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FULL REPORT

MYANMAR'S URBANIZATION

CREATING OPPORTUNITIES FOR ALL



WORLD BANK GROUP
Social, Urban, Rural & Resilience



ACKNOWLEDGEMENTS

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ABBREVIATIONS AND ACRONYMS

ADB	Asia Development Bank	FAR	Floor Area Ratio
AFD	Agence Française de Développement	FDI	Foreign Direct Investment
ARV	Annual Rental Value	FESR	Framework for Economic and Social Reforms
ASEAN	Association of Southeast Asian Nations	FPIC	Free, Prior and Informed Consent
BORDA	Bremen Overseas Research and Development Association	GAD	General Administration Department
BOT	Build-Operate-Transfer	GEN	Gender Equality Network
BRT	Bus Rapid Transit	GHSL	Global Human Settlement Layer
CBD	Central Business District	GIS	Geographic Information System
CBTA	Cross-Border Trade Agreement	GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
CDC	City Development Committee	GMS	Greater Mekong Sub-region
CDF	Constituency Development Fund	GVB	Gender-Based Violence
CHDB	Construction and Housing Development Bank (renamed Construction, Housing and Infrastructure Development Bank)	HARP-F	Humanitarian Assistance and Resilience Programme Facility
CSC	Citizenship Scrutiny Card	ILO	International Labour Organization
DAC	Development Affairs Committee	IPV	Intimate Partner Violence
DACU	Development Assistance Coordination Unit	IRD	Internal Revenue Department
DAO	Development Affairs Organization	IZ	Industrial Zone
DALMS	Department for Agricultural Land Management Statistics	JICA	Japan International Cooperation Agency
DDA	Department of Development Affairs	KOICA	Korean International Cooperation Agency
DFID	Department for International Development	LAMP	Land Administration and Management Program
DIIS	Danish Institute for International Studies	LAS	Land Administration System
DP	Development Partners	LGU	Local Government Unit
DPW	Department of Public Works	LIS	Land Information System
DOH	Department of Highways	LMIC	Low and Middle Income Countries
DUHD	Department of Urban and Housing Development	LTO	Large Tax Payer Offices
EDRB	Engineering Department of Roads and Bridges	LUC	Land Use Certificates
EM-DAT	Emergency Events Database	LVC	Land Value Capture
EU	European Union	MAC	Myanmar Architect Council
FAO	Food and Agriculture Organization of the United Nations	MCDC	Mandalay City Development Committee
		MCDV	Myanmar Comprehensive Development Vision
		MDI	Multidimensional Disadvantage Index
		MEB	Myanmar Economic Bank

MES	Myanmar Engineering Society	PFMIP	Public Financial Management Improvement Plans
MIMU	Myanmar Information Management Unit	PPP	Public-Private Partnerships
MNBC	Myanmar National Building Code	SAR	Special Autonomous Region
MOALI	Ministry of Agriculture, Livestock and Irrigation	SDG	Sustainable Development Goals
MOBA	Ministry of Border Affairs	SEE	State Economic Enterprises
MOC	Ministry of Construction	SLRD	Settlement and Land Records Department
MOEP	Ministry of Electric Power	SNG	Sub-National Governments
MOHA	Ministry of Home Affairs	SOE	State-Owned Enterprise
MOLIP	Ministry of Labour, Immigration and Population	SUDP	Strategic Urban Development Plan of the Greater Yangon
MOREC	Ministry of Natural Resources and Environmental Conservation	SWM	Solid Waste Management
MPLCS	Myanmar Poverty and Living Conditions Survey	TDAC	Township Development Affairs Committee
MRG	Mandalay Region Government	TDR	Transfer of Development Rights
MRT	Mass Rapid Transit	TVET	Technical Vocational and Education Training
MTFF	Medium-Term Fiscal Framework	UAGO	Union Attorney General Office
MUSIP	Mandalay Urban Services Improvement Project	UCCRTF	Urban Climate Change Resilience Trust Fund
NCDP	National Comprehensive Development Plan	UNFPA	United Nations Population Fund
NDMC	National disaster Management Committee	UNICEF	United Nations International Children's Emergency Fund
NGO	Non-Governmental Organization	UNISDR	United Nations International Strategy for Disaster Reduction
NLUP	National Land Use Policy	UNU-WIDER	United Nations University – World Institute for Development Economics Research
NRC	National Registration Certificate	WHO	World Health Organization
NRW	Non-Revenue Water	YBPC	Yangon Bus Public Company
NSDF	National Spatial Development Framework	YCDC	Yangon City Development Committee
NSDI	National Spatial Data Infrastructure	YRG	Yangon Region Government
NSDP	National Spatial Development Plan	YRTA	Yangon Region Transport Authority
NUP	National Urban Policy	YUMRT	Yangon Urban Mass Transit
OECD	Organization for Economic Cooperation and Development	YUTRA	Comprehensive Urban Transport Plan of the Greater Yangon
OOPs	Out-of-Pocket (Spending)		
PCCD	Pollution Control and Cleaning Department		

EXECUTIVE SUMMARY



CONTEXT

Urbanization in Myanmar is still in an early phase with slightly less than one-third of the population living in cities. This presents an enormous opportunity for the country. Cities are engines of growth and prosperity, which facilitate industries to grow jobs, services and innovations. Cities are also fundamental to lifting people out of poverty through increased employment opportunities and incomes to citizens. No country has reached middle income status without urbanizing.

That being said, the way that cities urbanize is important to growth, poverty and livability. If adequate investments are not made in basic infrastructure and services, urban planning, and in ensuring a governance and financing structure that can deliver for residents, cities instead can end up with major problems of congestion, pollution, sprawl, and inequality which can create or worsen social divisions, and potentially contribute to crime and violence.

The report, *Myanmar's Urbanization: Creating Opportunities for All* aims to understand urbanization in Myanmar drawing on the growing literature on the topic in Myanmar, especially for Yangon. It uses an inclusive urbanization lens and proposes a set of priority policy areas for urgent attention that will help to ensure the benefits of urbanization are widely realized given the projected growth of cities. An inclusion lens is particularly important in Myanmar as the country transitions from a complex history that has been characterized by decades of economic and political isolation, conflict, and underdevelopment.

Inclusive urbanization is reliant on three key dimensions; economic, social and spatial. Economic inclusion refers to equitable access to employment and income-generating activities in a city, and resilience to shocks. Spatial inclusion refers to equitable and affordable access to land, housing, infrastructure and basic public services. Social inclusion relates to individual and group rights, equity, security and dignity. Such aspects of social inclusion and exclusion are relevant to groups who are often marginalized in day-to-day urban life.

MAIN FINDINGS AND KEY CHALLENGES

Urbanization in Myanmar is steadily on the rise with approximately 30 percent of the population now living in cities. Much of this is attributed to internal migration flows. In Yangon, for example, 81 percent of the population growth between 2009 and 2014 was attributed to internal migration. The majority of migrants move to cities for employment. Other push factors of rural-to-urban migration include market shocks, rural poverty, landlessness and natural disasters.

The robust growth in recent years has brought a decline in urban poverty from 32.2 percent in 2004/5 to 14.5 percent in 2015. The economic growth in cities has been fueled by an expansion in construction, services, and manufacturing. Yangon is the country's most dominant city and contributes approximately 25 percent of the country's GDP.

Despite the positive benefits of growth, the increase in urban population has begun to put a strain on cities and the needs for affordable housing, infrastructure and services. In Yangon, for example, only 33 percent of the city's population have access to piped water, traffic congestion is on the rise, as is solid waste, flooding and pollution. There is also a rise in the number of informal settlements as new residents cannot afford the existing supply of housing. If left unaddressed, these infrastructure needs will lead to further congestion, slums, pollution, and growing inequality, putting a drag on opportunities for future growth and poverty reduction.



ECONOMIC INCLUSION

Economic inclusion in cities eludes many as they face challenges in the labor market related to: their lack of skills; high levels of informality; and discriminatory practices which particularly affect some subgroups. Levels of risk to natural hazards and economic shocks are high in Myanmar with the urban poor most acutely impacted. The lack of resilience to shocks affects their economic inclusion.

SPATIAL INCLUSION

Spatial inclusion is a challenge given high land and housing costs (e.g.in Yangon) and the overall lack of basic infrastructure and services in cities. The needs for urban transport, water and sanitation, solid waste services, and drainage are substantial. The lack of affordable housing, especially in Yangon, means that many end up in informal settlements, particularly in periphery areas away from the central business district where many jobs are located. Conditions in informal settlements can be extreme with access to even the most basic services being limited or unaffordable when purchased through small scale private providers. This can have negative outcomes on health indicators and ability to increase income generation from home-based microenterprises further exacerbating exclusion

SOCIAL INCLUSION

Social inclusion is also challenging for subgroups -- in the case of urban areas in Myanmar, these have been identified as the urban poor, migrants, non-Bamar ethnic groups, religious minorities, women and the disabled. These groups often face exclusion from jobs, housing, and infrastructure and social services for various reasons. Beyond the precarious living conditions facing low income populations (many of whom are migrants), there are challenges related to legal documentation, tenure security and crime leave many at high risk. Given the high costs in cities, the urban poor often must seek loans in the informal sector to cover illness, other unforeseen events, or to make ends meet. A survey of poor households in Yangon found that 86 percent had taken such loans, with interest rates in excess of 20 percent. High levels of indebtedness are thus widespread and can perpetuate the cycle of poverty.



Women may face security challenges in their communities as reported in numerous studies, and disabled are often excluded in accessing basic services. Ethnic and religious minorities also face challenges in accessing identification cards which are important to social inclusion.

Current structures of urban governance and finance have evolved to shift a number of political, administrative and financial responsibilities to

subnational governments which presents an opportunity to better reach urban residents. In practice, however, local governance is often hampered due to limited implementation of policies/frameworks, financial resources, and technical capacities and is in much need of modernization. These challenges result in inadequate service delivery and financing to meet growing needs on the ground.



Approximately

30%

of Myanmar's population now reside in cities, much of which is due to internal migration flows

PRIORITIES FOR INCLUSIVE, SUSTAINABLE AND COMPETITIVE URBANIZATION

Given Myanmar's relatively early stages of urbanization, the policies and investments made today will shape cities for decades to come. Prioritizing an inclusive cities approach will help to ensure that cities grow in an equitable way, which will have significant benefits for livability, prosperity and competitiveness.

The framework of economic, spatial and social inclusion points to several priority policy recommendations that can be implemented in the short, medium and longer term (See Table below). Many of the recommendations come back to the need for investments in:

- i) sustainable urban infrastructure and urban upgrading to provide basic services for all and ensure mobility for the flow of people, goods and services;
- ii) building resilience to mitigate the impact of shocks on the economy and on people's livelihoods and health;
- iii) facilitating access to legal documentation for migrants and specific subgroups, and targeting social programs for those that are particularly vulnerable to exclusion and may not be able to benefit from urban opportunities; and
- iv) capacity building and new financing for urban development.



Taking these recommendations forward will require additional work to identify champions, find relevant entry points for private sector investment, and ensure a stable governance framework aligned with sufficient technical capacity and financing for implementation.

These are challenges that the World Bank and other development partners can support in partnership with the Government of Myanmar.

Table 1. Priority Policy Recommendations for Inclusive Urbanization in Myanmar

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
Promoting economic inclusion to foster job creation and resilience to shocks			
High informality limits opportunities and links to exclusion	Improve opportunities for informal workers	<p>In-situ community based urban upgrading (M)</p> <ul style="list-style-type: none"> begin identification of high risk areas, needs and upgrading plan (S) secure financing (S-M) implementation (M-L) <p>Access to micro finance for small entrepreneurs (M-L)</p> <ul style="list-style-type: none"> develop enabling environment and incentives to foster micro finance (M-L) ensure gender equality in access (M) <p>Transport investments to enable mobility to jobs and markets (L)</p> <ul style="list-style-type: none"> Education and training for skills in urban jobs (L) prioritize vulnerable groups (S-M) investments in access and quality improvements (L) 	<ul style="list-style-type: none"> Development Affairs Organizations (DAOs)/ City Development Committees (CDCs) Ministry of Construction; Ministry of Education; Planning and Finance
Some areas in cities highly vulnerable to flooding and other natural hazards	Build resilience to natural hazards	<p>In-situ community based urban upgrading in high risk areas (S-M)</p> <ul style="list-style-type: none"> identify and prioritize investments (S) begin implementation (M) <p>Drainage/solid waste management (M-L)</p> <ul style="list-style-type: none"> identify and prioritize highest risk areas (S) implementation (M) <p>Early warning systems (S)</p> <ul style="list-style-type: none"> design and implement approach to reach the most vulnerable (S) 	<ul style="list-style-type: none"> DAOs/ CDCs Ministry of Construction Ministry of Social Welfare, Relief and Resettlement

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
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Promoting spatial inclusion to improve access to affordable land, housing and services for low income, and vulnerable populations

Substantial infrastructure deficits limiting successful urbanization and contributing to poor living conditions	Invest in equitable access to sustainable urban infrastructure	<p>Infrastructure investments needed in water, sanitation, roads, drainage, solid waste management (M-L)</p> <ul style="list-style-type: none"> • identify and prioritize needs with targeting of areas for greatest impact (S-M) • ensure participatory design that is gender, disabled-informed (S) • begin implementation (M-L) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction; • Ministry of Natural Resources and Environmental Conservation (MOREC)
Shortage of affordable housing, large and growing number of informal settlements	Improve and expand affordable housing	<p>In-situ upgrading of existing stock and slum areas (M-L)</p> <ul style="list-style-type: none"> • diagnostic needs assessment and development of affordable housing plan (S) • ensure target is for low income populations (S) • create enabling environment for housing supply and demand (M) • develop approach to incentivize private sector for low income market (S-M) • implementation (L) <p>Implement the National Land Use Policy (S-M)</p> <ul style="list-style-type: none"> • enable and train staff for implementation (S-M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction; • Construction and Housing Development Bank (CHDB); • Ministry of Planning and Finance
Limited urban planning results in congestion, sprawl, hazard risk, inequality, and can affect city growth opportunities	Improve integrated spatial planning for inclusive and resilient urban development	<p>Align plans across agencies (land use, transport, environment, disaster risk) (S)</p> <ul style="list-style-type: none"> • set up coordination mechanism (S) • invest in geospatial data and sharing platforms (e.g. plan for national spatial data infrastructure) (S) • Ensure planning is gender and disability-informed <p>Capacity building (M-L)</p> <ul style="list-style-type: none"> • identify needs and develop longer term strategy (M) • implementation (L) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction • Ministry of Social Welfare, Relief and Resettlement

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
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Promoting social inclusion to improve conditions for vulnerable groups to fully participate in society

Some are not able to fully participate in job markets or access services	Target social programs to marginalized groups (migrants, ethnic groups, disabled, women)	<p>Targeted programs designed to: link migrants with job opportunities, and provide assistance for disabled (M)</p> <ul style="list-style-type: none"> • identify and prioritize needs (S) • program design, implementation (M) <p>Addressing gender and other discrimination (S-M)</p> <ul style="list-style-type: none"> • awareness raising, education (S) • policy reform (M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Labor, Immigration and Population; • Ministry of Social Welfare, Relief and Resettlement
Lack of documentation and identification can prevent citizens from accessing jobs, services.	Facilitate access to legal documentation	<p>Reform of identification card system to ensure equity and remove obstacles linked to migration status (M)</p> <ul style="list-style-type: none"> • identify equitable approach and design system (S) • implementation (M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Labor, Immigration and Population; • Home Affairs

Ensuring good governance and finance for urban development is fundamental to creating inclusive, competitive and sustainable cities

Fragmented governance hampers decision making and improvements on the ground.	Strengthen coordination between government agencies for decision making and urban management	<p>Streamline processes for urban management, delivery (S)</p> <ul style="list-style-type: none"> • carry out diagnostic assessment of processes and develop recommendations for efficiency for core urban services (S) • implement changes in a phased manner (S-M) <p>Horizontal and vertical coordination needed (S-L)</p> <ul style="list-style-type: none"> • carry out institutional mapping and assessment for core agencies and recommend reforms (S) • implement changes in a phased manner (M-L) <p>Invest in capacity building for implementation (M-L)</p>	<ul style="list-style-type: none"> • DAOs/ CDCs • Relevant sectoral Ministries
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Table 1. Priority Policy Recommendations for Inclusive Urbanization in Myanmar (Continue)

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
Ensuring good governance and finance for urban development is fundamental to creating inclusive, competitive and sustainable cities			
Urban plans and programs can be disconnected from citizen's needs.	Strengthen participatory planning for urban development	Engage communities and citizens to help to promote inclusion (S) <ul style="list-style-type: none"> • mainstream participation in urban planning and program design (S) • train relevant staff (S) • ensure low income communities are included (S) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction
Strengthen participatory planning for urban development	Develop a holistic and equitable approach to financing for urban development	<p>Utilize intergovernmental fiscal transfer mechanisms to equalize regional disparities (M)</p> <ul style="list-style-type: none"> • diagnostic work to identify approach for reform (S) • implementation (M) <p>Strengthen local revenue generation (M-L)</p> <ul style="list-style-type: none"> • diagnostic work to develop proposals for increasing property tax revenues (S) <p>Allow more local discretion over funds use (S)</p> <ul style="list-style-type: none"> • Develop transparent decision making and implementation process (S) <p>Scale up private sector financing through improvements in enabling environment (M-L)</p> <ul style="list-style-type: none"> • Address existing bottlenecks through reform (M-L) • Invest in capacity building (S-M) <p>Explore use of Land Value Capture for larger cities (S-M)</p> <ul style="list-style-type: none"> • Carry out diagnostic work to identify key opportunities (S) • Implementation (M) 	<ul style="list-style-type: none"> • Ministry of Planning and Finance; • Ministry of Commerce



1

INTRODUCTION AND CONTEXT

KEY MESSAGES

- Urbanization in Myanmar is currently at 30 percent and growing steadily, driven mainly by migration, 43 percent of that to Yangon (2009-2014).
- The growth in cities can bring many opportunities for job creation and poverty reduction. Strong growth of over 8 percent between 2004-2015 brought reductions in urban poverty from 32 percent in 2004/5 to 14 percent in 2015. However, if not well planned and managed, urbanization can result in growing congestion, sprawl, slums, pollution and rising inequality which is now emerging in Yangon.
- In Myanmar, due to deep rooted patterns of exclusion over time, several groups in cities face barriers that limit their ability to fully contribute and benefit from urbanization.

POLICY RECOMMENDATIONS

- An inclusive approach to urbanization is especially important for Myanmar given its history. Policy priorities are related to three dimensions of inclusive urbanization—economic, spatial and social – and can promote more equitable and sustained growth, social cohesion, and livability.
- Implementing such an approach will require a deepening of reforms and strong commitment from different levels of government and other key stakeholders.

1.1 INTRODUCTION

Myanmar is going through a structural transformation and has enormous potential for growth, given its strategic location linking South Asia, Southeast Asia and China, as well as its rich natural resources. Growth has been strong, averaging over 8 percent between 2004 to 2015, and the national poverty rate has declined steadily during the same period, from 48.2 percent in 2004 to 32.1 percent in 2015. That said, its per capita GDP of \$1,275 in 2015 is among the lowest in the region. Human development indicators such as infant mortality and life expectancy are also still on the lower end of the spectrum.

With approximately 30 percent of its population living in cities in 2017, Myanmar is still considered as being at an early stage of urbanization, with a level of urbanization below that of Lao PDR (34 percent) and Vietnam (35 percent), but higher than Cambodia (23 percent).¹ At 1.7 percent in 2017, the annual urban population growth rate is lower than that of other countries in the region. However, in tandem with economic growth, the country is expected to continue to urbanize, with a projected increase to 35 percent in 2050 – an estimated increase of 9 million people in cities by migration alone.²

As experience in other countries has shown, urbanization will be important to continued growth and poverty reduction in Myanmar. Globally, over 80 percent of economic activity is concentrated in cities. Urban areas are essential for lifting people out of poverty through the opportunities that density can bring with jobs, services and innovation. A key element that will help drive the success of this urbanization process is ensuring that it is inclusive. This is particularly important in Myanmar given its transition from military rule and its associated challenges, including an ongoing peace process with multiple ethnic groups, a long history of exclusion of some groups to land and labor markets, services, and spaces that affect social and political life.

The country has faced several decades of civil conflict and tight military rule. Those conflicts had severe impacts on people's lives, created deep divisions, and diverted resources from the provision of public services. The democratic reforms beginning in 2011

have resulted in a transition from a planned to an open market economy, from military to civilian rule and from conflict to peace. There have been immediate and positive impacts on growth and poverty reduction, though deep-seated patterns of social, economic and political exclusion for many subgroups in the population remain and will be a great challenge to the sustainability and deepening of reforms. The achievements of this decade are at risk if policies to promote inclusion are not prioritized. Such risks can be particularly acute in cities where the density of people -- often from different socio-economic, ethnic, and religious backgrounds -- is higher, as is inequality.

International evidence on transitions out of conflict, as discussed in the *World Bank's World Development Report 2011: Conflict, Security, and Development*, highlights the importance of social cohesion policies that 'create a sense of fairness and social justice across population groups' and 'foster the participation of hitherto excluded groups or areas in economic and political decision-making, enabling them to benefit from development assistance' (World Bank, 2011). A more recent report, the World Bank and UN's *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict* report emphasized the extent to which a sense of fairness and social justice across population groups helps maintain peace and prevent violent conflict, and provides an overview of the existing studies linking social inequality and conflict in countries.

In this context, a focus on inclusive urbanization for Myanmar will be critical. Policies that promote inclusive urbanization can bring shared prosperity, enhance cities' productivity and competitiveness, and enhance social cohesion and livability. Yet if cities are not well-planned and well-managed, urbanization can lead to higher levels of poverty and inequality, which can affect a city's competitiveness, undermine socio-economic benefits, threaten sustainable growth, and result in social divisions, violence, and conflicts. Exclusion of subgroups, a lack of trust in institutions, lack of transparency, and inability to meet growing needs of residents, particularly in a dense urban environment, can exacerbate tensions and social strife.

¹ World Bank Open Data. <https://data.worldbank.org/>, accessed on 24 September 2018

² United Nations Department of Economic and Social Affairs/Population Division 15. (2014). *World Urbanization Prospects: The 2014 Revision*

Inclusive urbanization is reliant on three key dimensions; economic, social and spatial.³ Economic inclusion refers to ensuring opportunities for all in contributing to and sharing in rising prosperity. Spatial inclusion refers to improving access to affordable land, housing and services for all. Social inclusion involves improving the terms for marginalized groups to take part in society. In the case of urban areas in Myanmar, marginalized groups are identified as the urban poor, migrants, non-Bamar ethnic groups, religious minorities, women and the disabled, who face exclusion from jobs, housing, and infrastructure and social services for various reasons. These groups are not mutually exclusive, for example the proportion of migrants is higher among the urban poor than non-poor.

The three dimensions of inclusion are highly interlinked, and any approach to understand the complexity of issues or develop solutions must consider all three. For example, challenges in accessing income earning opportunities may be linked to macro level problems in the economy and structural problems in the labor market, but also may be linked to where people live and the possibilities for affordable transport to jobs and markets, limited basic infrastructure for home-based work, and/or exclusionary policies or social practices for some groups that are discriminatory.

This report seeks to understand some of the key issues related to inclusive urbanization in Myanmar and proposes a set of priority policy areas that will be important to ensure the benefits of urbanization are fully realized given the projected growth of cities. The report draws on numerous studies that have been carried out in the past few years by donors and other development partners related to specific aspects of urbanization. It is intended to present a broad overview of key issues, though the examples and data are particularly focused on Yangon and to some extent Mandalay due to the availability of information on these larger cities. There are many areas that would benefit from further in-depth analysis, particularly using primary data analysis which was beyond the scope of this report and are proposed for future analytical work (see Box 1.1 on available data and Section 6.6 on areas for future work).

This chapter provides an overview of urbanization trends in Myanmar. Chapter 2 briefly covers issues of economic exclusion while Chapter 3 looks at the multiple aspects of spatial inclusion, including a review of key sectoral issues. Chapter 4 covers social inclusion, Chapter 5 discusses issues around governance and finance and Chapter 6 provides a discussion on priority recommendations for inclusive urbanization.

Figure 1.1: Multi-dimensional Framework for Inclusive Cities



Source: Adapted from World Bank 2015

3 This draws on the framework developed in World Bank, 2015, World Inclusive Cities Approach Paper, World Bank Report AUS8539, Washington, DC

Box 1.1: Analyzing Urban Development in Myanmar: Data Resources

A common challenge with urbanization studies is the lack of quality data that can be disaggregated at a level that is meaningful at the urban level, and particularly within cities. Most surveys capture statistical representation at the urban level only, and not by cities with the exception of the largest city. This makes it hard to understand differences between or within cities which can be vast. As an example, overall urban development indicators tend to be higher in cities than in rural areas. However, when disaggregated by income

group, characteristics and living conditions for the poorest can be similar to rural areas, masking important information about conditions.

In the case of Myanmar, a number of rich data sets have recently become available and have provided the basis for many important studies which were utilized in the preparation of this report. Among the key data sets and their urban coverage are the following:

Table 1.1: Data Sources

YEAR	DATA SOURCE	COMMENTS
Surveys		
2014	Myanmar Population and Housing Census	Key demographic and housing indicators, full representation down to the ward level. Further primary analysis is possible and would be insightful for urban studies.
2015	Myanmar Poverty and Living Conditions Survey (MPLCS)	Sample survey of living conditions, can be used to describe the national, urban/rural and agro-ecological zone level. It cannot be used at the state and region level.
2015	Labor Force Survey, International Labor Organization:	Large sample (23,000) of workers nationwide, for each State / Region /Union Territory (SNGD), rural and urban areas were treated as separate basic strata thus can be disaggregated
2017	Myanmar Living Conditions Survey	Key indicators of living conditions, representative at the Union Territory, states and regions, urban and rural areas
Geospatial data		
1975, 1990, 2000, 2014	Global Human Settlement Layer	Globally available raster dataset produced by the Global Land Cover Facility. Uses Landsat imagery and a machine-learning algorithm to identify built-up land across four time-periods. Useful for measuring long-term urban growth
Yearly (2017 most recent)	Landscan	Global population distribution raster at 30m resolution. Created by Oak Ridge National Laboratory by using a combination of census and geographic data, as well as remote sensing analysis techniques. Helpful in areas where population figures are difficult to find
DMSP 1992-2012, VIIRS 2012-2018	Nighttime Lights	Global nighttime lights data published by the National Oceanic and Atmospheric Administration (US). Is a good measure of urban change and has been used as a proxy for GDP

URBANIZATION IS STEADILY ON THE RISE

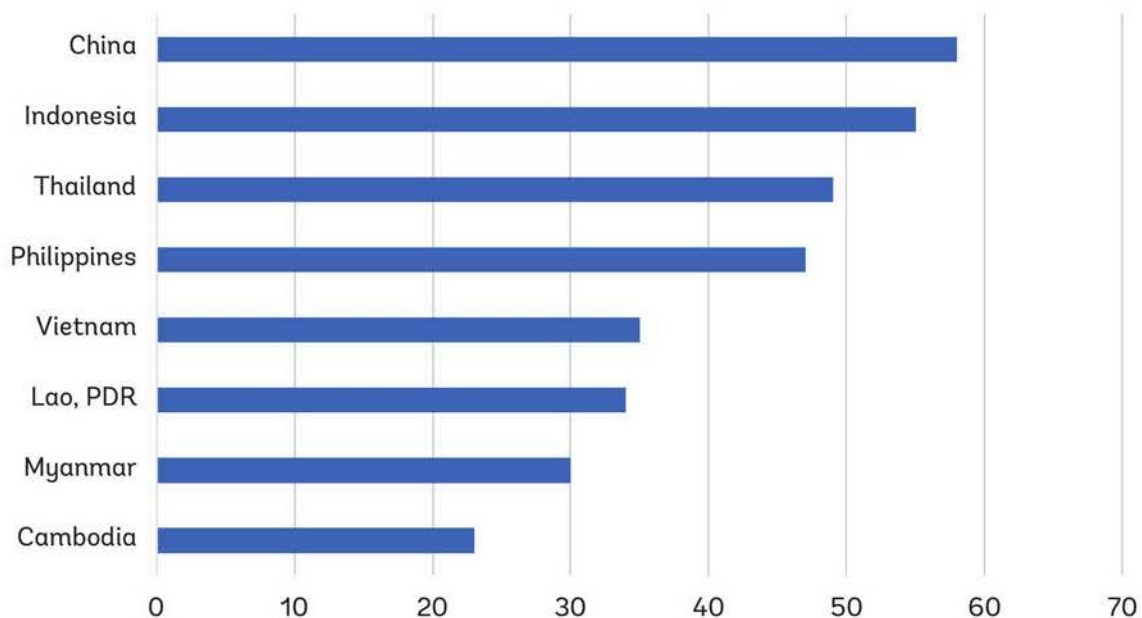
The urban population in Myanmar has increased gradually, from 24.7 percent in 1987, to 30.3 percent in 2017.⁴ Approximately 15 million people now live in urban areas, with Yangon and Mandalay accounting for 20 percent of the total urban population. Myanmar has a relatively low level of urbanization at 30 percent, but this is expected to change given continued economic growth. By 2050 it is estimated that 35 percent of the population, with much of that urban growth to happen in Yangon.⁵

Much of the population increase in cities is driven by internal migration.⁶ It is estimated that nearly 10 million people in Myanmar are not living in the township where they were born, equivalent to 21.6 percent of the population (2014 Census). Urban areas in Myanmar have received the bulk of recent migration flows. In Yangon, 81 percent of the population growth between 2009 and 2014 was attributed to internal

migration (Ministry of Labour, Immigration and Population, 2016). Analyses carried out on 2014 census data links increased migration to urban areas with economic and political liberalization in 2010/11 (Ministry of Construction, 2016). In addition, migrants have displayed a higher level of employment in the industrial sector than non-migrants, indicating that the search for better economic opportunities is a key driver of domestic migration.

Other push factors of rural-to-urban migration include market shocks, rural poverty, landlessness and natural disasters. For example, the Ayeyarwady Region, a poor agricultural region struck by Cyclone Nargis in 2008, has lost 784,919 people or 13.2 percent of the region's total population to neighboring Yangon (Ministry of Labour, Immigration and Population, 2016). Pull-factors can range from better living and working conditions, wider access to public services and job opportunities, to higher salaries, and stabilized political situation.

Figure 1.2: Share of Urban Population, EAP countries



Source: World Bank, World Development Indicators, 2018. Based on country census data

⁴ Myanmar, 2014 Census

⁵ UNFPA, 2017, Myanmar 2014 Census, Thematic Report on Population Projections

⁶ International migration is considered to be relatively lower. 75% of migrants have relocated to other places in Myanmar (Census, 2014)

Box 1.2: Internal Migration Patterns in Myanmar

Recent analysis using the 2014 Census shows that most internal migration is towards urban areas given the driving motivation for work. Over half of internal migrants moved to cities; 43 percent ended up in Yangon from 2009-2014 and another 12.5 percent in Mandalay (Table 1.2). Among the top 20 district-to-district migration corridors, 19 end up in Yangon and of those, the largest share end in Northern Yangon, the district with the highest proportion of manufacturing jobs (MOLIP and UNFPA 2016). Interestingly, 7 of these flows are movements within Yangon, and another 8 are from neighboring Ayeyarwady. Industrial

zones in other parts of the country – Mandalay, Ayeyarwady, Bago, Magway, Mon, Sagaing, Shan and Tanintharyia – also attract workers (MOLIP and UNFPA 2016).

A second notable pattern is the high in-migration to states that are located in strategic economic areas on the international border and along economic corridors. Districts that border Thailand (Myawady, Tachileik and Katwthoung), India (Tamu and Hkamati) and China (Muse) report high rates of net in-migration (MOLIP and UNFPA 2016).

Table 1.2: Internal Migration, Top 20 District-to-District Flows for Recent Migrants, 2014

Rank	District to District flow	Number of migrants
1	West Yangon to East Yangon	56,601
2	Phayapon to North Yangon	51,086
3	West Yangon to North Yangon	43,044
4	Hinthada to North Yangon	35,311
5	Maubin to North Yangon	33,369
6	Labutta to North Yangon	29,796
7	Thayawady to North Yangon	29,362
8	North Yangon to East Yangon	28,368
9	Pathein to North Yangon	27,852
10	East Yangon to West Yangon	26,257
11	East Yangon to North Yangon	25,652
12	Phayapon to East Yangon	24,891
13	South Yangon to North Yangon	24,660
14	Myingyan to Mandalay	24,500
15	Myaungmya to North Yangon	21,694
16	Bago to East Yangon	20,907
17	Bago to North Yangon	18,663
18	North Yangon to West Yangon	17,519
19	Magway to North Yangon	16,231
20	Pathein to East Yangon	14,835

Source: MOLIP and UNFPA, 2016

Source: Cunningham, W. and Munoz, R. eds., Myanmar Future Jobs: Embracing Modernity, Main Report and Background Reports, World Bank, 2018. Background paper, Internal Migration, Wendy Cunningham, Alejandro Huertas Harry Morog, and Mauro Testaverde with inputs from Soonhwa Yi

Urbanization thus far has brought reductions in urban poverty, with a substantial decline from 32.26 percent in 2004/5 to 14.5 percent in 2015.⁷ Other indicators of welfare, such as ownership of assets, also show improvements with particular increases in the ownership of smart phones (now at 87.3 percent in urban areas), televisions, cars, air conditioners, etc.⁸ This is largely attributed to growth in the service sector, and to some extent manufacturing, which is likely to have positively impacted the income generating opportunities of the urban poor more than the rural poor. Growth in the construction sector and in manufacturing has been predominately focused in urban and peri-urban areas.

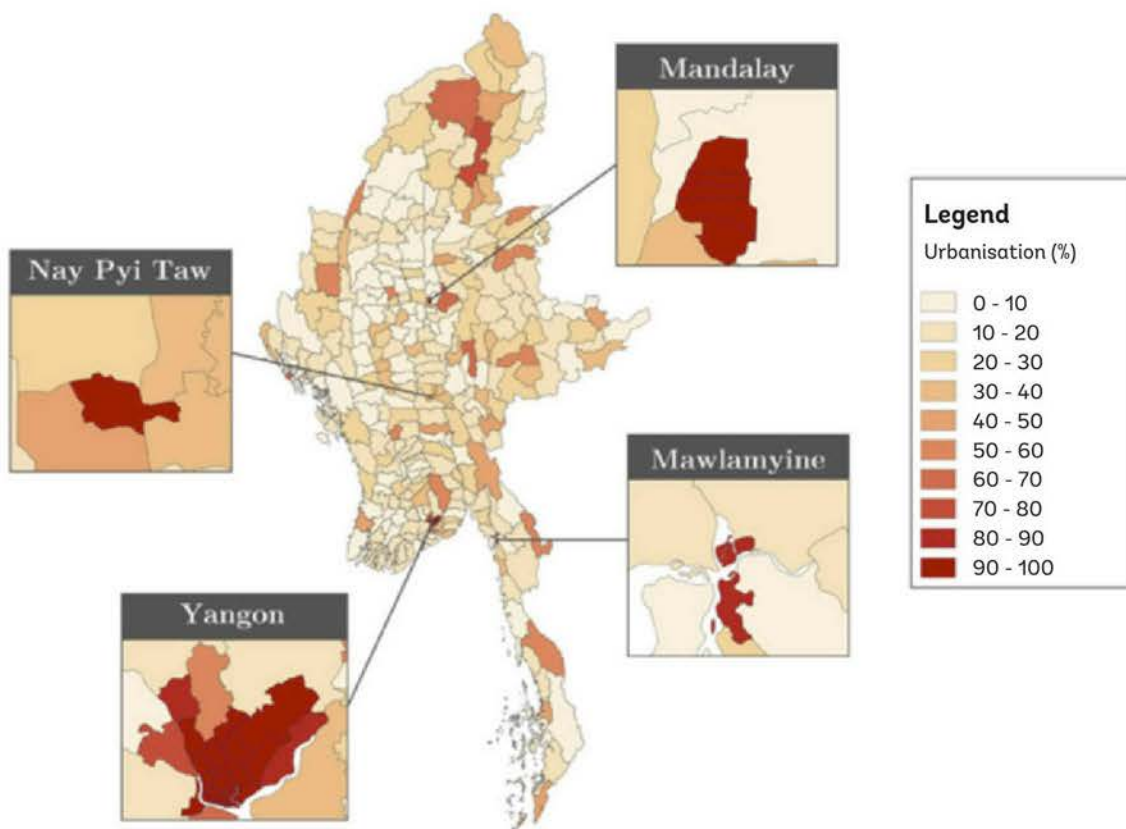
Urban inequality is higher than in rural areas, with a Gini coefficient of 38.6 in 2015 (as compared to 28.3 in rural areas).⁹ This is not an unusual pattern, but cause for attention as urbanization increases, particularly given the potential links of inequality and social tensions in cities. Information on intra-city patterns of inequality

is not available but would be insightful to understand spatial aspects of inclusion.

YANGON DOMINATES IN SIZE AND ECONOMY

Yangon is currently the country's most dominant city, driven by economic development given its role as the commercial and financial capital of Myanmar. With a population of over 5 million people in the city and 7.4 in the wider metropolitan region, Yangon is significantly larger than the country's second largest city, Mandalay (1.22 million), and contributes approximately 25 percent of the country's GDP. Over 90 percent of Yangon's economy made up of industry and services. While the transfer of national government functions to the new city of Nay Pyi Taw has diverted some activity from Yangon, the city is expected to remain the country's major urban center. Figure 1.3 below shows the distribution of the urban population by township.

Figure 1.3: Share of People Living in Urban Area by Township



Source: 2014 Census

7 MPLCS 2015 and 2017, World Bank Poverty Report. Estimate based on World Bank methodology

8 2017 World Bank Poverty Report

9 Data on trends is not available

Table 1.3: Proportion of Population in Urban Areas by State/Region

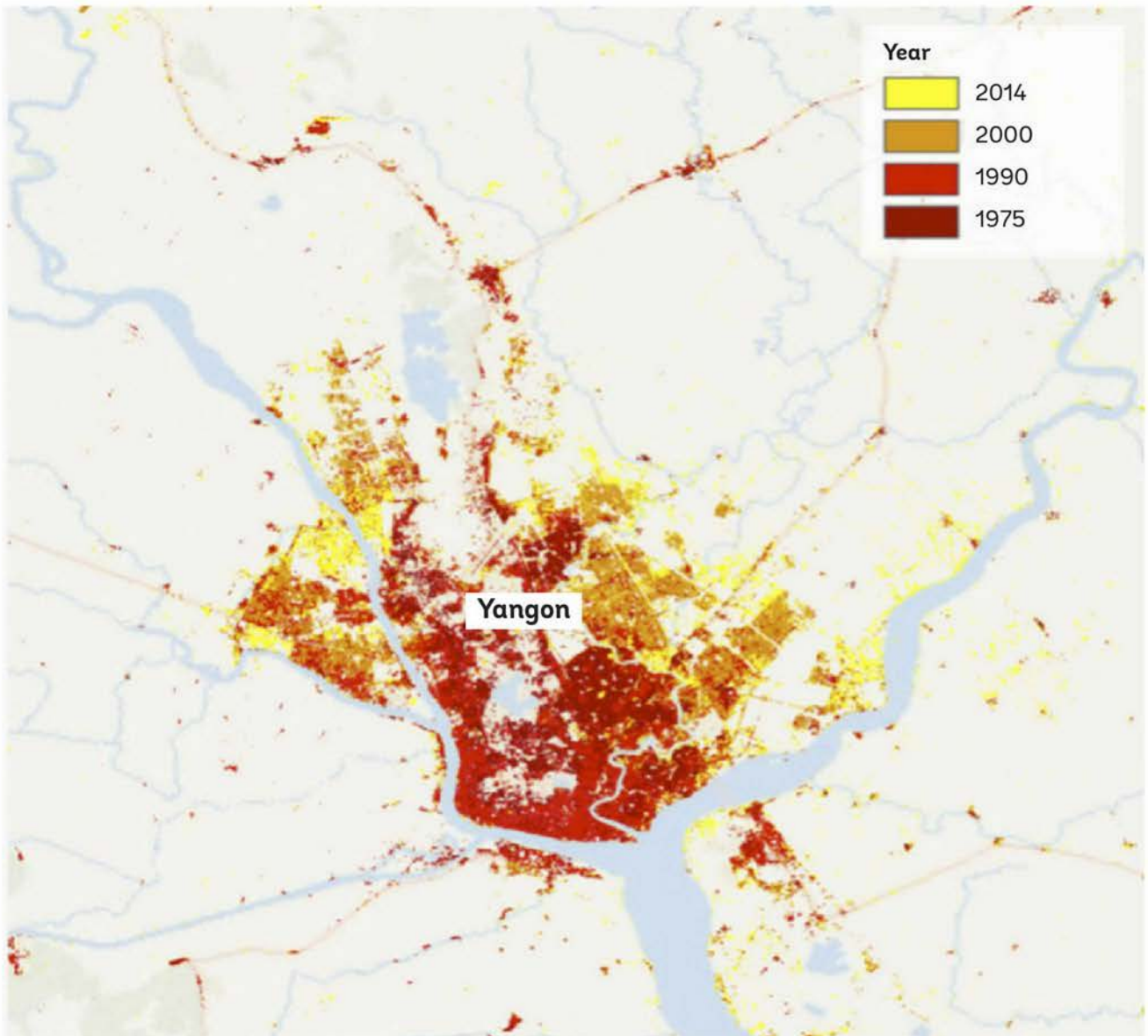
State/ Region	Total Population	Urban Population	% Urban	% of Total Urban Population
Kachin	1,642,841	592,368	36.1%	4.0%
Kayah	286,627	72,418	25.3%	0.5%
Chin	478,801	99,809	20.8%	0.7%
Sagaing	5,325,347	911,355	17.1%	6.1%
Tanintharyi	1,408,401	338,419	24.0%	2.3%
Bago	4,867,373	1,072,336	22.0%	7.2%
Magway	3,917,055	588,031	15.0%	4.0%
Mandalay	6,165,723	2,143,436	34.8%	14.4%
Mon	2,054,393	572,189	27.9%	3.8%
Rakhine	2,098,807	354,288	16.9%	2.4%
Yangon	7,360,703	5,160,512	70.1%	34.7%
Shan	5,824,432	1,395,847	24.0%	9.4%
Ayeyawady	6,184,829	872,600	14.1%	5.9%
Nay Pyi Taw	1,160,242	375,189	32.3%	2.5%
Union	50,279,900	14,877,943	29.6%	100.0%

Source: Adapted from Myanmar Ministry of Labor, Immigration and Population (2015) The 2014 Myanmar Population and Housing Census - The Union Report

Urbanization was accompanied by a modest rate of spatial expansion in urban areas between 2000 and 2010, with an average additional 40m² of land area per additional urban resident (World Bank, 2015) In Yangon, this figure was only 24m², suggesting that new urban residents were accommodated either through higher rates of occupancy in existing homes, higher density developments, or informal settlements with little accompanying infrastructure (Ministry of Construction, 2016). More recent mapping shows the city expansion through 2014 (Figure 1.4)

The increase in urban population has begun to put a strain on cities and the needs for affordable housing, infrastructure and services. In Yangon, for example, only 40 percent of the city's population have access to drinking water, traffic congestion is on the rise, as is solid waste, flooding and pollution. There is also a rise in the number of informal settlements as new residents cannot afford the existing supply of housing. If left unaddressed, these infrastructure needs will lead to further congestion, slums, pollution, and put a drag on opportunities for growth. These issues are discussed in detail in Chapter 3.

Figure 1.4: Urban Expansion, Yangon, 1975-2014



Source: World Bank calculations using Global Human Settlement Layer (GHSL) Data



2

ECONOMIC INCLUSION

KEY MESSAGES

- Urbanization is creating new employment opportunities manufacturing and services, particularly in Yangon and Mandalay. The service sector now dominates, accounting for approximately 40 percent of GDP.
- The job creation is not benefiting everyone due to: skills shortages, high levels of informality, and discrimination for some.
- Risks in cities from natural hazards and economic shocks affect economic inclusion particularly for the urban poor.

POLICY RECOMMENDATIONS

- Invest in improvements in education for all as well as conditions in the labor market and macro economy to create jobs and growth.
- Improve opportunities for informal workers, particularly vulnerable groups, through urban upgrading, access to micro finance, transport investments to enable mobility, and education and training for skills in urban jobs.
- Build resilience to natural hazards through urban upgrading and drainage and solid waste management in high risk areas, as well as through early warning systems that reach vulnerable communities.

2.1 INTRODUCTION

Cities are hubs of economic activity and generate demand for a variety of services. As such, urbanization has the potential to bring economic opportunity for many. Standards of living have increased more rapidly in cities than in rural areas, and employment has been a driver of economic growth and social cohesion (World Bank, 2017b). In Myanmar, urban areas have averaged an annual growth of 1.9 percent, which is 0.8 percent higher than that in rural areas (World Bank, 2017a).

At the same time, promoting economic inclusion in cities is reliant on equitable access to jobs and income-generating activities. Low-income populations are generally reliant on cash incomes, are highly vulnerable to employment losses and wage reductions in urban-based industries, and do not have agricultural production to fall back on as they would in rural areas. External shocks can also impact their

economic inclusion, particularly if mechanisms for resilience do not exist, as is typically the case for the urban poor and many new migrants (Baker & Gadgil, 2017).

In the case of Myanmar, urban development is providing economic opportunities particularly in the larger cities. Industrial zones - a total of 19 existed across Myanmar in 2015 - have created jobs. Yet at the same time, these jobs are not always accessible to urban residents for various reasons discussed below - lack of skills, informality, or discrimination -, and the vast majority of people work in the informal sector. Working in the informal sector can bring much uncertainty and risk to individuals and households given the lack of stability and social protection and can contribute to economic exclusion for vulnerable groups.

2.2 URBAN GROWTH CENTRES AND ECONOMIC OPPORTUNITIES

Myanmar's economy is transitioning from agriculture to other sectors, many of which are urban-based. The positive effect of urban agglomeration drives local economic growth in the city by not only providing diverse employment opportunities but also reducing trade cost, improving productivity, and facilitating export-oriented industries due to the nearby ports. In 2015, the service sector became the dominant sector accounting for almost 40 percent of GDP. The growing manufacturing industry contributes to the rest of 28.4 percent (World Bank, 2017b).

The country is part of the Greater Mekong Sub-region (GMS), which, established in 1962, also includes member countries Cambodia, Laos, Thailand, Vietnam, and Yunnan Province and Guangxi Special Autonomous Region (SAR) in southern China. An Economic Corridor development and Cross-Border Trade Agreement (CBTA) strengthens regional market integration and

value chains in Myanmar and the region. Border trade and connections with international activity provide economic opportunities. Border trade is expected to increase as Myanmar economically develops and imports more goods, and neighboring countries (especially China) move more toward the hinterlands (Rahardja, Artuso, & Cadot, 2016).

The Yangon Region, with 13 percent of the total population in Myanmar, produces and estimated 20-25 percent of the country's GDP and it seeks to diversify its investment opportunities to other sectors, such as tourism, services, and logistics. Other growth centers include Mandalay, for its role in regional trade and logistics for Northern Myanmar and link to the Belt and Road Initiative, and Nay Pyi Taw because of its role as the capital. Secondary cities also have an important role to play and would benefit from more detailed analysis.

Figure 2.1: Growth Centers



Figure 2.2: Population with Access to Corridors



Source: International Growth Center, 2016

2.3 EMPLOYMENT IN URBAN AREAS

Urbanization and the recent rapid growth of Myanmar have created much employment in sectors such as manufacturing, construction, retail and wholesale, and hotels and restaurants. Overall employment levels in urban areas are high, estimated at 78.2% for men and 53.5% for women (World Bank, 2017a). This rate is higher than in 2005 for every age group, with the greater increases seen for women, though their overall rates are still lower than men. According to the Asia Foundation’s inaugural *City Life Survey*, urban women and men in Myanmar have equal levels of education, but women are almost twice as likely than men to not be employed and not be seeking employment (Asia Foundation, 2017).

Urban workers work an average of 53 hours each week, considerably higher than the national average of 40 hours (MPLCS, 2015). Unemployment overall in Myanmar is very low in Myanmar (MPLCS, 2015). Of those not working, they are engaged in full-time housework (12.0 percent) or several other activities in the year prior to the survey, primarily being a student, retired, or suffering from a disability. The reasons for inactivity vary by characteristics: the elderly are retired, very young are in school, prime-aged workers are ill or disabled and could not work, and men are waiting for the busy (agricultural) season. Urban employment has a significant gender division as women are more likely to be responsible for housework

and childcare. Only 5 percent of women surveyed reported doing no housework or having no childcare duties, compared to 19 percent of men. In addition, 14 percent of women spend between 11 – 15 hours a day on domestic labor, compared to just 3 percent of men (Asia Foundation, 2017).

Despite the high employment rate and long hours worked, most of the jobs are low-productivity and low-paid jobs in household enterprises or small firms. For those working in unskilled jobs, many only require simple, mostly manual tasks, such as street vendors, care and maintenance of homes or buildings (World Bank, 2018). Wages are very low and jobs are overwhelmingly in the informal sector which can present significant challenges affecting economic inclusion.

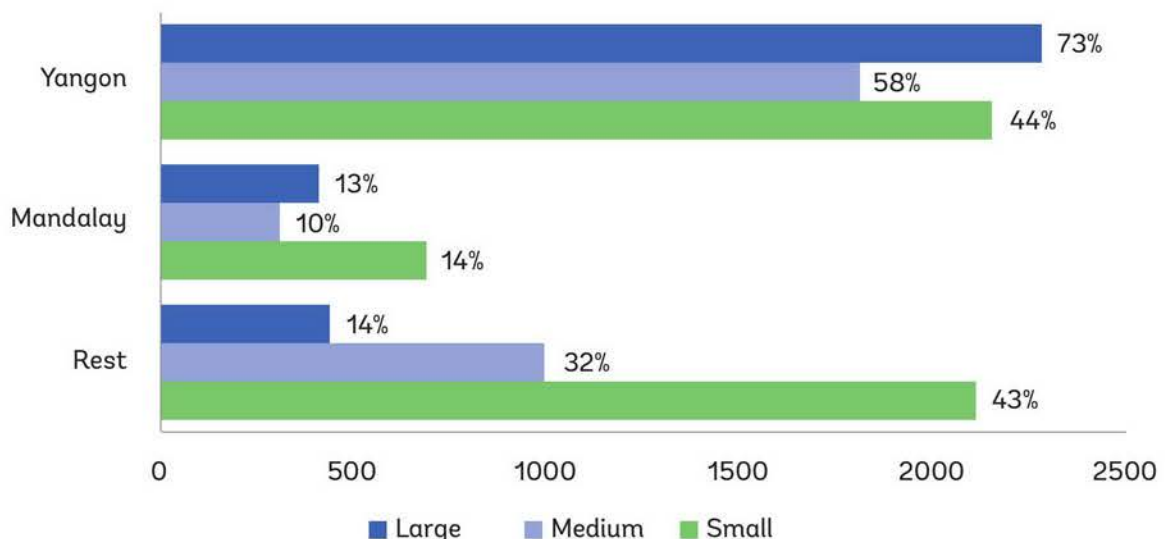
The formal modern sector only accounts for 11 percent of total jobs in Myanmar, similar to other countries who have gone through structural transformation periods such as Vietnam, but the number is still very limited. Only three percent of Myanmar’s workers are classified as professionals, managers, skilled technicians or associate professionals. and only 13 percent of Myanmar people with a high school education or above work in professional occupations. Women are three times as likely as men to be engaged

in professional occupations. (World Bank, 2018 Myanmar Jobs Report).

Yangon and Mandalay are where many of the existing formal jobs with firms are concentrated. These two cities represent about a third of all firms in the country, but more than half of the number of formal sector workers (60 percent), and 50 percent of total value-added and capital owned (Myanmar Economic Monitor, 2018). This high concentration is especially prevalent in manufacturing jobs, where Yangon represents 47 percent of all jobs, and Mandalay 16 percent. Most of the very large firms are located in Yangon given the concentration of industrial zones and more established infrastructure, particularly electricity.

Yangon has an estimated 30 industrial zones, many of which are located in North Yangon which is the most popular destination for internal migrants employed in manufacturing¹⁰. Despite the availability of some job opportunities, high rents prevent migration to the central business district (CBD) in West Yangon while moderate migration is happening in East Yangon with lower rents. The largest IZ of Myanmar is located in Hlaing Taryar township in north Yangon which employs hundreds of thousands of workers.

Figure 2.3: Firms in Industrial Zones



Source: Tim Dobermann. (2016). International Growth Center Policy Note on Urban Myanmar
 Note: from Robertson & Seng Taung (2015) and DISI. Small 'industrial' firms are between 10-15 workers, often family owned

¹⁰ Department of Population Ministry of Labor, Immigration and Population. (2016). Thematic Report on Migration and Urbanization

Some IZs, however, are not operating at their full capacity and the majority of manufacturing activities in IZs, such as textiles and food processing, remain at the lower end of the value chain. While some IZs attract firms, some struggle with low rates of active business activities due to limited demand in opening or scaling up IZs, economic fluctuations, failure of other firms that undermines new business from opening, rising cost of living, and rampant land speculation in IZs (Robertson and Taung, 2015). As a result, the IZs have not offered adequate employment opportunities to the large influx of migrants, and thus access to formal, well-paid jobs remains limited.

There are a number of constraints affecting access to better jobs particularly for vulnerable groups, in particular, skills shortages, informality, and discrimination which are discussed below.

THE LACK OF SKILLS IS HINDERING BETTER JOBS

A major obstacle cited by firms is skills. When firms were asked about the top obstacle they faced in conducting their business, from the list of 15 different obstacles, “inadequately educated workforce” was

the most frequent response (by 17 percent of the firms). Other obstacles included access to finance (15 percent) and poor power supply (14 percent) (Economic Survey, 2016). A second survey asked employers about difficulties in hiring, here too lack of skills was rated highly across a range of job types.

Overall skills levels are low in Myanmar which is a major deterrent to entering the labor market and to economic inclusion. Half of Myanmar’s workers did not reach middle school. Twenty percent said that they never attended school (or only attended monastic schools) while another 39 percent did not complete primary school. Only 21 percent had a high school education or above (MPLCS, 2015).

Among the more vulnerable groups, there are several specific factors that prevent higher educational achievement and skills development (though not specific to urban areas). For the poor, children dropout because they need to enter the labor market. For the disabled studies show that children living with one or more disability have much lower rates of enrollment in education than those without. Even if enrolled, discrimination in school can cause children living with disabilities to drop out (Eden Center for Disabled Children, 2015).

Table 2.1: Employer Difficulties in Hiring, 2016 (%)

	Manager or senior level professional	Semi-skilled non-production	Skilled production worker	Unskilled production worker
There were no or few applicants	52	64	42	50
Applicants lacked required job-specific skills	76	78	79	72
Applicants lacked required personal skills or behaviour	77	82	86	79
Applicants expected higher wages than the establishment can offer	78	76	45	62
Applicants did not like the working conditions	55	39	54	44

Source: Cunningham and Huertas (2017)

INFORMALITY IS HIGH WHICH CONSTRAINS INCLUSIVE GROWTH

The largest share of the population in cities, particularly the poor who typically have low educational attainment and skills, work in the informal sector. A 2017 survey of Myanmar's Micro, Small and Medium Enterprises estimated that approximately 95 percent of workers have no contracts, and that informal employment was the most common form of work among Myanmar's manufacturing enterprises (Ministry of Planning and Finance and UNU-WIDER, 2017). Working in the informal sector can present challenges to inclusion as wages tend to be lower than the formal sector, and informal workers typically do not have social protections, labor regulations are often not adhered to, and there is increased vulnerability to external shocks and exploitation (Baker & Gadgil, 2017).

It is estimated that about 80 percent of the urban workforce is employed in micro enterprises compared with a much lower 49 percent for rural areas (MPLCS). Almost half, 43 percent, of the micro enterprises in urban areas operate from home which means that affordable and reliable access to infrastructure and services is not only important to living conditions, but also to livelihoods. Frequent power outages affect almost 90 percent of the micro enterprises with consequent impact on productivity, and access to roads, water, and sanitation are also important. Twenty percent of urban firms operate from a traditional market or from a shop in a commercial area.¹¹

About 60 percent of micro enterprises are female owned, and approximately 25 percent of the immigrants own a micro enterprise (compared with 17 percent of the non-immigrants). The mean monthly income of workers in micro enterprises is 78,132 Kyats, which is below minimum wage and poverty line.

Most of the micro enterprises are in the service sector (63 percent in cities), about 25 percent of all firms are in street and related sales service, 20 percent in food processing, woodworking and garments; and 20 percent in hospitality, retail and other services. Other

microenterprises are in manufacturing (26 percent) and industry (18 percent). Very few micro enterprises have links with the formal sector or organized traders.

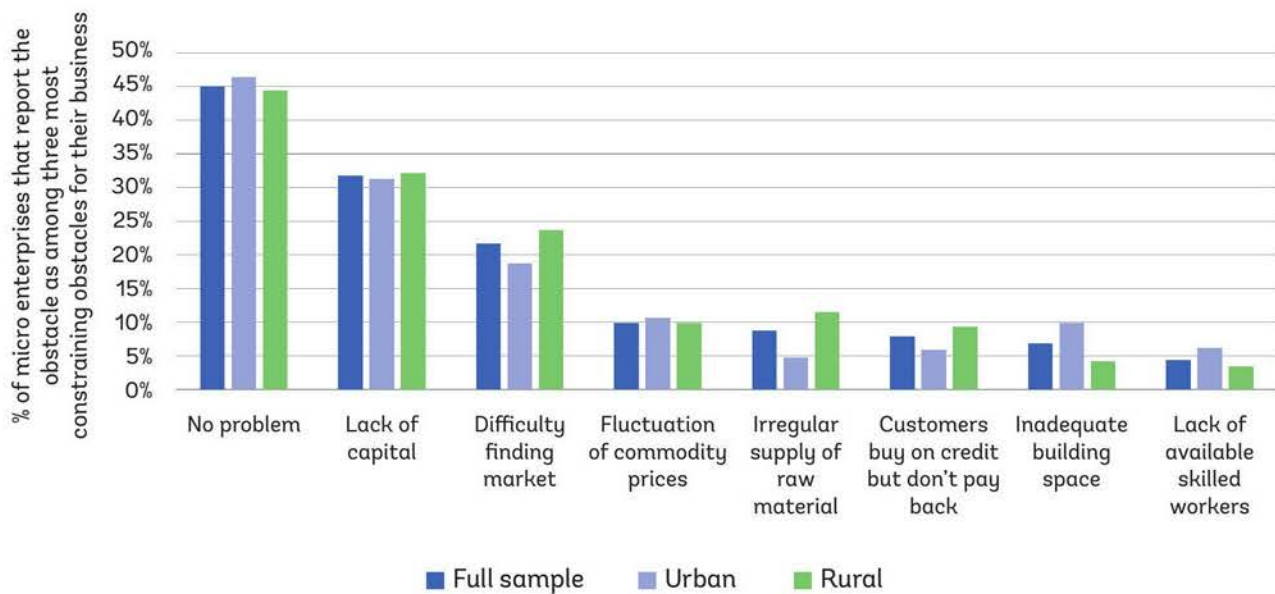
The most commonly cited obstacle by micro enterprises in Myanmar is limited access to finance (MCPLS). Analysis shows that limited access to finance and lack of adequate capital is a severe problem for small and medium firms. Possible explanations include lack of proper collateral, limited or no credit history, informational asymmetry about credit worthiness, and informal connections and payments required to obtain a loan. This is consistent with a random sample of unregistered firms in large cities in Myanmar found that the biggest reported obstacles by informal forms were access to finance (36 percent), access to land (20 percent), corruption, crime, electricity supply, water supply, access to technology, and lack of skilled workers.

As in other developing countries, the widespread and persistent informal economy in Myanmar plays an important role in providing jobs and raising income for the poor and will require more policy attention to maximize its contribution to employment and the overall economy.

A survey in three periphery townships of Yangon found that the majority (82 percent) worked as casual labors, street vendors, trishaw drivers, and bricklayers. Half of the vendors earned less than 3,000 Kyat (US\$2.58) per day. While a skilled bricklayer could earn 10,000 Kyat (US\$8.6) per day, an unskilled one could only earn 4,000 Kyat (US\$3.44) per day. About 40 percent of working households under the survey earned between 5,000 and 10,000 Kyat (US\$4.3 and US\$8.6) per day, but many such jobs were only seasonal. During the monsoon season, income of vendors, construction workers, and trishaw drivers was much reduced (YCDC and Save the Children, 2016).

¹¹ Mohammed Amin, 2018, Background paper on Micro enterprises, to Cunningham, W. and Munog, R. eds., Myanmar Future Jobs: Embracing Modernity, Main Report, World Bank, 2018

Figure 2.4: Top Obstacles Faced by microentrepreneurs in Myanmar, 2015



Source: MCLPS, 2015

DISCRIMINATION IN THE LABOR MARKET AFFECTS VULNERABLE GROUPS

There are numerous examples of discrimination affecting labor market entry in the literature. While a full review of these is beyond the scope of the study, a few examples pertaining to inclusion of vulnerable groups are discussed.

Overall, women in the labor market earn about 30 percent less than men, even when controlling for factors that may drive the wage differential. The gender wage gap could be due to various factors stemming from the literature: “unobservable or unmeasured factors that lower women’s productivity (such as intermittent labor force participation, ownership of factors of production particularly land in highly agricultural Myanmar), employer or family (or self) selection out of more lucrative jobs, or competing time demands linked to gender roles (homecare, childcare). Unlike most countries, Myanmar labor laws do not stipulate the principle of equal remuneration for work of equal value, and do not contain a provision of gender nondiscrimination in hiring, which may contribute to the wage discrepancies (World Bank 2018, Background Paper on Labor Supply).

One study found that in garment factories in Yangon’s industrial zones, pregnant and married women were highly discriminated against in hiring (Action Labor Rights, 2016). Recruiters favored single women and, in some cases, women were even made to prove they were not pregnant to get a job. Furthermore, it was found that “some factories forced women to resign when they became pregnant to get out of paying maternity leave, and if they were given leave, upon returning to work they were treated as new recruits.”

For children with disabilities, discrimination begins at an early age with difficulties in accessing birth registration documents, enrolling in school, and staying in school (See Chapter 4). This all affects their ability to enter into the labor market and participate productively in society.

2.4 RISK AND RESILIENCE AFFECT ECONOMIC INCLUSION

Natural hazards and economic shocks have been shown to negatively impact economic inclusion and to slow poverty reduction. Over the past 25 years, Myanmar has suffered 24 disaster events, affecting more than 4 million people and causing US\$4.7 billion in damages.¹² When a natural disaster hits, there is much volatility in the economy, and it is often the poor that are hardest hit. The urban poor are particularly vulnerable as they typically live in less desirable and higher risk locations such as hillsides and flood-prone areas (see Chapter 3 discussion on slums). Economic and health shocks are also significant, particularly for those with no safety nets. Low-income populations in cities often do not have safety nets, family networks, or agricultural production to fall back on as they would in rural areas, leaving them at risk.

Myanmar is exposed to a range of natural hazards, including cyclones, earthquakes, floods, landslides, tsunamis, and volcanoes. A 2015 UNISDR study ranked Myanmar among the top three countries in terms of vulnerability to extreme weather events (UNISDR, 2015), and both extreme weather events and inconsistent weather patterns are anticipated to increase in frequency and intensity over time (HARP-F and MIMU, 2018). The population is also at risk to economic shocks which affect livelihoods in numerous ways. From July to September 2015, for example, the country was hit by severe flooding and landslides, which cut growth by 0.8 percent and led to an increase in the price of basic foods. With even the most affluent urban households spending up to 60 percent of monthly household income on food, the impact of weather events on food prices has a particularly negative impact on the urban poor (Ibid).

Shocks that cause a change in incomes can reduce investment in productive assets and can affect the education of future generations. Beyond the hardships caused by falling into poverty, the very risk of impoverishment can cause insecurity, increase stress and increase the sense of defenselessness; it

can result in individuals making decisions that they otherwise would not (Calvo & Dercon, 2013). In the longer term, uncertainty about future prospects can result in households postponing or reducing productive investments and can reduce investment in education. Other studies have estimated that populations affected by climate-related events can take as long as 20 years to return to their original development trajectory (Hsiang & Jina, 2014).

The main economy-wide shock households in Myanmar face is reported to be fluctuations in the prices of basic needs that stem from exchange rate shocks, supply shocks, or shocks to transport and logistic costs. Increases in food prices and in the prices of other basic commodities and services make it harder for the working poor in both rural and urban areas, who are net “consumers”, to meet their basic needs. (World Bank, 2017, Myanmar Economic Monitor)

The level of self-reported shock exposure of households in Myanmar is relatively high – almost half (48 percent) of all households reported at least one shock in 2014, the year preceding the 2015 MPLCS. At the household level, health shocks are the most frequently reported (at the national level). 80 percent of households in Myanmar report health care costs related to inpatient or outpatient care and, of these, nearly a fifth reported that the health shock faced by their household had a severe negative impact on welfare (World Bank, 2017a). Shocks are dealt with in different ways by households in Myanmar – borrowing money, increasing labor supply and reducing food expenditures.

¹² World Bank analysis based on data from EM-DAT database (<http://www.emdat.be/>) as reported in the Myanmar Southeast Asia Disaster Risk Management Project Document, World Bank, 2017

Box 2.1: Health Shocks and Welfare in Myanmar

Health shocks, such as unpredictable or unforeseeable illnesses that diminish household health status, are among the principal factors predisposing households to financial catastrophe and impoverishment in LMICs. Health shocks are associated with out-of-pocket spending (OOPs) for medical treatment, related costs such as the costs of transportation, as well as foregone income due to the patients' inability to work. Faced with health shocks, poor households sometimes forgo healthcare with negative consequences for their health and well-being. When households do incur healthcare costs, they often use negative coping strategies such as reducing other consumption, borrowing or selling vital household assets.

Such payments can be catastrophic if they are too large relative to the available household resources to the extent of disrupting the household living standards and limiting their ability to purchase other essential non-medical goods and services. Catastrophic health expenditures are defined as spending on health that is higher than 10-25 percent) of household income/expenditures (Wagstaff and Doorslaer, 2003) or exceeds 40 percent of the household's non-food expenditures

(Xu et al., 2005) in a given period. Defined either way, catastrophic health expenditures add to poverty by diverting household spending for non-health budget items.

Myanmar has relatively high OOPs, with an over 70 percent share of total national health expenditures in 2017, due to lower public spending on health, and limited cost-sharing mechanisms in the country, relative to its neighbors (World Bank, 2018). Consequently, nationally, 19 percent of households reported spending more than 10 percent of their total welfare expenditures on health, and 3.4 percent of the population was pushed below the poverty line due to health spending (World Bank, 2018). Of households that visited a health facility, 28 percent reported taking loans and 13 percent sold their assets to cover their OOPs. The levels of foregone healthcare are also high, estimated to be about 4 percent nationally. The most important predictors of high OOPs relative to household capacity and total household expenditure in Myanmar include income and the presence of chronic disease. Such risks are highly prevalent in slums (as well as in rural areas).



3

SPATIAL INCLUSION

KEY MESSAGES

- Urban and spatial planning and management is limited. Where plans do exist, they are not fully implemented. This results in deficiencies in service delivery, and for larger cities (e.g. Yangon), congestion and growing informal settlements.
- Given urban growth and a historical lack of investment in cities, the needs for sustainable infrastructure are massive across sectors – affordable housing, urban transport, water and sanitation, drainage and solid waste management.
- Those living in informal settlements are most affected by limited infrastructure and services and are often at high risk from natural hazards.

POLICY RECOMMENDATIONS

- Invest in equitable access to sustainable urban infrastructure across sectors, with targeting to vulnerable areas.
- Improve and expand affordable housing through upgrading, creating an enabling environment for housing supply and demand and crowding in the private sector for the low-income market.
- Improve integrated spatial planning for inclusive and resilient urban development through aligning plans across agencies, ensuring planning is gender and disability-informed, building capacity and investing in geospatial data and sharing platforms

3.1 INTRODUCTION

Given Myanmar's relatively early stage of urbanization, there is an important opportunity to shape cities so that they are well-planned, allow for job creation, affordable housing, and the movement of goods and people. Patterns of spatial inequality can hamper the benefits of economic development, exacerbate social inclusion, and ripen the conditions for instability. This is particularly acute in cities given the density.

Spatial planning in cities, if done well, can help to foster inclusion, and promote equitable access to land, housing, infrastructure, and basic services. Understanding the relationship between urban spatial structure and inclusion is important in understanding inter- and intra-urban disparities. Vulnerable groups

in Myanmar face challenges of spatial exclusion related to accessing urban land markets, housing, and basic services in large part due to where they live or their citizenship status.

Policy tools that can improve equity and spatial inclusion for the urban residents include the following: opening access to land use and urban planning; land tenure; providing housing and basic infrastructure; and urban upgrading (Baker & Gadgil, 2017). This chapter addresses the urban challenges in Myanmar through a "spatial inclusion" lens, focusing on approaches to urban planning, followed by a discussion of accessibility, affordability, quality and safety of key services.

3.2 URBAN AND SPATIAL POLICIES AND PLANNING

Spatial planning that is well integrated with transport planning can help to foster equitable access to urban opportunities and amenities. The pattern of a city's physical layout or urban form is one of the many factors that affect the populations' ability to access economic opportunities in their cities. Good planning allows for a spatial match between jobs, markets, public transportation, health and education services, recreational areas, and affordable housing.

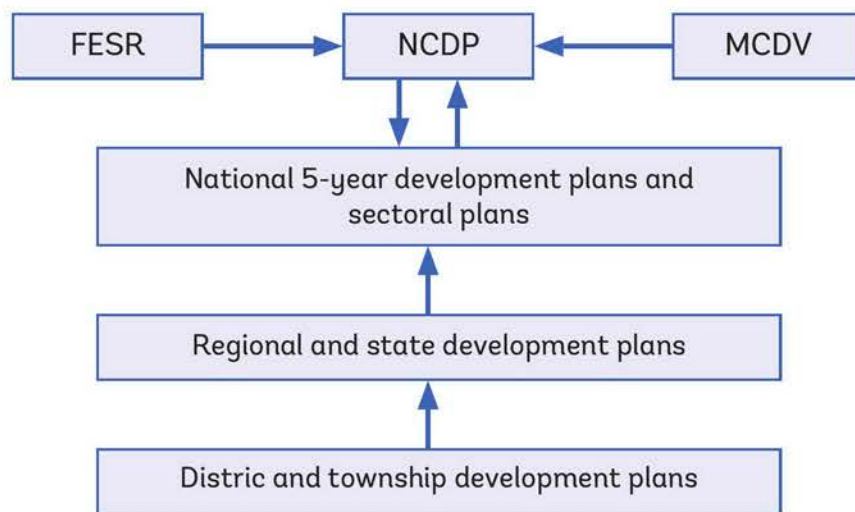
NATIONAL URBAN STRATEGIES

The great potential for urbanization in Myanmar presents a tremendous opportunity to put the right policies in place to influence the urbanization process for equity, as well as sustainability and city competitiveness. This translates to providing migrants, the urban poor, and excluded groups full access to the opportunities that cities can provide – jobs, land and housing, social and infrastructure services, public spaces and opportunities to participate in decision making. While many Southeast countries started

national planning with typical five-year or ten-year plans as early as in 1960s under the influence of the World Bank, Myanmar only started the process around 2010.

The government's Framework for Economic and Social Reforms (FESR) published in 2013 provides the latest guidance on strategic planning with short-term concrete outcomes between 2012 and 2015, laying out the foundation for long-term goals. Before FESR was in place, the National Comprehensive Development Plan 2011–2031 (NCDP) comprised four five-year plans, with goals set by the Federal Government and detailed plans compiled from the inputs from as local as townships and local agencies. Apart from NCDP and FESR are the Myanmar Comprehensive Development Vision (MCDV), Myanmar National Building Code, National Urban Policy, National Land Use Policy, National Transportation Master Plan, National Spatial Development Framework. While MCDV sets a vision of "two-polar growth with border development and better connectivity," the last four documents outline effective sectoral planning strategies with a strong emphasis on sustainable urban development.

Figure 3.1: Myanmar’s Administrative System and Planning Process



Source: Asia Foundation, 2016

Different policies to guide urban growth are at varying stages of being developed and implemented. Described below, these broadly aim to introduce strategic development objectives and a spatial hierarchy to guide urban development in Myanmar. At the state and regional levels, however, long-term urban planning is not commonly carried out.¹³

NATIONAL URBAN POLICY

The proposed National Urban Policy (NUP) – led by the Department of Urban and Housing Development (DUHD) at the Ministry of Construction (MoC) – aims to implement a comprehensive, long-term vision for urban development in Myanmar, with spatially integrated urban settlements, adequate infrastructure, and an enabling urban governance environment (UN Habitat, 2016). Driven by three central goals of economic development, livability and sustainability, NUP identifies (i) municipal governance and finance; (ii) urban and regional legislation; (iii) land governance; (iv) housing and (v) environmental and climate change issues as the five thematic areas for priority action. Once endorsed by the National Assembly, the intention is for NUP to guide any legislative changes and/or introduction of

new legislation, as well as to shape implementation strategies in the urban sector. A NUP Framework was recently discussed at a workshop held in June 2018, involving DUHD, representatives from the 14 states and regions and development partners; however, the timeline for implementation of the NUP is unclear.

NATIONAL SPATIAL DEVELOPMENT FRAMEWORK

As part of NUP, a National Spatial Development Framework (NSDF) is also being developed by MoC with support from UN Habitat (International Growth Centre, 2016). The Framework establishes a hierarchy of cities to shape future urban development, with:

- Yangon, Mandalay and Nay Pyi Taw as strategic growth centers;
- Regional secondary cities such as Patheingyi and Mawlamyine as clusters of commercial activities and transport links;
- Tertiary cities such as Lashio and Magway linking rural economies with agro-industrial processes; and
- “Special purpose cities” such as Tamu and Muse – border towns to support national reconciliation and promote trade.

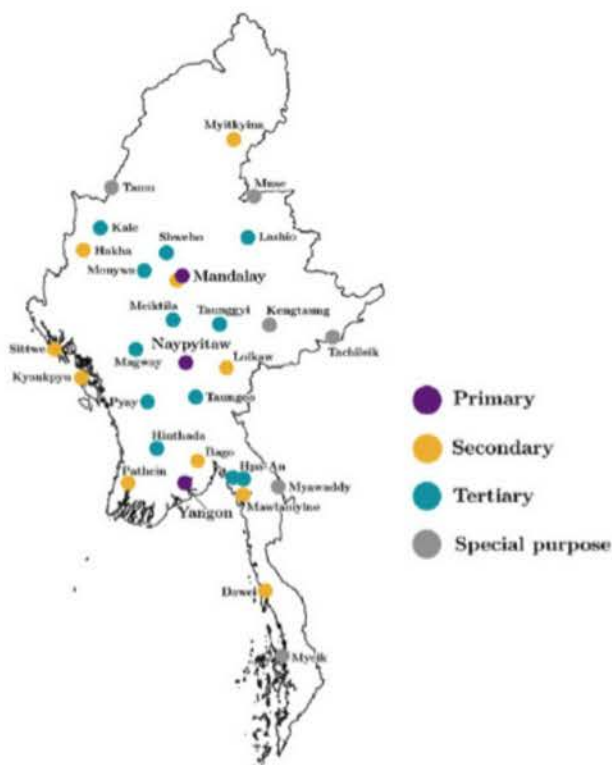
¹³ A 2016 study by The Asia Foundation found that no DDA had invested in strategic planning or policy-making regarding secondary cities and the role of urban development in regional socio-economic development. The study however suggests that this could be due to the relatively new subnational administrative structure in Myanmar and the need to address other more pressing concerns

Critically, the draft NSDF has also been factored in to the formulation of a National Transportation Master Plan, outlining a system of transportation axes that corresponds with the general orientation for nationwide spatial development (Ministry of Construction, 2016).

NATIONAL TRANSPORTATION MASTER PLAN

The National Transportation Master Plan recognizes the key role that transportation plays in fostering continued economic growth and social development. The Plan was developed to provide a framework for a long-term investment program that will enable the country to capitalize on integration in the ASEAN region, as well as to facilitate connectivity amongst the hierarchy of cities identified under NSDF. All modes of transport are covered by the plan, including road, rail, air, maritime and inland waterways. In addition, the Plan is aligned with Myanmar’s National Comprehensive Development Plan (NCDP) for 2011-2031, which establishes a long-term national development vision and strategic goals.

Figure 3.2: NSDF Hierarchy of Cities



Source: Myanmar Ministry of Construction, 2016

INSTITUTIONAL AND LEGAL FRAMEWORKS

INSTITUTIONAL FRAMEWORK FOR URBAN PLANNING AND URBAN GOVERNANCE

At the Union-level, spatial planning, land administration, housing and urban development come under the purview of the Ministry of Construction (MoC). Within MoC, the Department of Urban Housing and Development (DUHD) takes the lead in urban development policy-making, spatial planning and urban infrastructure development. While ongoing decentralization efforts mandate that local spatial planning responsibilities should be undertaken at the subnational level, challenges to realizing this vision exist, as discussed further in Chapter 5 below. DUHD continues to receive capacity-building training and assistance from international development partners such as JICA and has already undertaken town-level urban planning in 56 cities and towns across Myanmar. While DUHD has local offices in all fourteen states and regions, as well as a handful at the district level, the Department is not seen as having a significant presence outside of Nay Pui Taw.

Figure 3.3: NSDF Development Corridors



Source: International Growth Centre, 2016

The 2008 Constitution created 14 new state and region governments with semi-autonomous political and administrative structures, as well as the Union Territory of Nay Pyi Taw. Except for Mandalay and Yangon, each of the remaining state and region governments has a Department of Development Affairs (DDA), an umbrella institution that oversees Development Affairs Organization (DAO), which in turn are solely responsible for urban governance at the district/ township level. Myanmar has a total of 325 townships and 67 districts across the 14 states and regions (Asia Foundation, 2013).

Every DAO is guided by its own Development Affairs Law (or municipal law), but in practice all DAOs are similar, functioning as deconcentrated departments with the autonomy to plan and budget as required. Figure 3.3 lists the social and economic functions of DAOs, which are financed through a combination of revenue shared by the Union Government, a limited amount of transfers from State or Region Governments and other DAOs, as well as own-source

revenues (Asia Foundation, 2016). Urban planning is among the many legally-mandated functions of DAOs, but this is not commonly carried out.

Different administrative arrangements are in place for Yangon, Mandalay and Nay Pyi Taw. Yangon and Mandalay are managed by the Yangon City Development Committee (YCDC) and Mandalay City Development Committee (MCDC) respectively, both of which are responsible for delivery of urban infrastructure and services, land administration, urban planning, public health and tax collection. These are sizeable government agencies that manage multiple townships – 33 in Yangon, and 7 in Mandalay. YCDC and MCDC are not autonomous municipal governments, but instead come under the authority of the Yangon Region and Mandalay Region Governments. As the capital of Myanmar, Nay Pyi Taw is managed by a 10-member Nay Pyi Taw Council, with a General Administration Department (GAD) responsible for the administration of the Union Territory’s 8 townships.

Figure 3.4: Functions of DAOs



Source: Asia Foundation, 2016

Box 3.1: Urban Planning in Yangon City Development Committee (YCDC)

The City of Yangon Development Law, enacted in 1990, gives YCDC the mandate to plan and implement urban development work within the city, including land administration, urban planning, development of new towns, construction and maintenance of municipal infrastructure and delivery of basic urban services (e.g. water supply, sanitation, solid waste management, social/ community facilities). The law also grants YCDC the ability to determine the territorial limit of the City of Yangon, the ability to collect duties and taxes, as well as the right to take loans and

grants from external organizations. With the enactment of the Yangon City Municipal Law in 2013, YCDC is considered as being accountable to the Yangon Region Government. This is in line with Myanmar’s 2008 Constitution, which assigned all municipal affairs to States and Regions.

YCDC has a total staff of more than 10,000, spread across 20 departments as shown in Figure 3.4. This includes a dedicated department for City Planning and Land Administration.

Table 3.1: YCDC Departments

Administration Department	Engineering Department (Roads and Bridges)
Budget and Accounts Department	Engineering Department (Water Supply & Sanitation)
Work Inspection Department	Pollution Control and Cleansing Department
Co-ordination Department	Motor Transport and Workshop Department
Assessor’s Department	Central Store Department
Revenue Department	Playground, Park and Garden Department
Markets Department	Security and Disciplinary Department
Veterinary Department	Health Department
City Planning and Land Administration Department	Information and Public Relations Department
Engineering Department (Building)	Production Department

Source: YCDC

A study by a JICA team in 2013 found 4 YCDC bylaws relating directly to urban planning (JICA, 2013). While these defined the activities to be carried out – for example, the formulation of city development plans, processing of applications for construction – there was little by way of detail in terms of procedural responsibilities and enforcement. The City Planning and Land Administration department has also produced regulations relating to urban planning, but it is unclear whether these have legal standing. These include:

- Building setback from main roads;
- Building height;
- Special height control around the Shwedagon Pagoda; and
- Special height control around Yangon International Airport.

The administrative structure and roles and responsibilities of YCDC are expected to undergo further changes. On 29 June 2018, a new YCDC bill was approved by the Yangon Region Government, following several months of debate (San, 2018). Developed with the assistance of experts from Singapore and Japan over a period of two years, the new YCDC bill supplements the 2013 YCDC Law and proposes a number of changes to municipal governance. YCDC itself, for example, will undergo structural reform, whittling the existing 20 departments down to seven. The full array of proposed changes and the subsequent impact on the work of YCDC remain to be seen.

LEGAL FRAMEWORK

A comprehensive legislative system was inherited from the British colonial era, and several laws and regulations relating to urban planning and land management remain in place today. Some are outdated and require modification or replacement, particularly in light of the Constitution adopted in 2008. However, the revision of laws has been a slow process, and has been identified as an area in which international technical assistance should be provided (JICA, 2013). Table 3.2 below summarizes current legislation relating to urban planning, land management and housing¹⁴.

An Urban and Regional Development Planning Law is being drafted by DUHD, defining various types of spatial plans and roles and responsibilities for development and implementation across different levels of government. The Law proposes six different types of plans – (i) National Urban System Plan (the NSDF being a preliminary version); (ii) State/ Region

Urban System Plan; (iii) Concept Plan for a City or Town; (iv) Detailed Plans with specific land uses for limited areas; (v) Technical Urban Infrastructure Plans; (vi) Plans for Special Development Areas. Notably, the Law proposes the introduction of long-term Concept Plans, focusing on integrated land use and infrastructure needs with 50-year time horizons, as well as Detailed Plans that translate Concept Plan intentions to a smaller scale.

A Myanmar National Building Code has also been developed by the Myanmar Engineering Society with support from UN-Habitat, with the aim of introducing global standards for technical building norms and regulations. The Code was introduced in 2016. Aside from stipulating building regulations, the Code also specifies the types of building uses allowed under zoning plans, and suggests that the legal scope of zoning plans will be more clearly defined in the forthcoming Urban and Regional Development Planning Law (Myanmar Engineering Society, 2016).

Table 3.2: Laws Related to Urban Planning and Management

Law	Description
Land Acquisition Act (1894)	Stipulates that land can be acquired by the government if deemed to be in the public interest. Religious lands (pagodas, stupas, shrines and cemeteries) are exempt.
Rangoon Development Trust Act (1920)	The Act resulted in the establishment of the Rangoon Development Trust in 1921. The Trust was granted powers including the purchase/ acquisition of immovable property, project development planning and land management, levying of revenue taxes and lease fees of land, and establishment of laws and regulations as required. The Trust, based on the Act, managed long- and short-term leases of land and approved allowable uses. In this vein, the Trust issued land lease licenses, permits for construction, industrialization, agriculture and other special uses.
State's Housing Rehabilitation and Town and Villages Development Board Act (1951)	The Act was introduced in response to a housing shortage, which resulted from high levels of rural-urban migration into Yangon (then Rangoon) following independence. The Act stipulated that shelter would be provided through town and village development projects as well as public housing rehabilitation projects. To facilitate the provision of shelter, any land or building could be acquired through the 1894 Land Acquisition Act. It also allowed town and village development, supervision of public housing rehabilitation, land management and other related issues to be managed on a nationwide basis.
Urban Rent Control Act (1952, amended in 1960)	Similar to the Act above, the Urban Rent Control Act was introduced in response to the growing need to house in-migrants. The Act regulated urban rents to a low and affordable level and remains in effect today. Maintenance of rented properties has become a concern for many property owners as a result.
Farmland Law (2012)	Introduced in August 2012 under the 2008 constitution, the Farmland Law allows all farmers in Myanmar to enjoy land use rights.

Source: Adapted from JICA, 2013

¹⁴ Other related laws and regulations, such as the Town Planning Act (Draft Proposal) of 1961 and the Municipal Act of 1898 also exist, but their contents and continued application in today's context require confirmation (JICA, 2013)

Box 3.2: Urban Plans in Yangon

YCDC's Strategic Urban Development Plan of Greater Yangon (SUDP) (Phase I and II), or Greater Yangon Master Plan, aims to make Yangon a green city with sustainable and strong economic growth by 2040. The plan was developed in 2014 with JICA's assistance and proposes a set of urban development projects in a wide range of urban service sectors, e.g. solid waste management, power supply, economic zone development, transportation, etc. (Figure 3.4). It highlights the urgent need of density management, heritage conservation, and expanding Yangon city to be able to accommodate 10 million residents in the future. The plan also outlines a vision of building seven new satellite cities and five sub-centers around Yangon.

Furthermore, JICA completed the Comprehensive Urban Transport Plan of the Greater Yangon (YUTRA) in 2014, with additional studies on Yangon Urban Mass Transit (YUMRT) in 2015. The various Master Plans have progressed into Loans for the Greater Yangon Water Supply Improvement Project and the Yangon Circular Railway Line Upgrading Project. By expanding BRT networks, regulating parking, and establishing a unified transportation agency, YUTRA aims to double the number of trips per person per day by 2035.

Figure 3.5: Urban Function, Industrial Function, and Green and Water Function Envisioned in Greater Yangon Master Plan



Source: JICA, 2014

3.2 URBAN PLANNING CHALLENGES

The lack of comprehensive, integrated land use and infrastructure plans to guide urban growth is a noted shortcoming in Myanmar (Harvard Kennedy School, 2012). Where plans exist, the ability to ensure that growth takes place in accordance with plans is also not guaranteed. Globally, cities with well-managed and inclusive urban growth have largely succeeded by developing and implementing robust urban plans. Singapore and Tokyo, for example, are often cited as adopting international best practices in urban planning, incorporating a long-term, integrated view while also allowing for flexibility over the course of urban growth. Aside from informing land use decisions and timing infrastructure in tandem with growth, a comprehensive urban plan can facilitate the conservation of built and natural heritage, both of which are significant in cities such as Yangon and Mandalay.

LACK OF CLARITY OVER ROLES AND RESPONSIBILITIES

Municipal governance is unique in Myanmar, with no single agency having clear authority or decision-making power over the urban sector. The National Urban Policy Framework notes that Myanmar's "highly segmented municipal administrative landscape" has resulted in a "vast and permanent need for cooperation and coordination." Despite urban planning falling within the legal mandate of each DAO, no dedicated urban planning function exists at either the state/region or township level. Feedback from a DAO Director, as captured in the Asia Foundation's report *Municipal Governance in Myanmar*, indicated that "[t]he DAOs should do urban planning as per the law, but we can't. There is a gap between practice, duties and responsibilities."

Instead, MOC's Department of Urban and Housing Development (DUHD) is chiefly responsible for spatial planning in urban areas. It is unclear, however, as to the extent that this is done in close coordination with other public agencies and subnational governments, particularly because DUHD has a limited presence outside of Nay Pyi Taw (Asia Foundation, 2016). The role of DAOs in DUHD's urban planning is generally limited to facilitation and sharing of information.

Urban plans are commonly viewed as "belonging" to MOC, with little ownership on the part of DAOs. In addition, little emphasis is placed on the plans in terms of impacting DAOs' decisions on urban investments and services. As a result, public sector agencies are not always aware of each other's plans, often resulting in duplication or fragmentation of work, as well as missed opportunities for connectivity and more efficient delivery of services.

Within YCDC and MCDC, an urban planning function exists more clearly. YCDC, for example, has a City Planning and Land Administration department, among whose responsibilities are urban planning and urban design (see Box 3.1 above). At the same time, the division of responsibilities across different YCDC departments is unclear. As an example, YCDC has the mandate to assess applications for construction and issue building permits, but without a clear procedure in place, an application could go to either the City Planning department, or to the Engineering (Building) department. If assessed by the City Planning department, planners can check whether the proposed development is in line with regulations produced by their team, such as setback or height control. Any existing infrastructure constraints can also be verified. These checks provide an opportunity for YCDC to ensure that developments comply with a broader planning or urban design vision for a part of the city, and that the supporting infrastructure is able to support further development. However, if the proposal is sent to the Building team, there is no guarantee that such checks are carried out.

Aside from unclear roles and responsibilities within YCDC, urban governance and service delivery in Yangon also remains complex given that Union government agencies, the Yangon Region Government (YRG) and YCDC all operate in parallel. As shown in Figure 3.6, YCDC technically comes under the purview of the Ministry of Development Affairs, one of 12 Ministries overseen by the Chief Minister of Yangon. However, given Yangon's history of having a autonomous municipal governance structure, YCDC is seen as functioning more as a "thirteenth Ministry" than a downstream department. With the introduction of the new YCDC bill in June 2018, it remains to be seen as to whether a streamlined administrative structure



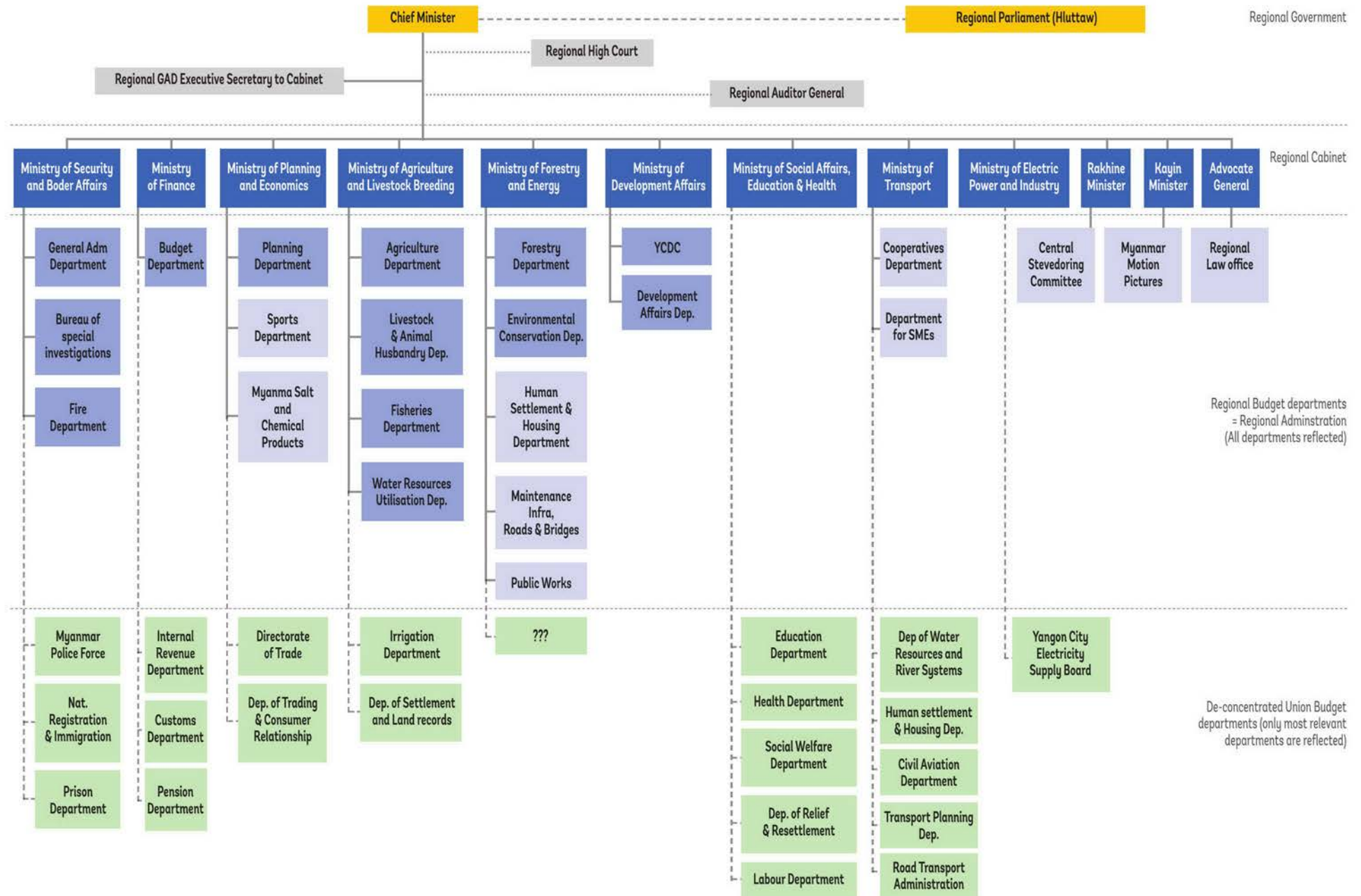
will enable clearer delineation and execution of roles and responsibilities.

LOW CAPACITY FOR IMPLEMENTATION

The unclear division of roles and responsibilities is further compounded by a lack of capacity to carry out assigned duties. The Department of Urban Housing and Development, for example, has only 20 trained urban planners on staff - a small number considering MOC's

primary role in undertaking spatial planning for cities and townships across the country. Within YCDC's City Planning and Land Administration Department, staff come from a variety of backgrounds, including engineering and architecture. Only a handful of staff have formal training in urban planning and design. A small number have been awarded scholarships for formal planning education, mostly in South Korea and Japan, and donor assistance at both the Union- and City-level has included a focus on capacity-building in urban planning.

Figure 3.6: Administrative Structure, Yangon Region Government



3.3 LAND

Secure land tenure and property rights are essential to inclusive urban development, as they underpin economic development and social inclusion. When land is poorly managed, associated problems often lead to disputes and corruption, land degradation, and lost socio-economic opportunities. While many countries have tried to harmonize modern statutory laws with customary ones, land tenure and property rights still are often affected by complex and contradictory set of rules, laws, procedures, customs, traditions, perceptions and other barriers (UN-Habitat and GIZ, 2014). In Myanmar, a good number of citizens, especially in rural areas, have historically possessed and used land without formal documentation. As a result, their land and property rights are not secure, causing fundamental vulnerability in their livelihoods. The 2008 Constitution stipulates that land is owned by the State and that citizens have property rights, and it is essential that these rights are secured to achieve a market-led economy with a vibrant land market.

Other aspects of exclusion to land in cities noted in the literature relate to citizenship (or obtaining proof of citizenship through the Citizenship Scrutiny Card which can be more difficult for ethnic or religious minorities), documentation of inheritance, transfers and ownership, literacy in Burmese, and high costs of registering deeds which can be prohibitive for low or middle-income families (Rhoades, 2017, Literature review, social inclusion in Myanmar. background paper).

The National Land Use Policy (NLUP) includes a dedicated section on gender equality, guaranteeing, among others, equal inheritance rights and land tenure to women. A study drawing on paralegal casework in Myanmar, however, found that while the law is gender-neutral in issues relating to land and property ownership, 80 percent of clients who sought paralegal assistance for land registration issues were men, likely because men more commonly hold land rights. 87 percent of male clients were also married, suggesting that in married households, it is typically the case that men hold legal rights to the couple's property. More than 15 percent of female clients lacked land possession documents, compared to only 5 percent of men. This suggests that women are more vulnerable to land-related disputes as they more

commonly lack evidence of their right to ownership (NAMATI, 2016).

LAND POLICY AND REGULATORY FRAMEWORK

Myanmar's current land administration challenges are legacies of the British colonial period and subsequent regimes. There are multiple and overlapping institutional mandates (World Bank, 2017c) and legal and regulatory frameworks (as shown in Table 3.3 and Table 3.4), as well as a weak system of land classification. The situation is further exacerbated by indeterminate land entitlements; lack of a comprehensive land registry and geospatial information; lack of a formal method to protect and recognize customary land rights; lack of Free, Prior and Informed Consent (FPIC) process (critical for Myanmar's Indigenous population); excessive use of state power on eminent domain; and policies for land concessions that override customary rights and other rights holders (FAO, 2016). Weak awareness and knowledge of land laws, land policies, and land regulations by government staff, business, civil society and professionals has contributed to disputes, conflicts, and confusion in Myanmar's land sector (World Bank, 2017c).



Table 3.3: Government Agencies Providing Land Services

Agency	Description
Department for Agricultural Land Management Statistics (DALMS)	Under the Ministry of Agriculture, Livestock, and Irrigation's (MOALI), DALMS takes most of the responsibility for land services.
General Administration Department (GAD)	Under the Ministry of Home Affairs (MoHA), GAD is responsible for administering and managing all non-forest and non-farm land in the country, which included town, village, religious and common land, riverbanks, ponds, cemeteries, grazing pastures and disposable state land. While GAD holds management responsibility, technical functions rest with the SLRD in most cases.
Settlement and Land Records Department (SLRD)	Established in 1907, the SLRD's roles were the fixation of land revenue rates, assessment of land revenue, maintenance of registers on land administration cases; and surveying of land and preparation of maps for the said purpose. In 1962, SLRD main objectives were redefined to the collection and compilation of agricultural statistics (Myanmar Agriculture, 2018).
Survey Department (SD)	Scales and supports the first and second order geodetic network of the country.
City Development Committees (CDCs)	In the three main cities of Myanmar, Yangon, Mandalay and Nay Pyi Taw, City Development committees provide land services instead of DALMS and GAD.

Source: World Bank, 2017

Table 3.4: Laws and Regulations Related to Land Rights

Agency	Description
The (Lower Burma) Land and Revenue Act, 1879	<ul style="list-style-type: none"> • The first law to clarify rights related to cultivable (agriculture) land • The law sets the assessment and collection of land revenue
The Upper Burma Land and Revenue Regulation, 1889	<ul style="list-style-type: none"> • Land revenue collection extended to Upper Burma
The Land Acquisition Act, 1894	<ul style="list-style-type: none"> • The law determines boundary demarcations and settlement operations for land revenue for land within towns and villages • The law also determines the procedures related to eviction from land acquired by the government
The Lower Burma Town and Village Lands Act, 1899	<ul style="list-style-type: none"> • The order allows vacant lands and fallow lands at the disposal of the Government to be transferred
Land and Revenue Order, 1911	<ul style="list-style-type: none"> • Sets rules on processes of objections
Land Acquisition Rules, 1932	<ul style="list-style-type: none"> • Compilation of land acquisition related laws including notices and directions, and provided procedures for land acquisition
Land Acquisition Manual, 1947	<ul style="list-style-type: none"> • The Law determines rights of land ownership for certain cases • The law serves as a basis for all land to be nationalized and distributed
Land Nationalization Act, 1953	<ul style="list-style-type: none"> • The Law prohibits a person to sell, buy, give away, pawn, exchange or transfer by any means immovable property with a foreigner or foreign owned company
Transfer of Immovable Property Restriction Law, 1987	<ul style="list-style-type: none"> • Determines procedures and conditions for: i) application and conditions for usage of vacant, fallow, and virgin lands; ii) conditions for guarantees and land revenue; and iii) roles, regulations, and monitoring to be imposed upon usage of lands
Vacant, Fallow, and Virgin Lands Management Law,	<ul style="list-style-type: none"> • The law determines boundary demarcations and settlement operations for land revenue for land within towns and villages • The law also determines the procedures related to eviction from land acquired by the government

Source: JICA, 2016

LAND ADMINISTRATION AND TENURE

The lack of land ownership records is a challenge that Myanmar is currently addressing. Land records are in poor condition and people often do not register land transactions. Land use certificates (LUC) often contain errors and inconsistencies and many of them must be replaced. Many of the survey and Kwin¹⁵ maps have not been properly maintained and deed registers for updating plot ownership are often not used. The lack of an up-to-date land record have led to disputes concerning alleged land grabbing and government staff are often tasked with resolving time consuming individual cases (World Bank, 2017c). Issuing certificates of land ownership and ensuring that all land measurements are made on a common system and digitizing the data are among the highest priorities. A Land Information System (LIS) has been piloted to identify land titles, zoning ordinances affecting the land use, and the status of any planning permit or development on the land (Ministry of Construction, 2016).

NATIONAL LAND USE POLICY OF 2016

In January 2016, the Government adopted the new National Land Use Policy (NLUP), intended as a living document that will form the basis of a new National Land Law. Driven by the need to unify the current diverse set of lands laws in the country, the NLUP establishes policies to manage, administer, and use the land resources of Myanmar for the purposes of “livelihood improvement of the citizens and sustainable development of the country”. Furthermore, NLUP outlines the common vision among Myanmar’s government, civil society, businesses and academia for building the infrastructure to provide institutionally sanctioned, automated means for easy access and sharing of authoritative geospatial information and delivery of land related e-services (World Bank, 2017c).

To successfully implement the NLUP, it is essential that a union-level council is established to convene the fragmented groups that may attempt to implement the policy in different ways. The council is anticipated to be a “technical advisory body that includes representatives from different stakeholders’ groups, such as farmer associations, ethnic nationalities, civil society, academia, the private sector and others.” Furthermore, to implement NLUP, Myanmar must develop a comprehensive legal and regulatory framework (which may include amending outdated laws, regulations and procedures) that ensures a land governance system this fair and inclusive. Finally, it is essential that the nascent geospatial infrastructure and services be systematically supported in the process (and eventually development into a comprehensive national spatial data infrastructure (NSDI)) to ensure overall efficiency and effectiveness of the sector (Ibid).

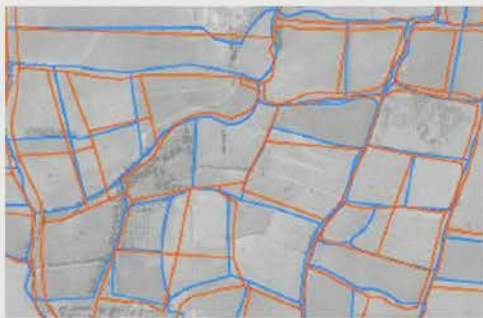


¹⁵ The Kwin map are the basis for settlement planning and management, land tax collection, crop statistic data compilation and land rights allocation mutation

Box 3.3: Smart Cities - Kwim Map Digitizing and Spatial Data Procession Under Land Administration and Management Program (LAMP)

Smart cities focus on the strategic use of new technology and innovative approaches to enhance the efficiencies and competitiveness of cities (UN-Habitat, 2015). In the land sector, smart city technologies can be utilized to establish and improve the fluidity of land markets. Poor land management may lead to disputes, land grabbing, land degradation, and lost socio-economic opportunities. Land-related smart city technologies such as satellite imagery and geospatial data, open-source GIS software, digitized land administration systems (LAS), and national spatial data infrastructure (NSDI), can reduce errors and inconsistencies in land titling and certificates, making land registry and transfer processes efficient, transparent and accessible.

The Land Administration and Management Program (LAMP, 2013-2015) focused on upgrading the existing pilot Land Administration System (LAS) computer system and database at the township level for long-term use and development. The new spatial data process involved an open-source GIS system (for cost efficiency) and included: 1) map scanning, ii) image enhancement for legibility; iii) geo-referencing of the Kwin map; iv) digitizing of each holding shown on the Kwin map; v) digitization of the holding boundary based on satellite imagery and calculation of land area; and vi) preparation of field maps for field visits.



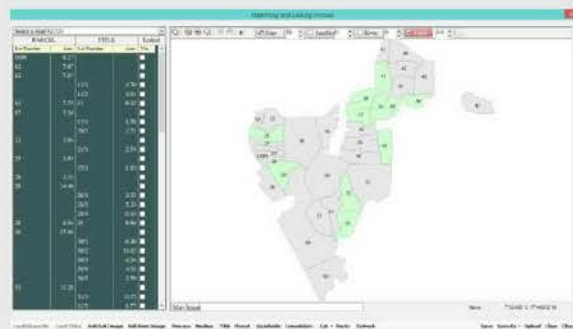
Digitized data plotted out to highlight difference in Kwin map and satellite image.

ID	List Number	Area	Owner	ID	Area	Owner
02	1.50	၁၅၀၀	ကျောင်းကန်ရွာ	02	၁၅၀၀	ကျောင်းကန်ရွာ
03	၄.၀၀	၄၀၀၀	ကျောင်းကန်ရွာ	03	၄.၀၀	ကျောင်းကန်ရွာ
04	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	04	၁၀.၀၀	ကျောင်းကန်ရွာ
05	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	05	၁၀.၀၀	ကျောင်းကန်ရွာ
06	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	06	၁၀.၀၀	ကျောင်းကန်ရွာ
07	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	07	၁၀.၀၀	ကျောင်းကန်ရွာ
08	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	08	၁၀.၀၀	ကျောင်းကန်ရွာ
09	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	09	၁၀.၀၀	ကျောင်းကန်ရွာ
10	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	10	၁၀.၀၀	ကျောင်းကန်ရွာ
11	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	11	၁၀.၀၀	ကျောင်းကန်ရွာ
12	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	12	၁၀.၀၀	ကျောင်းကန်ရွာ
13	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	13	၁၀.၀၀	ကျောင်းကန်ရွာ
14	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	14	၁၀.၀၀	ကျောင်းကန်ရွာ
15	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	15	၁၀.၀၀	ကျောင်းကန်ရွာ
16	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	16	၁၀.၀၀	ကျောင်းကန်ရွာ
17	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	17	၁၀.၀၀	ကျောင်းကန်ရွာ
18	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	18	၁၀.၀၀	ကျောင်းကန်ရွာ
19	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	19	၁၀.၀၀	ကျောင်းကန်ရွာ
20	၁၀.၀၀	၁၀၀၀၀	ကျောင်းကန်ရွာ	20	၁၀.၀၀	ကျောင်းကန်ရွာ

Land records are compared on the quality control screen to identify errors.

List Number	Area	List Number	Area	List Number	Area	List Number	Area	List Number	Area	List Number	Area	List Number	Area	List Number	Area
01	0.00	0.00	0.00	01	0.00	01	0.00	01	0.00	01	0.00	01	0.00	01	0.00
02	0.00	0.00	0.00	02	0.00	02	0.00	02	0.00	02	0.00	02	0.00	02	0.00
03	0.00	0.00	0.00	03	0.00	03	0.00	03	0.00	03	0.00	03	0.00	03	0.00
04	0.00	0.00	0.00	04	0.00	04	0.00	04	0.00	04	0.00	04	0.00	04	0.00
05	0.00	0.00	0.00	05	0.00	05	0.00	05	0.00	05	0.00	05	0.00	05	0.00
06	0.00	0.00	0.00	06	0.00	06	0.00	06	0.00	06	0.00	06	0.00	06	0.00
07	0.00	0.00	0.00	07	0.00	07	0.00	07	0.00	07	0.00	07	0.00	07	0.00
08	0.00	0.00	0.00	08	0.00	08	0.00	08	0.00	08	0.00	08	0.00	08	0.00
09	0.00	0.00	0.00	09	0.00	09	0.00	09	0.00	09	0.00	09	0.00	09	0.00
10	0.00	0.00	0.00	10	0.00	10	0.00	10	0.00	10	0.00	10	0.00	10	0.00
11	0.00	0.00	0.00	11	0.00	11	0.00	11	0.00	11	0.00	11	0.00	11	0.00
12	0.00	0.00	0.00	12	0.00	12	0.00	12	0.00	12	0.00	12	0.00	12	0.00
13	0.00	0.00	0.00	13	0.00	13	0.00	13	0.00	13	0.00	13	0.00	13	0.00
14	0.00	0.00	0.00	14	0.00	14	0.00	14	0.00	14	0.00	14	0.00	14	0.00
15	0.00	0.00	0.00	15	0.00	15	0.00	15	0.00	15	0.00	15	0.00	15	0.00
16	0.00	0.00	0.00	16	0.00	16	0.00	16	0.00	16	0.00	16	0.00	16	0.00
17	0.00	0.00	0.00	17	0.00	17	0.00	17	0.00	17	0.00	17	0.00	17	0.00
18	0.00	0.00	0.00	18	0.00	18	0.00	18	0.00	18	0.00	18	0.00	18	0.00
19	0.00	0.00	0.00	19	0.00	19	0.00	19	0.00	19	0.00	19	0.00	19	0.00
20	0.00	0.00	0.00	20	0.00	20	0.00	20	0.00	20	0.00	20	0.00	20	0.00

Automated report on errors based on matching tool.



Holding with a match in LUC records are highlighted. If there is no match, the holding will be further investigated.

Source: World Bank, 2017c

3.4 HOUSING

Given the recent urban population growth, Myanmar faces the challenge of shortages in adequate and affordable housing in cities. Furthermore, like other developing countries in the region, the housing sector in Myanmar is characterized by the dichotomy of formality and informality (UN-Habitat, 2018). Since the economic liberalization, major cities in Myanmar have focused on the construction of high-rise apartments and condominiums, adding stress to the affordability of housing as well as the cities' basic infrastructure and services. Furthermore, forced displacements from natural disasters such as the 2008 Cyclone Nargis has led to rapid rural-urban migration, and a growing population living in informal/semi-formal settlements.

A multidimensional disadvantage Index (MDI) using the 2014 Census data found that among 14 indicators, the most common disadvantage is housing, with nearly half of the country's population experiencing a disadvantage in this domain.¹⁶ Ensuring the provision of low cost and affordable housing is a priority in urban areas.

3.4.1 ISSUES AROUND EXCLUSION IN THE HOUSING MARKET

In Myanmar, a majority of the population still live in semi-temporary or temporary housing structures. In Yangon, only 25 percent of the households reside in formal housing units such as condominiums, apartments, and brick houses (also categorized as "pucca"). The remaining 75 percent of households live in semi-pucca or temporary structures that require frequent upgrades and retrofitting, as shown in Table 3.5 (ADB, 2018b). Many of these use non-permanent building materials such as bamboo, wood, mud plaster, and corrugated sheets, which expose the homes to various climate-related and disaster risks. Housing development in Yangon and major cities must therefore consider the need for reconstruction, upgrading, and/or retrofitting of semi-pucca and temporary structures, which constitutes over a majority of the current housing stock.

In terms of ownership, approximately 25 percent of households are renters, with many aspiring to move towards ownership (Table 3.6). For such households, it is essential that affordable housing and housing finance is available.

Table 3.5: Conventional Households by Types of Housing Units in Yangon

	Total	Type of Housing Unit							
		Apartment/ Condo	Bungalow/ Brick House	Semi- Pucca House	Wooden House	Bamboo	Hut 2-3 Years	Hut 1 Year	Other
North Yangon	566,167	41,378	40,544	60,132	265,847	138,340	7,517	5,843	6,566
East Yangon	486,790	112,666	47,588	54,772	211,653	47,644	3,781	2,566	6,120
South Yangon	339,205	4,815	12,276	17,031	142,082	152,721	5,319	3,226	1,735
West Yangon	190,782	108,005	16,639	18,706	39,841	5,714	422	230	1,225
Total	1,582,944	266,864	117,047	150,641	659,423	344,419	17,039	11,865	15,646

Source: ADB, 2018

¹⁶ Ministry of Population and Labor and the World Bank, 2018, "Multidimensional Welfare in Myanmar"

Table 3.6: Conventional Households by Types of Ownership in Yangon

	Total	Type of Ownership					
		Owner	Renter	Provided Free (Individually)	Government Quarters	Private Company Quarters	Other
North Yangon	566,167	344,903	156,717	15,620	30,483	9,924	8,520
East Yangon	486,790	271,801	154,948	22,849	20,597	6,244	10,351
South Yangon	339,205	293,928	26,768	7,831	6,887	1,847	1,944
West Yangon	190,782	110,146	49,420	7,556	19,366	2,273	2,021
Total	1,582,944	1,020,778	387,853	53,856	77,333	20,288	22,836

Source: ADB, 2018b

3.4.2 AFFORDABLE HOUSING

The National Housing Policy White Paper found that only 14 percent of all households in Yangon can afford housing units through formal provision channels (UN-Habitat, 2018). Rapidly rising rental prices in Yangon have forced low-income residents to move into cheaper but poor condition rental units or in worse cases, out of the rental housing market to squat in unhealthy, unsafe conditions. In Yangon's poorest settlements, it is estimated that 73 to 96 percent of residents live in houses with poor or very poor quality (Ibid). Formal residents from the inner city who cannot afford are forced to seek more affordable rental options in the city's periphery areas (Forbes, 2016).

The large number of informal settlements in cities of Myanmar, detailed in the following section, reflect the undersupply of affordable housing options. The short supply of land for affordable housing and high land prices are key reasons for high housing prices. Large pieces of land were transferred to private developers and individuals associated with the military in 2010 and 2011, which led to a shortage of government-owned land to develop affordable housing. Since the introduction of the Land Law in 2012, land prices for farmland increased 14 to 90 times, especially farmlands which were subdivided for residential purposes. Furthermore, Myanmar's underdeveloped housing finance sector (detailed in the following chapters) has not had a transparent and inclusive system in place and thus has undermined the effective supply of affordable housing (UN-Habitat, 2017).

3.4.3 INFORMAL SETTLEMENTS

While there is no national level statistic on urban populations living in informal settlements, it is estimated that slum residents account for at least 10-15 percent of Myanmar's population (International Growth Centre, 2016). Rural-urban migration as part of the country's economic transition, as well as recent natural disasters, have been major contributing factors to increased urban informal settlements, which has resulted in a chronic shortage of affordable housing in major cities (Ministry of Construction, 2016).

Based on the latest survey conducted by General Administration Department (GAD) in 2017, the total area occupied by informal settlements in Yangon is over 2,000 acres with approximately 475,000 people (or 155,000 households) living in such settlements. Furthermore, based on remote sensing data, it is estimated that a significant amount of these informal settlements (especially those in peri-urban Yangon as many as 270 out of 423 settlements) formed between January 2010 and July 2017 (ADB, 2018b). Many of these informal settlements are located in peripheral areas such as Htantabin, Hmawbi, Twantay, Hlegu, or Thanlyin, several of which are near the city's industrial zones and have limited urban services (JICA, 2013).

Approximately 77 percent of the informal settlements identified by Mapping Yangon are located in these peri-urban resettlement areas (UN-Habitat and Cities Alliance, 2017). Without sufficient options for affordable housing, higher rents have pushed the urban poor from central areas to fringes of cities

where inexpensive accommodation options are available; however, the provision of basic services is limited.

The housing conditions in the settlements are poor, with most households living in temporary houses made of non-permanent structures, in a space under 200 square feet in size (Ibid). Houses in Yangon’s slums are also vulnerable to fire accidents and collapsing. Informal settlements are usually overcrowded without adequate fire lanes. Most houses in slums are built with flammable materials such as bamboo, palm leaves, and wood; and residents commonly use firewood for cooking. The Mapping Yangon project estimated that 92 percent of the informal settlements were exposed to moderate to high risk of fire accidents. The quality of most self-built houses is such that they do not meet basic standards for emergency responses.

Substandard houses elevated on bamboo stilts are also vulnerable to collapsing from flooding or strong wind (UN-Habitat and Cities Alliance, 2017) (YCDC and Save the Children, 2016). The informal settlements are often distributed on low-lying land, adjacent to major water courses such as the Hlaing River, Pagundaung Creek, and the Yangon River. They are susceptible to seasonal flooding and tidal flows, which add to their vulnerability.

Although urban planning is generally lacking for cities in Myanmar to cope with the rapid urbanization process, recent urban policies have started recognizing the issue of informal settlements. Addressing the issue of slums has not gained adequate policy relevance in the past few decades due to its political and technical complexity (DIIS, 2017).

Recent high-level urban policy documents such as the Rapid Urban Diagnostic Report, National Urban Policy Framework, and National Housing Policy White Paper have recognized the issue of slums. However, there is no comprehensive informal settlement policy. The national government is pursuing small-scale settlement planning for secondary cities, particularly focused on small villages in forest areas and regularizing the villages for habitation under the GAD. For major cities, the regional government and CDCs have been addressing the issues. In Yangon, the Yangon Regional Government (YRG) has announced a city-wide plan to address the slum and squatter issue through assessment, resettlement, and enforcement of relevant rules and laws (Ministry of Construction, 2016).

3.4.4 MILLION HOMES PLAN

To address the growing housing shortage, the government put forth a “Million Homes Plan” to develop one million new housing units by 2030. MOC’s Department of Urban and Housing Development (DUHD) has formulated a plan to supply 20 percent of the total number of homes, of which 90 percent are to be low-cost housing for low-income households, and 10 percent are to be affordable housing units for lower middle-income households. Between 2010 and 2016, DUHD was able to complete only 60,000 low-cost and affordable homes across Myanmar, or an average of 10,000 units per year. The goal of building a million homes by 2030 depends heavily on DUHD’s capacity, which is currently far from meeting the demand (Table 3.7) (ADB, 2018b).

Table 3.7: Low-Cost and Affordable Housing Projects Completed by DUHD (2010-2016)

Period	Yangon Region		Other Towns		Construction Cost (million Kyat)	
	Buildings	Family Units	Buildings	Family Units	Total Cost	Cost per Unit
2010-11	27	336	6	46	6,075	16
2011-12	266	1,223	12	130	30,254	22
2012-13	231	1,204	-	-	43,282	36
2013-14	186	2,380	77	738	69,927	22
2014-15	218	5,678	64	1,248	131,442	19
2015-16	249	6,993	69	2,220	131,336	14

Source: ADB, 2018b.. Original source: Department of Urban and Housing Development, Myanmar Statistical Yearbook, 2016

3.4.5 NATIONAL HOUSING POLICY AND STRATEGY

Management of the housing sector, including urban development, has been devolved to the states and regions under the 2008 Constitution. However, at the policy level, DUHD plays an important role in building the capacity of states and regions in developing the appropriate policies and action responses to housing situations (Ministry of Construction, 2016).

Committed to providing “appropriate affordable housing for all in sustainable inclusive communities,” DUHD initiated the process of preparing a National Housing Policy in 2014. With support from UN-Habitat, a National Housing Policy and Strategy was prepared in 2017, which aims to provide a blueprint for government action in support of Myanmar’s housing and urban communities. The strategy involves two approaches (Table 3.8), one which focuses on the development of a modernized formal housing sector for the middle class, and the other which focuses on the large numbers of poor informal/semi-formal communities residing in housing made of traditional impermanent materials with limited services (UN-Habitat, 2017).

In addition to the National Housing Policy, laws and regulations pertaining to building codes and construction permit systems, including the Urban and Regional Development Planning Bill, National Housing Development Bill, and Myanmar National Building Code, have been in preparation (Table 3.9), however have not been enacted yet (JICA, 2018).

HOUSING FINANCE

Housing finance in Myanmar, both supply (financing for housing developers) and demand (financing for home buyers), remains underdeveloped. The general financial system in Myanmar is small and underdeveloped, with access to basic financial services extremely low. Currently, only 23% of adults in Myanmar have access to an account at financial institutions, compared to nearly 80% in Thailand and 90% in Malaysia (Ibid). Housing finance is furthermore a small proportion of the total credit market, and access to housing finance is even more limited.

As with most banks, only higher income households qualify for a housing loan as prices for houses that can serve as an acceptable collateral for the loan are typically high. The underdeveloped and restrictive financial system makes housing financing inaccessible to the majority of the population. For example, housing loans are generally non-amortizing, with interests only loans for a maximum term of one year; the Central Bank has, however, recently allowed some flexibility in the repayment term, which can now go up to 3 years (Ibid). Other challenges are summarized in Table 3.10.



Table 3.8: National Housing Policy and Strategy 2017 Approach

Formal Market	Informal/Semi-Informal Market
<p>Establish the rule of law, through:</p> <ul style="list-style-type: none"> • Formalize land title and land and housing transactions • Nominate a single responsible body for decisions, avoiding legal and procedural overlap • Lay out Master Plans and five-year development plans that allow for projected urban expansion and seek to acquire and release land in a timely fashion • Establish transparent clear approval processes integrated locally within one-stop shops, while following national and local plans • Establish a formal financial sector with contract-based loans and mortgages 	<p>Encourage people to earn livelihoods without undue interference or harassment, while improving community safety and quality of life, through:</p> <ul style="list-style-type: none"> • Land for incremental building, with a range of plot sizes, paying attention to access and right-of-way, livelihoods and inclusiveness • Settlement upgrading according to good practice, with certificates of occupation • Building community solidarity and representation
<p>General principles of market economics and consumer-driven choice are to prevail, through:</p> <ul style="list-style-type: none"> • Producing a range of unit types according to demand • General principles of full costing with transparent subsidy • Greater competition in all markets including finance, small and medium enterprises to provide variety and customization • Value capture on speculative land profits, land banking solutions • Development of a formal rental sector 	<p>General sustainability principles are to be supported in all activities, including:</p> <ul style="list-style-type: none"> • Low footprint • Resilience and disaster readiness • Inclusiveness and democratic rights • Attention to cultural values, ethnic identity, gender • Support of vulnerable groups

Source: UN-Habitat, 2017

Table 3.9: Status of Laws and Regulations Related to Housing

Urban and Regional Development Planning Bill	<ul style="list-style-type: none"> • Defines the establishment of Urban and Housing Development Region/State Committees, including the tasks and types of plans to be formulated. • Status: The Bill has been drafted and approved by the MoC December 2014, submitted to the Union Attorney General Office (UAGO) for comments, and is under final revision based on comments from UAGO.
National Housing Development Bill	<ul style="list-style-type: none"> • The bill covers the regulation related to the use of public land for housing, supply of housings, and establishment of committees in the state/region and autonomous local government levels. • Status: The bill has been drafted and approved by MoC, submitted to UAGO for consideration, and is under final revision based on comments from UAGO.
Myanmar National Building Code	<ul style="list-style-type: none"> • The Myanmar National Building Code (MNBC) is the unified building code for the country, which aims to provide city planning standards for building permitting to ensure security and safety during disasters and improve the living environment. MCBC also aims to standardize architectural design and construction, which has been developed with the support of the Myanmar Architect Council (MAC) and Myanmar Engineering Society (MES). • Status: MNBC has been approved at the cabinet meeting and is regarded as the guideline for building permits for local authorities.

Source: JICA, 2018

Table 3.10: Challenges of the Commercial Sector Housing Finance

- The weakness in the enabling environment and overall financial infrastructure
- Restrictions on the loan term to one to three years, and the related use of interest only loans
- Restrictions on the interest rates lenders can charge for different loan products
- The lack of a chapteral title law, where multi-family housing is the dominant urban house-type (which a new condominium law has come into effect, the apartment law is not still in place)
- The requirement that the property has to be fully paid for in order to obtain a title
- High transaction costs to transfer title limiting secondary market transactions in housing
- Lack of data to inform risk assessment for underwriting of housing loans (such as the lack of reliable income data and the lack of credit information bureau)
- Loan to value calculations for most banks are quite conservative
- Loans to private developers are based on the same collateral principles as individual loans (i.e. there is no project cash-flow based lending)

Source: ADB, 2018b

However, Myanmar has made significant efforts towards improving the domestic housing finance system. In 2013, under the initiative of MoC, the government established the Construction and Housing Development Bank (CHDB), as a development bank with semi-government ownership, to stimulate housing construction by providing affordable loans to potential developers and home owners. CHDB, which received a commercial banking license from the Central Bank of Myanmar in 2014, is intended to meet the requirement for a specialized financial institution that extends long-term housing loans at affordable interest rates (Ibid). The microcredit loans are intended for poor households and mainly for housing of 40 square meters built at a cost of MK10 million (excluding the cost of land which is subsidized by the government) (ADB, 2017a). CHDB can provide loans of up to 70 percent of the total cost of development projects, which means that a potential home owner must self-finance the remaining 30 percent (Ministry of Construction, 2016).

CHDB has been providing loans to housing developers through project finance, as well as through retail housing finance to home buyers. However, there remains a huge unmet demand. Given this challenge, various development partners, including Japan and Korea have been providing technical assistance for CHDB's capacity building. Under the Housing Finance Development Project (2018-2022), for example, JICA will provide a 15 billion JPY loan, administered by the Myanmar Economic Bank (MEB), to allow CHDB to finance retail mortgage loans at low interest rates with a term of up to 15 years (ADB, 2018b).

In addition to CHDB, MoC also set up a Revolving Fund to support the construction of low-cost housing units in 2014. The Revolving Fund is intended as a project financing mechanism to bridge the two- to three-year period from construction to sale completion. The Union Government released 100 billion MMK to the Revolving Fund, enhancing DUHD's capacity to undertake more housing projects¹⁷. With the additional sources from the Revolving Fund, in 2016, DUHD was able to increase its housing delivery by 33 percent from the previous year. As the program is still young, the leverage effect of the Revolving Fund (specifically the cash-flows from the housing sales that would replenish the Fund) will require a thorough analysis in the near future (Ibid).

¹⁷ Other funding sources for DUHD include government budget allocation of around 60 billion MMK per year, and project loans from CHDB at around 82 billion MMK in 2016-17) (ADB, 2018b)

3.5 INFRASTRUCTURE AND BASIC SERVICES

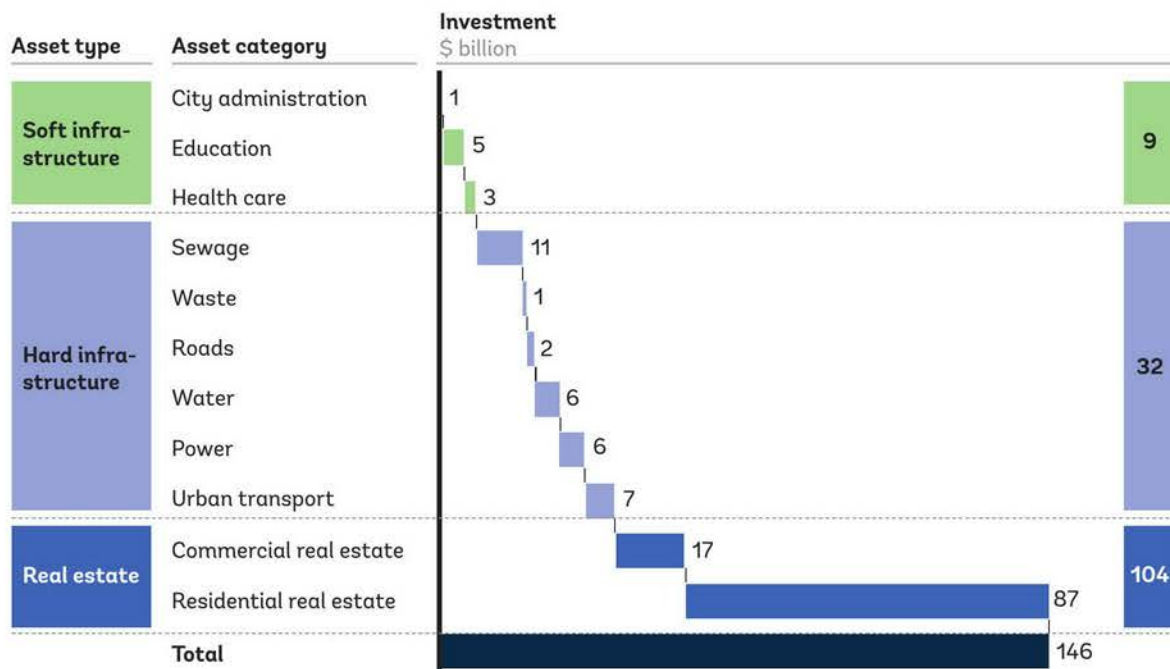
The needs for urban infrastructure and basic services are massive. One estimate finds that for Myanmar to keep pace with its infrastructure needs in large cities alone, approximately \$146 billion would be needed between 2010 and 2030.¹⁸ According to this estimate, close to 60 percent of the urban capital investment would likely be required for residential housing; more than 10 percent for commercial real estate; over 20 percent for hard infrastructure such as water, sewage, power, waste, roads, and mass transit; and more than 5 percent for soft infrastructure including health care, education, public administration, and social services such as fire brigades and police buildings. While this estimate is very approximate and can be contested, there is no doubt that the investment needs in cities are huge.

Those living in informal settlements are most affected as access to even the most basic services is limited.

These limitations have negative outcomes on health indicators, ability to increase income generation from home-based microenterprises, and for those in periphery areas, exclude them from access to job markets due to the limited availability of roads or access to public transport.

In general women are particularly affected by inadequate service delivery as they are typically responsible for household management. Women's safety is also placed at risk through inadequate sanitation infrastructure. In Myanmar's slums, open defecation, which often takes place at night for the sake of privacy, subjects women and girls to greater risk of attack.¹⁹ Even when shared sanitation facilities are available, studies have shown that harassment and gender-based violence is more likely to occur at toilets that are located away from home (Tacoli, 2012).

Figure 3.7: Investment Needs in Myanmar's Large Cities, 2010-2030, McKinsey Global Institute



Note: Numbers may not sum due to rounding.

Source: McKinsey Global Institute Cityscope 2.0 database; Pike Research; Japan International Corporation Agency; McKinsey Infrastructure Practice benchmarks per asset type; McKinsey Global Institute analysis

¹⁸ McKinsey Global Institute, 2013, Myanmar's moment: Unique opportunities, major challenges. Note: These estimates assume that Myanmar's large cities reach infrastructure levels in 2030 similar to what we see today in cities of comparable size in China, Indonesia, South Africa, and other developing countries

¹⁹ 2014 Myanmar Population and Housing Census Thematic Report on Housing Conditions and Household Amenities, published by the Government of Myanmar and UNFPA

3.5.1 URBAN MOBILITY AND TRANSPORT

Urban mobility is essential to spatially inclusive urban development as it allows people to access jobs, services and city resources. If segments of the population have challenges in moving around due to access and where they live, cost, safety, or discriminatory practices, this can affect their inclusion in urban life.

Trip rates – the average number of trips per person per day – are a way to measure mobility in cities. In the 2014 Comprehensive Urban Transport Plan of the Greater Yangon (YUTRA), prepared with the assistance of JICA, the person-trip survey concluded Yangon’s trip rate at 2.042 for all trips generated (Table 3.11). In most Asian cities, the trip rate ranges from 2.0 to 2.5, suggesting that the mobility in Yangon is lower than other regional cities. Recognizing the

importance of urban mobility and accessibility to livable, equitable and competitive cities, YUTRA sets out a development objective to “Ensure mobility and accessibility to urban services that are vital for the people and the society, by providing a transport system characterized by safety, amenity, and equity and sustained by an efficient public transport system.” (JICA, 2014).

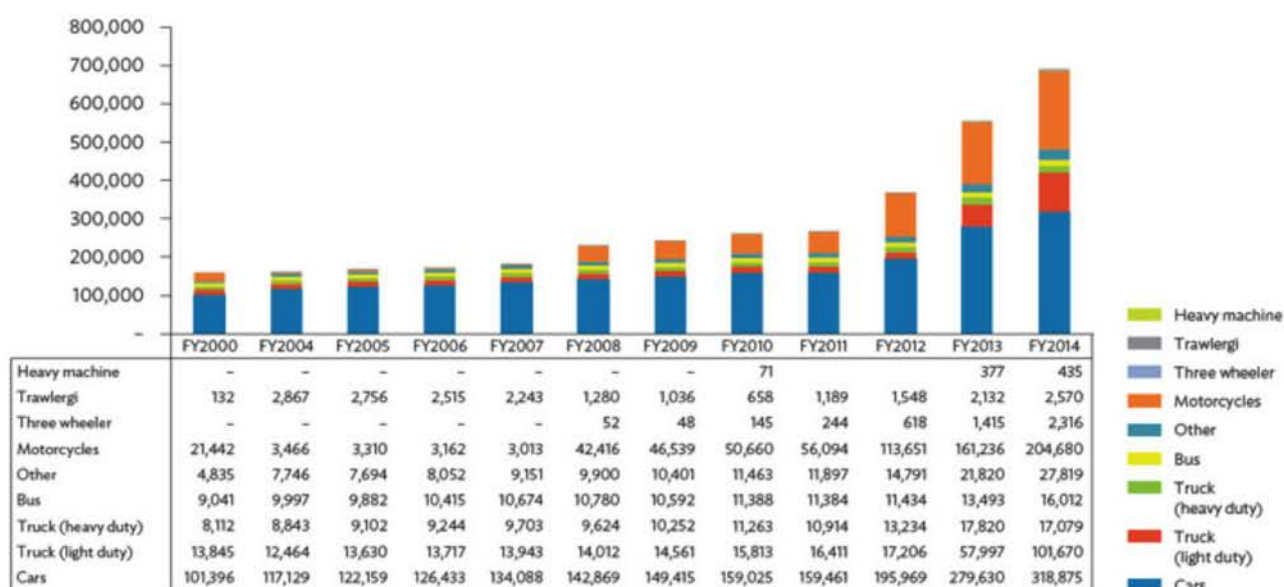
Conditions for Myanmar’s urban transport have rapidly declined since 2012. With the economic recovery and 2011 relaxation of restrictions vehicular imports and licensing, the number of private vehicles has rapidly increase in major cities. In the case of Yangon, the vehicle fleet grew by 37 percent between 2012 and 2015 – the number of cars increased by double while the number of motorcycles increased by 3.6 during that time (Figure 3.8) (ADB, 2016).

Table 3.11: Trip Rates in Yangon (2013)

	Male	Female	Total
All Trips	2.199	1.904	2.042
Excluding Walking	1.472	0.923	1.179

Source: JICA, 2014

Figure 3.8: Vehicular Fleet in Yangon

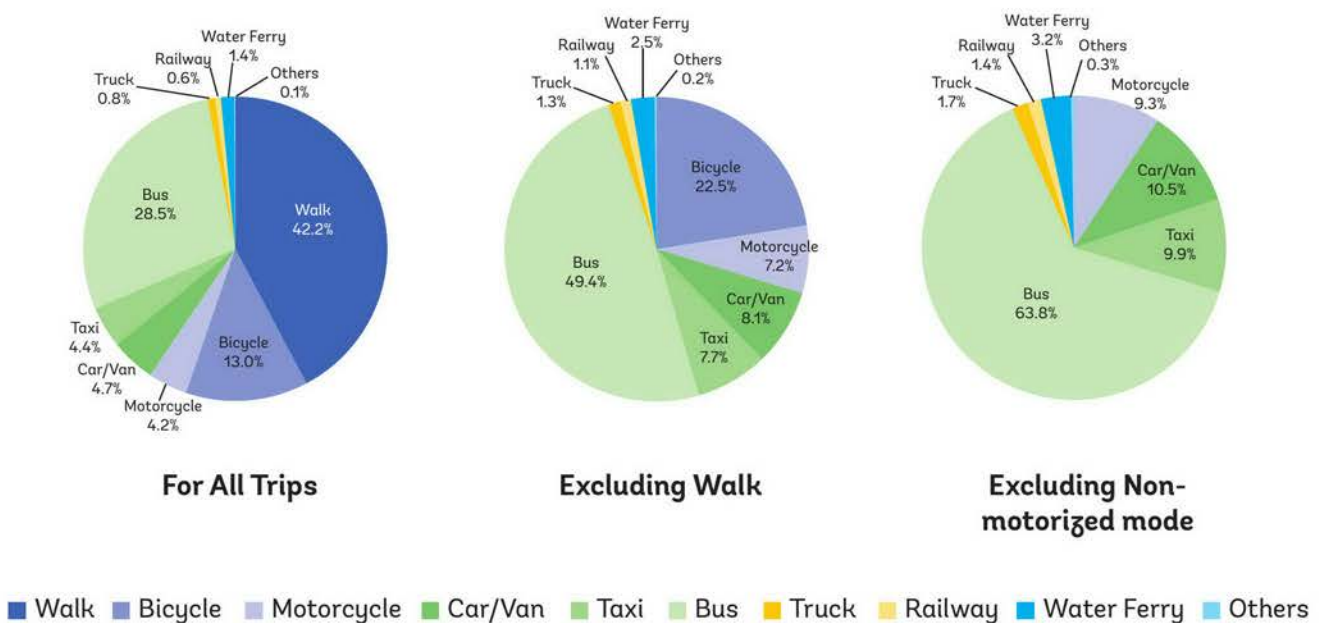


Source: ADB, Myanmar Transport Sector Policy Note – Urban Transport, 2016. Original Source: Road Transport Administration Department

Public and active transport has been the dominant transport mode for major cities in Myanmar, however with strong variation in modes between various cities.²⁰ In the City Life Survey conducted by the Asia Foundation in 2017, residents of townships in Yangon expressed a dependence on public and active transport for traveling between home and work (Asia Foundation, 2017). This is consistent with the person-trip survey results of YUTRA, which show that walking accounts for 42.2 percent, bicycle 13.0 percent, and bus 28.5 percent of all trips generated (Figure 3.9). The high modal share in walking suggests that work, school, and other activities most likely occur in a walkable proximity to home.

While the survey results seem promising for a walkable and sustainable city, it also suggests the weak capacity for urban mobility. This concern is highlighted by the steady decline of share of public transport modes, resulting from the weak operation and slow implementation of a well-functioning public transport systems. In Yangon, there are two types of local bus services: the first type involves about 5,000 small or individual bus operators managed under nonprofit bus control or bus line committees, and the second involves two large bus companies, the Golden City Link and Bandoola Transportation, which provide sizable and profitable services. However, with outdated fleets and other convenient transport modes, bus services have been steadily losing customers at a rate of 10 percent each year, with volumes in 2015 half of those in 2017 (Figure 3.10). Two thousand buses have recently been purchased for Yangon from China by the Yangon Bus Public Company (YBPC), a public-private joint venture majority-owned by the city government.

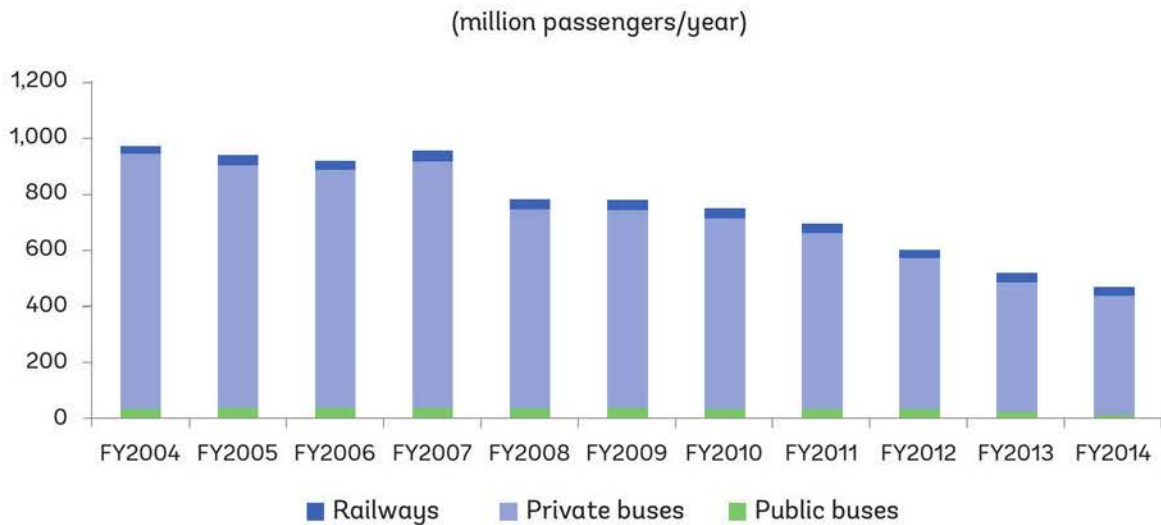
Figure 3.9: Modal Split in Yangon, 2013 (%)



Source: JICA, 2014

²⁰ Private includes personal motorbike and car, Active includes walking and biking, Public includes trishaw, motorbike taxi, taxi, ferry and bus

Figure 3.10: Public Transport Volume in Yangon



Source: ADB, 2016

Outside of Yangon, cities are experiencing the rise of private motorcycles (in Yangon, motorcycle share is low as they have been prohibited from entering the city center). In Mandalay, one million two-wheelers account for more than 90 percent of trips, where motorcycles account for 70 percent of trips (ADB, 2016). In Taunggyi and Hpa-An, the dominant mode of transport was private motorcycles at 59 percent and 55 percent respectively (Asia Foundation, 2017).

With rapid increase in personal vehicles as well as challenges in public transport, traffic congestion has emerged an urgent challenge. The Yangon City Development Committee (YCDC) estimated that vehicle speed, which reached 30 km/hour at peak hours in 2007, dropped to 10-15 km/hour by 2015 (ADB, 2016). Furthermore, motorization has jeopardized road safety. In the 2017 City Life Survey, 54 percent of respondents agreed or strongly agreed to the statement, “I am worried for my physical safety when riding in a motor vehicle on the roads in the city” – with 45 percent agreeing/strongly agreeing for the townships in Yangon, 70 percent in Taunggyi, and 51 percent in Hpa-An (Asia Foundation, 2017).

A combination of time constraints, cultural norms and the risk of gender-based violence has restricted women’s mobility more than men’s in Myanmar. Particularly in areas of conflict, where both gender-based and other types of violence are more prevalent, travel for women can be limited.

Furthermore, the conditions of urban mobility remain a critical challenge in densely populated informal settlements and resettlement areas in Myanmar which lack access to basic infrastructure and services including paved roads and are often located in city peripheries. In Yangon, 54 percent of the informal settlements have internal road networks provided by the government or built by the community, but most roads are unpaved and only 1.2 percent of the roads have drainage. Many informal settlement areas are flooded during the rainy season due to lack of drainage systems (UN-Habitat and Cities Alliance, 2017).

With such urgent challenges in urban transport, several pressing needs have been identified in Table 3.12 with different degree of urgency (based on implementation cost and base demand).

Table 3.12: Urban Transport Needs

	Yangon	Mandalay	Other
<p>Traffic Engineering and Management: Increase traffic carrying capacity through low-cost traffic management such as signage, signal lights, channeling, removal of on-street parking, management of street vendors, etc.</p>	Short-term	Short-term	Short-term
<p>Improve Pedestrian and Bicycle Safety: Improve the pedestrian facilities such as sidewalks and crossings, segregated bicycle lanes, off-street parking, etc.</p>	Short-term	Short-term	Short-term
<p>Demand Management: Limit the rise of personal cars through transport demand management measures such as taxes on vehicular purchase, registrations, fuel, parking and other measures to discourage low-occupancy vehicles.</p>	Short-term	Medium-term	Medium-term
<p>Road Network Development: Selective investments in road network improvement/upgrading and development.</p>	Medium-term	Medium-term	Medium-term
<p>Bus Reform: Facilitate bus reform with a focus on regulatory objectives (enhance safety, reduce undesirable behaviors such as illegal stops, and improving incentives for drivers and users). Reform should also aim to improve bus services via operational performance standards, effective operator engagement, regular hours of operation, and infrastructure as bus-stops.</p>	Short-term	Medium-term	Medium-term
<p>Mass Rapid Transit: Cost-efficient mass rapid transit (MRT) such as segregated bus rapid transit (BRT) on main arteries and upgrade of Circular Railway.</p>	Under Implementation	Long-term	Long-term
<p>Institutional Development: <p>Yangon: Strengthen and consolidate YRTA as the overarching transport authority for urban transport, with a vision for a hierarchically integrated transport system for Yangon</p> <p>Mandalay: Establish an overarching transport authority for urban transport to bring together relevant agencies, jurisdictions, and levels of government.</p> </p>	Short-term	Medium-term	Medium-term

Source: Based on ADB, 2016

Various development partners have been working closely with Myanmar, both at the national and regional level, to tackle the challenges of urban transport. JICA has been the most active development partner in the transport space, and has provided technical assistance for the development of the Strategic Urban Development Plan of the Greater Yangon (SUDP 2013), National Transport Development Plan (2014), YUTRA (2014), and the preparatory study for Yangon Urban Mass Rapid Transit (YUMRT 2015).

Under YUTRA, two Bus Rapid Transit (BRT) corridors were proposed with a preliminary feasibility study – BRT 1 route along the Sule Pagoda Road, Zoological Garden Road, and Bahan Road, and the BRT 2 route along Rhone Gyi Street and Pyay Road. Ultimately, a less ambitious version of JICA’s proposed plan, called the “BRT Lite” System was chosen for implementation through a public private partnership (PPP) scheme. The cost of the BRT system, estimated at 19.2 million USD, was fully financed by the PPP entity called Yangon Bus Public Company (40 percent funded by the government and 60 percent funded by private companies and public shareholders). BRT Lite commenced operations in February 2016 and runs along Yangon’s two main commuter routes, Pyay Road and Kabar Aye Pagoda Road with route extensions planned for the near future (Win, 2015). BRT Lite charges a flat rate of 300 kyats per ride (around 0.24 USD) and operates from 6:00 am to 7:30 pm.

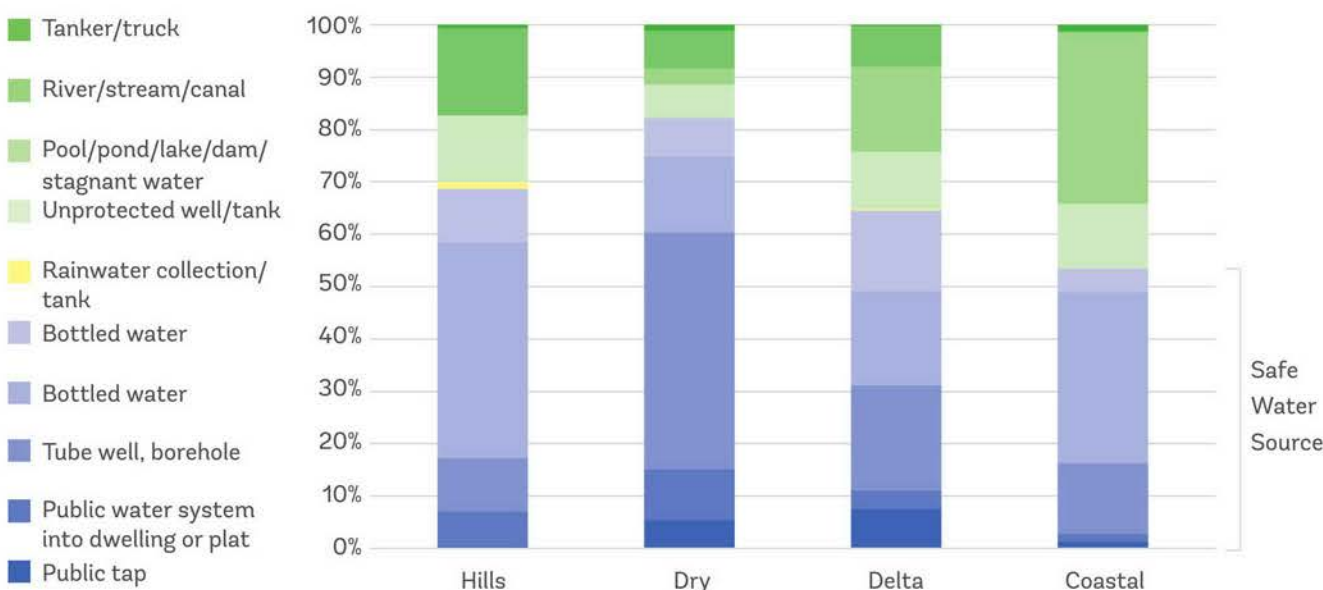
Furthermore, in 2015, JICA signed an ODA Loan Agreement for the Yangon Circular Railway Line Upgrading Project (24.866 billion JPY) which is to be completed in April 2020 (JICA, 2015). The ODA loan for the railway project is augmented with a grant aid for Enhancing Railway Operation Safety Project, Installation of Operation Control Center System Project, and the Yangon-Mandalay Railway Improvement Project Phase 1 (25 billion JPY) and Phase 2 (56.622 billion JPY) (Ibid). The Asian Development Bank (ADB) is also a strong development partner for Myanmar’s transport sector.

3.5.2 URBAN WATER

While Myanmar has abundant natural water sources, there is seasonal and regional variability. In the Delta region, which includes Yangon, access to safe drinking water varies substantially according to the wet, dry and cool seasons, and a third of individuals in the Delta region, including the Yangon area rely on rainwater collection as their primary drinking water source. Outside of the wet season, two thirds of them switch to alternate surface water sources that may be unsafe for drinking (Figure 3.11) (World Bank, 2017a).

As shown in Table 3.13, there is no single institution responsible for the overall management of Myanmar’s

Figure 3.11: Sources of Drinking Water in the Dry Seasons



Note: Figures are population weighted, and therefore reflect the share of individuals living in households with various sources of drinking water. Source: World Bank, 2017a

Table 3.13: Institutional Responsibilities for Urban Water Supply and Wastewater

	Male	Female
Overall Sector Planning	National Water Resources Committee, under the Ministry of Transport	
Yangon, Mandalay, Nay Pyi Taw	City Development Committee	City Development Committee
Provincial Capitals, Large Towns	Township Development Committee, under the Chief Minister	Township Development Committee, under the Chief Minister
Small Towns	Ministry of Agriculture, Livestock and Irrigation, Department of Rural Development	Not officially designated, de-facto the Ministry of Agriculture, Livestock and Irrigation, Department of Rural Development

water resources and the sector’s leadership is not well defined. For example, responsibility for urban water falls under three different government entities.

The government faces significant challenges to providing reliable and safe water services. The urban access rate for water supply is 94 percent, yet only 18 percent have piped water supply to the premises (UNICEF, 2015). While the accessibility data look comparable to those in other Southeast Asian countries, the health data tell a different story. Under 5-year child incidence of diarrhea and child mortality rate (66 per 1,000 live births in 2010) are higher than elsewhere in Southeast Asia. There is persistent high prevalence of diarrhea-related diseases, including cholera, dysentery, typhoid, and viral hepatitis, and water-related vector-borne diseases such as malaria, dengue, Chikungunya fever, Japanese encephalitis. These health risks are significant and result from: i) the underinvestment in preventative health care; and ii) underinvestment in, and less than optimal operation and maintenance of, water, drainage, and sanitation infrastructure.

Nearly all urban areas in Myanmar have suffered chronic under-investment in urban water infrastructure (UNICEF, 2015). There are marked differences in water service provision between the largest cities and smaller cities and towns, with urban water supply generally a neglected subject beyond the state capitals. Thus, most urban water supply is untreated, and likely to be contaminated by bacteriological contaminants (and arsenic in the Ayeryawady delta groundwater). Networked services rarely exist in most smaller cities and many residents

have developed their own private or shared water sources, which are often unsafe and not sustainable (UNICEF, 2015). It is estimated that a third of urban dwellers rely on bottled water for drinking (ADB, 2017a). Even in Yangon and Mandalay water is only partially treated. Urban water supply systems that do exist are generally very old and in poor condition and, as a result, most urban residents experience intermittent supply and poor quality.

The water services in Myanmar are generally funded by operational budgets from City Development Committees (CDCs) or via local or federal government subsidies, rather than from customer generated revenue. Where tariffs exist, charges are decided by each city/town and these tend to be set at very modest levels and seldom cover operating costs. Therefore, the sector’s current financing model marginalizes revenue generation and increases dependency on subsidies and donor support.

The Yangon water supply system is operated by the Department of Engineering (Water and Sanitation) under YCDC and takes water from four reservoirs. YCDC water supply has a relatively low service coverage, providing piped water to approximately 33 percent of the urban population in Yangon (approximately 230,000 household connections, of which 70 percent are metered). The remaining population is reliant either on tube-wells operated by YCDC or private water supply sources (ADB, 2018a). In Yangon’s slums, an estimated 22 percent of households have access to piped water, 21 percent use untreated water from ponds, and another 23 percent rely on shallow tube wells (YCDC and Save

the Children, 2016). Most of the city's water supply is, therefore, untreated and likely to be contaminated by bacteriological contaminants.

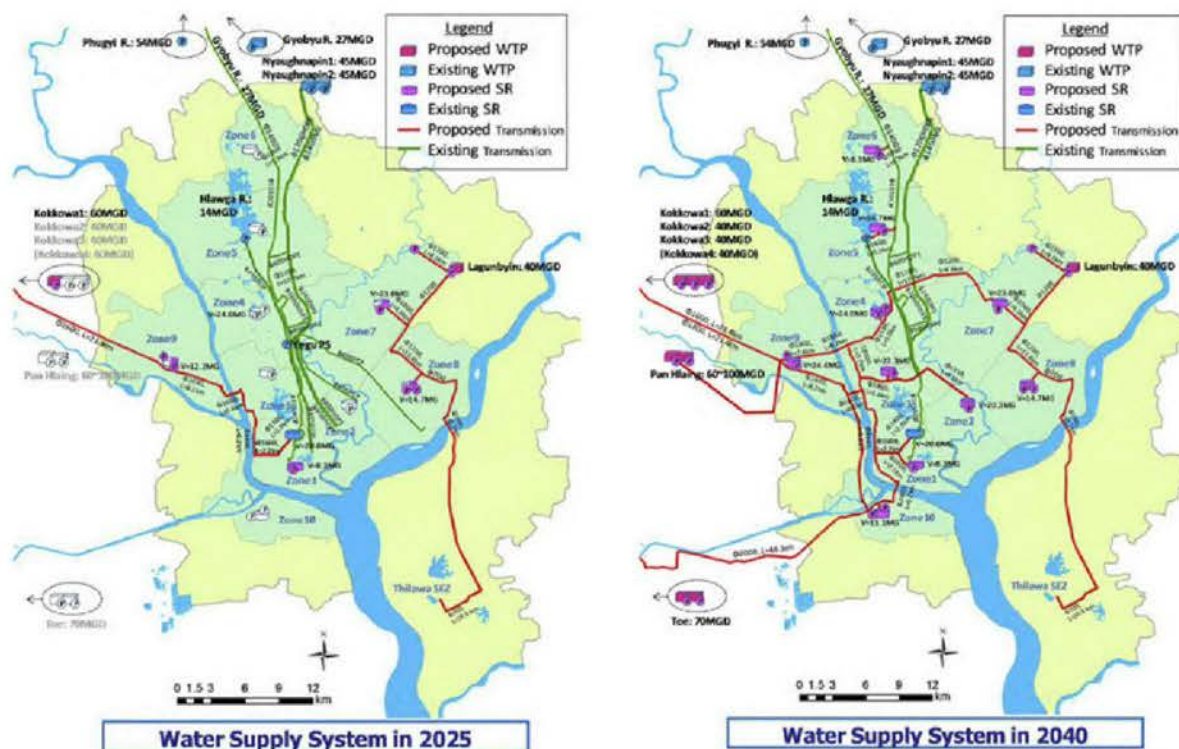
The water supply system in Yangon is also characterized by high NRW (estimated at 65 percent²¹) and low water tariff (domestic users in Yangon paid US\$0.10/m³ in 2013, lower than comparable cities in the region (US\$0.27/m³ in Bangkok and US\$0.19/m³ in Kuala Lumpur)). ADB estimates that despite the recent increase in level of fees by YCDC, the water tariff is not sufficient to cover the full operational costs (ADB, 2017a). These challenges are compounded by the increasing demand for water due to urbanization and a growing population.

There is a need for upgrading, expansion and reform. JICA has been the major development partner in the water sector in Yangon. The Greater Yangon Water Supply Improvement Project, for example, is expected to be completed in 2022 and will invest in improvements

such as i) development of water source, treatment plant, and transmission of system to increase water supply coverage; ii) creation of a distribution district including a service reservoir, distribution pump, and distribution pipe to ensure equitable water supply and NRW reduction; and iii) installation of disinfection equipment (JICA, 2018). Furthermore, long-term plans have been revised and updated (Figure 3.12) based on results from the Preparatory Survey Report on the Project for the Improvement of Water Supply, Sewerage, and Drainage System in Yangon City (2014) and Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (2017), assisted by JICA.

The state of water supply services in Mandalay is similar to that of Yangon. The service is managed by the Mandalay City Development Committee (MCDC), with piped water coverage of around 55 percent, and the remaining urban population relying on private shallow-wells. NRW is estimated at approximately 52

Figure 3.12: Revised Water Supply System for Greater Yangon (2025 and 2040)



Source: JICA, 2017

21 Without functioning production, zonal and customer metering an accurate assessment of NRW is impossible. Thus, this figure is based on World Bank staff estimates from similar cities

Table 3.14: Water Supply Components of MUSIP1 and MUSIP2

Subsector	MUSIP1 (April 2016 – March 2023)	MUSIP 2 (April 2020 – March 2027)
Water Supply System	Households with access to water supply without interruption increased from 19,000 (2014) to 124,000 (2024) through the upgrading of water treatment plant and reservoir, rehabilitation and construction of distribution networks, replacement of connections, and non-revenue water reduction.	The number of households with access without interruption further increased through the construction of new water intake at Dohtawady, expansion of distribution networks, increase of connections, and non-revenue water reduction.

Source: ADB, 2017b

percent, of which around 70 percent is due to physical loss from faulty meters and leaks (ADB, 2017b). Through the Mandalay Urban Services Improvement Project (MUSIP) Phase I and MUSIP Phase II (currently in preparation), the water supply system in Mandalay are to be improved as summarized in Table 3.14.

The JICA Grant Aid Project for Improvement of Water Supply System in Mandalay (signed in 2015) will further provide 2.555 billion JPY to construct a water supply system in Pyi Gyi Tagon Township and disinfection facilities for the existing water supply facilities in Mandalay City to increase the number of population served with piped water and to secure safe drinking water (JICA, 2015).

3.5.3 URBAN SANITATION

Sanitation is essential to urban livelihoods as absence of proper sanitation facilities can lead to diseases such as diarrhea, cholera, trachoma and other waterborne disease outbreaks. In Myanmar, 96 percent of the population in urban areas have access to improved sanitation, either a flush toilet or water-sealed latrine (MPLCS, 2015) and only three cities (Yangon, Mandalay and Nay Pyi Taw) have piped sewerage systems or centralized wastewater treatment systems. Most households outside of these three cities, in formal residential areas, have septic tanks but these are not routinely serviced or treated and there is no systematic collection and treatment of domestic wastewater. Households in informal settlements rely on improvised latrines and storm-water drains that carry untreated sewage in open channels. Furthermore, small-scale enterprises and industries often allow chemical waste (such as dyes for silk and weaving cloth) to run into the roadside

drains, causing severe environmental impacts and pollution of water courses and ground water (ADB, 2017a).

In Yangon and Mandalay, responsibility for the management of urban sanitation system lies with the Department of the Department of Engineering (Water and Sanitation) under YCDC and MCDC, respectively. This includes the collection of any fees related to the collection, treatment, and disposal of septage and the use of sewage systems. Campaigns to improve sanitation systems and awareness is the responsibility of the Department of Health (ADB, 2017a).

Yangon's sewer system is 120 years old and dates back to the colonial period. Service coverage is extremely low, approximately only 350,000 people, which is less than 10 percent of the city's population (JICA, 2013). Prior to the new wastewater treatment plant, which was completed in 2015, the city's wastewater was discharged untreated into the Yangon River, causing severe pollution (Ministry of Construction, 2016). Improvement of the sewerage system (both infrastructure and operational service) is an urgent challenge for the city and has been highlighted in JICA's SUDP. SUDP's master plan covers the construction of six additional sewerage treatment facilities in various townships, which is anticipated to cover 49 percent of Yangon's total population (JICA, 2013).

In Yangon's poor urban neighborhoods, only 5 percent of the surveyed households had toilets connected to concrete tanks that can be considered improved sanitation facility. Forty-six percent households used open pit latrines overflowing during the rainy season, and another 37 percent household sewage went to open drains and ponds. Some informal settlements

Table 3.15: Wastewater Management Components of MUSIP1 and MUSIP2

Subsector	MUSIP1 (April 2016 – March 2023)	MUSIP 2 (April 2020 – March 2027)
Wastewater Management	Direct discharge of wastewater to receiving waters reduced from 85,000 m ³ /day (2014) to 25,000 m ³ /day (2024) through construction of wastewater treatment plant, construction of interceptor along Thingazar Creek, construction of sewerage networks, and improvement of septage treatment.	BOD loading to environment reduced through increase of wastewater treatment capacity, improvement of treatment process, expansion of interceptor and sewerage networks, construction of household connections, and improvement of septage treatment.

Source:ADB, 2017b

in the low-lying or riverside areas are flooded most of the year and the sewage goes directly to the flooded areas surrounding the houses (UN-Habitat and Cities Alliance, 2017) (YCDC and Save the Children, 2016) This creates enormous health and environmental risks for those in slums.

Most of Mandalay is not served by a centralized sewerage network or wastewater treatment plant. The majority of the wastewater ends up in open drainage channels which are then further discharged into rivers and lakes. Under the MUSIP Phase 1 and 2, ADB intends to improve wastewater management in Mandalay as summarized in Table 3.15.

Adding to country’s water pollution challenge is the industrial wastewater coming from the regional industrial zones. According to the Pollution Control and Cleaning Department (PCCD) under YCDC, within Yangon’s 24 industrial zones alone, only 188 out of the 3,474 factories had proper wastewater treatment facilities, while most factories disposed their wastewater in creeks and rivers which channel into major rivers in the region. Regions outside of Yangon face a similar situation. While Myanmar has enacted wastewater related laws and regulations such as the Environmental Conservation Law (2012), Environmental Conservation Rules (2014), and Environmental Impact Assessment Procedure and Environmental Quality (2015), effective implementation remains a challenge (Aung, 2017).

3.5.4 SOLID WASTE MANAGEMENT

Solid waste management (SWM) is essential to urban livelihoods as absence of services will lead to serious environmental and public health issues. With rapid economic growth and shifts in consumption and production patterns since 2012, waste generation has significantly increased in Myanmar, causing urgent challenges for the nation. In general, SWM in Myanmar requires significant improvements. Collection is labor intensive, landfills remain open dumping sites, recycling is undertaken mainly by informal sector, and large amounts of uncollected waste are open disposed in drains and canals, causing degradation of environment and public health, breeding opportunities for mosquitoes and other waterborne diseases, as well as increases in flood damages due to reduction of drainage capacity (ADB, 2017a). Safety measures for SWM workers, whether in the formal or informal sector where many of the urban poor work, are often inadequate.

It is estimated that in Yangon, approximately 1.7 million tons of municipal solid waste are generated per year, out of which 870,000 is received at the dumpsites²². In Mandalay, about 408,800 tons of municipal solid waste are generated per year, out of which 342,000 is received at the dumpsites. While there are no formal statistical data regarding the amount of municipal solid waste generated and collected, the estimates suggest that from Yangon and Mandalay alone, 900,000 tons per year does not reach the dumpsites and is lost scattering around in the cities or thrown in rivers and streams. Central parts of the cities are covered better, but poorer parts and more industrial parts show substantial littering.²³

²² Estimates are excluding the “floating” population who add more wastes in informal settlements

²³ Higher percentages of waste being formally collected are estimated by the city governments, but the information on scattered waste throughout suggests that the actual waste being brought to the formal dumpsites is lower than the total waste generated

Table 3.16: Major Landfill Sites in Yangon and Mandalay

Location	Capacity (ton/day)	Condition	Status
Yangon City Development Committee (YCDC)			
Hteinpin	1,080	Open Dumping	Operating
Dawai Chang	843	Open Dumping	Operating
Shwepyithar	61	Open Dumping	Operating
Mingalardon	43	Open Dumping	Operating
Dala	33	Open Dumping	Operating
Seikyi Khanaungato	4	Open Dumping	Operating
Mandalay City Development Committee (MCDC)			
Kyar Ni Kan (North)	450	Open Dumping	Operating
Thaung Inn Myount Inn (South)	300	Open Dumping	Operating
New Braway Factory	142	Open Dumping	Closed in 2009
New Kandawgyi Lake	80	Open Dumping	Closed in 2009
New Zanningkalow Pond	28	Open Dumping	Closed in 2007
Corner of N/E Mandalay	450	Open Dumping	Closed in 2013

Source: Institute for Global Environmental Strategies, 2017

Formal waste collection and disposal in Myanmar has traditionally been under the responsibility of townships and the CDCs. For the three major cities, the PCCD under CDC and their administrative branches are responsible for SWM in their respective municipal areas. Most municipal governments have limited budgets and facilities for SWM, and private sector involvement is very limited at this stage. Primary waste collection in Myanmar is labor intensive, using either the bell system (door-to-door), block or container collection method, often without adequate safety measures and equipment for the handlers. Primary collection is carried out by push carts and tricycles, while secondary collection is carried out by dump trucks (Institute for Global Environmental Strategies, 2017). Solid waste is transported to final disposal sites through transit stations, typically located along streets. Open dumping sites are in various locations (Table 3.16).

In slums, conditions are even worse with very limited access to municipal, community-organized, or private-sector led solid waste management services. Littering is widespread, and waste is left uncollected, with most slum residents dumping their garbage

in open spaces, roadsides, rivers, or ponds, further exacerbating poor sanitary conditions (UN-Habitat and Cities Alliance, 2017). However, although large amounts of household solid waste remain uncollected, the informal plastic collection and recycling chain is sizable, helping to recycle plastic waste and providing a source of income to thousands of households in Myanmar (Netherlands Enterprise Agency, 2017).

The insufficient collection and dumping of wastes causes environmental and health problems, but also specific problems regarding water safety: (i) blockage of drainage systems leading to flooding, specifically in monsoon season; (ii) blockage of sewer system lead to flooding of sewerage and potentially cholera outbreaks; (iii) waste dumped in surface water damages ecosystem and contaminates water resources for drinking and irrigation water purposes; (iv) waste in pools, specifically adjacent to residential areas and markets and public spaces, create potential breeding grounds for vector borne diseases; and (iv) plastics dumped into the rivers contribute to the ocean plastic “soup”. The problem of solid waste mismanagement contributing to problems regarding water safety is recognized in the

Yangon area and the same issue can be found at any scale of settlements located on river systems across the country (Netherlands Enterprise Agency, 2017). The Irrawaddy river in Myanmar is positioned as the placed at ninth place in terms of the top 20 polluting rivers contributing to the ocean plastics problem²⁴.

As a result of insufficient funding and investments, awareness and household engagement, there is insufficient waste segregation and recycling neither by the local cities' governments or the households itself. Waste recycling is carried out mostly by the informal sector, waste pickers and waste collectors who collect the recyclable materials and sell to waste dealers who further clean and sort the waste for further selling locally and abroad. There are however insufficient statistics regarding the quantities and types of recycled waste²⁵. In addition, a large part of the waste consists of organic material (some 70 -80 percent), which generates opportunities in treatment by composting/digestion and sorting.

Public revenue for SWM is generated through general taxes and direct revenues from collection fees. Direct revenues for household or domestic waste management are generated through user charge, which are based on location (in the case of YCDC) or the volume of waste disposed (in the case of MCDC), and the fees may range from 300 to 900 kyats/month. However, the collection rate of service fees from households remain low and a substantial deficit between revenues and expenses for SWM exists. For commercial waste, special collection fees can range from 20,000 to 150,000 kyats/month based on the volume of waste (Institute for Global Environmental Strategies, 2017).

Priorities for improvement for solid waste management range from improving the collection and cleaning of the cities, educate and engage citizens to reduce littering, upgrading or closing the open dumps and construct and operate sanitary landfills without environmental impacts and where financially possible more advanced waste treatment. The Ministry of Natural Resources and Environmental Conservation (MOREC) has an important role to play, along with relevant stakeholders to establish national level waste management policies and strategies including institutional frameworks, financing mechanisms, and enforcement and monitoring systems. Currently

there are a range of policies, laws and regulations on environmental conservation and pollution control, however, there are none directly addressing SWM in a holistic manner. Furthermore, weak enforcement and monitoring capacities are a major barrier to implementing effective SWM practices. At the local level, Yangon, Mandalay, and Nay Pyi Taw have received technical and financial support from various development partners (ADB, JICA, KOICA, EU, BORDA) to establish new waste collection, recycling, treatment and final disposal facilities (Ibid).

For more advanced waste treatment solutions, increases of the revenues in the solid waste sector are a necessary requirement. In addition, the sharp increase of plastics and packaging materials in the waste streams and continued dumping of such wastes into rivers and streams as well as generally throughout the city is also an increasingly urgent problem. Definition and adoption of policies and investments to reduce the plastic leakage into the waterways, reduce plastic use and increase the potential and profitability of recycling and plastic alternatives is also a key priority. Cost recovery strategies for SWM need to be improved to promote a fairer cost sharing system to beneficiaries, reduce subsidies provided by the cities, and encourage sound fiscal planning for SWM.

3.5.5 DISASTER RISK MANAGEMENT (INCLUDING FLOOD CONTROL AND DRAINAGE)

A resilience lens is critical to an inclusive and sustainable urban development. Global experience shows that the concentration of people and goods in cities has historically meant that urban areas are hardest hit by natural disasters, particularly the urban poor who often settle in high-risk areas because this is the only land that is available and affordable. Myanmar's urbanization challenge is exacerbated by its vulnerability to natural disasters – earthquakes, floods, landslides, cyclones, tsunamis, fire, hail and storms.

Myanmar ranks third place among countries most affected by extreme weather events between 1997 and 2016 in the 2018 Global Climate Risk Index

24 Lebreton, L. C. M. et al. River plastic emissions to the world's oceans. *Nat. Commun.* 8, 15611 doi: 10.1038/ncomms15611 (2017).

25 IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), *Waste Management in Myanmar*, 2017

and over the past 25 years has suffered 24 disaster events, affecting more than 4 million people and causing 4.7 billion USD in damages. In 2008, Cyclone Nargis resulted in an estimated loss of 140,000 lives and property of approximately 2.4 million people, with a total damage and losses estimated at 21 percent of the GDP. The 2010 Cyclone Giri that hit Rakhine State caused 45 fatalities and 10 million refugees, with an estimated financial damage of 5.7 million USD (JICA, 2017b). As recently as 2015, the country suffered severe floods and landslides, resulting in 132 fatalities and a 0.8 percentage point drop in economic growth.

In response, the Government of Myanmar (GoM) enacted the Natural Disaster Management Law in 2013 and issued the supporting Disaster Management Rules in 2015. The rules require Ministries and administrative units to prepare disaster management plans; however, enforcement and implementation of the law and rules remain a challenge (World Bank, 2017d). Given the frequency of natural disasters, the National Disaster Management Committee (NDMC) is more focused on post-disaster assistance than upstream improvement of disaster resilience and development of management plans. Weak capacity, a lack of resources, insufficient analytics, and a focus on disaster response together hamper the mainstreaming of resilience principles across sectors.

In terms of infrastructure, most cities in Myanmar lack proper storm water drainage networks and face severe flooding during the monsoon season. In Yangon, drainage and flood control is under the responsibility of Engineering Department of Roads and Bridges (EDRB) of YCDC. Inadequate tertiary drainage networks and blocked primary and secondary networks result in monsoon season flooding with inundations 0.5 to 1.0 meters deep. The drainage network which consists of 22 major channels are primarily tidal and lack gates to prevent backflow during high tides and the capacities of pumping stations are insufficient to discharge excess water out of the city area (ADB, 2017a). Lack of dredging and maintenance of the storage ponds and canals also exacerbate the issue, particularly in combination with other urban sanitation challenges such as the dumping of solid waste. Mandalay and secondary cities share similar challenges.

Various development partners have highlighted the urgency of mainstreaming and strengthening resilience in Myanmar's urban development. The World Bank's Myanmar Southeast Asia Disaster Risk Management Project (2017-2023) aims to support

GoM and Yangon through a 117 million USD loan and technical assistance under four components i) strengthening the financial planning for disaster resilience, ii) urban flood risk management, iii) safer public facilities and critical infrastructure, and iv) Contingent emergency response (World Bank, 2017d). In Mandalay, ADB's MUSIP Phase 1 involves a drainage and flood protection component which aims to reduce the households living in wards affected by seasonal flooding through the dredging of canals and increased pumping capacity (ADB, 2017b). Furthermore, JICA has supported the implementation and expansion of end-to-end early warning systems for natural disasters (JICA, 2017b).

Urgent action is needed in some slum areas where the population is at high risk. In Yangon, an estimated one third of all settlements are located along rivers, creeks or on swamp land which flood frequently especially during the monsoons. The lack of storm drainage or of solid-waste disposal in slums can worsen and extend flooding. Extended flooding can result in disability and death by drowning or collapsing structures, sickness transmitted by water-borne vectors, displacement, and destruction of property. Overcrowded slums are particularly exposed to the rapid spread of infectious diseases that are transmitted through flood waters (for example, diarrhea, cholera, typhoid, leptospirosis, and meningitis). Malaria- and dengue-carrying mosquitoes also breed in stagnant water—especially when temperatures are high. Exposed wells and broken water pipes elevate the risks (Baker, 2012).





4

SOCIAL INCLUSION

KEY MESSAGES

- Social inclusion is especially important in cities where the density can make inequalities particularly evident and result in social tension.
- The urban poor face many daily challenges and are particularly burdened by debt which in turn has implications on the development of human capital and reduction of poverty.
- Other subgroups such as urban migrants, women and the disabled face challenges finding jobs and housing making it difficult to integrate in city life.

POLICY RECOMMENDATIONS

- Promote equal opportunities for marginalized groups which will enable them to fully take part in society.
- Invest in targeted social programs for some groups such as: linking migrants with job opportunities, assistance for the disabled through universal design in upgrading programs and better access to education, and addressing discrimination through policy reform and awareness raising.
- Facilitate access to legal documentation by removing the current obstacles linked to migration status and ethnicity through reform of the identification card system.



Social inclusion relates to fostering and enabling inclusive attitudes towards marginalized groups, such as the urban poor, regardless of differences in gender, ethnicity or region of origin. Promoting social inclusion also means facilitating equitable access to legal status and tenure security, urban safety, and inclusion through participation in governance and decision making. Access to human capital, i.e. the knowledge, skills and health accumulated throughout one's life, is also critical for marginalized groups in allowing them to reach their full potential as productive members of society (World Bank, 2018c). Strengthening human capital is thus critical to advancing equity and ensuring more inclusive growth (Tanaka, Spohr, & D'Amico, 2015).

In Myanmar, there are a number of subgroups that have been identified as vulnerable to exclusion. These include the urban poor, some migrants, non-Bamar ethnic groups, religious minorities (approximately 12 percent of the population), non-citizens under the 1982 citizenship law, and people living with disability (approximately 4.6 percent of the population). Exclusion also exists based on sexual orientation and gender identity minorities (SOGI) though information on this subgroup was very limited.²⁶

Inequality is higher in cities, as well as more starkly evident given the density of people. Informal settlements exist side-by-side with better-off neighborhoods in larger cities. For subgroups, this plays out in various ways. For example, a citizenship scrutiny card (CSC) is needed to own property, practice law, access university, apply for electricity, and buy health insurance; those who lack one report difficulty in buying and selling land, accessing rights to security, legal protection, and inheritance; difficulties are also reported with getting cash transfers in social protection schemes, stipends, and scholarships.²⁷

This chapter focuses on some of the key topics specific to social inclusion in urban areas in Myanmar with regard to vulnerable groups including internal migrants the urban poor, and people with disabilities. Gender issues, a cross cutting topic, is discussed throughout the report. Information on issues of inclusion for ethnic groups and religious minorities in urban areas was not fully available in the literature though has been covered in other chapters for specific issues particularly with regard to obtaining Citizenship Scrutiny Cards (CSCs).

26 World Bank, Social Inclusion in Myanmar, 2017 draft paper. Myanmar's 1982 citizenship law defines those who belong in Myanmar as members of 'national races', who need to have been present in the country before the British annexation began in 1823. The law stipulates three categories of citizen—citizen, associate citizen, and naturalized citizen. It is in practice difficult for those who cannot prove their ancestry to before 1823 to get full citizenship, despite the law allowing for third generations of non-taingyintha (indigenous) residents to have this. One in five people in Myanmar lack a citizenship scrutiny card (CSC). Numerous groups, including those of Indian sub-continent and Chinese descent, report trouble obtaining citizenship cards and other documents. In recent years, Muslims renewing or obtaining new citizenship scrutiny cards have reported having to list a 'foreign' designation on their cards in addition to their ethnicity

27 Ibid

4.1 URBAN MIGRANTS

The urbanization process in Myanmar has been dominated by migration within the country, largely driven by search for jobs, yet policies on internal migration are limited. Migration for work is known to bring many benefits. Individuals and households benefit when they can seek out opportunities for wage labor in cities, remittances earned by migrant workers can ease financial constraints, move people out of poverty, reduce child labor, and even provide opportunities for entrepreneurship.

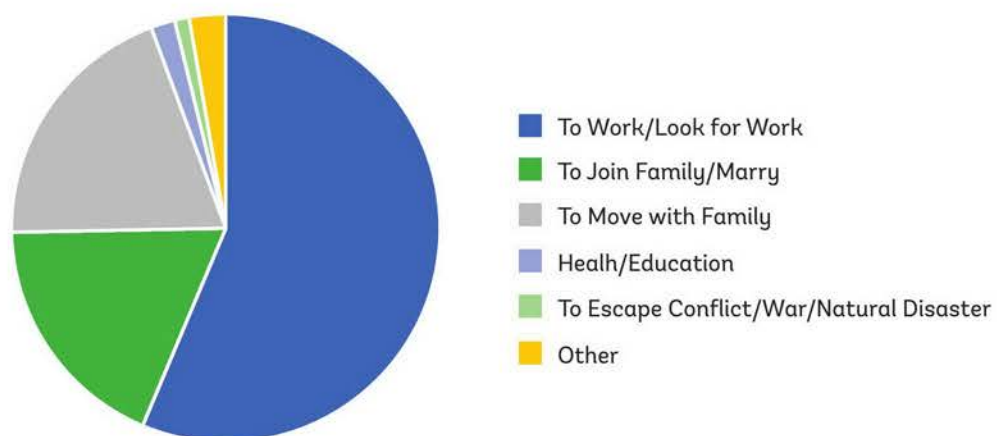
Globally, research on social inclusion in urban areas has documented extensive cases of stigma faced by migrants who are blamed for increased crime, the growth of slums, housing shortages, overburdened basic infrastructure and services, congestion, and increasing exposure to environmental hazards (Garland, Massounmi and Ruble, 2007). Such stigmatization is particularly aimed at low-skilled, low income migrants working in the informal sector.

Most migrants in Myanmar move for work (56 percent), or to accompany those who move for work (38 percent move to join a family member) (Figure

4.1). A study of more than 7000 internal migrants in 14 states/regions of Myanmar reports that 84 percent of the interviewed households declared that they migrated for work (ILO 2015). Some of this may be motivated by severe weather that destroys livelihoods (MOLIP and UNFPA 2016), a lack of off-farm employment in rural areas, and seasonality of agriculture that limits rural livelihoods (Mahajarn and Myint 2015; World Bank and EMR 2016).

The characteristics of migrants show that they are slightly more likely to be more educated, younger, male, semi- or un-skilled, and dependent children than the non-migrant working age population. Close to 56 percent are male, most have a primary education, but are disproportionately likely to have middle high school or higher education as compared to non-migrants. Landless households are more likely to have family members migrating, with internal migration involving the poorer households that are unable to afford the cost of migrating internationally. Finally, most migrants are children of the household head. (ILO, 2015)

Figure 4.1: Motivation for internal migration



Source: Cunningham, W. and Munoz, R, eds., Myanmar Future Jobs: Embracing Modernity, Main Report and Background Reports, World Bank, 2018 based on author's calculations, MPLCS (2015)

Notes: the category "to work/look for work" includes those who provided this response as well as their family members who reported "accompany a family member". The category "accompany a family member" or "to marry" do not indicate if the family member is elsewhere due to work or due to other reasons

Many migrants work as micro entrepreneurs and only 7 percent of migrant workers had a written contract which exposes them to exploitation. Some literature points to various problems faced by immigrant entrepreneurs including poor knowledge about existing markets, limited access to finance and connections with the local population (Fairlie and Woodruff 2010, OECD 2010, Marchand and Spiegel 2014). Male migrant workers earn higher salaries than female migrant workers with the exception of the hotel industry (ILO, 2015).

From the survey data, 26 percent of migrant workers were in a situation of forced labor and 14 percent in a situation of trafficking for forced labor. This was highest among the 15-17 age group, and those who had only completed lower secondary education. Those in situations of forced labor or trafficking were likely to earn less, work for longer hours, rely on employer-provided housing and be in consensual debt. (ILO, 2015)

Most of the rural migrant newcomers are the ethnic Bamar majority. The numbers of ethnic Karen and Rakhine, especially from Ayeyarwady Region, are also significant among recent migrants. In Hlaing Thayar, there is in general no reported open tension stemmed from ethnic or religious differences. Yet, there are generally more trust and community support among migrants of the same ethnicity group or from the same geographical area (DIIS, 2017).

The Buddhist and Christian organizations in Yangon also provide support to newcomers to informal settlements. The Christian churches usually provide more material support, whereas the Buddhist monasteries tend to provide more protection against potential evictions – it is commonly believed that residents are less likely to be evicted if there is a monastery in the settlement (DIIS, 2017).

An exception is the minority Muslim community, who felt discriminated and isolated. In Yangon in recent years, Muslim newcomers are more likely to settle in townships and downtown areas where there are large existing Muslim neighborhoods, rather than the fast-growing settlements like Hlaing Thayar. Some Hindu migrants also expressed being discriminated, mainly because they were often mistaken as Muslims (DIIS, 2017).

Interviews with migrants as well as local government officials reflect gaps in access to services in urban areas (World Bank, 2016). Officials across ministries and regions all cited migration as an important phenomenon that has major impacts on the way they work for example with regard to urban planning, or the delivery of social services, but also reported that the lack of existing data made it difficult to know how and where to support migrants.

4.2 URBAN POOR

Urban Poverty is estimated at 14.5%, which is a significant decline from 32.2 percent in 2004/5 and reflects the growth in the manufacturing and services sector.²⁸ Despite this significant decline, many poor households, mainly dwelling in fringes of cities, still struggle to meet basic needs for living. Poor working families in Yangon rely on unstable daily wages, high-interest loans, and inadequate food for survival. Over 80 percent of the surveyed 300 households in three peri-urban townships of Yangon lived on 2,000 Kyat (US\$1.72) or less per person per day – lower than the international benchmark – including 43 percent of the surveyed households struggling to survive on less than 1,000 Kyat (US\$0.86) per person per day (YCDC and Save the Children, 2016).

The cost of living has risen steeply in recent years. Since most residents in informal settlements do not have access to municipal services, some have to buy electricity and clean water from informal sources such as private generators and bottled water distributors at prices higher than the regular. Food is the main item of expenditure for 85 to 92 percent of households in informal settlements in Yangon (UN-Habitat and Cities Alliance, 2017). Most surveyed households lived with persistent food insecurity. About 87 percent of poor urban families spent merely 750 Kyat (US\$0.57) per person per day on food and often skimmed on the amount or quality of food. Protein is insufficient in many diets when rice, fish paste, and vegetables were the most common food in slums (YCDC and Save the Children, 2016). Enhancing food security, for example expanding dried fish as affordable source of protein, will be important for basic nutrition of the urban poor.

28 MPLCS 2015 and 2017, World Bank Poverty Report. Estimate based on World Bank methodology

Myanmar has the lowest life expectancy among all the ASEAN countries. Poor sanitation conditions and limited access to healthcare services have attributed to communicable diseases such as diarrhea, hepatitis, tuberculosis, as well as high under five mortality in slums in Yangon and Mandalay (International Growth Centre, 2016). Healthcare was the second highest reason behind the urban poor taking high-interest loans. For example, childbirth is a major financial burden that has led many poor women to seek cheaper but unskilled midwives at home. About 48 percent of surveyed households experienced some major illness in the past one year, treatment of which contributes to long-term indebtedness. As a result, there are also high levels of untreated diseases (YCDC and Save the Children, 2016). Children in slums suffer from constant shortage of decent food and sanitary living conditions, which has a negative long-term impact on health and life expectancy.

Although the majority of informal settlers send their children to school, the number of children enrolled drops drastically after the age of 13. Among poor households in Yangon, approximately half are at school at age 13; 14 percent at age 16; and only 2 percent at age 17. Many leave school at the age of 13 or 14 to seek employment in the informal sector (YCDC and Save the Children, 2016). Common informal work for girls includes employment in garment factories, or as housemaids, while boys tend to work as street vendors or casual laborers. Many girls also leave school to care for younger family members, allowing parents to go to work. Without an income, these girls are often considered a financial burden of their families.

Financial inclusion is a challenge among the urban poor who have limited income to make ends meet and thus must seek loans in the informal sector. High levels of indebtedness and high-interest loans are widespread among poor residents in informal urban settlements. Improving one's financial situation was rated by slum dwellers the top priority for solutions (UN-Habitat and Cities Alliance, 2017). Among the surveyed poor households in Yangon, 86 percent had taken loans at an interest rate of 20 percent or above. Except for money lenders, many residents also frequently borrowed from family members and acquaintances, as well as visited local grocery shops and pawnshops for quick cash (International Growth Centre, 2016).

The loans taken by poor urban households are usually for small amounts, and are used for basic needs. Forty-four percent of loans taken by the 300 surveyed households in Yangon were 50,000 Kyat (US\$43) or below. Over half of the loans were for food, rent, and other basic needs. Among those residents who had taken high-interest loans, over 50 percent borrowed for food, and another 26 percent of loans were for healthcare or health-related purposes (YCDC and Save the Children, 2016). Other reasons for borrowing include requiring credit to obtain official documents for job applications, or enrolling children in public schools.

Many poor urban households have also been caught in debt traps, with high-interest loans quickly and easily becoming unaffordable. In some cases, borrowers have had to borrow from other sources to finance earlier loans or have even resorted to moving to different neighborhoods to avoid repayment. Conflicts or violence resulting from failure to repay loans have also been reported in informal settlements (DIIS, 2017).

SLUM DWELLERS FACE MANY CHALLENGES

As discussed in Chapter 3, there are a large number of informal settlements in Myanmar. This population is also expected to grow given increased urbanization and the lack of affordable housing options. Beyond the issues of precarious living conditions and limited access to basic services, there are a number of challenges for slum dwellers that particularly affect their inclusion in the city. These include issues around legal documentation, tenure security, and crime.

Attitudes to slum dwellers and legal documentation. Informal settlements, a common phenomenon in the rapidly urbanizing developing world, have been generally tolerated by municipal authorities in Myanmar (UN-Habitat, 2017). However, evictions of urban squatters since the late 1950s have also built negative perceptions among urban dwellers. Instead of being viewed as legitimate residents who require support, or who are acknowledged as making contributions to economic growth, informal settlers are sometimes viewed as threats to safety and urban development, or even perceived as “professionals” who gain wealth by receiving compensation for illegally-occupied land (DIIS, 2017).

A significant number of urban residents do not have legal identity documents. According to the 2014 Census, 22.4 percent of residents in Yangon Region do not have any type of identify documents (Myanmar Ministry of Immigration and Population Report, 2015). In particular, residents in informal settlements have difficulties in obtaining such documents, which in turn hinders their access to formal employment, municipal services and low-interest loans. For example, a National Registration Certificate (NRC) is often required to be employed in larger factories. To obtain one, proof of a permanent address has to be shown, which is often not possible for those renting spaces in illegal settlements. Difficulty in obtaining legal status has worsened the cycle of poverty among informal settlers (DIIS, 2017).

Some informal settlers have to find alternative ways to obtain legal documents in order to secure employment or send their children to school. This may include, for example, paying additional fees to officials or other influential local figures in order to obtain documents, for which some may be forced to take a loan. Others may try to borrow an NRC from friends and family members or seek help from other well-connected individuals to find work at factories. Yet, even such informal channels are not within reach of the poorest urban dwellers, compared to those financially better off and socially better connected (DIIS, 2017).

Tenure security and evictions. Tenure security is a highly complex issue given the different ownership and the myriad of laws governing land and properties in Myanmar. The Mapping Yangon project found that nearly all residents in informal settlements had little tenure security of any type. Nevertheless, many households in underserved resettlement areas, who were relocated from the inner city in the last century, were issued lease certificates or other tenure documents by the government. The land of some peri-urban, densely populated settlements, though included within the administrative boundary of Yangon city as the city expands, are still classified as village tracts subject to laws governing rural land. Tenure systems and security also vary within each settlement. For example, some resettlement sites warranted originally relocated households lease of land plots. But later the plots were subdivided and resold to other occupants, leaving the ownership mixed and complex (UN-Habitat and Cities Alliance, 2017).

Not having security of tenure obstructs poor residents' access to legal documents and municipal services, prevents them from investing in the houses and improving their own living conditions, brings fear of eviction, creates high level of turnover and uncertainty, hinders social cohesion, and breeds ground for crimes and tensions. Unsurprisingly, demand for tenure security is thus high among informal settlers. Over 90 percent residents in informal settlements do not want to move. According to the 2014 Census, only 68 percent of urban residents in Yangon have secure tenure, the lowest among all the states and regions (Ministry of Labour, Immigration and Population, 2017).

There is a spectrum of tenure insecurity in Myanmar – some are under constant threat of eviction, and some face no immediate threat but might have to move after a number of years (Forbes, 2016). Some informal settlements, though lacking formal land titling or tenure, are not under threat of eviction as the settlers rent parcels of subdivided private land owned by powerful landlords. Meanwhile, many are under constant fear of eviction and have to move from one place to another (YCDC and Save the Children, 2016).

The resettlement model has been the predominant approach in redeveloping informal settlements in Myanmar for decades. Massive resettlement projects were implemented in the 1950s, 60s, 80, and 90s to relocate inner-city settlers to fringes of cities, and redevelop land in the central city with higher-value properties. Slum clearance has continued to take place in recent years. In absence of adequate replacement housing, many evicted slum dwellers have ended up squatting in other informal settlements as the only affordable option with access to economic opportunities (DIIS, 2017). Repeatedly moving or being forced to move from one illegal settlement to another also perpetuates the cycle of urban poverty and inequality.

CRIME AND VIOLENCE FURTHER AFFECTS VULNERABLE GROUPS

Informal settlements, especially large ones such as Hlaing Thayar township, are infamous for high level of crimes. Due to the high mobility of residents, it is believed by the public and local authorities that such informal settlements have encouraged criminals and gangsters to behave and escape freely. Informal

settlements are commonly seen as the breeding ground of crime, social tension, gangs, and all kinds of illegal activities, with higher-density settlements seen as being attractive for criminals to cluster and hide from authorities (DIIS, 2017). The Global Peace Index Survey places Myanmar at number 130 on a list of 162 countries ranked for women's safety, and 17th out of 19 Asia Pacific countries, ahead of only the Philippines and North Korea (2018).

Many informal settlers themselves are victims of crimes. As police are not seen as playing a proactive role in upholding law and order, residents tend not to report crime to them or to other ward authorities, particularly when they have newly arrived in a settlement. Women, particularly single women and widows, are reported as being afraid to walk the streets of informal settlements alone at night. They are also less likely than men to report crimes, as

they feel more vulnerable and fear revenge from the criminals (DIIS, 2017).

While data are not urban specific, gender-based violence (GBV) is a persistent problem in Myanmar. Women and girls experience various forms of violence, such as physical, sexual, verbal, or psychological abuse, in their private and public lives. While statistical data on the scale and nature of GBV remains limited, a number of studies have shown that GBV is prevalent in the country. Studies on Intimate Partner violence (IPV) and rape suggest this is quite prevalent. Over half of women respondents in a survey by the Gender Equality Network (GEN) reported experiencing intimate partner sexual violence and marital rape. Nationwide rape statistics for 2012 were the highest in five years, making rape the second-most commonly reported serious crime after murder.²⁹

4.3 PEOPLE WITH DISABILITIES

An estimated 2.3 million people, or some 4.6 percent of Myanmar's population, is reported to live with some sort of disability³⁰. About 10 percent of these are children. Ayeyarwady Region and Chin State reported the highest prevalence of disability at 7.6 and 7.4 percent of the state populations respectively. The prevalence of disability in Rakhine State was also high, at 5.3 percent.³¹ The disabled are excluded in various ways --many cannot access education, employment and health services (Ministry of Labour, Immigration and Population, 2017). Illiteracy levels among the disabled are more than 10 times as high as for those without disabilities.

Children with disabilities may lack birth registration documents, which constrains their access to services. UNICEF found that 27 percent of children with disabilities in their 2016 study did not have a birth certificate. In certain states and regions in the study—Tanintharyi, Kayin and Rakhine—only around 50 percent of children with disabilities had their births registered, the first step to obtaining a birth certificate (UNICEF, 2016). Those without birth

certificates cannot obtain citizenship scrutiny cards (CSCs), which, as outlined above, makes it difficult to access a range of services, including higher education, as well as to own land and vote (Newall, 2015).

Existing studies show that children living with one or more disability have much lower rates of enrollment in education than those without. Even if enrolled, discrimination in school can cause children living with disabilities to drop out. A 2015 study found that children with disabilities were “pushed” out of school by discrimination from school administrations, teachers and peers, as well as accessibility issues, such as difficulties with transport, access to bathrooms, and long school commutes. The study found that they were not “pulled” out of school: even though parents complained of poverty, children with disabilities were not leaving school to work to support their families (Eden Center for Disabled Children, 2015). Though Yangon may have slightly more opportunities than other cities with two government-run schools, five private schools, and five NGO institutions, these are still very limited (Bawi, 2012).

29 The Asia Foundation, 2017, Myanmar Urban Crime and Violence, and Gender Equality Network (GEN), Behind the Silence: Violence Against Women and their Resilience Myanmar (Yangon: GEN, 2015), 32, <http://www.genmyanmar.org/publications/Behind%20the%20SilenceFullReportEnglish.pdf>

30 The definitions of disability used in the census were in line with international standards and UN recommendations, and consist of having self-reported difficulties with seeing, hearing, walking, and remembering or concentrating. These are four of the six developed by the Washington Group on Disability Statistics

31 Because up to 1.09 million were not enumerated in Rakhine state, the percentage of the population living there with disability could be much higher



4.4 GOVERNANCE, COMMUNITY NETWORKS, AND PARTICIPATION

The broad issues of governance are discussed below in Chapter 5, though it is important to recognize that the less regulated informal settlements have stimulated informal local governance systems that play a role in social inclusion. Local leaders, older residents from resettlements in the last century, as well as monasteries and churches provide support to newcomers, often in terms of services and amenities such as real estate, money lending, and sales of water and electricity. Community networks are generally strong among kin, friends, and neighborhoods in informal settlements as a survival strategy,

with community “elders” who sometimes serve as neighborhood advisors. Community networks are usually stronger among the ethnic minority groups than the Bamar majority. However, high resident turnover and the sense of insecurity due to lack of tenure and fear of eviction have undermined social cohesion and obstructed formulation of community self-help organizations, which could otherwise be more active in encouraging communities to organize and address issues such as poor provision of basic services (DIIS, 2017).





5

GOVERNANCE AND
FINANCE FOR INCLUSIVE
URBANIZATION

KEY MESSAGES

- Strong institutions, good governance and sufficient financing at the local level are necessary for implementing inclusive urbanization policies.
- Decentralization in Myanmar is still at an early stage and local implementation is substantially hampered by financial constraints, and technical capacity.
- Sub-national financing is inadequate for local governments to fulfill their service delivery responsibilities in cities and requires much reform.

POLICY RECOMMENDATIONS

- Strengthen coordination between government agencies for decision making and urban management by streamlining processes and investing in capacity building for implementation.
- Strengthen participatory planning for urban development by engaging communities and citizens (including low income).
- Develop a comprehensive and equitable approach to financing for urban development by improving regional disparities via intergovernmental fiscal transfer mechanisms, strengthening local revenue generation, scaling up private sector financing and using land value capture for larger cities to raise revenue.

5.1 GOVERNANCE AND INSTITUTION

5.1.1 INTRODUCTION

Building inclusive and sustainable cities requires strong institutions and good governance at all levels of government, but especially at the local level. In Myanmar, decentralization and deconcentration reform efforts are still young, having been initiated in the 2008 Constitution. While urban service delivery functions have been devolved to subnational governments, in practice, local governance is often hampered due to limited implementation of policies/frameworks, financial resources, and technical capacities. Lack of transparency and fair decision making as well as insufficient resources to successfully implement programs and policies on the ground may lead to unequitable urban development and intra-city disparities, which may further lead to social tensions, crime and violence. Engaging communities and citizens in decision-making processes is important in strengthening policies, enhancing service delivery, and ensuring social stability in cities. Empowering urban dwellers to actively engage and contribute in their cities is a powerful way of promoting inclusion (Baker & Gadgil, 2017). This chapter explores the current condition and challenges of governance and institutions in Myanmar in the context of inclusive urbanization.

5.1.2 LEGAL AND POLICY FRAMEWORK

Historically, Myanmar's political and administrative structure has been highly centralized. The 2008 Constitution included a number of provisions aimed at increasing the degree of political (transfer of decision-making power and accountability), administrative (distribution of managerial responsibilities) and fiscal (expenditure responsibilities and corresponding financial resources) decentralization (Asia Foundation, 2013). The Constitution legally established state and region governments, providing them the right to enact laws, prepare budgets, collect taxes, and manage entities under their control.

Chapter Two³² of the Constitution, which is divided among eight sectors (finance and planning; economic; agriculture and livestock breeding; energy, electricity, mining, and forestry; industrial; transport, communication, and construction; social; and management), lists areas over which the state/region governments have legislative powers (Asia Foundation, 2015). While the 2008 Constitution and subsequent reforms delegated functions to the state/region governments and established new mechanisms of local governance, Myanmar still remains a relatively centralized state (Asia Foundation, 2015b).

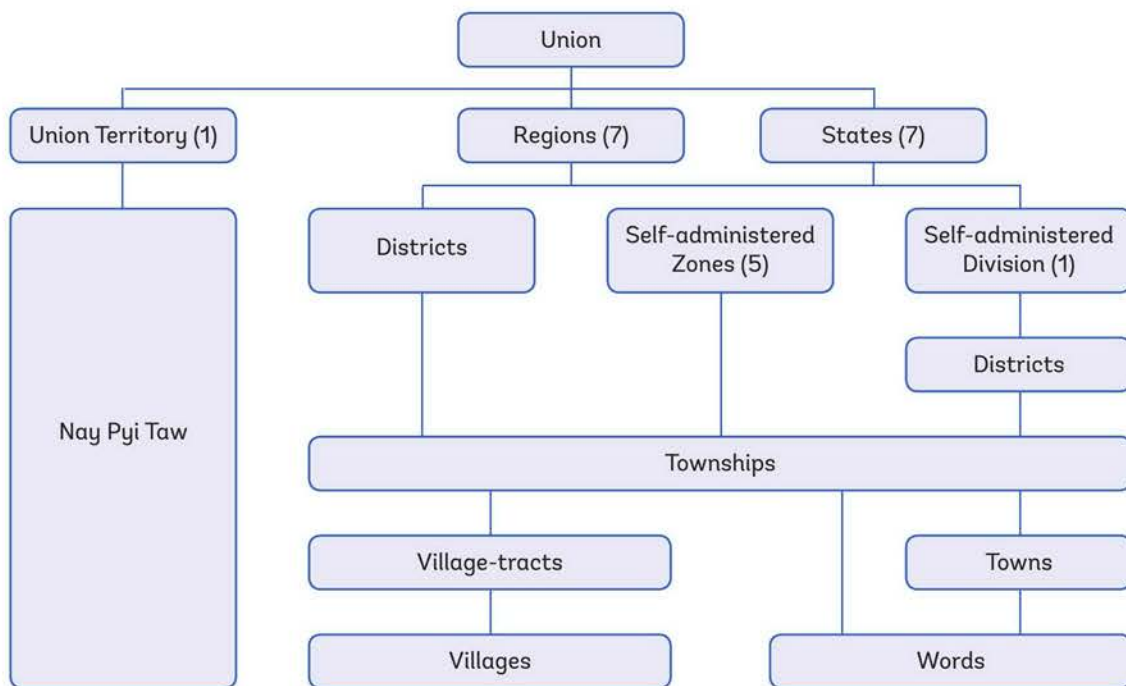
DEVELOPMENT AFFAIRS ORGANIZATIONS

Currently, Myanmar is administratively divided into seven states, seven regions, and one Union Territory (the capital city of Nay Pyi Taw) which are further divided into 74 districts; 330 townships and approximately 400 Development Affairs Organizations (DAOs); 13,618 village tracts and 3,063 wards; and approximately 70,000 villages (Dickenson-Jones, Dunn, Joelene, De, & Betty, 2016) (Figure 5.1).



32 Schedule One indicates the Union responsibilities while Schedule Two indicates the Region or State Legislative List

Figure 5.1: Administrative Structure of Myanmar

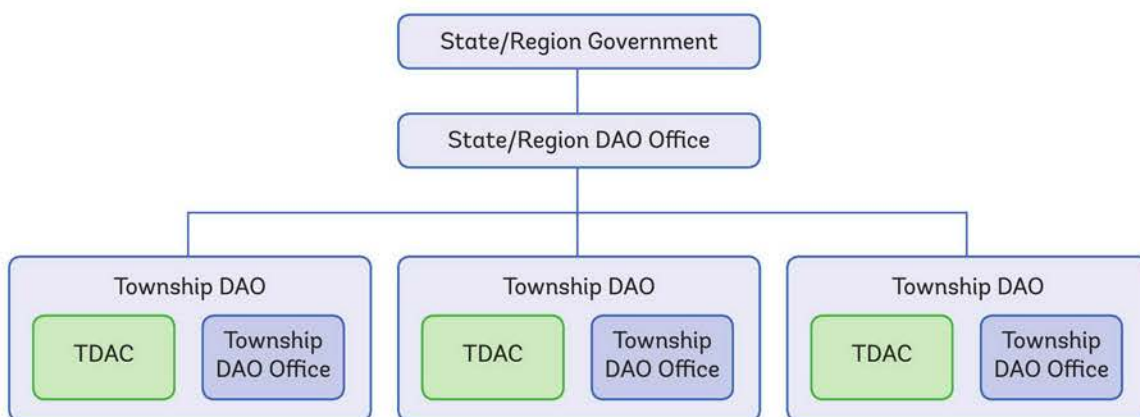


Source: Ministry of Land, Infrastructure, Transport and Tourism, Japan (MLIT), 2013

Prior to the 2008 Constitution, urban matters were managed by the Department of Development Affairs under the Union Ministry of Border Affairs (MoBA)³³. The 2008 Constitution transferred these function to the 14 states/regions, establishing township-level DAOs under the full control of the new 14 states/

regions (Figure 5.2). Each of the 14 state/region parliaments (hluttaw) enacted their Development Affairs (Municipal) Laws and the township-level DAOs would focus on urban governance under the supervision of the state/region Minister of Development Affairs (Asia Foundation, 2015b).

Figure 5.2: State/Region Government and DAOs



Source: Asia Foundation, 2015b

³³ Under the 1989 Municipal Law, Municipal Committees served the administrative roles and functions for urban areas while District Councils served similar roles for rural areas. The 1993 Development Committees Law established that Development Committees report to the Ministry of Home Affairs' General Administration Department, however were placed under Ministry of Border Affairs in 1994

The DAOs are a nascent exception to Myanmar’s relatively centralized administrative structure. All townships in Myanmar (except Yangon, Mandalay and Nay Pyi Taw) have township-level DAO offices, which serve as municipal offices under the full control of the respective state/region government where they are located. The DAOs are comprised of a Township Development Affairs Committee (TDAC), which is generally composed of seven members, of which four are indirectly-elected community representatives) and a Township DAO Office, which is composed of professional DAO civil servants. The state/region-

level DAO office supervises the township-level offices, including coordination and staff management for the whole state/region (Ibid). DAO is the only fully decentralized government agency under the control of state/region governments (all other subnational entities are under the Union Ministry) and are unique in ways summarized in Table 5.1. The legal mandate of DAOs clearly define its core duties and responsibilities, which focus on the provision of social (basic) services and local economic governance in urban areas, as defined in Table 5.2.

Table 5.1: Comparison of DAO and other Subnational Entities

DAO	Other Subnational Entities
Fully decentralized government agency under the control of state/region governments	Part of the Union Ministry, primarily reporting to Nay Pyu Taw.
Fully self-funded and must use their revenue within the township where it was collected. Have significant discretion over the use of their revenue collected.	Receives its union budget from the Union Government Fund.
Serve as major social service providers for roads and bridges, urban water supply, waste management, drainage, etc. Paramount in local economic governance, issuing local business licenses and permits, collecting taxes and fees, and managing local auctions for toll roads and ferries.	Tends to focus on one sector.

Source: Asia Foundation, 2015b

Table 5.2: DAO’s Duties and Functions

DAO Social Service Duties and Function	DAO Economic Governance Duties and Function
<ul style="list-style-type: none"> - Township planning - Water supply - Sanitation - Sewerage disposal - Disaster preparedness - Street lighting - Roads and bridges - Vagrant persons on the streets - Animal control - Parks, swimming pools, public baths, and recreation centers - Road rules, street naming and addresses - Cemeteries and crematoriums - Removal of cemeteries - Public buildings under the DAO - Demolition of squatter buildings - Other development works with public interest - Other duties as needed 	<ul style="list-style-type: none"> - Markets owned by DAO - Privately-owned markets - Cattle markets - Slaughterhouses - Roadside stalls - Small loan businesses - Bakeries and restaurants - Dangerous trades - Lodging houses - Breeding of animals and disposal of carcasses - Ferries - Slow-moving vehicles
All duties and functions are entirely supported by revenues raised locally by DAOs	

Source: Ibid

CITY DEVELOPMENT COMMITTEES

The three principle cities of Nay Pyi Taw, Yangon (which includes 33 townships and four districts in the Yangon Region), and Mandalay are subject to specific governance and management arrangements under City Development Committees (CDCs) which differ from the states/regions and DAOs. The CDCs are responsible for urban planning and development, urban land administration, municipal public works and service delivery (roads and bridges, water supply, waste management, parks and sports grounds, street lighting, funeral services, fire-fighting, etc.), public health, and tax collection (including business licensing and registration). Yangon City Development Committee (YCDC) and Mandalay City Development Committee (MCDC) are not fully autonomous local governments and have delegated administrative functions of the Yangon Region Government (YRG) and Mandalay Region Government (MRG). Both cities are managed by CDCs that are partly elected by the public where the chairmen are Ministers of Development Affairs of the respective region governments. In contrast, as the capital of Myanmar, the Union Territory of Nay Pyi Taw is managed separately by a ten-member Council, of which nine members are selected by the president and one is appointed by the military (Ibid).

MINISTRY OF CONSTRUCTION

Within the Ministry of Construction (MoC), the two main departments associated with urban planning and development are Department of Urban Housing and Development (DUHD), and the Department of Public Works (DPW). DUHD takes the lead in urban development policy-making, spatial planning, land administration, and housing and urban infrastructure development. DPW is responsible for planning and implementation of infrastructure including roads, bridges, airfields and buildings (JICA, 2014).

In line with the decentralization efforts which mandate that local spatial planning responsibilities should be undertaken at the subnational level, DUHD to shift its functions from “doing” to “enabling”, focusing more on policy making, planning, regulating and monitoring urban and regional development and construction. Historically, DUHD acted as a “provider” of urban-related services such as the planning, management, and implementation of physical and social infrastructure, including i) Urban development

and redevelopment projects incorporating planning for water supply and sanitation, ii) New town and satellite town developments, iii) Various types of housing development including affordable housing, public and rental housing, sites and services and slum and squatter upgrading schemes, iv) Industrial zone development, v) State owned and urban land, especially in Yangon, and vi) Joint venture investment zones (Ibid).

Today, DUHD's roles and responsibilities shifted to a more “Enabler, Facilitator, and Regulator” role and responsibilities include:

- i) Development of the National Spatial Development Plan (NSDP) incorporating Urban Development Policy, National Housing Policy, an integrated urban network system (National Urban System Plan), and a comprehensive land use plan, consistent with the emerging National Comprehensive Development Plan (NCDP).
- ii) Assisting of the state/region governments and CDCs as required, with activities such as urban planning/human settlement planning including concept plans, structure plans and local plans/detailed guidance for major cities, as well as providing advice and assessing development permit applications.
- iii) Improving access to basic social services in urban and rural areas such as shelter, education, health, potable water, and creating a livable environment while ensuring protecting of the natural environment
- iv) Establishing and modifying planning laws and regulations, pertaining to urban planning and development
- v) Assisting the Union Government to establish a national spatial planning system in collaboration with relevant line ministries (Ibid).

5.1.3 ADMINISTRATIVE CAPACITY

DEVELOPMENT AFFAIRS ORGANIZATIONS

As discussed above, while the 2008 Constitution involved significant provisions aimed at decentralization, Myanmar remains a highly centralized state. The division of administrative responsibilities and accountability relationships defined in Chapter Three created a somewhat blurry

distinction between the state/region departments and the state/region-level offices of the Union ministries. In terms of urban matters, the Constitution provided DAOs the responsibility and discretionary power to perform its social service provision and economic development duties and functions. However, the removal of the Department of Development Affairs under MoBA meant that DOAs were left without a “mother” ministry which would serve as a central guiding agency to streamline development. As a result, the 14 state/regions each have unique DAO systems with its own legal mandate, policies, staffing, and training programs, which present various capacity (versus mandate) challenges in revenue collection, budgeting and financing; planning and implementation; and human resources (Ibid).

Revenue Collection, Budgeting, and Financing Capacity. While DAOs are uniquely self-funded with high discretion over the use of its revenues, DAOs are mandated with responsibilities of social service provision and local economic governance. Therefore, effective revenue collection and management, budgeting and finance are essential to local service delivery and is one of the largest operational challenge of DAOs. In terms of revenue collection, larger towns may be able to raise enough revenues to cover the cost base, however many medium and smaller towns struggle to raise revenue. While many state/regions allow for a limited transfer of funds, a

holistic approach to improving revenue collection and management is a high priority. In terms of budgeting, integrated strategic planning and budgeting is not available. Furthermore, multi-year budgeting is not allowed, complicating efforts to implement large-scale projects (such as water and sewage systems) which require budgeting to be spread over several fiscal years. Finally, the above-mentioned challenges limit the DAO’s accessibility to external financing sources, such as international development partners (further detailed below in Section 5.2).

Urban Planning and Implementation. Currently there is a lack of integrated planning and budgeting with little cross-sectoral planning between government agencies. As there is no parent ministry for DAOs, urban planning and implementation processes (such as policy development, financial systems, procurement, O&M) are not streamlined, and the state/region governments must take-on an increasingly important role in this area. Urban master planning only exists in Yangon and Mandalay, despite the emerging urbanization needs in secondary cities. Outside Yangon and Mandalay, development projects are generally conducted based on immediate needs with less than one-year budgets. While DAOs have a mandate for urban planning, however do not have dedicated staff or department for urban planning (further detailed in the Urban Planning Chapter).



5.2 FINANCING

Sound financing mechanisms are critical for inclusive and sustainable urban management and service delivery. Insufficient resources to successfully implement programs and policies on the ground lead to unequitable and unsustainable urban development. Weak capacities for policy-making, planning, implementation, and enforcement, often are rooted in the lack of sufficient human, technical, and financial resources. As elaborated in Section 5.1, the 2008 Constitution laid out the decentralization of fiscal, as well as political and administrative, roles and responsibilities. Since then, sub-national governments (SNGs), including state/regions and townships/districts, have played an increasingly prominent role in the management and spending of public finance and service delivery. However, the financial mechanisms in place, including the inter-governmental fiscal transfers and generation of own-source revenues, are insufficient to finance required infrastructure and services at the local level. This chapter explores the current condition and challenges of financing urban development in Myanmar. Furthermore, the chapter lays out potential new sources of revenue to be explored.

5.2.1 FISCAL RESOURCES

Current revenues of SNGs can generally be categorized into Union transfers and own-source revenues (Table 5.3). SNGs outside of Yangon and Mandalay are heavily reliant on Union transfers, which constitute approximately 90 percent of their revenue source. In Yangon and Myanmar, approximately 50 percent of revenues come from Union transfers while the remaining come from current own-source revenues (taxes and non-taxes) as well as capital and financial revenues (including revenues from sale of capital assets) (Figure 5.3).

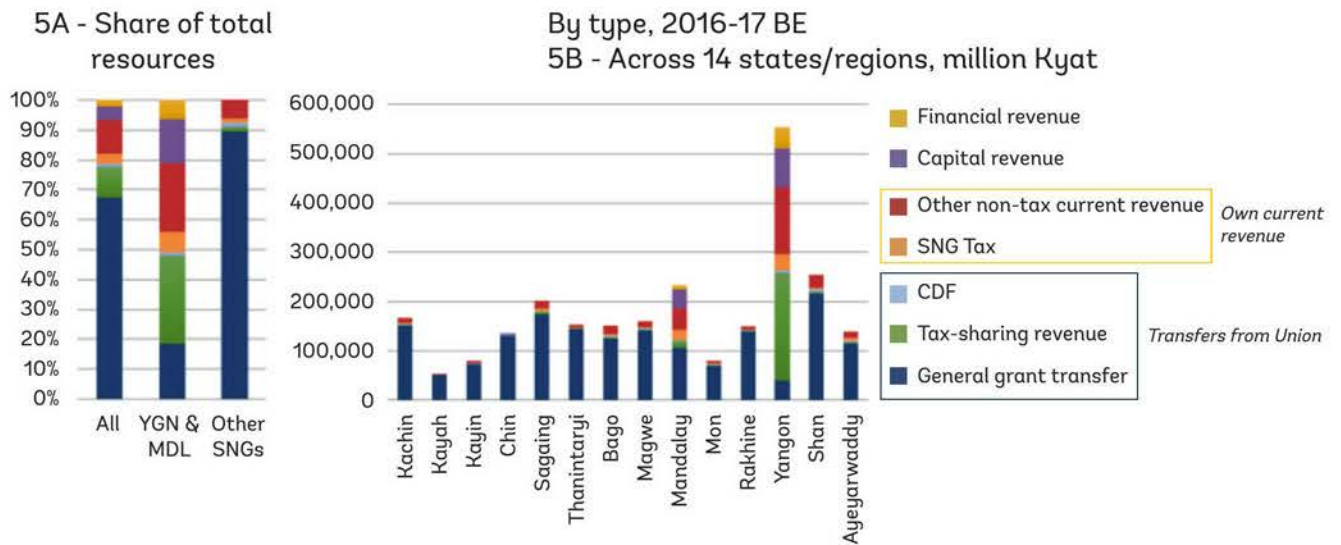
Union General Purpose Grant Transfers. The general-purpose grant is the largest fiscal transfer to the states/regions, accounting for 87 percent of all transfers in 2017-2018. The general-purpose grant uses a formula with six equally weighted indicators: i) state/region population, ii) state/region poverty index, iii) state/region per capita GDP, iv) state/region land area, v) state/region urban population, and vi) state/region per capita tax collection. Three indicators are used as proxies for expenditure needs

Table 5.3: SNG Current Revenue Breakdown

Union Transfers			Own-Source Revenues		
			Non-Tax	Tax	
Union General Purpose Grant Transfer	Constituency Development Fund (CDF) Transfers	Other Ad-Hoc Transfers	Union Tax Revenue Sharing: - Commercial Tax - Income Tax - Special Goods Tax - Stamp Duty Tax	Fees, penalties, monopoly licenses, etc.	Wheel tax, property tax, excise tax, mineral tax, land tax, water and embankment tax, forest products extraction tax, fisheries tax

Source: Renaissance Institute, 2018

Figure 5.3: Breakdown of SNG Fiscal Resources



Source: Ibid

while the other three are used as proxies for fiscal constraints (i.e. ability to generate own revenues). The rules-based mechanism (including the macro indicator linked formula for the transfer pool) were introduced to the grant transfer mechanism in 2015-2016 as part of the Medium-Term Fiscal Framework (MTFF) reform to ensure a more transparent and equitable horizontal allocation of funds. However, the distributional impact remains small and there is much room to improve the disparities across states/regions (Renaissance Institute, 2018).

Constituency Development Fund (CDF). CDF transfers are the smallest fiscal transfers to the states/regions, accounting 1.7 percent of all transfers. Through the CDF, each of the 330 townships receive 100 million Kyats, which are used for small-scale infrastructure or for supplementing the Union expenditure on education and health (Ibid).

Union Tax Revenue Sharing. Union tax revenue sharing accounts for 9% of fiscal transfers to states/regions. Currently, there are four taxes that are shared to SNGs – commercial taxes, special goods taxes, stamp duty taxes, and individual income tax. The four taxes are collected by the Internal Revenue Department (IRD) under the Union Ministry of Planning and Finance (MoPF). Originally, the tax sharing mechanism allowed the taxes to be shares by origin of accrual (i.e. collection), however the mechanism created a bias to state/regions with greater commercial activity and better-developed tax administrations, such as Large Tax Payer Offices (LTOs). In 2016-2017 FY, 87 percent of the tax-sharing pool was allocated to Yangon as

a result of large state-owned enterprises (SOEs) operating across the country but filing taxes at the Yangon LTOs. Since then, equitable policy changes have been implemented and 15 percent of commercial and special goods taxes from SOEs at Yangon LTOs are distributed across states/regions in accordance to the general-purpose grant transfer formula, bringing down Yangon's share of the tax-sharing pool to 56 percent in 2017-2018 FY (Ibid).

Own-Source Revenues (Tax and Non-Tax). Within the powers stipulated under Schedule 5 of the 2008 Constitution, state/region governments collect both tax and non-tax revenues. Schedule 5 formally assigns several items as local taxes on SNG budgets (see Table 5.3 for tax and non-tax items). However, tax autonomy – the power of SNGs to exercise discretion over tax policy, including tax base and rate – remains to be explored. Several state/regions, including Yangon, have passed their own tax laws to alter tax bases and rates for property, land, fisheries and wheel taxes, suggesting that SNGs are indeed keen and able to set their own rates. Tax revenues and non-tax revenues account for a significant share of own-source revenues, at 16 percent and 53 percent respectively. However, the majority is collected by Yangon and Mandalay (65 percent of tax revenue and 80 percent of non-tax revenue) and SNG tax performance outside of the two cities remain weak (Ibid).

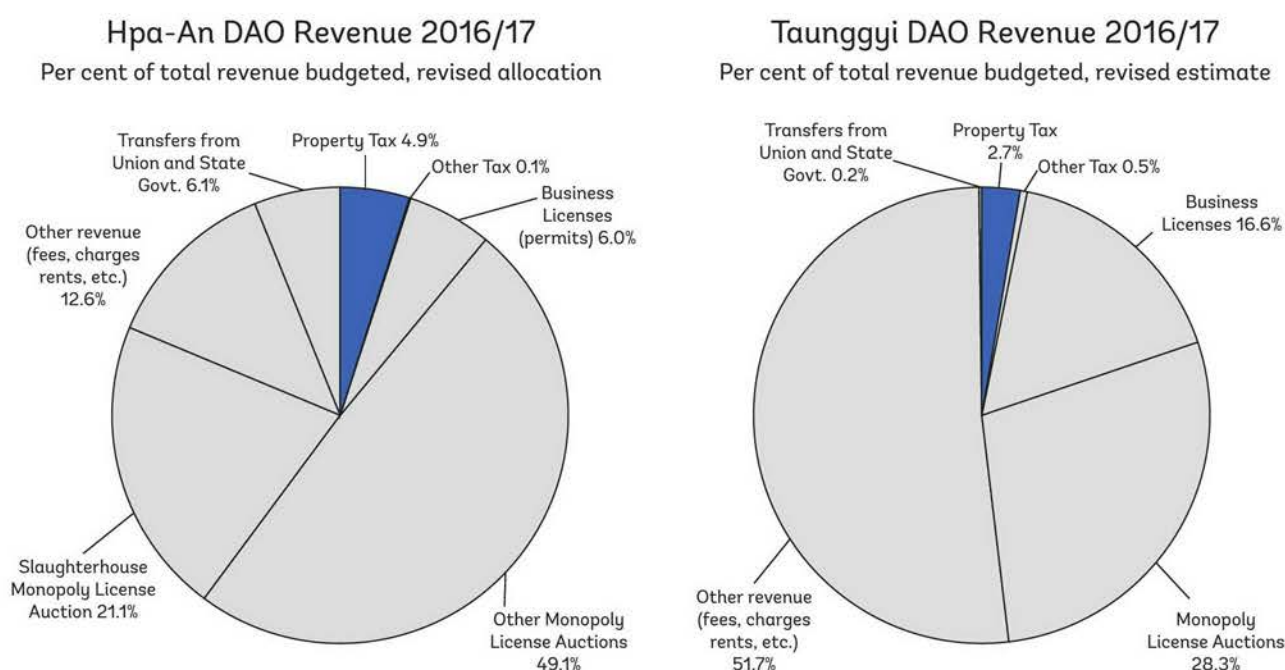
5.2.2 PROPERTY TAX

Myanmar currently has a functioning property tax system, however plays a small role compared to other SNG revenue sources (Figure 5.4).

Taxes and Charges Related to Property. Taxes and charges on property include property tax (urban), land tax (rural), capital gains tax on sale of property, stamp duty on sale of property and user fees related

to property. Property tax in Myanmar is a regular compulsory payment made by the owners/occupiers of the property to the urban municipalities (CDCs or DAOs) for the benefit of receiving public services. Property tax in Myanmar is distinct from other property-related taxes and charges, in that they are paid to the CDCs/DAOs rather than the Union government (Table 5.4) (McDonald & Hein, 2017).

Figure 5.4: DAO Revenues 2016/17 for Selected Cities



Source: McDonald & Hein, 2017

Table 5.4: Taxes and Charges on Property in Myanmar

Type	Timing of Payment	Payment To
Property Tax (Urban)	Regularly	Municipalities (CDCs or DAOs)
Land Tax (Rural)	Regularly	Union (collected by GAD)
Capital Gains Tax	One time at sale of property	Union (collected by IRD)
Stamp Duty	One time at sale of property	Union (collected by IRD)
User Fees	When services are used	Service Provider

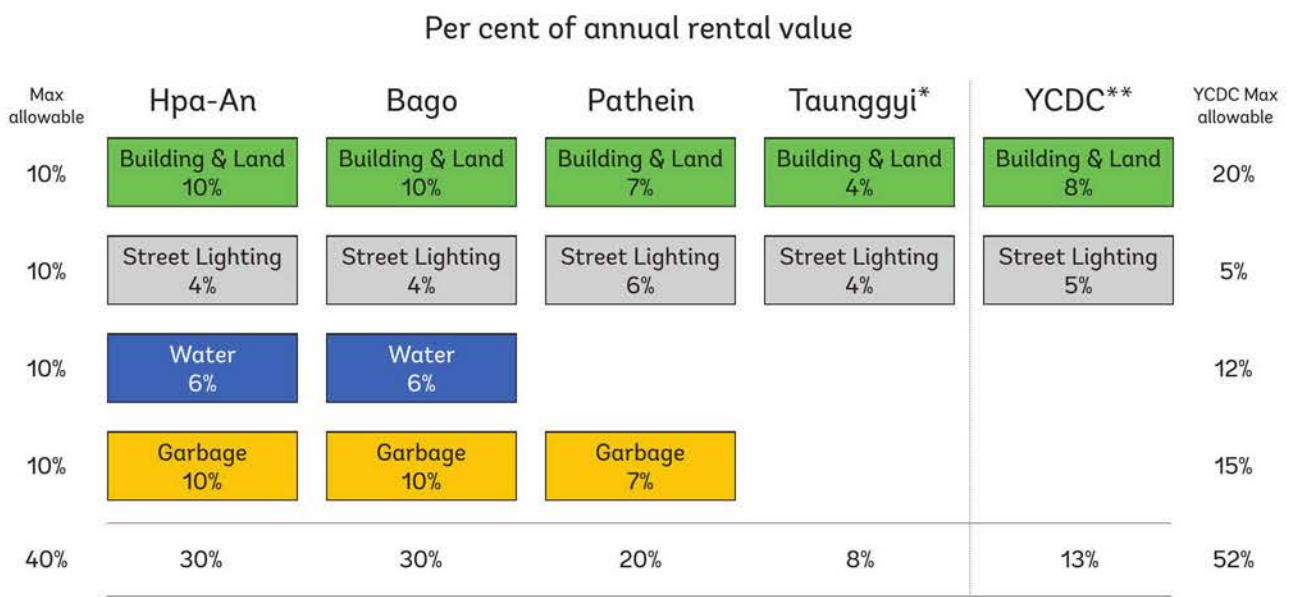
Source: Ibid

Legal Foundations for Property Tax. The legal foundations for urban property tax in Myanmar are prescribed in the Development Affairs Laws of the states/regions. For Yangon, property tax is defined as a combination of general tax, lighting tax, water tax and cleansing tax which is payable by the owners and/or occupiers (Figure 5.5). The tax is based on an assessment of the annual rental value (ARV) of the property which is provided by the YCDC Assessors Department. In case there is a change in assessed property values or other tax policy changes, the YCDC Assessors Department must seek approval from the YRG. The YRG Development Affairs Committee (DAC) may grant exemptions and discounts for religious and public buildings as well as properties in areas affected by poverty (Ibid).

Property tax in urban areas managed under DAOs (as opposed to CDCs) have a similar combination mechanism, except that the building and land tax is payable by the owner and service-specific user fees are payable by the occupants, in general. Property valuations are calculated based on ARVs. Policy decisions including tax rates and assessed property valuations are the responsibility of the Minister of Development Affairs or the DAC (Ibid).

Tax Administration. Property tax administration in Myanmar is still quite weak with substantial room for improvement. Current conditions for tax administration including: i) tax base identification, ii) property valuation, iii) cadastral record keeping, iv) tax rates and billing, v) tax collection, and vi) enforcement for selected cities are summarized in Table 5.5.

Figure 5.5: Composition of Property Tax and Tax Rates Applied for Selected Cities



Source: Ibid

Table 5.5: Current Conditions of Property Tax Administration for Selected Cities

Component	YCDC	Other Cities (DAOs)
Tax Base	<ul style="list-style-type: none"> - Approximately 300,000 properties on the cadastral record - Owner/occupier to pay property tax to YCDC Assessors Department - Exemptions for religious and public buildings, full or partial relieve for poverty 	<ul style="list-style-type: none"> - Properties on cadastral record: Hpa-An (8,494), Taunggyi (33,764), Pathein (18,748), and Bago (26,415) - Payable by owners of all buildings (residential, government and commercial) regardless of rental status - Exemptions for religious, government, and military buildings
Valuation Technique	<ul style="list-style-type: none"> - ARV and monthly rental values (MRV) determined by YCDC Assessors Department - Nine types of property classification - Last valuation review: 2014/2015 	<ul style="list-style-type: none"> - Varying valuation techniques: ARV calculated based solely on the buildings' physical characteristics, AVR calculated based on building's physical characteristics and local adjustments, and AVR calculated as land area multiplied by value per foot - Last valuation review: Hpa-An (2008), Taunggyi (2014/15), Pathein (2012/13), and Bago 92012/13)
Record Keeping	<ul style="list-style-type: none"> - Digital cadastral record for 283,569 residential properties for tax billing purposes, included taxpayer number address, valuation, and tax payable amount. Property classification on paper ledgers maintained by assessors - Paper-based case files for non-residential buildings - Valuation information entered into cadaster manually. Only buildings built after 2015 have accurate physical information 	<ul style="list-style-type: none"> - Hpa-An: Digital cadastral records for 8,057 properties with remaining kept on paper ledger; digital records include information on ownership, building materials, and number of floors; updated by tax collectors based on phone-based app - Taunggyi: Digital cadastral records for 23,516 properties with remaining kept on paper ledger; digital records include information on ownership, land size, building materials, number of floors and road type; updated by tax collectors based on phone-based app - Pathein and Bago: Paper-based cadastral record; includes information on ownership, building materials and number of floors; updated by tax collectors
Tax Rate and Billing	<ul style="list-style-type: none"> - 5-13% based on property type (includes: general and lighting taxes) 	<ul style="list-style-type: none"> - Hpa-An: 30% (includes: building, lighting, water and garbage) - Taunggyi: 8% (included building and lighting) - Pathein: 20% (included housing, lighting and garbage) - Bago: 30% (included building, lighting, water and garbage)
Collection	<ul style="list-style-type: none"> - Private properties: collected every six months by tax collectors (door to door spot collections) - Factories/workshops: collected once a year - Hotels/accommodations: collected every three months - Payments can be made directly to designated bank accounts 	<ul style="list-style-type: none"> - Collected every six months (door to door spot collections)
Enforcement	<ul style="list-style-type: none"> - Revenue Recover act (1980) entitles municipalities to take legal action in the event of non-payment - The YCDC Law (2013) stipulates that YCDC can sieves the property until property tax arrears are settled - However, enforcement is weak and resource provisions are rarely used 	<ul style="list-style-type: none"> - Revenue Recover act (1980) entitles municipalities to take legal action in the event of non-payment - However, enforcement is weak and resource provisions are rarely used

Source: Ibid

5.2.3 REVENUE COLLECTION AND MANAGEMENT

A majority of revenue collection (approximately 77 percent) is conducted by municipal offices such as the CDCs and DAOs. A majority of YCDC and MCDC’s revenue collection comes from non-tax sources such as sale of capital assets, sale of monopoly auction licenses and other fees. Revenue collection by SNG bodies constitute approximately 17 percent (Figure 5.4) (Renaissance Institute, 2018).

5.2.4 SUBNATIONAL GOVERNMENT BORROWING

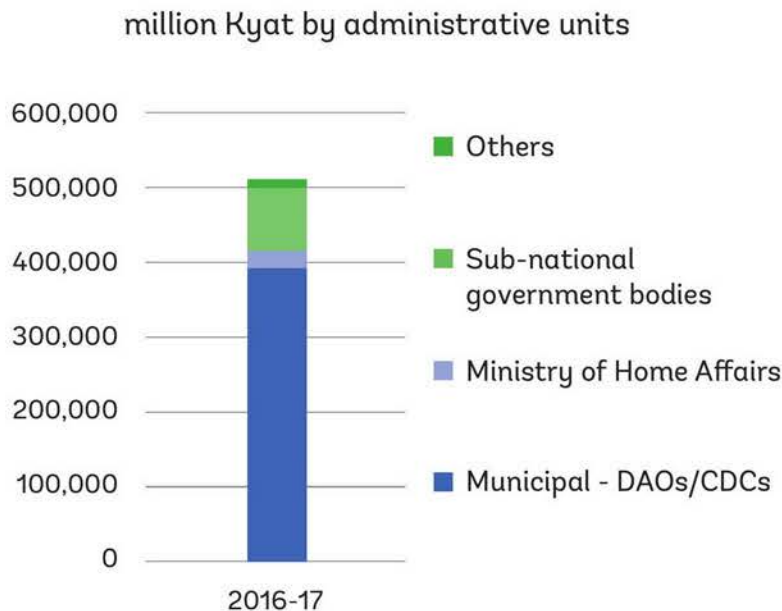
The 2016 Public Debt Management Law stipulates that states/regions can borrow from both Myanmar and international lenders with the approval from the Union Cabinet and the Union Hluttaw (state/region parliament). However, to date, SNGs outside of Yangon and Mandalay have not undertaken significant external borrowing (Ibid).

5.2.5 PRIVATE SECTOR

Both international and domestic private resource flows have increased significantly in Myanmar since 2011. In terms of international private resource flows, foreign direct investment (FDIs) grew more than six-fold between 2012/13 FY and 2015/16 FY. While the share is small compared to FDIs, domestic private investments have also increased incrementally, especially in the sectors of real estate, transport, and manufacturing. This growing appetite presents an opportunity for cities to leverage the private sector in financing inclusive and sustainable urban development (Government of China; ASEAN; UNDP, 2017).

The role of private sector in development assistance is being explored in the forthcoming Development Assistance Strategy which is being developed by the Development Assistance Coordination Unit (DACU). Private sector financing may include public-private partnerships (PPPs), guarantees, equity and blended finance, i.e. use of public funds to leverage private investments (Ibid).

Figure 5.6: SNG Own-Source Revenue Collection



Source: Renaissance Institute, 2018

Public Private Partnerships (PPPs). Myanmar has implemented various forms of PPPs in several sectors, including telecommunications, electricity, natural resources, housing, civil aviation, roads and public transport. Despite the absence of national/sector policy frameworks or institutional management functions dedicated to PPPs, rapid progress is being made in appointing private sector counterparts for PPPs. The Ministry of Electric Power (MOEP) and the electric power sector has been a particular area of focus for PPP application (ADB, 2014). Furthermore, a large share of the highway networks in Myanmar operates under Build-Operate-Transfer (BOT) arrangements (Renaissance Institute, 2018).

Innovative Infrastructure Financing Mechanisms (including Land Value Capture). Once the legal, regulatory and enforcement frameworks are in place, cities in Myanmar may explore innovative infrastructure financing mechanisms such as Land Value Capture (LVC). LVC schemes and techniques (Table 5.6) tap into urban land values to support urban infrastructure finance. Yangon and possibly Mandalay may have the conditions to introduce LVC, including strong economic growth, rising real incomes, and increased motorization and congestion, which are all factors that may contribute to land value appreciation around improved urban infrastructure. However, adoption of LVC schemes and techniques would require the city to have a complete and formally adopted detailed city base map, land use zoning including floor area ratio (FAR) demarcations, building regulations and permit procedures as a prerequisite (World Bank, 2018a).

Table 5.6: Various Land Value Capture Schemes

LVC Scheme	Description
Betterment Levies	Captures part of the land value gain attributable to the infrastructure investment by imposing a one-time tax or charge on the land-value gain
Developer Land Sales	Requires subdivision developers to provide their own internal infrastructure and to recover their costs through land sales. As the scale of new development increases, this policy shifts an ever-larger share of total infrastructure investment to private developers
Value Capture via Project-Related Land Sales	Involves the sale of land whose value has been enhanced by infrastructure investments or zoning changes. If the public sector owns the land, it can internalize the benefit of public investment and capture the gains through land sales
Development Charges	Developer receives development rights in exchange for obligation to compensate in cash (or provide in-kind) the cost of certain items of public infrastructure benefitting larger area.
Sale of Development Rights	Zoning tool which allows public authorities to sell development rights (such as additional densities or permits to developed beyond the zoned FAR) as an alternative to the sale of land to capture incremental value generated by public infrastructure projects. The proceeds from the sale of development rights are then used to finance infrastructure improvements.
Transfer of Development Rights (TDR):	Zoning tool which enables the surplus (or unused) floor volume of buildings (such as heritage buildings which may not be making full use of the zoned FAR) to be sold or traded for cash to other developers who may want to build buildings with higher FAR in other parts of the city.
Special Assessment Districts	An institutional and financing mechanism which enables organization of a distinct area within a city, such as a specified set of blocks in a CBD, for the purpose of aiding in the development or improvement of public assets that provide a direct and special benefit such as streets, sidewalks, curbs and gutters, water, sewer, gas electric, lighting, drainage or flood control facilities.

LVC Scheme	Description
Developer Exactions and Impact Fees	Approaches land financing from the cost side, unlike value capture. They are one-time, up-front charges designed to recover the infrastructure costs associated with growth. Developer exaction requires developers to install at their own expense the internal infrastructure needed to meet development standards or to pay for infrastructure elements provided by public authorities. Impact fees are designed to cover the external infrastructure costs caused by new development
Land Asset Management	Allows public authorities to exchange land assets for infrastructure assets, in cases where the balance sheets of many public entities are top heavy with urban land and property assets but the cities where the property is located suffer acute shortages in infrastructure. Public authorities may sell or lease publicly owned land and use the proceeds to finance infrastructure investment. Rather than using land-financing instruments to finance individual investment projects, public entities undertake a balance sheet adjustment, in which they modify the overall composition of publicly held assets (increase public infrastructure assets and reduce land assets)

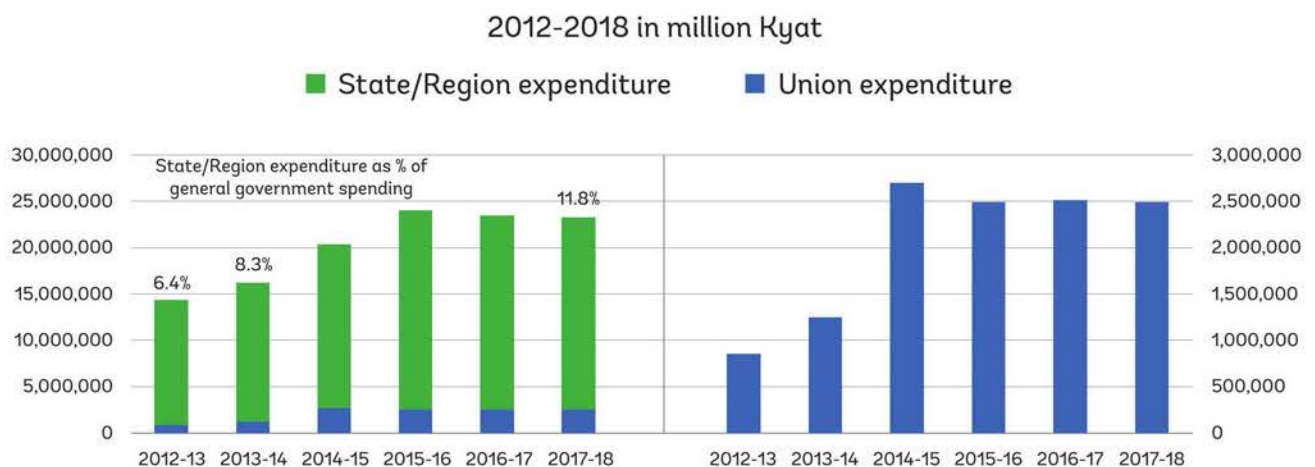
Source: World Bank, 2017e; World Bank, 2018

5.2.6 EXPENDITURES

State/region expenditure has nearly tripled since 2012/2013, when their first budgets were enacted. Recent trends in state/region expenditure and Union expenditure are shown Figure 5.6. While impacts of decentralization is evident, Myanmar’s state/region share of general government expenditure remains at 12 percent, which is lower than its neighboring countries such as Vietnam (45 percent), Indonesia (35 percent) and the Philippines (25 percent) (Ibid).

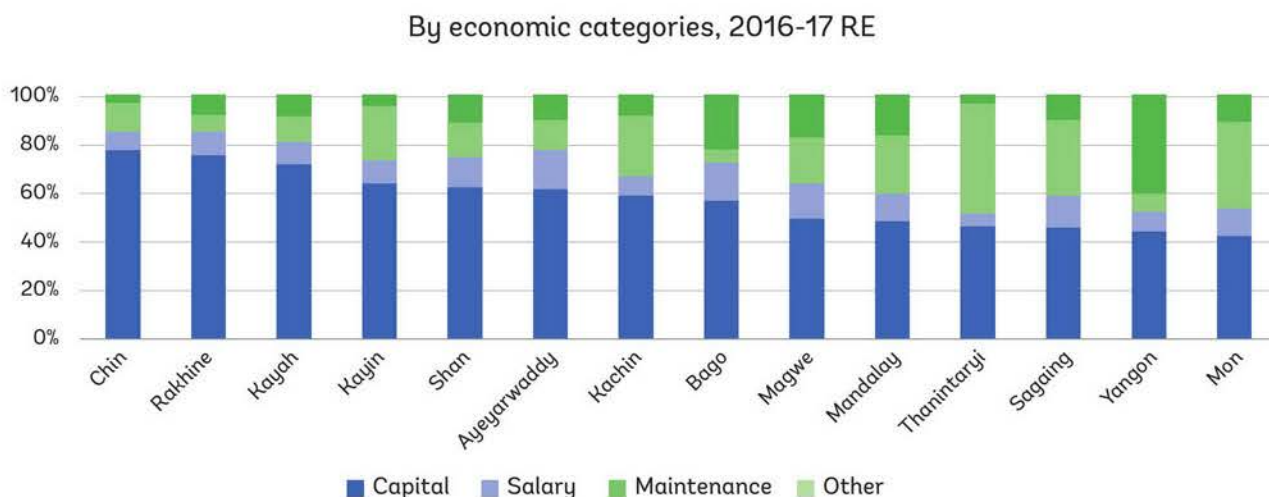
Capital Expenditure. While the breakdown of SNG budget expenditure varies across states/regions, in general, capital expenditure constitutes a large ratio of SNG budgets, with all states/regions allocating at least 40% of budget on capital investments (Figure 5.7). In all states/regions (excluding Yangon), the share of budgeted capital expenditure has grown (36 percent increase in 2013-2014 and 55 percent in 2016-2017), suggesting an increasing prioritization in infrastructure development (Ibid).

Figure 5.7: Expenditure Across Levels of Government



Source: Renaissance Institute, 2018

Figure 5.8: Breakdown of SNG Expenditure (by Expenditure Category)



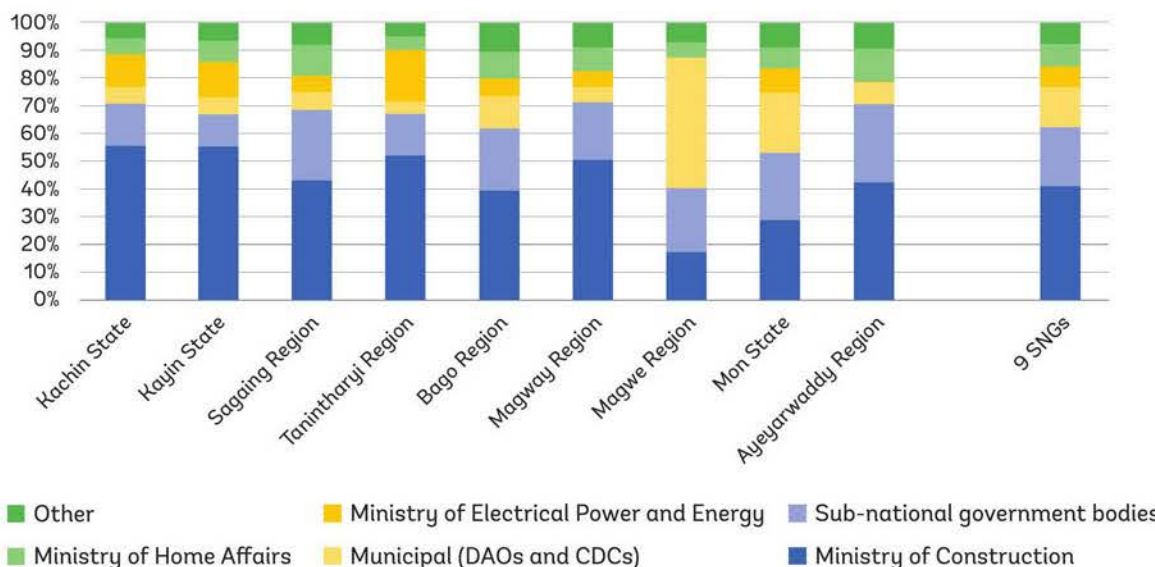
Note: RE = Revised Estimate (revised figures during fiscal year)
 Source: Renaissance Institute, 2018

Looking at the breakdown of SNG budget expenditure by executing agency, the largest share is budgeted to the Ministry of Construction (MoC) (Figure 5.8). Subsequently, the largest capital expenditure is also budgeted to MoC. A significant portion of MoC budget is allocated to rural roads under the Department of Highways (DOH). Furthermore, a share of municipal budget is also allocated for roads. Until 2015, State

Economic Enterprises (SEEs) made up a significant share of SNG budgets (primarily road investments under the MOC Public Works). Currently, the only sizable SEE on the SNG budget is the Electricity Supply Enterprise under the MOEP (Ibid). Incidence analysis to understand the extent to which expenditures reach the poor is beyond the scope of this study but would be insightful for policy.

Figure 5.9: Breakdown of SNG Expenditure (by Executing Agency)

By administrative units, % of total across 9 state/region budgets in 2017-18 BE



Note: Other includes: 1) Ministry of Agriculture, Livestock and Irrigation; 2) Ministry of Health and Sports; 3) Ministry of Natural Resources and Environmental Conservation; 4) Ministry of Planning and Finance, and few other small departments; Sub-national government bodies includes: SNG Cabinet Office, SNG Parliament, Court, Attorney General Office and Auditor Office; Municipal units include Development Affairs Organizations (DAOs) and Mandalay City Development Committee (MCDC); BE = Budget Estimate (enacted by legislature)

Source: Renaissance Institute, 2018



Current Expenditure. Current expenditure across SNGs has decreased in the recent years. For all SNG current expenditure in 2017-2018 FY, approximately 40 percent was budgeted for “maintenance,” 29 percent for “salary payments,” and 15 percent for “purchase of goods and services (Ibid).”

5.2.7 PUBLIC FINANCIAL MANAGEMENT

The 2008 Constitution established the current SNG institutions associated with Public Financial Management (PFM) such as the Hluttaws and budget departments. There have been significant efforts to improving fiduciary capacity, including i) budget execution rates, ii) cash management, and iii) fiscal transparency and public access to key fiscal information (such as the publication of Citizen’s budgets). However, there are still uncertainties around accounting practices, flow of funds, integrated planning and budgeting, data availability, etc. that require further assessment. Examples of Good Practice from other regions may be explored (Box 5.1)

Medium-Term Fiscal Framework (MTFF) Reforms. The MTFF reform aimed to foster fiscal discipline and improve strategic resource allocation to government agencies. The MTFF reforms introduces rules to fiscal transfers, such as the revision of the allocation formula for the Union General Purpose Grant (see Chapter 5.2.2 Fiscal Resources).

Changes to the Budget Calendar. An important recent development in Myanmar is the shift in its Budget calendar, which has changed from April-March to October-September. The rationale for the change is commonly cited as the difficulties in implementing infrastructure projects hampered by the onset of the rainy season (during June – October). In contrast to the Budget calendar, the Tax calendar is expected to remain the same (April-March). Having two separate fiscal calendars for Budget and Tax is not uncommon around the world, however, requires some consideration in terms of cash management (Ibid).

Box 5.1: Public Financial Management for Local Governments in the Philippines

In the Philippines, a PFM Assessment Tool was first introduced by Department of Budget and Management (DBM) in 2012 as part of its effort to institutionalize governance reforms by enabling local government units (LGU) to assess and improve their PFM systems, as well as generate information that would serve as a basis for their PFM Improvement Plans (PFMIPs). The PFM Assessment covers seven critical dimensions of performance of a well-functioning PFM system, namely:

- Policy-based Budgeting: Contains indicators that measure if the budget is prepared with due regard to government policy.
- Comprehensiveness and Transparency: Contains indicators that measure if budget information provides a complete picture of revenue forecasts, prior, current and budget years' expenditures, and the expected outputs. They also measure whether fiscal and budget information is accessible to the public.
- Credibility of the Budget: Contains indicators that measure whether or not the budget is realistic and is implemented as intended.
- Predictability and Control in Budget Execution: Contains indicators that measure if the budget is implemented in an orderly and predictable manner and whether or not there are arrangements for the exercise of control and supervision in the use of public funds.

- Accounting, Recording and Reporting: Contains indicators that measure whether or not adequate records and information are produced, maintained, and disseminated for purposes of decision-making, control, management, and reporting on operations.
- Internal and External Audit: Contains indicators that examine the arrangements for scrutiny of public finances and follow-up by the local chief executives.
- Citizens' Participation: Contains indicators that measure the extent by which the LGU encourages concerned citizens (organized as Civil Society Organizations) become partners of the LGU in the formulation, monitoring, evaluation, and improvement of the local budget.

For Myanmar, introduction of a PFM tool/assessment similar to that of the Philippines will shed light to the strengths and weaknesses of current local PFM systems - including fiscal resources and revenue collection, budgeting and expenditure execution, accounting and reporting, etc. The PFM tool/assessment will identify the bottlenecks in the current procedures and subsequent concrete action plans for improvement.

Source: World Bank, 2017f



6

PRIORITIES FOR
CREATING INCLUSIVE
CITIES IN MYANMAR

KEY MESSAGES

- Cities are engines of growth and prosperity, and are essential for lifting people out of poverty through increased employment opportunities.
- The way that cities grow, however, matters in terms of creating the foundations for livability, prosperity and competitiveness.
- Prioritizing an inclusive cities approach will help to ensure that cities grow in an equitable way which will have significant benefits for peace and stability.

POLICY RECOMMENDATIONS

- To promote inclusive urbanization, priority recommendations are presented in the areas of economic, spatial and social inclusion, as well as the need for promoting good governance and financing for urban development. These focus on investments in:
 - o sustainable urban infrastructure and urban upgrading;
 - o building resilience to mitigate the impact of shocks on people's livelihoods and health; and
 - o policy changes to facilitate access to legal documentation for migrants and specific subgroups, and targeted social programs for those that are particularly vulnerable to exclusion.
 - o Capacity building and new financing for urban development
- Implementation will be reliant on a strong commitment from government to a bold reform agenda.
- Reform will also require identifying champions and key stakeholders, finding relevant entry points for private sector investment, and ensuring a stable governance framework aligned with sufficient technical capacity and financing for implementation.

6.1 INTRODUCTION

Urbanization brings many opportunities for growth and poverty reduction. Given Myanmar's relatively early stages of urbanization, the opportunities are ever more important -- the investments made today will shape cities for decades to come. Prioritizing an inclusive cities approach will help to ensure that cities grow in an equitable way which will have significant benefits for livability, prosperity and competitiveness. An inclusive urbanization approach is consistent with the Sustainable Development Goals (SDGs), particularly SDG number 11 which is to 'make cities and human settlements inclusive, safe, resilient and sustainable,' and the New Urban Agenda which calls for the provision of basic services for all citizens, and refers to the 'Right to the City' as its guiding visionary principle. This means "equal use and enjoyment of cities and human settlements, seeking to promote inclusivity and [ensuring] that all inhabitants, of present and future generations, without discrimination of any kind, are able to inhabit and produce just, safe, healthy, accessible, affordable, resilient and sustainable cities and human settlements to foster prosperity and quality of life for all. (United Nations, 2017)".

The framework of economic, spatial and social inclusion used in this report points to several priority policy recommendations outlined below and summarized in Table 6.1 along with the key lead agencies for implementation. Other World Bank reports include recommendations for reforms in the macro economy, labor markets, and social sectors. These reforms are fundamental to sustainable development in Myanmar. This report has prioritized recommendations that are core to inclusive urbanization and can have the greatest impact. Also discussed are examples of good practice approaches adopted in World Bank operations and other international contexts.

Many of the recommendations come back to the need for investments in sustainable urban infrastructure and urban upgrading to provide basic services for all and ensure mobility for the flow of people, goods and services, building resilience to mitigate the impact of shocks on the economy on people's livelihoods and health, facilitating access to legal documentation for migrants and specific subgroups, ensuring gender equity, and targeting social programs for those that

are particularly vulnerable to exclusion and may not be able to benefit from urban opportunities.

Taking these recommendations forward will require additional work to: deepen the analysis on the details of where and how they can have the biggest impact, identify champions and key stakeholders, find relevant entry points for private sector investment, and ensure a stable governance framework aligned with sufficient technical capacity and financing for implementation. These are challenges that the World Bank and other development partners can support in partnership with the Government of Myanmar.

Table 6.1: Priority Policy Recommendations for Inclusive Urbanization in Myanmar

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
Promoting economic inclusion to foster job creation and resilience to shocks			
High informality limits opportunities and links to exclusion	Improve opportunities for informal workers	<p>In-situ community based urban upgrading (M)</p> <ul style="list-style-type: none"> begin identification of high risk areas, needs and upgrading plan (S) secure financing (S-M) implementation (M-L) <p>Access to micro finance for small entrepreneurs (M-L)</p> <ul style="list-style-type: none"> develop enabling environment and incentives to foster micro finance (M-L) ensure gender equality in access (M) <p>Transport investments to enable mobility to jobs and markets (L)</p> <ul style="list-style-type: none"> Education and training for skills in urban jobs (L) prioritize vulnerable groups (S-M) investments in access and quality improvements (L) 	<ul style="list-style-type: none"> Development Affairs Organizations (DAOs)/ City Development Committees (CDCs) Ministry of Construction; Ministry of Education; Planning and Finance
Some areas in cities highly vulnerable to flooding and other natural hazards	Build resilience to natural hazards	<p>In-situ community based urban upgrading in high risk areas (S-M)</p> <ul style="list-style-type: none"> identify and prioritize investments (S) begin implementation (M) <p>Drainage/solid waste management (M-L)</p> <ul style="list-style-type: none"> identify and prioritize highest risk areas (S) implementation (M) <p>Early warning systems (S)</p> <ul style="list-style-type: none"> design and implement approach to reach the most vulnerable (S) 	<ul style="list-style-type: none"> DAOs/ CDCs Ministry of Construction Ministry of Social Welfare, Relief and Resettlement

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
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Promoting spatial inclusion to improve access to affordable land, housing and services for low income, and vulnerable populations

Substantial infrastructure deficits limiting successful urbanization and contributing to poor living conditions	Invest in equitable access to sustainable urban infrastructure	<p>Infrastructure investments needed in water, sanitation, roads, drainage, solid waste management (M-L)</p> <ul style="list-style-type: none"> • identify and prioritize needs with targeting of areas for greatest impact (S-M) • ensure participatory design that is gender, disabled-informed (S) • begin implementation (M-L) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction; • Ministry of Natural Resources and Environmental Conservation (MOREC)
Shortage of affordable housing, large and growing number of informal settlements	Improve and expand affordable housing	<p>In-situ upgrading of existing stock and slum areas (M-L)</p> <ul style="list-style-type: none"> • diagnostic needs assessment and development of affordable housing plan (S) • ensure target is for low income populations (S) • create enabling environment for housing supply and demand (M) • develop approach to incentivize private sector for low income market (S-M) • implementation (L) <p>Implement the National Land Use Policy (S-M)</p> <ul style="list-style-type: none"> • enable and train staff for implementation (S-M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction; • Construction and Housing Development Bank (CHDB); • Ministry of Planning and Finance
Limited urban planning results in congestion, sprawl, hazard risk, inequality, and can affect city growth opportunities	Improve integrated spatial planning for inclusive and resilient urban development	<p>Align plans across agencies (land use, transport, environment, disaster risk) (S)</p> <ul style="list-style-type: none"> • set up coordination mechanism (S) • invest in geospatial data and sharing platforms (e.g. plan for national spatial data infrastructure) (S) • Ensure planning is gender and disability-informed <p>Capacity building (M-L)</p> <ul style="list-style-type: none"> • identify needs and develop longer term strategy (M) • implementation (L) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction • Ministry of Social Welfare, Relief and Resettlement

Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
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Promoting social inclusion to improve conditions for vulnerable groups to fully participate in society

Some are not able to fully participate in job markets or access services	Target social programs to marginalized groups (migrants, ethnic groups, disabled, women)	<p>Targeted programs designed to: link migrants with job opportunities, and provide assistance for disabled (M)</p> <ul style="list-style-type: none"> • identify and prioritize needs (S) • program design, implementation (M) <p>Addressing gender and other discrimination (S-M)</p> <ul style="list-style-type: none"> • awareness raising, education (S) • policy reform (M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Labor, Immigration and Population; • Ministry of Social Welfare, Relief and Resettlement
Lack of documentation and identification can prevent citizens from accessing jobs, services.	Facilitate access to legal documentation	<p>Reform of identification card system to ensure equity and remove obstacles linked to migration status (M)</p> <ul style="list-style-type: none"> • identify equitable approach and design system (S) • implementation (M) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Labor, Immigration and Population; • Home Affairs

Ensuring good governance and finance for urban development is fundamental to creating inclusive, competitive and sustainable cities

Fragmented governance hampers decision making and improvements on the ground.	Strengthen coordination between government agencies for decision making and urban management	<p>Streamline processes for urban management, delivery (S)</p> <ul style="list-style-type: none"> • carry out diagnostic assessment of processes and develop recommendations for efficiency for core urban services (S) • implement changes in a phased manner (S-M) <p>Horizontal and vertical coordination needed (S-L)</p> <ul style="list-style-type: none"> • carry out institutional mapping and assessment for core agencies and recommend reforms (S) • implement changes in a phased manner (M-L) <p>Invest in capacity building for implementation (M-L)</p>	<ul style="list-style-type: none"> • DAOs/ CDCs • Relevant sectoral Ministries
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Indicative Time Frame:
 Short term (S): 1-2 years
 Medium term (M): 2-3 years
 Longer term (L) 3-5 years

CHALLENGE	OUTCOME	PRIORITY ACTIONS	LEAD AGENCIES
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Ensuring good governance and finance for urban development is fundamental to creating inclusive, competitive and sustainable cities

Urban plans and programs can be disconnected from citizen's needs.	Strengthen participatory planning for urban development	Engage communities and citizens to help to promote inclusion (S) <ul style="list-style-type: none"> • mainstream participation in urban planning and program design (S) • train relevant staff (S) • ensure low income communities are included (S) 	<ul style="list-style-type: none"> • DAOs/ CDCs • Ministry of Construction
Strengthen participatory planning for urban development	Develop a holistic and equitable approach to financing for urban development	<p>Utilize intergovernmental fiscal transfer mechanisms to equalize regional disparities (M)</p> <ul style="list-style-type: none"> • diagnostic work to identify approach for reform (S) • implementation (M) <p>Strengthen local revenue generation (M-L)</p> <ul style="list-style-type: none"> • diagnostic work to develop proposals for increasing property tax revenues (S) <p>Allow more local discretion over funds use (S)</p> <ul style="list-style-type: none"> • Develop transparent decision making and implementation process (S) <p>Scale up private sector financing through improvements in enabling environment (M-L)</p> <ul style="list-style-type: none"> • Address existing bottlenecks through reform (M-L) • Invest in capacity building (S-M) <p>Explore use of Land Value Capture for larger cities (S-M)</p> <ul style="list-style-type: none"> • Carry out diagnostic work to identify key opportunities (S) • Implementation (M) 	<ul style="list-style-type: none"> • Ministry of Planning and Finance; • Ministry of Commerce

6.2 PROMOTING ECONOMIC INCLUSION

From a broad policy perspective, there are many opportunities for promoting economic inclusion through better access to and quality of education for all, and addressing issues in the macro economy and labor market to create increased opportunities for employment and income generation. Myanmar has lower educational attainment than comparator countries (about 5.7 years) and low education quality. It is reported that 20 percent of third graders cannot understand what they read. More than 80 percent of employers say that the education system does not prepare people for work (World Bank, 2017b). These challenges will require significant investments from a national perspective.

At the urban level using an economic inclusion lens, two key priorities stand out: addressing the high levels of informality; and improving resilience to natural hazards and economic shocks. As discussed in Chapter 2, those working in the informal sector cannot count on regular incomes for their families nor do they have social protections to fall back on in times of need. When disasters or shocks hit, the urban poor tend to be most vulnerable given where they live and their limited safety nets, and lack of savings to fall back on. One event can wipe out one's home and livelihoods and create much instability in the economy. Strengthening approaches to address informality and build resilience are essential to building economic inclusion.

Fostering opportunities for those in the informal sector. A full discussion on issues in the labor market that may contribute to high levels of informality is beyond the scope of this report. Myanmar still has major work in addressing bottlenecks to improving the environment for the private sector which will attract more and diversified foreign investments to sustain job creation (World Bank, 2018b). For those groups that are more prominent in the informal sector such as the urban poor, migrants, and women, opportunities to enhance their income earning opportunities and access to the formal sector include: urban upgrading to provide better infrastructure services that will enable more home based work; better transportation to enable mobility to jobs and markets; education and training programs that are linked to the skills needs in urban based industries; and micro financing for small

entrepreneurs (see example in Box 6.2).

Firms mention the lack of skills as one of the key constraints to growth. The existing technical vocational and education training (TVET) system is under-utilized and is poorly oriented to the skills employers need (World Bank, 2018b). The system is highly fragmented, with training services offered by the public and private sector, by numerous ministries, and at national and local levels. There are no quality standards that are applied across institutions and no accreditation system to measure quality. There is little attention by the training institutions on the skills demanded by the labor market or to job placement of graduates. These factors help explain why technical and vocational education has limited success in building human capital leading to higher quality jobs (ADB 2016, Milio et al. 2014).

Improvements in the TVET system could help to bridge the gap between the need for skilled labor and those that don't have the skills to enter the formal labor market. Government could support institutions through demand-driven mechanisms, such as vouchers to students or to employers can expand access. Such vouchers would need to be linked to the demands in the labor market and could be targeted to those most in need.

Box 6.1: Moving beyond Informality - Policy Priorities for Skills Development and Examples of Success

Several countries in the East Asia region are heralded as successes in terms of producing skills required for economic growth. In the 1960s and 70s, governments in the Republic of Korea, Singapore and Taiwan, China overcame challenges common in low- and middle-income countries to pursue strategic plans to create both demand for, and supply of, high-skilled labor. This fueled the growth of technology-intensive sectors, that later became drivers of strong economic growth. It is important to note, however, that these initiatives built on earlier efforts to ensure inclusive access to the basics of human capital investment, including good nutrition, and strong healthcare and education. Without such a foundation, the attempts to build higher-order skills for a significant part of the working population would not have succeeded.

Other countries in the region have learned from this experience in attempting to close their skills

gaps. The Third Elementary Education Project in the Philippines, for example, is aimed at improving standards in school by giving school management more autonomy, providing more training for teachers, increasing distribution of school supplies and deploying other measures of improving quality of education. Such measures were found not only to raise test scores, but also improved girls' educational attainment and positively impacted their eventual labor market earnings.

The World Bank's 2014 report *East Asia Pacific at Work: Employment, Enterprise and Well-Being* acknowledges that skills gaps can arise and persist for a host of reasons, and that each country faces a unique set of challenges that requires different policy actions in response. The table below sets out a framework for broad priority actions required.

Figure 6.1: Framework for Broad Priority Actions for Building Capacity

	Generate and disseminate information	Align incentives	Increase capacity
Labor markets	<ul style="list-style-type: none"> • Create and manage appropriate labor market information systems 	<ul style="list-style-type: none"> • Enforce apprenticeship contracts between firms and workers 	<ul style="list-style-type: none"> • Facilitate recruiting links between schools/training centers and firms
Credit markets	<ul style="list-style-type: none"> • Collect earnings data in labor market information systems 	<ul style="list-style-type: none"> • Provide guarantees or other incentives to private banks 	<ul style="list-style-type: none"> • Expand public student loan programs
Decision making	<ul style="list-style-type: none"> • Collect data on school and training provider performance and disseminate to students and families 	<ul style="list-style-type: none"> • Subsidize opportunity and other costs of education and training to make staying in school easier 	<ul style="list-style-type: none"> • Provide counseling and support services to youth at risk of dropping out
Coordination	<ul style="list-style-type: none"> • Facilitate information flows between firms and schools/training centers on current and expected demand 	<ul style="list-style-type: none"> • Subsidize worker training and firm upgrading/technology adoption in specific sectors 	<ul style="list-style-type: none"> • Facilitate firm opportunities to support schools/training centers with instructors, materials, or facilities
Government	<ul style="list-style-type: none"> • Collect and utilize data to evaluate school and training provider performance 	<ul style="list-style-type: none"> • Hold providers accountable for performance through funding mechanisms or other incentives • Make providers accountable to students through voucher systems 	<ul style="list-style-type: none"> • Improve institutional arrangements to provide sufficient autonomy at all levels • Deliver needed support to teachers and administrators at school level

Other programs, such as initiatives in Kenya and the West Bank and Gaza have used innovations to link jobs between employers and low skilled labor. Kenya's Duma Works (www.dumaworks.com), a mobile social network and allows informal workers to connect to jobs through friends of friends. Souktel (www.souktel.org) uses SMS to reach a wider clientele than just internet users. Informal employers can post vacancies in a simple manner that does not require extensive registration processes.

There is much scope for introducing such training programs in Myanmar which would help to prepare those in need with the skills necessary for the job market. The use of social networking technologies could help to link informal workers with job opportunities. To maximize impact on inclusive urbanization, such programs could be targeted to ensure inclusion of the urban poor, new migrants, women, and on ethnic and religious minorities.

Source: World Bank, 2014, and Cunningham, W. and Munoz, R, eds., Myanmar Future Jobs: Embracing Modernity, Main Report and Background Reports, World Bank, 2018

Building Resilience. Given Myanmar's exposure to risk, building resilience, particularly for marginalized groups who are often hit the hardest by disasters or shocks will be important to economic inclusion. Building resilience can be achieved by ensuring infrastructure investments are resilient, by creating insurance and catastrophic risk pools, and through strengthening disaster planning and early warning systems in urban areas. The Myanmar Southeast Asia Disaster Risk Management Project aims to build resilience through improving drainage services and the structural performance of selected public facilities in Yangon, and enhancing the capacity of the Government to facilitate disaster response. The project strengthens financial planning for disaster resilience, helps to reduce flood risk by improving and increasing the capacity of drainage infrastructure in Yangon and introducing an integrated approach to flood risk management, it reduces disaster risk in Yangon by (a) retrofitting priority public facilities to ensure a targeted level of performance during a design-level earthquake, and (b) supporting risk assessments for lifeline infrastructure (World Bank, 2017d).

For the urban poor and other marginalized groups who are typically at highest risk, key priorities include urban upgrading, programs that invest in early warning systems can help plan for shocks and mitigate impacts on the population. In Indonesia, for example, the Jakarta Flood Early Warning System has been used to build capacities to manage risk. The capacity building took place at the community level, with training for representatives in urban neighborhoods most vulnerable to flooding, and participatory approaches ensured all urban residents were included regardless of income and community status (UNISDR, 2010).

6.3 PROMOTING SPATIAL INCLUSION

Investing in affordable, safe, and reliable housing, infrastructure, and transportation services, particularly in underserved areas, can reduce spatial inequality, open up new employment opportunities, and reduce health and disaster risk. The current needs in Myanmar are significant, prioritizing investments in sustainable infrastructure and affordable housing, as well as building capacity to carry out integrated planning are top priorities for fostering spatial inclusion in cities.

Investing in Equitable Access to Sustainable Infrastructure and Affordable Housing. Chapter 3 describes the basic infrastructure-related challenges that Yangon and Myanmar – the country’s two largest cities – currently face. From water supply to sanitation, solid waste management and affordable housing, the cities are both faced with difficulties in ensuring a reliable and accessible supply of basic services. Ensuring equitable access to sustainable infrastructure is a key facet of pro-poor, inclusive development. Sustainability, in the case of Myanmar, particularly includes resilience given the country’s high exposure to natural hazards, but given the lock-in effects of infrastructure, approaches for compact low carbon urban development are also

critically important investments in basic services such as sanitation, solid waste collection and a reliable water supply can have substantial benefits to health, productivity and welfare. Providing access to affordable and reliable transportation also ensures better access to employment opportunities, as well as to services and amenities such as schools and hospitals. Together, these basic infrastructure investments can help to reduce spatial disparities within cities.

Infrastructure needs can vary widely across any given city, with some areas historically underserved compared to others. The downtown region of Yangon, for instance, benefits from a colonial era drainage system, even if its capacity has not kept up with more recent growth. In contrast, informal settlements lack access to almost all basic services. To identify priority infrastructure needs, urban upgrading programs can adopt participatory approaches to both identify and implement infrastructure upgrading at the neighborhood level. Such participatory approaches often have better outcomes in terms of sustainability of interventions, given the involvement of the community across all stages of infrastructure identification, design and maintenance.

Box 6.2: Vietnam Urban Upgrading Project

The Vietnam Urban Upgrading Project (VUUP) was implemented over a ten-year period from 2004 to 2014, with the aim of alleviating poverty by improving the living and environmental conditions of the urban poor in selected cities. The project specifically adopted participatory planning methods, with the intention of developing outcomes that were inclusive and pro-poor.

Many cities in Vietnam have low-income areas with uneven access to basic services. Frequent flooding and poor sanitation, for example, are common challenges; subsequently, the urban poor population also faces serious health and environmental risks. VUUP set out to address these challenges in the cities of Hai Phong, Nam Dinh, Ho Chi Minh City and Can Tho. More

than 200 low-income areas across these cities were identified for inclusion in the project, with communities actively involved in the process of assessing what types of infrastructure interventions would be most beneficial for them. More than 2.5 million urban poor have benefited from the project, with improvements made to roads, water supply, drainage, sanitation services and electricity provision. Previously, emergency response vehicles such as ambulances and fire trucks could not access homes as local roads were narrow and often flooded. This is no longer a concern with improvements made under the project; in addition, children are able to play safely in the streets around their homes. The project also upgraded clinics, community centers, schools and kindergartens in low-income neighborhoods.

Figure 6.2: Before and After Images of Urban Upgrading in Vietnam



Before (L) and After (R) pictures of the An Kim Hai Canal in Hai Phong. Prior to VUUP, the canal was polluted and largely abandoned by city residents, eventually becoming a prime spot for crime and drug abuse. Under VUUP, the canal was dredged and surrounding roads were upgraded, creating a new amenity for the community and leading to revitalization of the area. (Source: World Bank, 2015)

Aside from investing in infrastructure, the project also provided access to micro loans for households whose incomes are in the bottom 40 percent. These households were able to use the loans to make improvements to their homes, and to engage in income-generating activities.

The success of VUUP has led to the design and implementation of other similar projects in Vietnamese cities. Building on the VUUP model, the Scaling-Up Urban Upgrading Program (SUUP), approved in 2017, incorporates principles of universal design in project-funded infrastructure. Recognizing that upfront incorporation of such principles – catering, for example, to a growing elderly population as well as to those with

disabilities – is more affordable than retrofitting at a later stage, the project plans to engage with communities to design infrastructure that is more inclusive for all.

In Myanmar, such an approach could be considered for the upgrading of existing urban settlements, given the challenges currently faced in ensuring adequate access to basic services in fast-growing cities like Yangon. The involvement of the local community in the selection of priority infrastructure, as well as in the downstream maintenance and up-keep of facilities, would contribute to overall sustainability and ensure a more inclusive approach.

Sources: World Bank, 2015; World Bank, 2017g

As the population in cities rise, the needs for affordable housing will also increase. The deficit is substantial, and the city has significant slum populations. Such conditions can create divisions in society and do not allow for equitable urban growth. Programs such as urban upgrading and the supply of affordable housing are needed. Several existing initiatives, such as the “Million Homes Plan” which aims to develop one

million new housing units by 2030, or slum upgrading programs are important to promoting spatial inclusion. A number of examples such as the Vietnam Urban Upgrading (Box 6.2) or the Indonesia Approach to Affordable Housing and Slum Upgrading (Box 6.3) are highly relevant for Myanmar and are needed with urgency.

Box 6.3: Addressing Affordable Housing in Indonesia

Indonesia faces substantial demand for affordable housing, with one million new units needed annually. Around 20 percent of the 64.1 million housing units are in poor condition, with much of it informal and self-built. Approximately 22 percent of Indonesia's urban population, or around 29 million people, live in slums with substandard housing and inadequate access to basic services. Among the challenges are constraints that prevent the private sector from participating in low cost housing development, as well as bottlenecks with land availability, including complex land acquisition processes.

The Government of Indonesia has a broad set of policies and institutions to support affordable housing, but these have not been effective in meeting demand. To address these challenges, the Gol launched the One Million Homes program, a subsidized mortgage scheme in mid-2015, the National Affordable Housing Program, and the National Slum Upgrading Project which are all currently under implementation (both projects supported by the World Bank).

The National Affordable Housing Program Project aims to innovate the affordable housing market by addressing bottlenecks and actively engaging the private sector in delivering for unserved segments. The approach has three components; i) targeting lower middle income households that are unable to access commercial mortgage finance for home purchase without public assistance; ii) targeting the bottom 40 percent of Indonesian households that require home improvement rather than home purchase solutions and for whom the market for commercial mortgage finance is unaffordable even with deep assistance enhancements; and iii) support to policy reform and capacity building activities.

The National Slum Upgrading Project aims to improve urban infrastructure and services in slums across Indonesia. The project finances connective infrastructure identified through Slum Improvement Action Plans which are five-year plans to be prepared by local governments with technical assistance and support, as well as tertiary infrastructure identified at the community level. This includes small scale water supply, drainage, sanitation, footpaths, fire safety, site improvements (public spaces and sidewalks) and modest support for strengthening community-based livelihoods through the construction of livelihood enabling facilities and services. The project will support improvements to housing of the poorest where deemed necessary within the context of slum upgrading.

Though the projects are still under relatively stages of implementation, the combined approach is anticipated to help Indonesia meet its significant demand for affordable housing. In Myanmar, given that an estimated 10-15% of the population are in informal settlements, and that there is growing pressure to address the lack of affordable housing in larger cities, a similar multi-pronged approach is already being considered by organizations such as the semi-government Construction, Housing & Infrastructure Development Bank (CHID Bank). International examples such as the Indonesia programs could provide useful learning points as Myanmar looks towards addressing both demand- and supply-side issues relating to the provision of affordable housing.

Box 6.4: Japan's Legal System for Low-Income Housing and Public Housing Measures in Airin District, Japan.

Japan's Public Housing Act, enacted in 1951, stipulates the national government to provide financial and technical assistance to local governments for the construction of affordable housing to low-income residents. During the high-economic-growth era between 1950s and 1970s, the government committed to develop public housing in the urban areas to accommodate the housing shortage. Today, however, given the fiscal difficulties and declining population, there is a tendency to refrain from building public housing resulting in an insufficient supply. As a result, despite the needs for public housing, it is extremely difficult for low-income citizens to live in public housing (in 2010, the ratio of successful applicants to the total number of applicants for public housing was about 1 in 30 in Tokyo and about 1 in 18 in City of Osaka). Such defective housing measures have caused people to become "housing poor."

The Nishinari Special District Vision (NSDV) aims to revitalize the district and protect the livelihoods of its long-time residents. In the short term, the initiative places importance on improving the livelihoods of low-income residents. The main measure considered for achieving this goal is improving the supply of affordable and high-quality public housing. Reinforcement of affordable housing measures will limit excessive development by the capital

Source: Shirahase, 2018

market and gentrification to some extent. While housing measures can be carried out by the city or the prefecture, the City of Osaka has taken leadership for affordable housing under the NSDV initiative. The City of Osaka has considered measures for the housing poor, centered around the reconstruction of municipal housing.

At the national scale, construction of new public housing is limited due to the high costs associated. Alternative measures, such as the conversion of vacant houses, are being promoted to supply public housing at a low cost. While such alternative measures are currently not conspicuous in the Airin District, if national government housing measures (such as the Housing Safety Net Act enacted in 2017) become easily accessible for housing developers, it is highly likely that the low-income housing market and environment will change significantly in the Airin District.

For Myanmar, the lessons learned from Airin suggest that the provision of affordable housing is a complex issue of supply, livelihoods, accessibility, and financing. Increasing supply of new construction alone does not meet market demand and must be simultaneously explored with livelihoods (i.e. access to basic infrastructure), accessibility (i.e. public transport options), and financing (rental or ownership/mortgage options).

Improving integrated urban planning which is coordinated with capital investment plans. The physical layout of a city is one of several factors that can impact access to jobs and services. Residents of a low-income area with no direct access to transport routes, for instance, have considerably fewer opportunities for employment and income-generation. Adopting an integrated planning approach is one key way to ensure that there is more equitable access to infrastructure and amenities. By ensuring that infrastructure and land use planning are integrated, cities can better ensure that services keep pace with the rate of urban development. Robust urban planning can also pre-emptively guard against some of the

challenges commonly associated with a quickened pace of urbanization, such as sprawl, congestion and the proliferation of informal settlements.

Building capacity for integrated urban planning is important for Myanmar, particularly considering its complex subnational governance structures and the current practice of urban planning being carried out at different levels of government, often without coordination. Given the relatively low pace of urbanization compared to other countries in the region, the timing is also opportune to institute clear roles and responsibilities in the urban planning process, and to work with development partners

to build technical capacity. The finalization of the National Urban Development Strategy presents an entry point for further engagement in this regard.

The Singapore experience is one that demonstrates how it has been carried out, and the strong role of participation in the planning process. (Box 6.5)

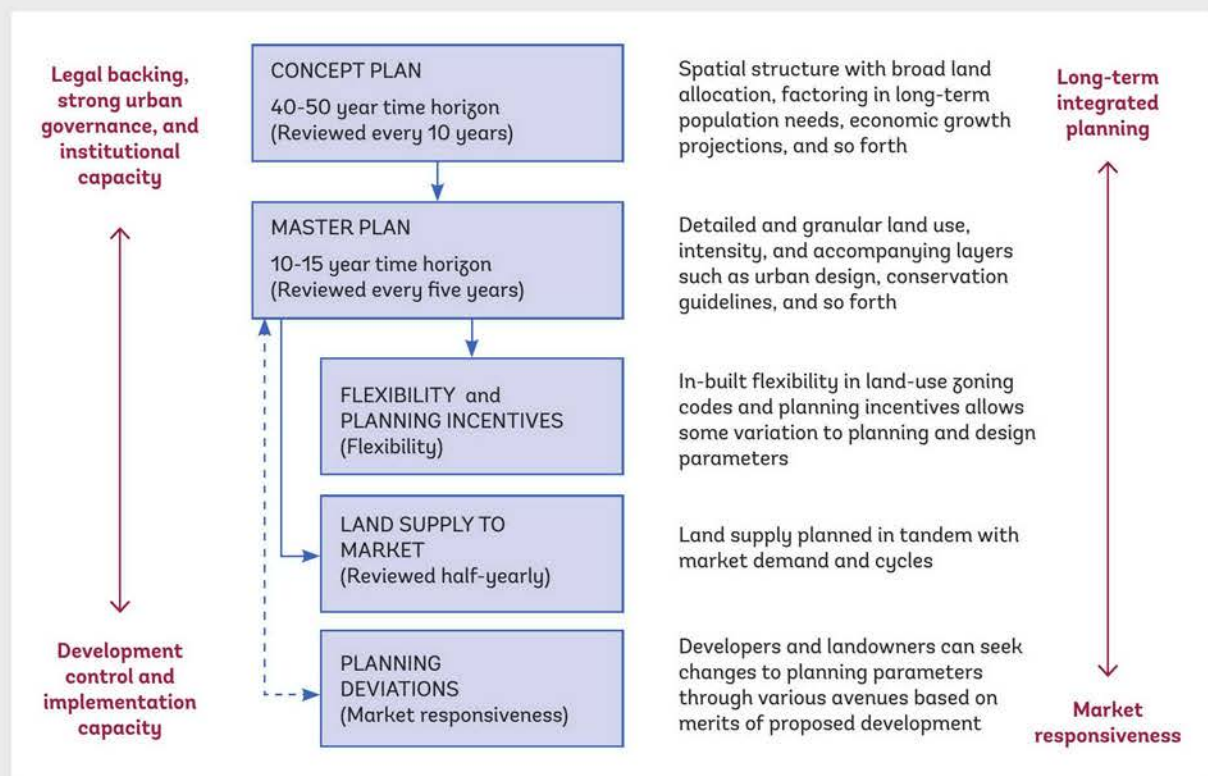
Box 6.5: Urban Planning in Singapore

Singapore’s success as a highly livable urban environment has been attributed in part to the city-state’s practice of integrated, long-term strategic planning. Urban planning in Singapore begins with a forward-looking Concept Plan, a multi-agency government effort that maps out Singapore’s urban development over a 40 to 50 year timeframe. Based on projected future economic growth and population figures, the Concept Plan provides a broad-based land use plan to meet the country’s long-term land needs, establishing the amount and location of land under key land use groups, including residential, industrial, commercial, parks and transport infrastructure.

The Concept Plan is translated into a statutory Master Plan, which reflects the details of designated land use, land parcel configuration

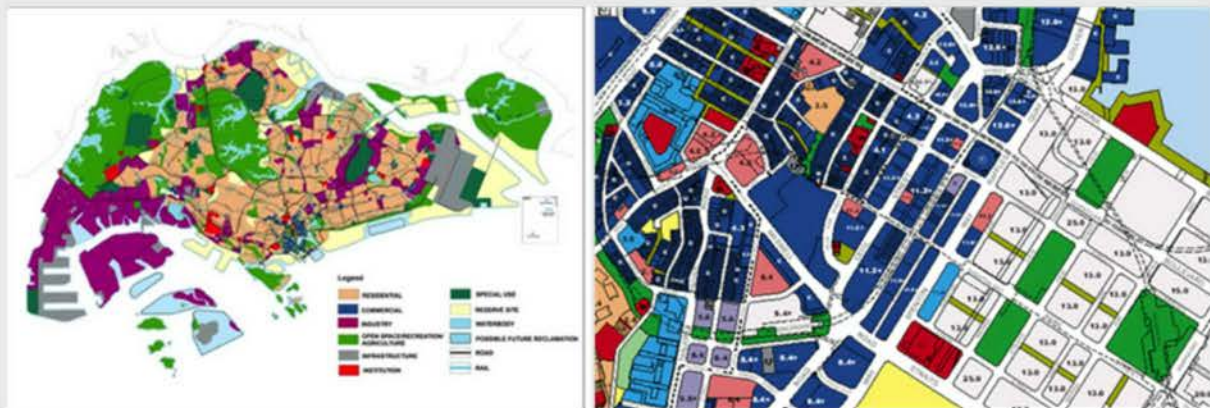
and allowable density. The Master Plan is also complemented by detailed control plans, which are developed to shape the spatial structure of the city around specific concerns – the provision of parks and waterbodies, for instance, and the identification of conserved heritage buildings and conservation zones. The realization of planning intentions established in the Concept Plan and Master Plan is further enabled through several downstream processes, including the Government Land Sales program, whereby the State releases land parcels for sale in a carefully-timed manner, responding to market demand and also facilitating the development of strategic growth areas. All developments are also subject to the Urban Redevelopment Authority’s Development Control guidelines, which establish technical requirements such as building height and setbacks.

Figure 6.3: Singapore’s Urban Planning Framework



Source: Shirahase, 2018

Figure 6.4: Singapore's Land Use and Master Plans



Left: Land Use Plan 2011, showing broad land use categories;
 Right: Master Plan 2014, showing detailed land uses and densities for individual parcels
 Source: Urban Redevelopment Authority, Singapore

Long-term planning has allowed Singapore to balance competing land use needs in a land-scarce environment, while also ensuring a high degree of sustainability and livability. The effectiveness of its Master Plan rests in its clear links to the vision and long-term strategies for growth of the city, as well as the country's strong enabling environment for implementation, i.e. legislative and regulatory systems that support the realization of the land use plan. Public engagement in the development of both Concept and Master Plans is also becoming increasingly established as a key part of the plan formulation process.

In Myanmar, challenges exist both in terms of drawing up robust plans as well as in implementing them, particularly given the lack of technical capacity and lack of clarity over roles and responsibilities across the various levels of government. International best practice examples, such as that of Singapore, can provide guidance in terms of how a systematic and integrated urban planning process could eventually be institutionalized. To be effective, such systems not only rely on an integrated approach to develop plans, but also facilitate implementation and enforcement with a strong legal and governance framework.

Source: World Bank, 2016; and World Bank, 2017

Building capacity for data-informed urban planning. Effective urban planning must also be adequately informed by data and analytics in order to develop a firm understanding of a city's current and future needs. This is, for example, being done in Indonesia under the World Bank's City Planning Labs initiative (Box 6.6). Similarly, Myanmar's National Land Use Policy 2016 establishes a clear vision for developing national spatial data infrastructure (NSDI), with easy access

and sharing of geospatial data among government agencies, civil society, academia and businesses. Such a system would allow data-informed urban planning to be carried out, and the ongoing One Map initiative signals the government's commitment to this vision. However, current regulations and practices often stand in the way of information sharing, and capacity for collecting and utilizing geospatial data remains at a nascent stage.

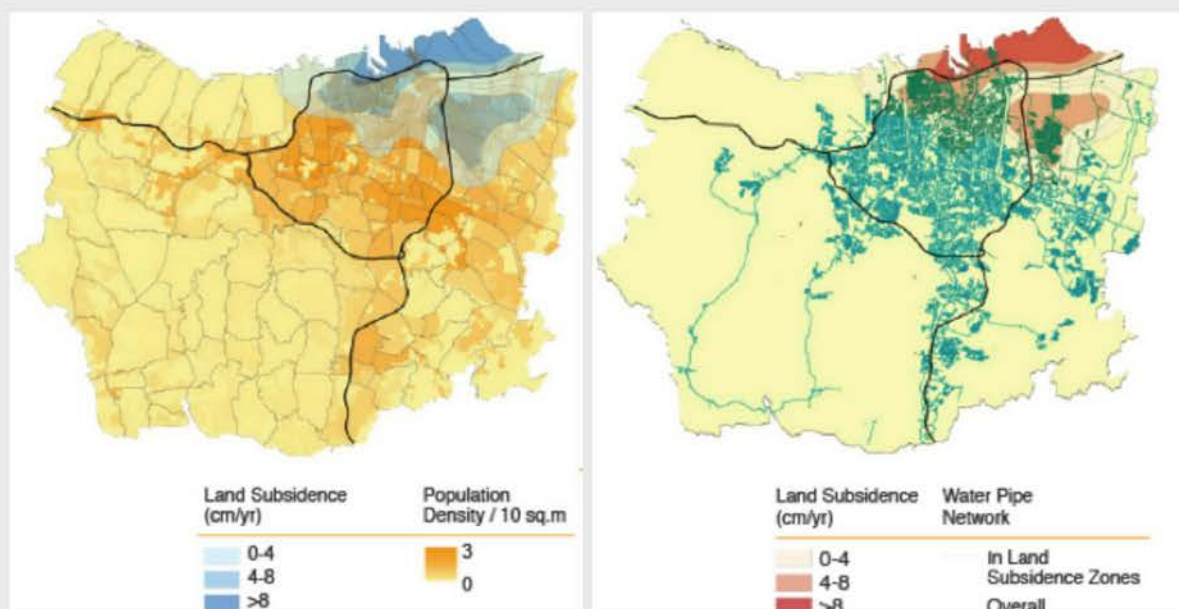
Box 6.6: City Planning Labs in Indonesia

The World Bank's City Planning Labs (CPL) initiative supports cities in Indonesia to develop a unified spatial data infrastructure, with a view to improving data-informed urban planning. Challenges faced by cities in Indonesia are not dissimilar to those in other fast-urbanizing areas, including uneven service delivery and the need for increased resilience to climate change risks. CPL works closely with municipal governments to establish policies and procedures for agencies to collect and share data, develop tools for data collection and analysis, and build capacity of city-level staff to understand and make use of the data available. The long-term goal of CPL is for Municipal Spatial Data Infrastructure (MSDI) to be managed and maintained independently by local governments.

In Semarang, one of two pilot CPL cities, spatial analysis has allowed urban planners to understand how poverty distribution, land subsidence and

infrastructure gaps interact. The city has long faced challenges relating to land subsidence, with impacts that include increased vulnerability to flooding, as well as physical damage to buildings and infrastructure. The figure below illustrates two overlays of spatial data – one showing land subsidence and population density, and another showing the distribution of the water supply pipe network. In areas that are underserved by the existing network, land subsidence is higher, likely as a result of residents continuing to tap on the local groundwater supply. With higher levels of land subsidence, land in these areas is also more affordable than in other parts of the city, leaving more low-income families to settle there. Planners can make use of this information to plan an expansion of the water supply network, in order to improve basic service provision and break the cycle of persistent groundwater usage causing further land subsidence.

Figure 6.5: Land Subsidence, Population Density and Water Supply in Semarang



Myanmar's National Land Use Policy 2016 sets out equally ambitious goals for the development of NSDI. Beyond the establishment of an NSDI framework, the application of available data should also be considered, e.g. as part of capacity-building for improved urban planning.

Source: World Bank, 2018.

Encouraging participatory planning approaches to build inclusive urban environments. Participatory approaches are also critical to informing planning for inclusive urban development. Rather than adopting a business-as-usual approach that treats planning as a purely technical or bureaucratic process, participatory approaches emphasize citizen participation and stakeholder involvement as integral parts of an iterative planning process. By involving a broad range of stakeholders from the start, participatory approaches can be particularly

important for marginalized groups, including women, ethnic minorities and the disabled, to have a voice in shaping the urban environment. The Asia Foundation's *City Life Survey* found that women in Myanmar were twice as likely than men to not know how much influence they have over decisions made by their municipality. As a first step towards ensuring that planning in Myanmar is more attuned to the needs of different groups in the community, data that can be disaggregated by age, gender, ethnicity, religion and disability should be collected (Asia Foundation, 2017).

6.4 PROMOTING SOCIAL INCLUSION

A number of subgroups in Myanmar do not fully benefit from urbanization such as the urban poor, the disabled, some ethnic groups and some migrants. There are many countries that have addressed social inclusion through strong social programs and improving the rights of citizens. In Myanmar, high priorities are policies that target assistance to vulnerable groups, and help to allow for formalization of their identity in the city can help to promote inclusion.

Targeting social programs. Programs that reach marginalized groups such as the disabled or new migrants that may not have the skills or networks to find employment are in need. A number of policy recommendations have been raised in the 2017 report on Disability (Ministry of Labour, Immigration and Population, 2017). For the disabled in urban areas, there are good practice examples from other countries that use universal design approaches to planning including the Vietnam Scaling Up Urban Upgrading Project (Box 6.2) which implements technical standards for accessible infrastructure and transport and universal design approaches in urban environments, roads, schools and public facilities. Specialized school programs would allow many children, who are currently unable to attend school, to attend.

A focus on migrant populations is important for social inclusion in urban areas. International evidence shows that policies to remove obstacles linked to migration status for access to services, and addressing

various forms of economic, political, and cultural discrimination against migrants are important as are tackling stereotypes and promoting intercultural dialogue and understanding. For Myanmar, there are important opportunities for such awareness raising, targeted programs in linking migrants with job opportunities, facilitating migration through affordable loans or subsidy programs (as was done in a famine prone region in Bangladesh, Bryan, Chowdhury, and Mobarak 2014), and ensuring rental and affordable housing options can facilitate their transition to the city. Vietnam offers several types of financial assistance to migrants, including loans with preferential conditions and the "62 Poorest Districts" program which pays travel-related expenses and provides preferential credit to poor workers. In the China Rural Migrant Project (through the Government of China with World Bank support), information, employment assistance, and other services are used to enhance migration as a jobs strategy. An approach focused on improved access to skills through training in rural areas for urban jobs (as defined by the urban employers) through training center- employer partnerships, reductions in the cost of job search through enhanced employment services and legal aid to services to migrant workers. An evaluation of the program after 6 years of implementation has found that beneficiaries found work more quickly in their field of study, acquired jobs with higher wages, and increased their acquisition of formal qualification certifications.³⁴

³⁴ World Bank, Rural Migrant Skills Development and Employment Project, 2008-2015

Facilitating access to legal documentation. Evidence from other countries shows that enabling the flow of people through migration, particularly when driven by economic forces, is a positive and selective process (World Bank, 2009). Stemming the flow of people can create unnecessary friction and impose the cost of forgone opportunities for economic growth and convergence in living standards. By removing obstacles linked to migration status for access to basic services such as health and education, and addressing various forms of economic, political, and cultural discrimination against migrants, governments can foster economic growth and promote social inclusion.

Many minorities in Myanmar have difficulties in obtaining legal documents. In the urban context, this is a particular challenge for residents in informal settlements, especially migrants, and is a main obstacle hindering their access to formal employment, municipal services and low-interest loans. Reforms are needed to ensure access to documentation, such as the National Registration Certificate (NRC) which is often required to be employed in larger factories but only available for those with a permanent address. Such policies are a deterrent to inclusion and can perpetuate the cycle of poverty. China, well known for their 'hukou' household registration system that similarly put rural migrants at a substantial disadvantage in accessing urban services has made changes over time to eliminate such policies and increase opportunities for new urban residents.

Box 6.7: The ID4D Program

The World Bank, through the ID4D Program, has experience in helping over 20 countries analyze problems, design solutions, and implement new systems to increase the number of people with official identification and the development impact of the overall identification system. When more people have formal identification and identification systems function well, individuals access necessary services, governments function better, use resources more efficiently, and improve statistics to better inform their future policies. Different countries have used different registration systems, with the use of biometrics now being employed widely in Indonesia, (e-KTP), India (Aadhaar), and elsewhere. These programs create a unique identity number for every resident using biometric identification. In the case of India, for example, the Aadhaar program aims to achieve social inclusion and more efficient public and private government service delivery by providing an ID for residents that didn't previously have one,

and is being used for several public purposes such as digitizing government subsidy flows, financial services, recording attendance for government employees to reduce absenteeism, and issuance of passports, identity cards, and other forms of IDs (Banerjee, 2015). The program now reportedly reaches 99 percent of all Indians over the age of 18. Available analysis concludes that the program has value in enabling previously marginalized populations to be included in a number of welfare programs and has much potential in enhancing transparency in the delivery of government services, though concerns on security, privacy and any impact on efficiency have also been raised (Khera, 2018).

For Myanmar, reforms to modernize and improve transparency of the current identification system are needed and would have the potential to contribute substantially to improving social inclusion.

6.5 FOSTERING GOOD GOVERNANCE AND FINANCING FOR INCLUSIVE URBAN DEVELOPMENT

As Myanmar transitions from a highly centralized system, strong institutions and good governance will be important at the local level to foster an inclusive approach. Decentralization efforts are still nascent, and while urban service delivery functions have been devolved to subnational governments, in practice, local governance is often hampered due to limited implementation of policies/frameworks, financial resources, and technical capacities. Key elements of transparency and fair decision making as well as sufficient resources are necessary to foster inclusion. Evidence from other countries shows that engaging communities and citizens in decision-making processes is a powerful way of promoting inclusion (Baker & Gadgil, 2017). Among key priorities are improving coordination and operational processes for urban planning, management and local service delivery, incorporating participatory planning in decision making, and developing a comprehensive approach to increasing financing for urban development.

Strengthen coordination between the various government agencies and streamline operational processes related to urban planning, management and local service delivery. Building inclusive and sustainable cities require strong institutions and good governance at all levels of government. Currently there is a lack of integrated planning and budgeting with little vertical/horizontal coordination and cross-sectoral planning between government agencies. As there is no parent ministry for DAOs, urban planning and implementation processes (such as policy development, financial systems, procurement, O&M) are not streamlined, and the state/region governments must take-on an increasingly important role in this area. Strengthening horizontal/vertical/cross-sectoral coordination and streamlining operational processes are critical to improving the efficiency of local service delivery. In parallel, efforts are needed to build capacity to implement such priorities.

Strengthen participatory planning involving communities and citizens for stronger local government accountability for inclusive urban development. Engaging communities and citizens in decision-making processes is important in strengthening policies, enhancing service delivery, and ensuring social stability in cities. Enhancing community participation ensures that priority needs are identified and that local governments are held accountable. Empowering urban dwellers to actively engage and contribute in their cities is a powerful way of promoting inclusion. Currently, the TDACs of DAOs are composed of seven members, of which four are indirectly-elected community representatives. Local planning can be further enhanced with stronger community participation requirements in the planning processes.

Develop a comprehensive approach to improving financing mechanisms for inclusive urban development. Local government financing is not adequate for the municipalities to fulfill the devolved service delivery responsibilities. While the 2008 Constitution devolved urban service delivery roles and responsibilities to local governments, in reality, its functions are hampered due to insufficient resources to successfully implement programs and policies. While state/region governments are heavily reliant on inter-governmental fiscal transfers from the Union Government, municipal governments such as DAOs are mostly self-funded. While larger municipalities may be able to raise enough revenues to cover the cost, many medium and smaller towns struggle to raise the necessary revenues. A holistic approach (considering both vertical and horizontal constraints) to improve the SNG financial mechanism, including revenue allocation, budgeting, and financing capacity is a high priority. Among key elements:

- a. **Intergovernmental fiscal transfer mechanisms to improve disparities across SNGs.** While there have been efforts to improve transfer mechanisms, distributional impacts remain

Box 6.8: From Suppression to Cooperation –Bottom-Up Community Development in Airin District, Japan.

Airin District, a densely-populated community located in Nishinari, Osaka, Japan, was a town notoriously plagued with poverty and crime from the 1960s to 1990s. In 1966, the City of Osaka, the Prefectural Government of Osaka, and the Prefectural Police Department designated Airin District as a priority zone requiring special measures to suppress illegal activities and riots by organized gangs. While extensive measures were implemented over 30 years, fundamental issues of the communities were not resolved. Airin District remained stigmatized and distrust between the residents, day laborers (commuting from outside Airin), and the local governments remained intense.

To address the complex challenge of unemployment, homelessness, aging population, and crime, social action groups in Airin Districts called for the Japanese Government to implement assistance measures aimed at the protection and independence of the district's homeless population. This was a shift in approach – from one of confrontation and suppression to one of cooperation and engagement. In 1999, a committee, led by professional practitioners, researchers, and civil society, was established to address the various issues and needs of the Airin community. In 2005, the Community Development Action Group (CDAG), consisting primarily of community residents, was established and thereon made extensive efforts to reach out the various stakeholders in the community.

Owing to such efforts by the CDAG, in 2012, the City of Osaka launched an extensive Project called the Nishinari Special District Vision (NSDV), which aimed to revitalize Airin District. The Project was based on a bottom-up approach, allowing community improvement measures to be implemented at an unprecedented rate. The Project led to a significant change in the public perception of Airin District, which was traditionally perceived as a dangerous, dirty and untouchable town. The NSDV was fully launched in FY 2013 with a 6.7 billion JPY investment over five years, aimed to transform Airin into a “town where children’s voices can be heard.” The short-term phase of the Project aimed at improving sanitation, public safety and the community environment through such measures as tuberculosis prevention, installation of security cameras and street lighting, and enforcement on illegal dumping and illegal parking. Many of these efforts were organized by community residents with the cooperation of the local government and have significantly improved the district's environment (i.e. illegal dumping and parking has been cut by half) and reduced crime rates. In the longer term, provisions for housing upgrades and employment generation (through new businesses such as international tourism) are anticipated.

For Myanmar, Airin's participatory planning and community driven development strategies serve as an example on ways to strengthen community ownership and government transparency and accountability – factors that are essential to inclusive urban planning and development.

Source: Shirahase, 2018

limited and there is much room to improve regional disparities. For the Union general-purpose grant, a rules-based mechanism was introduced as part of the MTFF reform to ensure a more transparent and equitable horizontal allocation of fund. For the Union tax revenue sharing, equitable policy changes were introduced to allow for commercial

and special goods taxes from SOEs filing at LTOs to be redistributed across the regions in a more equitable manner. However, regional disparities are still significant and further improvements may be considered to equalize the fiscal capacities of SNGs.

- b. **Own-sources revenue generation which will allow SNGs to have higher discretion over the use of funds to meet local needs.** For DAOs, which are uniquely self-funded, strengthening the performance of own-source revenue generation is critical to execute their mandated responsibilities of social service provision and local economic governance. However, effective revenue collection and management remains one of the largest operational challenges of DAOs, especially for medium and smaller towns. At the state/region level, own-source revenue generation outside of Yangon and Mandalay remain weak, with most state/region governments relying on Union transfers for approximately 90 percent of their revenue source. Such state/region governments may underperform in generating their own-source revenues because of the presence of intergovernmental fiscal transfers which may serve as a disincentive to generate local revenues. Strengthening of own-source revenue generation is critical for SNGs (especially DAOs) to execute their mandated service delivery responsibilities and have discretion over the funds to respond to the actual local needs.
- c. **Property tax system with a long-term vision.** While Myanmar has a functioning property tax system, revenues from property tax currently plays a small role compared to other SNG revenue sources. By strengthening the property tax system, it can become a major revenue source for SNGs. In the short/medium term, building awareness, strengthening tax administration (including tax base, valuation methods, record keeping, tax rates/billing, collection and enforcement), and adjusting tax policies would establish a stronger, fairer and sustainable system. As with many countries, property tax is a contentious subject and actual revenues from collections may remain modest in the short/medium term. However, in the longer term, a robust and well-functioning property tax system may become a critical revenue source for larger cities such as Yangon and Mandalay.
- d. **Private sector financing for inclusive urban development.** Both international and domestic private resource flows have increased significantly in Myanmar since 2011 and the growing appetite presents an opportunity for cities to leverage the private sector in financing inclusive urban development (including PPPs, guarantees, equity and blended finance). While Myanmar has implemented various forms of PPPs in several sectors on big-ticket projects, PPPs at the local level remain limited, primarily due to weak fiscal capacity of SNGs and the inability to develop bankable projects and/or structure competitive and transparent transactions. Furthermore, currently there are no national/sector policy frameworks or institutional management functions dedicated to PPPs. The role of the private sector in development assistance is being explored in the forthcoming Development Assistance Strategy developed by DACU, however there is much capacity building required for both the public and private sectors.
- e. **New revenue sources, including innovative financing mechanisms such as Land Value Capture.** Innovative infrastructure financing mechanisms such as Land Value Capture (LVC) has been utilized around the world to finance urban infrastructure projects. Yangon and possibly Mandalay may have the conditions to introduce LVC, including strong economic growth, rising real incomes, and increased motorization and congestion, which are all factors that may contribute to land value appreciation around improved urban infrastructure. However, adoption of LVC schemes and techniques would require prerequisites, such as a complete and formally adopted detailed city base map, land use zoning including floor area ratio (FAR) demarcations, building regulations and permit procedures.

6.6 CONCLUSIONS AND PRIORITY AREAS FOR FUTURE RESEARCH

This report has brought together a large amount of accumulated knowledge from existing studies that have largely been carried out over the past five years. The information provides a basis for understanding key issues facing inclusive urbanization in Myanmar, with a particular emphasis on Yangon and to a lesser extent Mandalay. As discussed in this chapter, there is much work to be done in increasing investments in cities and in implementing reforms. The World Bank and other donors are increasingly engaging in the urban sector in Myanmar, with scope for scaling up to assist with the reform process. The sections below briefly summarize key donor activity and areas for future research.

DEVELOPMENT PARTNER ASSISTANCE ON URBAN DEVELOPMENT

While international donors and development partners (DPs) have provided substantial amount of technical assistance and grant-aid/loans (Table 6.2), Myanmar's financing, planning and implementation capacity and speed has not kept up with the recent urbanization and commercial development. To address the capacity weaknesses, DPs have provided various forms of capacity building assistance at both the national and subnational level, however these efforts have not had a sustained impact beyond the period of assistance. Given the scale of urban infrastructure and capacity building needs, a robust coordination among donors and DPs is essential. Recognizing the importance of coordination and information-sharing platforms, Cooperation Partners Group (CPG) working groups for various sectors, including urban, have been formed. The working groups are anticipated to allow DPs to help consolidate around high needs issues and develop efficient assistance programs that more holistically considers strategic needs and the work of various DPs.



Table 6.2: Development Partners in Myanmar: Urban Sector Engagement

Development Partner	Sector Engagement	Details
World Bank (WB)	Asia Development Bank (ADB)	<ul style="list-style-type: none"> • National Community Driven Development Project (2013-) • Modernization of Public Finance Management (2014-) • Towards a Sustainable Land Administration and Management System in Myanmar - Land Sector Needs Assessment; Thematic Policy Notes (2017) • Myanmar Southeast Asia Disaster Risk Management Project (2017-) • Myanmar Urbanization ASA (2017-) • Myanmar Subnational Public Expenditure Review (2018-) • Myanmar Urban Transport ASA (2018-)
Asia Development Bank (ADB)	Urban transport, water supply, wastewater mgmt., drainage and flood protection, solid waste mgmt.	<ul style="list-style-type: none"> • Myanmar Urban Development and Water Sector Assessment, Strategy, and Road Map (2013) • Yangon Urban Renewal and District Cooling Project (2014-) • Myanmar Transport Sector Policy Note: Urban Transport (2016) • Transformation of Urban Management in Myanmar (2016) • Mandalay Urban Services Improvement Project (2016-) (co-financed with Agence Française de Développement (AFD)) • Yangon Urban Services Improvement Project (2018-)
Japan International Cooperation Agency (JICA)	Urban development, urban transport, water supply, sewerage and drainage, housing finance	<ul style="list-style-type: none"> • Strategic Urban Development Plan of the Greater Yangon (2013) • Urban Development Plan for Regional Cities – Mandalay, Patheingyi and Mawlamyine (2016) • National Transport Development Plan (2014) • Comprehensive Urban Transport Plan of the Greater Yangon (2014) • Preparatory study for Yangon Urban Mass Rapid Transit (2015) • Yangon Circular Railway Line Upgrading Project (2015-) • Improvement of Water Supply, Sewerage, and Drainage System in Yangon City (2014) • Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (2017) • Improvement of Water Supply System in Mandalay (2015-) • Myanmar Data Collection Survey on Housing Finance System (2018) • Housing Finance Development Project (2018-2022)
UN-HABITAT	Urban planning, land, housing policy, informal settlements and slums	<ul style="list-style-type: none"> • Guidelines for Urban Planning for Myanmar (2016) • Land Administration and Management Program for Myanmar (2016) • National Housing Policy and Strategy (2017) • Mapping Yangon: The Untapped Communities (2017) (with Cities Alliance) • Support for the National Spatial Development Plan
Asia Foundation with Myanmar Development Research Institute: Centre for Economic and Social Development	Governance and Finance	<ul style="list-style-type: none"> • Fiscal Decentralization in Myanmar Towards A Roadmap to Reform (2014) • Municipal Governance in Myanmar (2015) • Provision of Public Goods and Services in Urban Areas (2016) • State and Region Financing Budgeting and Planning (2016)
Renaissance Institute	Governance and Finance, property tax	<ul style="list-style-type: none"> • Managing the Challenges of Rapid Urbanization: A Review of the Existing Property Tax System in Myanmar (2017) • What is the Wallet? Public Money in Myanmar's States and Regions (Brief Budget Series: Country Overview) (2018)
Department for International Development (DFID)	Urban development	<ul style="list-style-type: none"> • Cities and Infrastructure for Growth Technical Assistance (2018-)

Source: Based on discussions with development partners

AREAS FOR FUTURE DIAGNOSTIC WORK

In the context of preparing this study, several areas for future analytical work been identified which are summarized below. This list is in no way exhaustive but rather suggestive as it relates to key policy priorities.

- **Intra-city spatial analysis.** Overall, much of the work could be deepened with better city level data to carry out intra-urban analysis particularly in Yangon. This would capture key issues related to urban poverty, mobility and access to jobs and services, housing conditions, and exposure to risk. Some of this would be possible with further analysis of the 2014 Census data and high resolution satellite imagery.
- **Secondary Cities.** Information on secondary cities was limited but would be beneficial for analysis of economic potential, and key needs. One suggested approach is to carry out Economic Potential Index analysis which analyzes the economic potential across municipalities and districts defined as determinants to high productivity.³⁵ The indicators typically used are market access, transport connectivity, economic density, urbanization, and human capital. Combined, these factors can provide insight into the potential productivity of a district, or for Myanmar, a township.
- **Urban Land.** In-depth analysis on a range of issues related to urban land is needed: analysis and mapping of the different land types, legal arrangements, land administration practices, valuation and taxation practices, and assessment of the current policy, legal, institutional and service delivery frameworks with an exclusion lens for certain groups (residents of informal settlements, women, poor, peri-urban residents in areas where city boundaries are unclear).
- **Affordable Housing.** Given the substantial needs for affordable housing, there are a number of subtopics that would benefit from additional study beyond the recent review of Yangon's Housing Market. Key areas include a deeper understanding of constraints in the housing market and priority recommendations for reform, viable models for PPPs in affordable housing, opportunities for housing finance, and differentiated options for home ownership or rental across different income groups.
- **Employment barriers for migrants, women and the urban poor.** Several issues have been raised in the literature regarding employment barriers for subgroups. A more in-depth analysis of these issues with an aim to further identify policy recommendations that are in need of reform to reduce exclusion in the labor market are needed.



³⁵ See Roberts, 2016

Table 6.3: Priority Policy Recommendations by time Frame

THEMATIC AREA	SHORT TERM YEARS 1-2	MEDIUM TERM YEARS 2-3	LONG TERM YEARS 3-5
ECONOMIC INCLUSION	In Situ Community Based Urban Upgrading		
	Identify high risk areas, needs and upgrading plans		
	●	●	●
		Secure financing	Begin implementation
	Microfinance for small entrepreneurs		
	Ensure gender equality in access		
	Develop enabling environment and incentives to foster microfinance		
● ●			
Transport investments to enable mobility to jobs and markets			
Education and training for skills in urban jobs			
Prioritize vulnerable groups			
●	Invest in access and quality		
● ●			
Drainage/solid waste management			
Identify and prioritize high risk areas			
●	Begin implementation		
● ●			
Early warning systems			
Design and implement			
Ensure approach to reach the most vulnerable			
●			

THEMATIC AREA	SHORT TERM YEARS 1-2	MEDIUM TERM YEARS 2-3	LONG TERM YEARS 3-5
SPATIAL INCLUSION	<p>Invest in infrastructure needs - water, sanitation, roads, drainage, solid waste management</p>		
	<p>In-situ upgrading of existing housing stock and slum areas</p> <p>Create enabling environment for housing supply and demand</p> <p>Diagnostic needs assessment and development of affordable housing plan</p> <p>Ensure target is for low income populations</p> <p>Develop approach to incentivize private sector for low income market</p>		
	<p>Implement the National Land Use Policy</p> <p>Enable and train staff for implementation</p>		<p>Begin implementation</p>
	<p>Align plans across agencies (land use, transport, environment, disaster risk)</p> <p>Set up coordination mechanism</p> <p>Invest in geospatial data and sharing platforms (e.g. plan for national spatial data infrastructure)</p> <p>Ensure planning is gender and disability-informed</p>		

THEMATIC AREA	SHORT TERM YEARS 1-2	MEDIUM TERM YEARS 2-3	LONG TERM YEARS 3-5
SOCIAL INCLUSION	Identify and prioritize needs	Program design and begin implementation	<p>Targeted programs designed to: link migrants with job opportunities, and provide assistance for disabled</p>
	Awareness raising, education	Program design and implementation Policy Reform	
	Identify equitable approach and design system (S)	Begin implementation	
GOVERNANCE AND FINANCE	Carry out diagnostic assessment of processes and develop recommendations for Prioritize efficiency for core urban services	<p>Horizontal and vertical coordination needed</p> <p>Implement Changes in a phased manner</p> <p>Invest in capacity building</p>	<p>Reform of identification card system to ensure equity and remove obstacles linked to migration status</p>
	Carry out institutional mapping and assessment for core agencies and services		
	<p>Engage communities and citizens to help to promote inclusion</p> <p>Mainstream participation in urban planning and program design</p> <p>Train relevant staff</p> <p>Ensure low income communities are included</p>		

THEMATIC AREA	SHORT TERM YEARS 1-2	MEDIUM TERM YEARS 2-3	LONG TERM YEARS 3-5
GOVERNANCE AND FINANCE	Invest in capacity building	<p>Utilize intergovernmental fiscal transfer mechanisms to equalize regional disparities</p> <p>Improvements in enabling environment Address existing bottlenecks through reform</p>	
	Diagnostic work to identify Approach for reform	<p>Utilize intergovernmental fiscal transfer mechanisms to equalize regional disparities</p> <p>Begin implementation</p>	
	Diagnostic work to develop proposals for increasing property tax revenues	<p>Strengthen local revenue generation</p>	
	Develop transparent decision making and implementation process	<p>Allow more local discretion over funds use</p>	
	Invest in capacity building	<p>Scale up private sector financing through improvements in enabling environment</p> <p>Address existing bottlenecks through reform</p>	
	Carry out diagnostic work to identify opportunities	<p>Explore use of Land Value Capture for larger cities</p> <p>Implementation</p>	

REFERENCES

- Action Labor Rights. (2016). *Under Pressure: A study of Labor Conditions in Garment Factories in Myanmar which are wholly Korean owned or in Joint Venture with Korean Companies*. Yangon: Action Labor Rights.
- ADB. (2014). *Technical Assistance Report: Republic of the Union of Myanmar - Support for Public-Private Partnership Framework Development*.
- ADB. (2016). *Myanmar Transport Sector Policy Note - Urban Transport*.
- ADB. (2017a). *Urban Development and Water Sector Assessment, Strategy and Road Map: Myanmar*.
- ADB. (2017b). *Technical Assistance Report: Myanmar - Preparing the Second Mandalay Urban Services Improvement Project*.
- ADB. (2018a). *Project Concept Paper - Proposed Loan, Myanmar: Yangon Urban Services Improvement Project*.
- ADB. (2018b). *Yangon Housing Market Study*.
- Asia Foundation. (2013). *State and Region Governments in Myanmar*. Yangon: The Asia Foundation and Myanmar Development Research Institute - Centre for Economic and Social Development.
- Asia Foundation. (2015). *State and Region Public Finances in Myanmar*. Yangon: The Asia Foundation and Myanmar Development Research Institute - Centre for Economic and Social Development.
- Asia Foundation. (2015b). *Municipal Governance in Myanmar - An Overview of Development Affairs Organizations*. Yangon: The Asia Foundation and Myanmar Development Research Institute - Centre for Economic and Social Development.
- Asia Foundation. (2016). *The Provision of Goods and Services in Urban Myanmar: Planning and Budgeting by Development Affairs Organizations and Departments*.
- Asia Foundation. (2017). *City Life Survey: Myanmar 2017 Pilot Initiative*.
- Aung, M. M. (2017, October 23). Yangon factories told to treat water or else. *Myanmar Times*. Retrieved from <https://www.mmtimes.com/news/yangon-factories-told-treat-water-or-else.html>
- Baker, J. L. (2012). *Climate Change, Disaster Risk and the Urban Poor*. Washington, DC: The World Bank.
- Baker, J. L., & Gadgil, G. U. (2017). *East Asia and Pacific Cities: Expanding Opportunities for the Urban Poor*. Washington D.C.: World Bank.
- Banerjee, S. (2015). *Aadhaar: Digital Inclusion and Public Services in India, Background Paper for World Development Report 2016*. Washington DC: World Bank.
- Bawi, S. V. (2012). *Understanding the Challenges of Disability in Myanmar*.
- Calvo, C., & Dercon, S. (2013, October). Vulnerability to Individual and Aggregate Poverty. *Social Choice and Welfare*, 41(4), 721-740.
- Dickenson-Jones, G., Dunn, L., Joeline, C., De, S. K., & Betty, M. (2016). *Intergovernmental Fiscal Relations in Myanmar: Current Processes and Future Priorities in Public Financial Management Reform*. JICA & CESD.
- DIIS. (2017). *Migration and Security Challenges in Yangon's Informal Settlements - The case of Hlaing Thayar township*.
- DIIS, D. I. (2017). *Migration and Security Report*.
- Eden Center for Disabled Children. (2015). *A Space to Learn for All Children? Inclusive Education and Children with Disabilities in Myanmar*. Yangon: ECDC.
- FAO. (2016). *Formulation and Operationalization of National Action Plan for Poverty Alleviation and Rural Development Through Agriculture: Working Paper 10 on Land Tenure and Administration*.
- Forbes, E. I. (2016). On the Frontier of Urbanization: Informal Settlements in Yangon, Myanmar. *Independent Journal of Burmese Scholarship*, 199-238.
- Garland, M. a. (2007). *Global Urban Poverty, Setting the Agenda*. Washington, DC: The Wilson Center.
- Government of China; ASEAN; UNDP. (2017). *Development Finance Assessment Snapshot: myanmar - Financing the Future with an Integrated National Financing Network*.

- HARP-F and MIMU. (2018). *Vulnerability in Myanmar: A Secondary Data Review of Needs, Coverage and Gaps*.
- Harvard Kennedy School . (2012). *Yangon's Development Challenges*.
- Hsiang, S. M., & Jina, A. S. (2014). *The Causal Effect of Environmental Catastrophe on Long-Run Economic Growth: Evidence From 6,700 Cyclones*. National Bureau of Economic Research.
- Institute for Global Environmental Strategies. (2017). *Waste Management in Myanmar - Current Status, Key Challenges and Recommendations for National and City Waste Management Strategies*.
- International Growth Centre. (2016). *Urban Myanmar*.
- JICA. (2013). *The Project for the Strategic Urban Development Plan of the Greater Yangon: Final Report I*. Tokyo: JICA.
- JICA. (2014). *Project for Comprehensive Urban Transport Plan of the Greater Yangon (YUTRA)*.
- JICA. (2014). *The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar*.
- JICA. (2015, October 16). *JICA Press Release*. Retrieved from Signing of Japanese ODA Loan Agreement with Myanmar: Support for the Yangon urban transportation network, a stable power supply to the Greater Yangon area and the East-West Economic Corridor: https://www.jica.go.jp/english/news/press/2015/151016_01.html
- JICA. (2016). *Technical Assistance for Preparation of Resettlement Work Plan in Myanmar*.
- JICA. (2017). *Preparatory Survey for Greater Yangon Water Supply Improvement Project (Phase II)*.
- JICA. (2017b). *The Project on Establishment of End-to-End Early Warning System for Natural Disaster in the Republic of the Union of Myanmar*.
- JICA. (2018, May 10). *JICA Press Release*. Retrieved from Ground-breaking Ceremony for "The Greater Yangon Water Supply Improvement Project (MY-P5)": <https://www.jica.go.jp/myanmar/english/office/topics/press180510.html>
- JICA. (2018). *Myanmar Data Collection Survey on Housing Finance System Report*.
- Jolliffe, K., & Mears, E. S. (2016). *Strength in Diversity: Towards Universal Education in Myanmar's Ethnic Areas*. The Asia Foundation.
- Khera, R. (2018, January 21). *Why India's Big Fix Is a Big Flub*. Retrieved from The New York Times: <https://www.nytimes.com/2018/01/21/opinion/india-aadhaar-biometric-id.html>
- McDonald, L., & Hein, A. (2017). *Managing the Challenges of Rapid Urbanization: A Review of the Existing Property Tax System in Myanmar*. Renaissance Institute.
- Ministry of Construction. (2016). *National Habitat Report: The Republic of the Union of Myanmar*.
- Ministry of Labour, Immigration and Population. (2016). *The 2014 Myanmar Population and Housing Census: Thematic Report on Migration and Urbanization*.
- Ministry of Labour, Immigration and Population. (2017). *The 2014 Myanmar Population and Housing Census: Thematic Report on Disability*.
- Ministry of Labour, Immigration and Population. (2017). *The 2014 Myanmar Population and Housing Census: Thematic Report on Housing Conditions and Household Amenities*.
- Ministry of Land, Infrastructure and Tourism. (2013). *An Overview of Spatial Policy in Asian and European Countries*.
- Ministry of Planning and Finance and UNU-WIDER. (2017). *Myanmar Micro, Small and Medium Enterprise Survey 2017. Nay Pyi Taw: Ministry of Planning and Finance*.
- Minoletti, P. (2016). *Gender (In)Equality in the Governance of Myanmar: Past, Present, and Potential Strategies for Change*. Asia Foundation.
- Myanmar Agriculture. (2018). *Myanmar Agriculture*. Retrieved from <http://www.myanmargeneva.org/e-com/Agri/expind/agri-index/myanmar.com/Ministry/agriculture/Organi/slrd.htm>
- Myanmar Engineering Society. (2016). *Myanmar National Building Code*. Retrieved from Myanmar Engineering Society: <http://www.mes.org.mm/content/myanmar-national-building-code>
- NAMATI. (2016). *Gendered Aspects of Land Rights in Myanmar: Evidence from Paralegal Casework*.
- Netherlands Enterprise Agency. (2017). *Myanmar Waste Scoping Mission Report*.
- Newall, P. (2015). *Towards realizing the rights of persons with disabilities in Myanmar*. Myanmar: The Leprosy Mission.
- Rahardja, S., Artuso, F., & Cadot, O. (2016). *Myanmar - Diagnostic Trade Integration Study (DTIS): Opening for Business*. World Bank.

- Renaissance Institute. (2018). *What is the Wallet? Public Money in Myanmar's States and Regions (Brief Budget Series: Country Overview)*.
- San, M. P. (2018, June 29). *Yangon Chief Minister Makes New Municipal Law*. Retrieved from The Irrawaddy: <https://www.irrawaddy.com/news/burma/yangon-chief-minister-makes-new-municipal-law-official.html>
- Tanaka, S., Spohr, C., & D'Amico, S. (2015). *Myanmar Human Capital Development, Employment, and Labor Markets*. ADB.
- UN Habitat. (2016). *The Republic of the Union of Myanmar: National Urban Policy Framework*.
- UNDP. (2015). *Local Governance Mapping - The State of Local Governance: Trends in Yangon*.
- UN-Habitat. (2017). *The Republic of the Union of Myanmar: National Housing Policy & Strategy*.
- UN-Habitat. (2018). *The Republic of the Union of Myanmar: National Housing Policy White Paper*.
- UN-Habitat and Cities Alliance. (2017). *Mapping Yangon: the Untapped Communities, Phase One Report*.
- UN-Habitat and GIZ. (2014). *Land Tenure Security in Selected Countries: Synthesis Report*.
- UN-Habitat, U. a. (2015). *HABITAT III – Issues Paper, 21 – Smart Cities*.
- UNICEF. (2015). *Myanmar Water, Sanitation and Hygiene Sector Situation Analysis Report*.
- UNICEF. (2016). *Situation Analysis of Children with Disabilities in Myanmar 2016*.
- UNISDR. (2010). *A guide for implementing the Hyogo Framework for Action by local stakeholders*. Kyoto, Japan: UNISDR.
- UNISDR. (2015). *Global Assessment Report on Disaster Risk Reduction 2015*. New York: UNISDR.
- United Nations. (2017). *New Urban Agenda*. United Nations.
- Win, A. N. (2015, November 26). *No more public investment needed for bus rapid transport*. Retrieved from Myanmar Times: <https://www.mmtimes.com/business/17824-no-more-public-investment-needed-for-bus-rapid-transport.html>
- World Bank. (2009). *World Development Report 2009: Reshaping Economic Geography*. Washington DC: World Bank.
- World Bank. (2011). *World Development Report 2011: Conflict, Security and Development*. Washington, D.C.: The World Bank.
- World Bank. (2014). *East Asia Pacific At Work: Employment, Enterprise and Well-Being*. Washington DC: World Bank.
- World Bank. (2015). *Implementation Completion and Results Report: Vietnam Urban Upgrading Project*.
- World Bank. (2016). *A Country on the Move: Domestic Migration in Two Regions of Myanmar, a Qualitative Social and Economic Monitoring Thematic Study*.
- World Bank. (2017a). *An Analysis of Poverty in Myanmar - Part I: Trends Between 2004/5 and 2015*. Yangon: World Bank.
- World Bank. (2017b). *Myanmar Economic Monitor: Capitalizing on Investment Opportunities*. World Bank.
- World Bank. (2017c). *Towards a Sustainable Land Administration and Management System in Myanmar - Land Sector Needs Assessment Thematic Policy Notes*.
- World Bank. (2017d). *Project Appraisal Document: Myanmar Southeast Asia Disaster Risk Management Project*.
- World Bank. (2017e). *Unlocking Land Values to Finance Urban Infrastructure*.
- World Bank. (2017f). *Philippines Urbanization Review Phase II - Policy Note on Local Governance and Service Delivery, Assessment of the Assistance for Disadvantaged Municipalities (ADM) Program*.
- World Bank. (2017g). *Project Appraisal Document: Vietnam Scaling-Up Urban Upgrading Project*.
- World Bank. (2018). *Myanmar Future Jobs*. Washington, DC: The World Bank.
- World Bank. (2018a). *Myanmar Public Expenditure Review III: Subnational Governance, Finance and Delivery of Services - Mission Findings*.
- World Bank. (2018b). *Myanmar Economic Monitor, May 2018: Growth Amidst Uncertainty*. Washington, DC: World Bank.
- World Bank. (2018c). *The Human Capital Project*. Washington, D.C.: World Bank.
- YCDC and Save the Children. (2016). *Lives on Loan: Extreme Poverty in Yangon*.





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