



Unlocking Public and Private
Finance for the Poor



UNCDF LOCAL TRANSFORMATIVE FINANCE

**Local government finance is
development finance**

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DAVID JACKSON, EDITOR



Unlocking Public and Private
Finance for the Poor

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Foreword

The 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs), provides a bold blueprint to move our planet towards a more prosperous and sustainable future. Unfortunately, we were off track even before the COVID-19 pandemic. The situation has worsened, and progress on many SDGs has either stalled or reversed.

One of the factors slowing progress is lack of adequate financing. To address this challenge, we need to mobilize finance from all sources, as envisaged in the Addis Ababa Action Agenda. Effective actions are needed to generate public and private financing that is aligned with the SDGs. The public sector, especially local governments, has to play a key role in achieving the SDGs by providing basic and essential public goods and services, investing in critical infrastructure and expanding economic opportunities to an ever-growing urban population. To support local governments in their efforts to finance the SDGs, stronger international cooperation remains critical.

We at the United Nations Department of Economic and Social Affairs and the United Nations Capital Development Fund have pooled our respective expertise, tools and convening power to better support the development and management of local infrastructure, spur local revenue mobilization, advance local debt management, and promote direct lending from public and private financial institutions to local governments. We have done this by ensuring the meaningful participation of their communities.

This publication is the continuation of such collaboration. It aims to encourage transformative thinking in support of local sustainable development by examining the current local development finance architecture and by opening discussion about potential innovative new financial instruments and mechanisms at the local levels. Its key message is that there is significant potential to expand the scale of finance at the local level.

Going forward, it is our hope that this book will serve as an important reference point for local governments and the international community to provide adequate financing at the local level, which is critical for achieving the SDGs by 2030.

A stylized, cursive signature in black ink, reading 'Preeti Sinha'.

Preeti Sinha
Executive Secretary
UN Capital Development Fund

A stylized, cursive signature in blue ink, reading 'Navid Hanif'.

Navid Hanif
Director
Financing for Sustainable
Development Office
UN Department of Economic and
Social Affairs



Preface

The United Nations Capital Development Fund (UNCDF) has a long track record of conceiving and testing innovative financial solutions that mobilize capital investment for our clients – the frontier economies known as least developed countries (LDCs) – and their populations, while contributing to thought leadership for the wider financing of the development agenda. Recent examples of this thought leadership include collaboration with the Organisation for Economic Co-operation and Development (OECD) on the annual *Blended Finance in the Least Developed Countries* report and the biannual *World Observatory on Subnational Government Finance and Investment* report.

The recently approved UNCDF Strategic Framework 2022–2025 continues this tradition by emphasizing UNCDF’s hybrid nature as a development finance institution on the one hand and a United Nations development agency on the other.

During the discussions leading up to the 2022–2025 Strategic Framework’s approval, Member States and development partners encouraged UNCDF to strengthen its alignment with the priorities of the LDCs as expressed in the Doha Programme of Action (2022), which highlights building productive capacity. LDC concerns are also embodied in their collective requests to the Rio conventions on climate, biodiversity and desertification for financial mechanisms that address the existential risks of the environment and climate emergency. And throughout 2021, there was a wider appreciation of the urgency of greater capital flows towards sustainable infrastructure, including local infrastructure, particularly given the rapid growth rate of cities in developing countries. The United Nations Economic and Social Council, with Pakistan in the chair, promoted a focus on sustainable infrastructure finance; and the European Union, together with UN-Habitat, published a landmark report on *Financing Sustainable Urban Development*.

This publication provides a substantive consideration of one of the questions raised in these debates: Given the scale of the capital flows required, is the architecture of the global financial ecosystem fit for purpose? Much more remains to be done to fully implement the comprehensive framework envisaged in the 2015 Addis Ababa Action Agenda to promote long-term-oriented and transformative investment into the Sustainable Development Goals that is inclusive and sustainable.

Solving this problem will take more than one approach. It will require proactive engagement and energy from multiple actors at different levels of

territorial governance. The 2021 report of the Intergovernmental Panel on Climate Change spells out in stark terms the danger to humanity if we ignore the urgent need to act. This necessity compels us to look for imaginative solutions to financing bottlenecks and to rethink the structure of development finance.

Structural changes to the global financial architecture will be required. This publication explores a repurposing of local government finance as a vehicle to accelerate environmentally sustainable and inclusive development.

This book is a thought-provoking, forward-thinking volume in an established tradition of UNCDF 'outside-the-box' scholarship. In 1998, *Taking Risks* highlighted the potential for local development funds to stimulate economic growth and alleviate rural poverty. This approach was a novelty at the time, yet these financing mechanisms have since been taken to scale by governments, development partners and development financial institutions – most notably the World Bank – and have led to a large volume of resources being channelled to the local level.

Similar scale-up resulted from a 2010 discussion note co-authored by UNCDF, the United Nations Development Programme and the United Nations Environment Programme about local climate finance; this triggered the establishment of the Local Climate Adaptive Living Facility (LoCAL), a standard, internationally recognized country-based mechanism for verifiable climate adaptation finance which is endorsed by both the United Nations Framework Convention on Climate Change and the Doha Programme of Action. The LoCAL financing mechanism is currently expanding to 30 countries and is being scaled up by global climate finance.

Another, more recent, visionary work from UNCDF is the 2017 volume on *Financing Sustainable Urban Development in the Least Developed Countries*; co-authored with the Financing for Sustainable Development Office (FSDO) of the United Nations Department of Economic and Social Affairs (UN DESA), this publication contributed to the creation of the International Municipal Investment Fund.

Finally, in 2021, UNCDF and FSDO partnered on a pathbreaking UN publication on infrastructure asset management – a hitherto unacknowledged component of development finance.

This volume continues this spirit of innovation and forethought, as a contribution to the wider debate on local sustainable infrastructure financing. It showcases thought leadership and insight from the UNCDF advisors and collaborators in its flagship Local Transformative Finance Practice. Coinciding with the 2022–2025 Strategic Framework, the book provides an analytical tool to align UNCDF initiatives in domestic capital market development, local infrastructure finance, local climate finance, municipal finance and fiscal decentralization with requisite structural reforms to the financial architecture.



Acknowledgements

This publication rests on a three-decade foundation of knowledge and networks that have sustained the United Nations Capital Development Fund's (UNCDF's) work in local financing of infrastructure and services since the design of the first local development fund in the 1990s. It also draws from insightful debate and discussion at the United Nations and elsewhere between 2019 and 2021 about capital markets, public finance, infrastructure and the role of subnational institutions (regions, cities, municipalities, local authorities), development and the UNCDF Strategic Framework 2022–2025. Therefore, it is imperative to acknowledge the different threads that are woven together to make the case presented in this book. In this light, acknowledgements, recognition and gratitude are due to the following.

The lead author and editor of this book is David Jackson (UNCDF). Gratitude and acknowledgement are due to the chapter authors, listed here in alphabetical order: Christel Alvergne, Shade Amole, Suresh Balakrishnan, Claire Chan, Sophie De Coninck, Lennart Fleck, Johan Gély, Sarah Harris, Jesmul Hasan, Rajivan Krishnaswamy, Jaffer Machano, Rukan Manaz, Paul A. Martin, Linda Newton, Isabella Pagotto, Daniel Platz, Dmitry Pozhidaev, Paul Smoke, Jesper Steffensen, Francesca Valentini, Pio Wennubst and Nan Zhang.

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Acknowledgement is also made to the members of the European Union and UN-Habitat Advisory Group on Financing Sustainable Urban Development, chaired by Sir Paul Collier (Professor of Economics and Public Policy, Blavatnik School of Government, University of Oxford) and comprising Edlam Abera Yemeru (Chief of Urbanization Section, United Nations Economic Commission for Africa), David Jackson (Director of Local Transformative Finance, UNCDF), Serge Allou (Technical Advisor, UCLG), Gerry Muscat (Head of Division, Regional and Urban Development, European Investment Bank) and Amadou Oumarou

(Director for Infrastructure & Urban Development, African Development Bank). This publication builds on the 2021 Financing Sustainable Urban Development Report by this group and seeks to explore some of the more radical potential innovations touched upon during the Advisory Group discussions.

For their dedication beyond the call of duty, their teamwork and their professionalism, the authors acknowledge the many leaders working in local and national institutions and the current and former UNCDF staff members who drive the work in local government finance based on a shared understanding that people and their immediate institutional and physical environment should be at the centre of development. In this spirit, acknowledgement is due to those current and former staff members, who, although not authors of the chapters, have contributed to the thought and practical experience contained within.

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Abbreviations

ASEAN	Association of Southeast Asian Nations
CDC	Council for the Development of Cambodia
CDP	Committee for Development Policy
DBSA	Development Bank of Southern Africa
DDEG	discretionary development equalization grant
DST	digital service tax
EVI	Economic and Environmental Vulnerability Index
FDI	foreign direct investment
FMDV	Global Fund for Cities Development
GCF	Green Climate Fund
GDP	gross domestic product
GNI	gross national income
HAI	Human Assets Index
IGFT	intergovernmental fiscal transfer
IGFTS	intergovernmental fiscal transfer system
IMF	International Monetary Fund
INCA	Infrastructure Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
IPO	initial public offering
KCCA	Kampala Capital City Authority
LDC	least developed country
LGU	local government unit
LGUGC	Local Government Unit Guarantee Corporation
LoCAL	Local Climate Adaptive Living Facility
MDF	Municipal Development Fund
MDFO	Municipal Development Fund Office
MIGA	Multilateral Investment Guarantee Agency
NAP	national adaptation plan
NBFI	non-bank financial institution
NDC	nationally determined contribution
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OSR	own source revenue
PBCRG	performance-based climate resilience grant
PPP	public-private partnership
QIP	quality investment proposal
REAP	revenue enhancement action planning
RIDF	Regional Infrastructure Development Fund
SDG	Sustainable Development Goal
SFI	special financial intermediary
SMEs	small and medium-sized enterprises
SNG	subnational government
SPV	special purpose vehicle
UglFT	Uganda Intergovernmental Fiscal Transfers Program for Results
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value added tax



1

Analysis and Investment Agenda for a Liveable Healthy Planet

DAVID JACKSON

This book argues that more local government finance is imperative if developing countries, including the least developed countries (LDCs), are to realize economic structural transformation and environmental sustainability. The book shows how building robust municipal and local government financial systems and deep, liquid domestic capital markets can accelerate the requisite transformation. And it underscores how planetary health depends on municipal and local government finance: towns and cities are not only a unit of analysis but are the essential unit of action to address the crisis highlighted in the 2021 Intergovernmental Panel on Climate Change (IPCC) report. These two considerations of transformation and sustainability converge at the climate crisis, which amplifies the urgency of a financial ecosystem that works for cities and local governments well beyond just a matter pertaining to developing country cities to one that should be at the top of the global agenda if we are serious about surviving on the planet.

The book also describes how local government finance is critical to developing countries' recovery from the COVID-19 pandemic and how it presents an opportunity for national governments to accelerate this recovery and reshape their economies so as to better deploy available resources for structural transformation through the three transitions – green, urban and productive – outlined in this chapter.

This introductory chapter sets out the book's main arguments and proposes a policy agenda for planetary health. It is divided into four sections:

- Section 1 provides a conceptual context, highlighting issues of productivity, urbanization and climate change and their interface with the international development finance framework, outlining why local government finance is development finance.
- Section 2 describes what needs to be done and illustrates the types of investment required in towns and cities to secure a liveable future for the next generation.
- Section 3 sketches current international development policy towards municipal and local government finance and explains why the global financial ecosystem is not working for cities and local governments.
- The final section proposes an agenda for an enabling global financial architecture appropriate for the needed increase in subnational finance. It also introduces the other chapters in the volume, which provide further analysis and delineation of the main arguments made here.

1. Why local government finance is development finance

Development finance is about sustainably paying for social and economic transformation. The Sustainable Development Goals (SDGs) encapsulate a broad global consensus about what this transformation requires. The concept of economic transformation as a factor in a country's evolutionary development path is largely drawn from Arthur Lewis (1954, 2013) and Albert Hirschman (1958), among others. It refers to a transition from low to high productivity and requires a shift to more efficient public and private institutions, increased fiscal space and deeper domestic capital markets¹. Transformation is often characterized by agricultural processing, manufacturing and urbanization. Increases in fixed capital formation and in fiscal space (including local fiscal space) as a proportion of gross domestic product (GDP) are indications of this economic transformation. Transformation can also include a reduction in the proportion of national income derived from the export of unprocessed primary commodities.

Development pathways

The ideas of Lewis and Hirschman about productivity and its economic and social impacts generally correlate with today's classification of countries into 'rich' or 'developed' countries – broadly equivalent to the Organisation for Economic Co-operation and Development (OECD) group of countries – and 'developing' countries, as grouped into upper-middle-income, lower-middle-income and least developed categories.

This **productive transition** is a priority for most developing countries, particularly those in the lower- and middle-income country groups (UNCTAD, 2020). The Committee for Development Policy of the United Nations Economic and Social Council highlights building productive capacity as the key to sustainable graduation from LDC status (CDP, 2017), and the United Nations Conference on Trade and Development (UNCTAD) monitors the structural transformation of LDCs in an annual report (most recently, UNCTAD, 2021). Finally, the productive transition is a key objective of the outcome statement of the Fifth United Nations Conference on the Least Developed Countries (LDC5)².

The LDC group of countries was established by the 26th session of the United Nations (UN) General Assembly in 1971, which formally selected 25 countries that met the initial criteria based on a low GDP per capita and the presence of structural impediments to growth³. The United Nations Capital Development Fund (UNCDF) was established as a special measure for the LDCs to address these structural impediments by providing development capital and technical assistance on terms favourable to them⁴. In effect, UNCDF was created to boost the productive transition.

By 2021, the list of LDCs had grown to 46 countries, spurred first by the end of the colonial era and later by the end of the Cold War. In recent years, some countries, such as Equatorial Guinea in 2017, have graduated from LDC status; others are slated for graduation, although the COVID-19 pandemic is affecting the timetable. The criteria for inclusion in the LDC category have evolved and currently comprise three elements⁵: a low gross national income (GNI) per capita (the 2021 threshold is below \$1,018); a low ranking on the Human Assets Index, which scores health and education levels; and a threshold ranking on the Economic and Environmental Vulnerability Index, which measures key features of structural weakness and has recently added climate change–related criteria. LDCs benefit from special aid and trade measures⁶.

The COVID-19 pandemic has demonstrated that the global economic architecture makes developing countries highly vulnerable to shocks and that structural transformation remains of critical importance. From an analysis of progress, and applying principles of development economics, the Committee for Development Policy has identified three broad groups across LDCs following different development pathways towards graduation and sustainable development. While the grouping is based on LDCs, the analysis is relevant to many other developing countries as well; for more on this topic, see chapter 2, beginning on [p. 71](#).

- The first group are **countries with a trajectory of rapid economic growth and rapid increase in income through natural resource exploitation together with limited progress towards human asset development and the reduction of economic**

vulnerabilities. While this group is moving towards statistical graduation – based on the indicators alone – deeper investment in human assets and environmental security is essential to their being able to sustainably increase productivity in non–natural resource sectors. Examples of such countries include Angola, Equatorial Guinea and Guinea.

- The second group is a collection of **countries that combine economic specialization such as tourism or specific national resources with progress in human asset development.** This group tends to comprise smaller states that can benefit from diaspora remittances or other unique endowments that are invested into increasing specialization. The path of these countries shares some similarities with the first group but includes a degree of diversification together with higher productivity in some sectors. Examples of current LDCs include Bhutan, Kiribati, Nepal, São Tomé and Príncipe, Solomon Islands and Tuvalu. Graduated LDCs include Botswana, Cabo Verde, Maldives, Samoa and Vanuatu.
- The third group consists of **countries that invest heavily in economic diversification, structural transformation and the development of human capital.** Their transformation includes agricultural processing and progress towards more productive economic activities, including industrialization and manufacturing. Increased access to global markets and value chains on better terms is a priority. UNCTAD (2016) describes this group as following the classic Lewis development model, although on a slow trajectory. Examples of LDCs in this group include Bangladesh, Lao PDR and Myanmar.

Graduation from LDC to middle-income country status does not necessarily alter the terms of the transformation equation; all developing countries continue to pursue transformation and can benefit from defining and executing a national development strategy. However, things have changed since the advent of the development economics paradigm. Business as usual is no longer an option, as the next subsection outlines.

How climate change and urbanization disrupt development pathways

Two external imperatives disrupt the procession of countries towards productive structural transformation, compelling two other transitions.

Climate change

In light of the 2021 IPCC report, it is imperative for all countries to consider planetary health alongside productivity. This means defining development strategies

for a **green transition**. The 1992 Earth Summit in Rio de Janeiro was an unprecedented effort to focus on the impact of human socioeconomic activities on the environment and set a new blueprint for international action. The summit highlighted the importance of environmental concerns to sustaining human life, something that had not previously been officially acknowledged. Issues addressed included patterns of production with an emphasis on sustainability and recycling, alternative sources of energy to reduce emissions of greenhouse gases that fuel climate change, a focus on public transportation instead of private cars, preservation of water and soil resources, a recognition of the importance of biodiversity and an acknowledgement of the risk from species extinction.

The summit was revolutionary because it was the first intergovernmental recognition of the link between development, the environment and our shared planetary future. It had many achievements, including Agenda 21 and the Rio Declaration on Environment and Development as well as the establishment of three foundational global conventions: the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity and the United Nations Convention to Combat Desertification⁷. Implementation of these international agreements – and of the 2015 Paris Agreement – is a prerequisite to human survival on the planet. Thirty years after Rio, we are in the midst of the crisis that was foreseen a generation ago. Therefore, environmental sustainability must be added to productivity as a destination on the development path. This book argues that subnational finance is an indispensable way to accelerate this solution before it is too late.

The pathway from a least developed to a more developed economy must be reviewed in the context of the Rio conventions. Climate change is now with us: it is a present and ongoing threat, not a future hypothetical one (IPCC, 2021). The geographical location of many LDCs makes them particularly vulnerable in this regard. The road forward can only involve a green transition. An alternative ‘dirty’ route with increased greenhouse gas emissions and continued environmental degradation is no longer possible. Emphatically, the reality of climate change makes any carbon- and petrochemical-fuelled development path untenable.

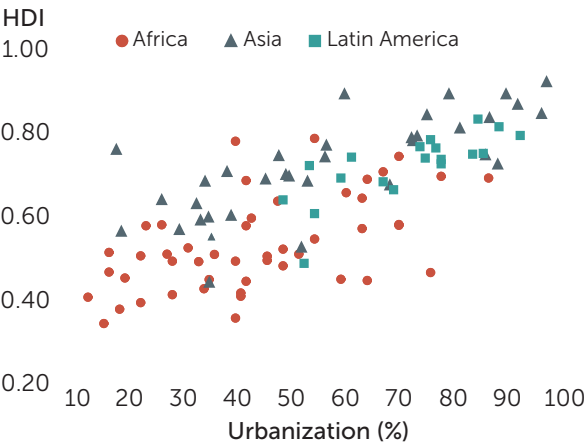
**ENVIRONMENTAL
SUSTAINABILITY
MUST BE ADDED TO
PRODUCTIVITY AS A
DESTINATION ON THE
DEVELOPMENT PATH.**

Urbanization

A further shared characteristic of many developing countries is that they are among the world’s most rapidly urbanizing. Most of the world has reached a stable state of around 80 per cent of their population living in urban areas. LDCs are heading in this direction with increasing speed. It took Paris, France, 100 years

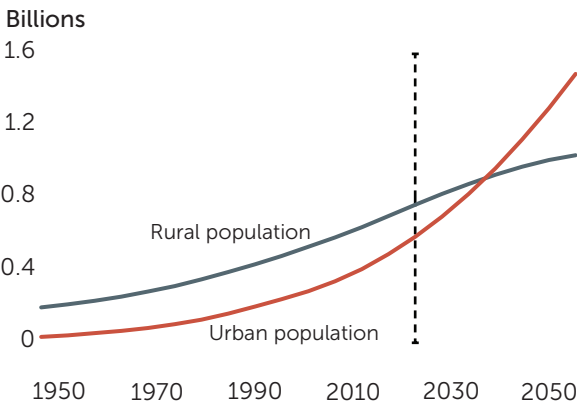
to grow from half a million inhabitants to a million. Lagos, Nigeria, achieved this growth in 10 years (Jackson and Zhang, 2020; UNCDF, 2020g). At its face, urbanization should be good news because,

Figure 1.1 Human Development Index and urbanization in selected countries of Africa, Latin America and Asia, 2017



Source: EIB (2020).

Figure 1.2 Urban and rural populations in Africa, 1950–2050



Source: EIB (2020). Data source: World Bank, World Development Indicators (2019).

in other economies, it was accompanied with the productivity increases critical for transformation. Furthermore, cities have been associated with social progress, while rural areas are often characterized as more conservative (UN-Habitat, 2020). And there is often a positive correlation between the Human Development Index and urbanization (see figure 1.1).

Yet many developing country cities are urbanizing rapidly without sufficient investment to drive productivity increases and improvements in socioeconomic conditions – resulting in towns and cities that are neither environmentally sustainable, nor productive, nor advancing social progress (EIB, 2020; UNCDF, 2020g). Figure 1.2 illustrates the exponential increase in the rate of urbanization in Africa.

The climate crisis makes this question of urban productivity and environmental sustainability equally relevant for developing countries that have already reached the 80 per cent urbanization level but still need to urgently upgrade their built environment to reduce emissions, adapt and build resilience for the difficult years ahead.

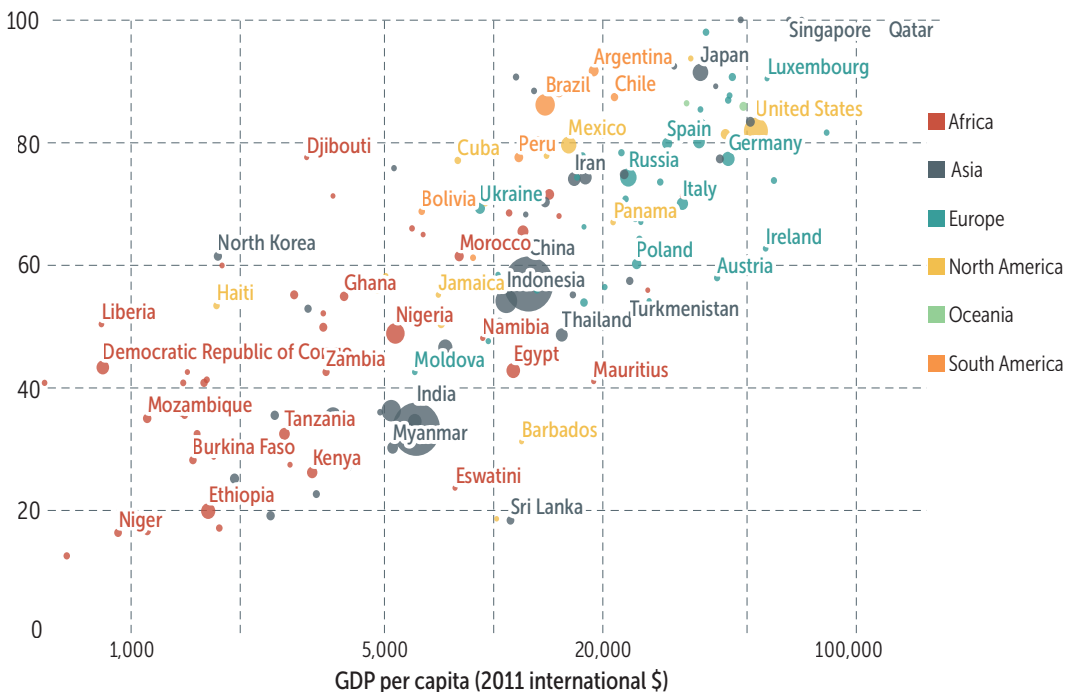
An examination of aggregate data provides context on how

climate change and urbanization are disrupting development pathways. In sub-Saharan Africa, the urban population increased from 22 per cent in 1980 to over 40 per cent in 2018, and total GDP grew from \$271 billion to \$1.7 trillion⁸. Globally, urbanization, productivity and GDP growth have risen hand in hand (see

figure 1.3) and there seems to be a correlation between the three. These are meta trends, and economic history confirms that they map the trajectory of economic development in North and South America, the Middle East, North Africa and parts of Asia (Collier, 2017). There is a catalyst for this correlation. A closer look at the data reveals that high levels of investment in infrastructure are required to achieve it. Otherwise, countries might experience trade and consumption–driven growth that may not boost productivity or be sustainable over the longer term.

Figure 1.3 Urban population by GDP per capita, 2016

Share of population living in urban areas (%)



Source: Global Change Data Lab, [Our World in Data web page](#).

The sustainable infrastructure imperative

Tracking progress in sustainable infrastructure investment

Since 1980, gross fixed capital formation, a proxy measure for infrastructure investment, has remained constant at around 25 per cent of global GDP. In the meantime, the import and export of goods and services grew from 13 per cent to 26 per cent of global GDP⁹. This relative increase in goods and services, as well of remittances, reflects the globalization wave since the 1990s. However,

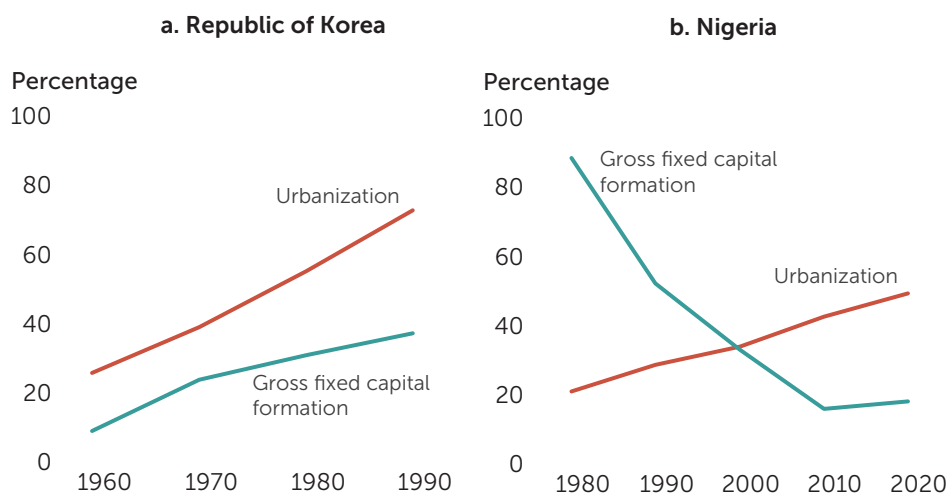
the devil is in the details. While gross fixed capital formation remains constant on aggregate, in countries experiencing increases in urbanization **with** productivity, it reaches up to 45 per cent of GDP during the urbanization phase (see figure 1.4a) but has not increased sufficiently in countries experiencing low productivity urbanization (see figure 1.4b).

The combination of capital investment and urbanization stimulates productivity, overall prosperity and increased family income. This is a well-trodden and well-documented path¹⁰. It is acknowledged that in recent decades the benefits have become more unequally shared (Piketty, 2014). Yet, putting aside the issue of wealth distribution, it is also clear from the data that parts of Africa and Asia are not following this productive route at all, but are instead experiencing urbanization without the required investment in infrastructure and public services.

Why there is no alternative to sustainable infrastructure investment

Is there a road to transformation through consumption and growth led by small and medium-sized enterprises (SMEs)? Or does sustainable infrastructure investment at scale remain essential for structural transformation? The answer partly lies in productivity. Can goods, services and remittances increase productivity, while respecting the twin disruptions, without capital investment? If not, rapidly growing cities will become unproductive and environmentally unsustainable urban sprawls.

Figure 1.4 Comparison of gross fixed capital formation during periods of rapid urbanization in countries with different levels of productivity



Source: World Bank [Database](#).

Household incomes are a key barometer of what is happening. The signs are not good; on aggregate, family incomes are not increasing at a scale that indicates sufficient productivity growth (OECD and UNCDF, 2020). Figure 1.5a illustrates that Africa's productivity has remained static, while Asia's has increased and Latin America's has decreased since 2000; this broadly correlates with gross fixed capital formation in the respective continents, as shown in figure 1.5b. The data would appear to support the broad thesis that fixed capital formation is a key factor driving productivity in developing countries.

Another barometer of whether cities are meeting the challenge is their built environment. The form of the financing shapes the form of the city. The urban core of Turin, Italy, looks like it does because it was planned and built holistically with capital provided by the Kingdom of Savoy from the 16th century and continues to be holistically planned to this day¹¹. Skilled stonemasons were required to deliver baroque architecture at scale (see photo 1.1). Songdo in the Republic of Korea was master-planned and built as an eco-friendly smart city (see photo 1.2) with a public transportation system, water and waste facilities, and high-density mixed-use buildings (Poon, 2018). The city was designed as an international hub hosting anchor institutions such as the headquarters of the Green Climate Fund. Financing for urban planning and development – including for a 12.3 kilometre bridge connecting Songdo to the Incheon airport (see photo 1.3) and a high-speed rail link to Seoul – was backed by the Korean central government and local authorities as well as by private investors (*Economist*,

**THE FORM OF THE
FINANCING SHAPES
THE FORM OF THE
CITY.**

Figure 1.5 Labour productivity and gross fixed capital formation across continents, 2000–2018



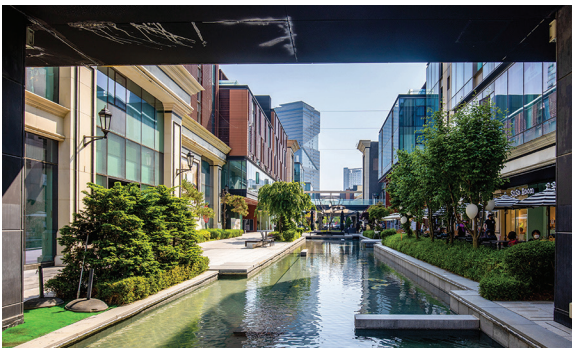
Source: Figure 1.5a: EIB (2020), based on Conference Board Total Economy Database; figure 1.5b: [World Bank Database](#).

Photo 1.1 Turin, Italy: functional and aesthetic urban design at scale



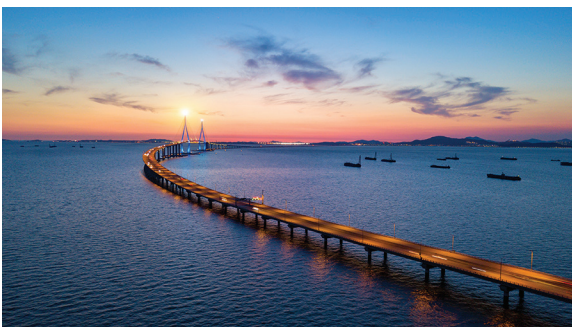
Credit: Maykova Galina/Shutterstock.

Photo 1.2 Songdo, Republic of Korea: purposeful design of sustainable and productive urban spaces



Credit: Stock for You/Shutterstock.

Photo 1.3 Incheon, Republic of Korea: catalytic, resilient blended finance



Credit: CJ Nattanaï/Shutterstock.

2010). Similarly, in China, Shenzhen was planned to leverage its proximity to Hong Kong. Since 1980, it has been transformed from a small fishing village to a megacity with skyscrapers as well as extensive public services and green spaces (Nan and Wang, 2015): 40 per cent of Shenzhen's area is green space – an equal value to Hong Kong's – compared to 33 per cent and 27 per cent for London and New York, respectively¹².

These cities demonstrate how urban master planning and blended finance enabled productivity growth and urban expansion with some environmental awareness and sustainability considerations built in (although more is needed). While their architectural forms differ, common features include dense housing, clustering of industrial activities, strict zoning, strong public institutions and provision of public infrastructure. These cities all have green space, public services, freely available potable water and environmentally adaptive features. Residential densities encourage specialized labour markets. For example, building on its historic urban and social capital, Turin's pillar industries now include automotive manufacturing and confectionery and chocolate production, all of which require specialized and connected value chains with multiple, cumulative stages of processing.

The master planning of Turin, Songdo and Shenzhen span different temporal, political and economic

dimensions. Their urban forms have advocates and detractors. Yet in each case, capital was available at the right price and volume to finance a productive **urban transition** over a relatively short period. Despite this success, even these cities are now facing the disruption of climate change and its urban impact.

Of course, not all towns and cities are designed holistically in this way. Others are more heterogeneous and have grown incrementally over time. In each case, however, the physical urban expression of each neighbourhood is bound up with the structure and composition of the finance.

Many developing country cities are characterized by a wide disparity in standards of infrastructure and service provision, often in close juxtaposition. Retail malls, hotels and offices are endowed with piped water, irrigated green spaces, solar-powered energy and fast Internet access. They are located alongside precarious buildings that are not connected to any of these amenities and that are constructed to very different standards. Instead of mass transport, tightly packed minibuses compete for congested road space with oversized cars used by the wealthier. Here too, the form of financing shapes the form of the city. The characteristics of these cities tell us that while capital is available at a price that can finance the ringfenced and bankable 'islands', it is not accessible at the right price for financing at scale infrastructure and services in the surrounding urban sea.

WHILE CAPITAL IS AVAILABLE AT A PRICE THAT CAN FINANCE THE RINGFENCED AND BANKABLE 'ISLANDS', IT IS NOT ACCESSIBLE AT THE RIGHT PRICE FOR FINANCING AT SCALE INFRASTRUCTURE AND SERVICES IN THE SURROUNDING URBAN SEA.

As urbanization increases without the required investment, it becomes difficult and more expensive for cities to attract the required investment to raise productivity. They are less able to offer the opportunities for increased living standards and social progress historically seen in cities elsewhere. The climate and environmental crisis is exacerbated as retrofitting can often be more expensive than incorporating environmental sustainability into the initial design (UN-Habitat, 2020) – a point further developed in chapter 7 (beginning on [p.193](#)) on asset management.

The European Investment Bank (2020) highlights how low productivity urbanization is damaging the prospects of developing countries and risks locking them into environmentally unsustainable pathways – with severe implications not just for the cities themselves but for the planet as a whole.

We have referred to the economic transformation and increases in productivity required for development and the fresh obstacles to progress brought by the twin imperatives of climate change and urbanization. In effect, the development trajectory has branched out to three transitions: the productive transition; the urban transition; and the green transition.

An individual investment – for example, a waste-to-energy plant that produces clean energy from plastic waste (see the case study in chapter 13, [p. 353](#)) – can simultaneously support all three transitions. Nevertheless, the transitions speak to unique lenses through which to view and measure the impact of the waste-to-energy plant, each with different global agreements and standards (although again, these are necessarily overlapping).

The consideration and financing of these transitions is advanced by different constituencies. The question of **productivity and development** is closely followed in the analyses of UNCTAD, the UN Industrial Development Organization, the UN Department of Economic and Social Affairs, and the regional UN Economic Commissions, together with the Bretton Woods institutions (i.e. the World Bank and the International Monetary Fund). It is frequently a factor in national development plans and the purpose behind loans from development finance institutions.

The **green transition** involves the Rio conventions discussed earlier in this chapter and is measured by the contribution countries make to these conventions, such as the nationally determined contributions to the Paris Agreement as reviewed at the 2021 Glasgow Conference of the Parties to the UNFCCC. In addition to development finance institutions, there are bespoke financial institutions for this

transition such as the Green Climate Fund, the Global Environment Facility and the Land Degradation Neutrality Fund.

**THE URBAN
TRANSITION IS
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The **urban transition** is followed by city networks such as United Cities and Local Governments and ICLEI–Local Governments for Sustainability. In the international development system, its ‘custodian’ is UN-Habitat, and it is reviewed at the World Urban Forum. Global policy is shaped by the New Urban Agenda, approved in 2016 at the Habitat III conference in Quito, Ecuador. There are no purposely designed global financial institutions for the urban transition, although some national bodies exist. The urban transition is underfunded compared to the significant resources devoted to the pro-

ductive and green transitions. We need to understand and appreciate that the productive and green transitions need to be connected to the urban transition. This is the missing link. Connecting it will accelerate all three transitions.

Without increased investment in municipal and local government finance in developing countries, problems will continue to mount. Outward migration will remain the preferred option for many – first to the megacities, then further afield. Unless cities, especially intermediary cities (UNCDF, 2021d), become high-quality places in which to live, it will be difficult to achieve the required productive, green and urban transitions. And without these transitions, our home on the planet becomes precarious indeed.

2. The transformative investment we need

This section describes what needs to be done and provides examples of the kind of local investment needed. To achieve this investment at scale, towns and cities must realize their potential to be more than units of analysis and of planning: They must become effective units of implementation and investment.

Local sustainable infrastructure and the productive transition

The objectives of developing countries for the productive transition have been expressed in the recommendations of the Committee for Development Policy of the UN Economic and Social Council. One of these recommendations highlights the need for integrated policies across five broad areas: (i) building development governance, (ii) creating positive synergies between social outcomes and productive capacity, (iii) establishing conducive macroeconomic and financial frameworks, (iv) developing industrial and sectoral policies that promote technological upgrading and structural transformation, and (v) providing adequate international support (CDP, 2020). In light of the 2021 IPCC report, these principles are relevant to all countries (and their cities) because the productive transition must be concomitant with new forms of environmental and economic resilience and a shift to approaches such as the circular economy.

We have discussed the positive relationship between urbanization, fixed capital formation and productivity and how this is essential for the green and urban transitions. This meta-analysis is confirmed by studies of local investment (e.g. Duranton and Puga, 2004). The investment agenda for the productive transition includes the following:

- Employment and labour market strengthening so the city can provide productive livelihoods that in turn contribute to its fiscal and economic strength
- Concentric value chains to stimulate positive feedback and clustering of related economic activity – a marker of high productivity
- A circular economy approach, such as waste to energy, so the city can link the productive transition to the green transition
- Catalytic sectors and specialization that apply the principles of local development to invest in the unique qualities of the local place and local society
- Rural-urban linkage and a territorial approach that maximize the impact of local value chains and connect them to the Rio conventions (e.g. food systems)

- Connectivity to ensure the swift and friction-free flows of people, services, goods and information in the local space (e.g. physical connectivity and Internet bandwidth and accessibility)

Examples of these investments are illustrated in box 1.1. In addition to domestic institutions, there are many international agencies – including UNCTAD, UNCDF and the UN Department of Economic and Social Affairs – that monitor local economic development indicators and can provide substantive support required by municipal and local governments¹³.

Local sustainable infrastructure and the urban transition

The urban transition is not only about accommodating the rapidly increasing number of people living in urban areas, but also about improving cities that already have stable populations. The overall policy agenda for the urban transition is the New Urban Agenda approved by the world's governments at the 2016 Habitat III conference. The New Urban Agenda takes towns and cities as the lens through which to view the Rio conventions and the Sustainable Development Goals (SDGs) as a whole. The New Urban Agenda has not received the attention of its contemporary global agreements – the Addis Ababa Action Agenda on Financing for Development, the Paris Agreement and the SDGs – yet the latter cannot be implemented without it. The New Urban Agenda provides a roadmap for the urban transition which includes the following:

- Good quality and affordable housing so families can build healthy, accomplished lives in close proximity to employment, education and recreational opportunities
- Parks, green space and environmental protection so towns and cities can deepen their climate resilience, build on their geographical attributes and improve urban design and utility (see chapter 12 beginning on [p. 311](#))
- Education and vocational training so citizens can broaden their horizons, develop civic awareness and acquire skills useful to the local economy and beyond
- Health and social services to support citizens in both acute emergency and chronic conditions and to provide civic and compassionate support to local lives
- Public safety and well-being so women and men, young and old can circulate and live within the city in security and freedom
- The right to the city – ensuring the city is inclusive, all its citizens share what it has to offer, contributing to its social and economic vitality and governance processes

Box 1.2 provides specific examples of what these investments mean. At a global level, city networks and entities such as UN-Habitat provide substantive support for the urban transition.

Local sustainable infrastructure and the green transition

The green transition is a global imperative that affects all towns and cities. The SDGs incorporate the Rio conventions, which form the main policy agenda for the green transition. It is not hyperbole to state that the Earth will not be able to support us unless we make the green transition¹⁴.

The green transition is not uniquely urban, but it will be won or lost in towns and cities. To implement the Rio conventions, rural and underpopulated land is important for rebuilding biodiversity, replenishing soil and vegetation, and sequestering carbon. For urban areas, however, the degree of global warming and environmental degradation already locked into the system means that towns and cities need to increase their capital investment programming. Examples of the types of investment required include the following:

- Clean energy, without which greenhouse gases will continue to accumulate in the atmosphere
- Waste disposal and recycling including waste to energy, without which the plastics crisis will exacerbate and the circular economy will not grow
- Sustainable piped water, without which water tables will continue to deplete through overuse of bottling, and cost-effective water (for both drinking and washing) cannot be delivered at scale
- Sustainable mobility and public transport, without which carbon-neutral transportation cannot be developed and expanded
- Climate adaptation and improved city resilience, without which towns and cities will continue to face increased flooding and other environmental shocks including heat sinks from overuse of cooling systems
- Contribution to mitigation through biodiversity, carbon sequestration and others, without which long-term sustainable urban life will not be possible

Box 1.3 contains specific examples of these important infrastructure improvements. Cities and local governments are engaged with a wide variety of institutions – including the World Resources Institute and ICLEI–Local Governments for Sustainability – that provide substantive and technical support to the green transition.

Box 1.1 Elements and examples of the productive transition

Concentric value chains. Extractive industries and agriculture are a major driver of economic growth in many developing countries. Harnessing those sectors for expansion of productive capacity requires industrial and agricultural policies that build forward and backward linkages, self-reinforcing specialized clusters of economic activity, and positive externalities in the local value chain, rather than exporting raw commodities from the local economy for value to be added elsewhere. This is the essence of local economic development and can lead to value chains that may ultimately reduce overreliance on extractive industries. See Coe and Hess (2013).

Circular economy. Building a circular economy in cities contributes to all three transitions – productive, green and urban. Cities are leading developments in circular manufacturing, fashion, transport, food and procurement. For example, Belo Horizonte, Brazil, is tackling electronic waste and youth unemployment; New York City's #WearNext campaign brings together local fashion industry players to encourage textile recycling; and the London Waste and Recycling Board has created a circular economy programme that offers business advisory services and investment guidance to SMEs. See Ellen MacArthur Foundation [Circular Cities: Thriving, Liveable, Resilient webpage](#); and Stahel (2019).

Catalytic sectors and specialization. Local development does not refer to only the geographical coordinates but also the local context and resources. For example, in most small island developing states, fisheries and tourism will continue to be the main economic activities (FAO, 2019). Ensuring that these sectors are catalytic and specialized is crucial to achieving those countries' productive transition. Further harnessing economic linkages to the diaspora is also beneficial. See Pike, Rodríguez-Pose and Tomaney (2016); and UNCDF (2020c) and Pike, Rodríguez-Pose and Tomaney (2016).

Rural-urban linkage and territorial approach. Increasing agricultural productivity and adopting the territorial approach to food systems and food security and nutrition is key to the productive transition. OECD, the Food and Agriculture Organization of the United Nations and UNCDF (2016) provide a policy framework for this. UNCDF (2021b) co-led the [Alliance for Local Food Supply Chains](#) for the 2021 UN Food Systems Summit. For example, the [Support to Agricultural Revitalization & Transformation \(START\)](#) Facility designed by UNCDF improves access to finance for SMEs engaged in agricultural value addition in Northern Uganda. See Lynch (2005).

Connectivity. The interface between physical and virtual connectivity can affect the local fiscal space and the ability of local government to drive the productive transition. Physical connectivity includes not only transport but also connectivity between neighbourhoods – and even between buildings, like the Medellín, Colombia, escalators shown in photo 1.5 (p. 27). Online businesses and service providers have clearly benefited from the COVID-19 pandemic. But this virtual activity can negatively affect local fiscal space, for instance, through the loss of local tax revenue due to digital platform providers (discussed at length in chapter 15, beginning on p. 375). UNCDF's rebuilding local fiscal space initiative (Steffensen, Löffler and Engen, 2020) and Roberts (2019) explore this issue.

(continued)

Box 1.1 Elements and examples of the productive transition *(continued)*



The productive transition



Box 1.2 Elements and examples of the urban transition

Good quality and affordable housing. There are still around 2 billion informal workers and 1 billion slum dwellers globally. Overcommodification of housing can lead to greater inequality, spatial segregation, inadequate housing provision and growing homeless populations. Affordable housing for all is one of the ultimate goals of the urban transition and the New Urban Agenda; it is also an element of the Right to the City agenda. See Fields and Hodgkinson (2018); Harvey (2013); Tighe and Mueller (2013).

Parks, green space, good urban design and environmental protection. Parks and green space are part of a city's sustainable urban transition and green future. Urban parks and trees can mitigate the impact of urban heat islands, minimize flooding and improve water quality, clean the air and improve public health. Green and public spaces are also municipal assets that, if well managed, can generate revenues for their maintenance and contribute to expanded local fiscal space; for more on this, see chapter 12, beginning on [p. 311](#). See Konijnendijk and others (2005); Montgomery (2013).

Education and vocational training. Education is about human realization and not just training specifically for the labour market. However, better and more targeted labour market training can reinforce the specialized clustering and externalities required for local economic development. There are examples of nations without significant raw materials that have applied education and training as a growth strategy (Denmark, Japan, Rwanda). For example, education facilities play a significant part in sustainable urban development in Kitakyushu, Japan (Nuzir and Dewancker, 2014). Education is not just for children; cities are enablers of the lifelong learning that builds social capital and economic resilience. See Psacharopoulos and Woodhall (1993).

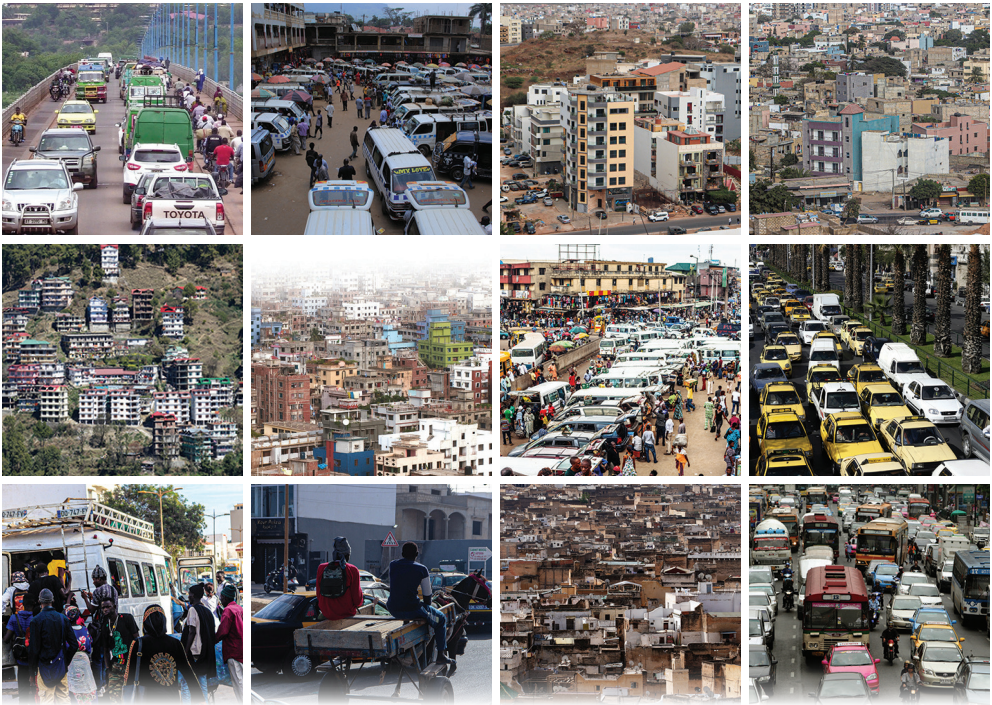
Healthcare and social services. The COVID-19 pandemic has demonstrated that local governments are at the forefront of healthcare service delivery and rapid emergency response (UN-Habitat and UNCDF, 2021). A recommendation for the use of operational expenditure block grants as an effective vehicle for local governments to implement their COVID-19 response strategies was widely circulated by UNCDF (2020k). UCLG and UN-Habitat's 2020 [live learning webinars](#) provided real-time examples from cities at the frontline. On a structural level, it is also crucial to incorporate intergovernmental structures and dynamics into health sector financing and service delivery (Jackson, 2004; Smoke, 2001; UNCDF, 2010).

Public safety and well-being. Public safety is fundamental to the inclusivity of urban development because disadvantaged groups such as women, children and the elderly are more vulnerable to crime. Urban infrastructure, such as street lighting and safe transportation, can improve public safety for vulnerable groups. For instance, Rabat, Morocco, launched women-only buses to reduce sexual harassment (Yasmine, 2018). UNCDF is supporting several municipalities in Morocco and Senegal to invest in energy-efficient public lighting, contributing to public safety particularly for women. See Van den Berg and others (2019).

The right to the city and inclusivity. The 'right to the city' was encapsulated in the New Urban Agenda and is about the full accessibility and availability of the amenities and utility of the city to its inhabitants. Harvey (2013) provides a theoretical perspective on how capital intersects with the right to the city. UNCDF's initiative, IncluCity, by promoting inclusive governance and public financing instruments, expands municipal services and infrastructure adapted to needs of vulnerable groups, ensuring everyone's right to the city (UNCDF, 2020h, 2021a).

(continued)

Box 1.2 Elements and examples of the urban transition *(continued)*



The urban transition



Box 1.3 Elements and examples of the green transition

Clean energy. Cities consume 78 per cent of the world's energy and are responsible for 75 per cent of global greenhouse gas emissions (UN-Habitat, 2020). In urban settings, energy is largely needed for transportation, buildings and infrastructure, water management and supply, food production and other activities. Clean energy is crucial to cities' green and productive transitions, as in Singapore, which is sourcing energy from clean power – solar, hydro, wind, waste to energy, among others. See Brown (2015).

Waste management and waste to energy. There is an accelerating trend towards waste-to-energy solutions that link urban management with energy supply and ideally build fiscal space. Sustainable waste management is another way to address the plastics crisis and a form of circular economy. There is a growing pipeline of waste-to-energy projects in municipalities in developing countries. For example, in Cambodia, UNCDF is supporting a project in Poi Pet that provides a waste disposal management system to safely incinerate a mix of household and light industrial waste and generate electricity; see chapter 13, [p. 353](#). See Hoornweg and Bhada-Tata (2012).

Sustainable piped water. Cities should source their water sustainably (e.g., less bottled, more piped, more recycled, rainwater capture). A 2013 study found that bottled water costs multiple times as much as tap water to supply per litre (Boesler, 2013). Solutions for piped water require up-front public investment that is often difficult to obtain. Increasing piped, potable water is an important part of the green transition. UNCDF's Blue Peace Financing Initiative is an example of leveraging innovative finance to invest in water infrastructure to deliver safe, affordable and sustainable water to local residents. The initiative is explored in chapter 14, beginning on [p. 359](#). See Leal Filho and Sümer (2014).

Sustainable mobility and public transport. Mobility patterns should be environmentally sustainable. For example, UNCDF is supporting Kumasi, Ghana, to develop a bus rapid transit system to deliver affordable, environmentally responsive transportation services to local residents. Similarly, the World Resources Institute encouraged the expansion of public transportation and cycling in response to COVID-19; Mexico City accordingly sought to expand cycle paths to alleviate risks of public transportation usage. Mobility is one of the five UN-Habitat urban planning principles (UN-Habitat, 2015). See Montgomery (2013); Tolley (2003).

Urban climate change adaptation and resilience. Much urban climate adaptation investment involves the drainage, storage and management of increased volumes of water. Land use planning and urban design contribute to this. Cities can remain habitable through alternative air conditioning, heat sinks, architecture and urban design. Air conditioning and dense buildings create unhealthy environments in hot temperatures with heat expelled to already warm alleyways and then absorbed by buildings. This has a negative effect even if the original power source is clean. There are alternatives: Singapore is among those pioneering efforts in urban design (Tan, 2018). To guide policy-makers, the IPCC (2018) produced a comprehensive report on cities and the impact of a 1.5°C rise in temperature.

Climate change mitigation and biodiversity. Cities are a key contributor to climate change as urban activities are a major source of greenhouse gas emissions. Cities and biodiversity interact with each other: urban biodiversity can influence the form of cities and dwellers, while the development of cities has a direct impact on urban biodiversity. Urban farming is an example of promoting biodiversity and carbon sequestration in cities in addition to reducing run-off. Urban farming and rooftop usage can reduce food-related carbon emissions and bolster biodiversity for pollinators such as birds, bees and butterflies (Kinney, 2018). See IPCC (2018); Kabisch and others (2017).

(continued)

Box 1.3 Elements and examples of the green transition *(continued)*



The green transition



3. Can we pay for it? International development policy on subnational finance

The current international development finance framework with respect to local and regional governments goes some way towards recognizing the importance of investing in transformative infrastructure. However, it does not fully address the issue; nor does it adequately recognize the role of subnational finance. This section briefly summarizes existing international policy on development finance.

The Addis Ababa Action Agenda: public and private financing for development

The Addis Ababa Action Agenda (UN, 2015a) was approved at the Third International Conference on Financing for Development in 2015. It provides a global framework for financing the implementation of the SDGs by attempting to align financing flows and policies with development priorities. It is contemporaneous with three other global agreements of the mid-2010s: the Paris Agreement, the SDGs and the New Urban Agenda (UN, 2015b, 2015c, 2017). Its implementation is monitored by the UN Financing for Sustainable Development Office and reviewed each year at the Financing for Development Forum.

The Addis Ababa Action Agenda promotes greater attention to the mixing of capital flows for development, adding private sector resources to those of publicly funded official development assistance (ODA) provided through the aid budgets of OECD Development Assistance Committee countries and other donors.

The Addis agenda has sometimes been incorrectly interpreted as giving preference to private resources over public, of making the calculation that ‘public funds are not enough, so we will need to go to the private sector’ – an assumption often accompanied by a call for more ‘bankable projects’¹⁵. While the agenda does call for greater private sector capital flows, it also stresses the importance of increased ODA and the unique and irreplaceable catalytic role played by ODA. Only ODA and national fiscal resources can produce the reforms and investments to foster not only increased private flows but also the strengthened domestic fiscal space and capital market transformation needed to accelerate sustainable development outcomes. In other words, more ODA and a more effective public sector are essential catalysts for transformation.

A second misinterpretation often arising in the implementation of the Addis agenda relates to an underappreciation of its call for systemic reforms. This

is sometimes conflated with support to individual transactional private sector investments to the extent that the systemic reforms are forgotten.

Addis does call for increased alignment of private financial flows (and transactions) with development goals. However, it does not suggest that a deal-by-deal approach of (bankable) project pipelines will be sufficient. While bankable projects certainly play a role, without systemic reform it is unlikely that the right type of project can be originated at the scale required for the green, urban and productive transitions, particularly given the urgency of the climate crisis. It is estimated that \$500 billion per year is required for LDCs and other lower-income countries alone to pay for the productive transition¹⁶.

The emphasis that Addis gives to ODA as a necessary complement to more private sector development flows is relevant to all developing countries, but particularly to lower-income developing countries, because ODA is a greater proportion of overall public expenditure for them than for middle-income countries. The latter group can supplement ODA with domestic funding of reform and domestic financing of catalytic investment. A strong public sector and strong domestic capital markets are a prerequisite for transformational private sector finance. But ODA funding has not increased to drive this transformation.

In recent years, economic growth in LDCs and other developing countries has been driven by foreign direct investment, remittances and trade; and in terms of percentage growth rates, this group of countries has outperformed both OECD countries and other developing countries since the 2008–2009 global financial crisis. Yet without catalytic ODA, this growth can be wasted (UNCTAD, 2021). Close analysis of the data reveals a telling divergence: OECD countries and other developing countries demonstrate growth with increases in productivity, and LDCs show growth without the same productivity increases (UNCTAD, 2020). This decoupling risks locking LDCs into a cycle of chronic low productivity. As illustrated by the COVID-19 pandemic, increases in living standards are vulnerable and can be rapidly reversed in the absence of economic diversity and resilience (UNCTAD, 2020). The targeted ODA to LDCs called for in the Addis agenda would address this issue.

Economic growth is not the same as economic transformation. And indeed, transformation is more important than growth. There remains chronic underinvestment in transformative infrastructure in LDCs and other developing countries from both public and private sources (Akram, 2021). We argue that both the increased ODA and focused private sector engagement called for in

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the Addis Ababa Action Agenda should be directed to the subnational level to best achieve this transformation.

Financing sustainable urbanization: bankable commercial projects versus financeable transformative projects

As noted, in the context of the Addis Ababa Action Agenda for financing development, the answer to the question ‘Where is the money going to come from?’ has often been ‘Find more bankable projects’. The problem is framed as an insufficient number of bankable projects for domestic and international financial markets to finance. Yet simply developing more projects with bankability in mind is **not** the answer for transforming developing country cities. And blindly following this approach could delay, rather than speed up, required investment in the holistic provision of infrastructure and services. The problem is a lack

SIMPLY DEVELOPING MORE PROJECTS WITH BANKABILITY IN MIND IS NOT THE ANSWER FOR TRANSFORMING DEVELOPING COUNTRY CITIES: THE PROBLEM IS A LACK OF TRANSFORMATIVE INVESTMENTS THAT ARE FINANCEABLE.

of transformative investments that are financeable. Understanding the difference between a bankable project and a transformative financeable investment requires an appreciation of the distinction between financial recycling of capital on the one hand and structural transformation on the other.

Finance is about the allocation, management and circulation of capital. The finance industry makes capital available at a price, often calculated as a percentage return above the base rate at which banks lend to each other, such as the LIBOR (London Inter-Bank Offered Rate). This base rate is connected to the degree of price inflation in the economy and ensures a minimal conservation of capital. The finance industry provides the function of (ideally) efficiently intermediating and reallocating capital and preserving the value of savings, including pensions, through this continual recycling (Harvey, 2021). Finance is one of the main pillars of the capitalist system that, to a greater or lesser extent, is the world’s economic model. Finance moves capital through buying and selling assets and through lending and providing guarantees. All other factors being equal, capital tends to flow towards the highest return at the lowest possible risk.

Economic development is about the purposeful change of the composition of economic activity and the structure of economic relations. Left to its own devices, the finance industry will not always provide capital of the right quality (value, terms, tenor, rate of return) to enable this transformation. A bankable project for commercial finance may require terms and conditions that preclude transformational impact. For example, revenues generated from a retail

shopping mall–hotel complex in a large city can be ringfenced to create a commercially bankable structure with sufficient risk-adjusted returns to repay commercial finance, but the same project may not meet transformation objectives (see photo 1.4).

The focus should be on transformative and financeable projects, not merely bankable ones. We propose that a transformative financeable project is a capital investment that fulfils four conditions:

- Has impact in terms of the **productive transition** (as measured by impact on fixed capital formation, productivity, household income of local families etc.)
- Contributes to planetary health and the **green transition** (as measured e.g. by impact on the attainment of Rio convention goals and specifically the commitments made at the annual conferences of the parties to these conventions)
- Contributes to the **urban transition** and to local development (see box 1.4) by positively intersecting with the physical, social, economic and urban environment (as measured by e.g. impact on goals of the New Urban Agenda, on urban inclusion and on local fiscal space)
- Is **financeable** and can sustainably provide revenue streams to pay for the investment (as measured by the financial, economic and political costs of the repayment arrangements to the city and its citizens). Although this criterion makes no inherent value judgement on the balance and blend of public and private money, it does require accountability and value for money to the citizens.

A transformative financeable project may also be commercially bankable. Or it may require a blend of finance to bring it to fruition, some of which is commercial and some of which provides capital on non-commercial terms. Or it may be funded by public investment alone, in which case the repayment is indirect in the form of increased fiscal space over time.

We can better understand these four conditions by testing them against existing infrastructure in towns and cities. The conditions do not only apply to master planning from a tabula rasa but also include investing in existing neighbourhoods. The form of the financing shapes the form of the city. In some cases, one way to move from bankable to transformative is to invest in the neighbourhoods and families in situ rather than clearing space for project-financed islands. The ringfencing is not only financial; the physical manifestation of the business plan is also the dividing line between the polished flooring and security guards immediately inside the shopping mall and the cracked pavement and depleted infrastructure and services just outside its doors.

Box 1.4 The critical importance of local development finance

Local development should be viewed as a positive asset that contributes to national development and that is not in competition with central agencies. National development is cumulative local development, and much of the resources managed nationally are generated locally. Therefore, local investment should be welcomed in national development strategies (EU and UN-Habitat, 2021). In this light, expanding local fiscal space can be framed as a reimbursement to the parts of the national territory that generated the resources in the first place and investment in other parts of the territory so they may do the same. One definition of local development sums this up well:

Clearly, it is not just development that happens locally (as all development ultimately does), but rather development that leverages the comparative and competitive advantages of localities and mobilizes their specific physical, economic, cultural, social and political resources. Said differently, in the expression local development the adjective local does not refer to the where, but to the who and the how of development promotion. It refers to the actors that promote it and the resources they bring to bear on it. Development is local if it is endogenous, open and incremental, that is: if it makes use of locality-specific resources, combines them with national/global resources and brings them to bear on the national development effort as additional benefit in a positive sum game (Romeo, 2013, p. 63).

Local development is a specific analytical approach and investment strategy that enables a stronger and mutually reinforcing connection to be made between the urban transition, the productive transition and the green transition highlighted in this chapter. UNCDF has been a thought leader on local development for three decades through the work of many of the contributors to this book, among others. It means space- and place-based economics. There are different interpretations of spatial and locational economic analysis, which is based on an appreciation that most economic theory misses important insights because it ignores, or fails to adequately model, the fact that markets and economic relations play out over space (Harvey, 2006; Krugman, 1995). Hodder and Lee (2015) refer to a 'friction of distance' and Tomaney (2010) and Anderson (1983) talk about a 'uniqueness of place'. These ideas about local development, and their connection to the material in this book, are further explored in Jackson (2012); Pike, Rodríguez-Pose and Tomaney (2016); Romeo (2013); and UNCDF (2020c).

The contrast between photos 1.4, 1.5 and 1.6 illustrates how investing in what is already there can produce different cityscapes with greater sustainability. Photo 1.4 is a design that seeks to imitate the type of environment illustrated in photos 1.1 and 1.2 but deliberately separates this from the wider city with an outer wall that limits and controls access, while promoting individual vehicle transport. The net result is a miniature pastiche which, instead of achieving the benefits of the designs in photos 1.1 and 1.2, makes these benefits harder to attain for the wider city. By contrast, photo 1.5 is an investment that connects low-income families with the central business district with an extended system of escalators which significantly reduce commuting times and have measurably increased household incomes. Nobel Prize-winning economist Joseph Stiglitz (2014) refers to this investment in an analysis of the transformative impact of urbanization done right – intertwining productivity, urbanization and

Photo 1.4 Walled compound with controlled access (outside and inside, Nairobi, Kenya)

Credit: AP.

**Photo 1.5** Connectivity (Medellín, Colombia)

Credit: Holcim Foundation (2014).

Photo 1.6 The challenge of transformation (Kya Sands, South Africa)

Credit: Johnny Miller/Unequalscenes.com.

environmental concerns. Photo 1.6 illustrates the challenge but also the potential of connectivity and land available for potentially transformative investments in situ. Given the four conditions proposed above, what would be the best use of the vacant plot at the bottom right of the photo?

Financeable transformative projects: the role of blended finance

The Addis agenda promotes blended finance as one option to increase investment flows for transformation. Since 2018, UNCDF has published an annual report on blended finance in the LDCs; as the first of these reports explains:

Blended finance has [the] potential to put ODA to catalytic effect and leverage additional private investments into LDCs. Blended transactions can also create important demonstration effects that could support commercial replication

and informed national policy choices. At the same time, blended finance needs to be deployed effectively to support national ownership and to ensure that risks and rewards are shared fairly between public and private partners. Moreover, international public finance will continue to remain essential for LDCs. This highlights once again the importance of donors meeting their ODA commitments and providing other support measures to LDCs. – Masud Bin Momen (UNCDF, 2018, p. iv)

Essentially, blended finance is the mixing of grant-funded ODA and/or concessional finance with commercial finance to fill the gap between the actual return generated on an investment's business model and the commercial risk-adjusted return under prevailing market conditions.

There are many definitions for blended finance. OECD and UNCDF take blended finance to be '...the strategic use of concessional finance to catalyze additional private-sector or commercial investment in SDG-related investments in developing countries. Concessional resources can be both domestic and international, as well as public and private (in the case of philanthropy, for instance)' (UNCDF, 2018, p. 14).

Investment-grade infrastructure projects in developing countries already have specific methods of guaranteeing commercial returns. These include

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tightly ringfencing the investment to a revenue stream and reducing non-revenue-generating (but potentially more transformational) components. Long-term equity positions that mitigate short- and medium-term risk by guaranteeing influence and access to assets (such as land) and revenues over the long term are another investment strategy for bankable transactions.

Blended finance represents a public subsidy (from taxpayer resources). Therefore, it is important that this subsidy should deliver transformation and that, over time, it indirectly gives back to the common weal through increased fiscal space. The application of public funds to blended finance must also be shown to be more efficient and effective in delivering the transformative outcome than other ways of spending the money. Blending is not always the best – it may be more efficient to achieve the desired outcome through direct public investment. On the other hand, it may be better to save the public resources with a 100 per cent privately financed arrangement.

The most recent UNCDF review (OECD and UNCDF, 2020) presents three main conclusions:

- Blended finance in developing countries is still a relatively small proportion of financial flows.
- It mainly supports infrastructure finance and larger commercial projects, particularly in upper-middle-income countries; it provides little support to the SME sector.
- Very little blended finance reaches the LDCs at all.

As discussed above, ODA – an essential ingredient of the blend – has become increasingly scarce. Donor countries are falling short of their commitments to developing countries at the same time that COVID-19 has created a fiscal squeeze on developing country resources. Between 2012 and 2018, only 6 per cent of the total volume of private finance mobilized by blending was in LDCs, or about \$13.4 billion. By contrast, \$84 billion (41 per cent) of private finance was mobilized in upper-middle-income countries and \$68 billion (33 per cent) was in low- and middle-income countries (OECD and UNCDF, 2020).

It should be stressed that blended finance as a concept is not new. Public and private finance have always mixed to pursue government policy objectives, including in such sectors as defence, transport, and fossil fuel energy and for specific territorial regeneration programmes such as recovery from conflict or recession. The novelty of blended finance highlighted in the Addis Ababa Action Agenda and explored in the OECD and UNCDF reports is twofold: (i) the agenda encourages an increase in blending for poorer countries when hitherto it had mainly occurred in richer countries; and (ii) the agenda supports blending as a strategy to meet a broad range of SDGs when previously it had served strategic economic purposes but not necessarily delivered on specific social goals.

There is a lively debate as to whether blended finance shows a track record of improving health or education outcomes at scale in developing countries. The case is still not proven¹⁷. The balance of experience suggests blending may be more transformational in infrastructure than in service provision. The challenge therefore is to find ways that blended finance can enable and speed up the productive, green and urban transitions in developing country towns and cities while avoiding some of the mistakes and wasteful, ineffective use of resources of worst case examples.

One approach is to focus on the most appropriate and effective level for blending to take place, given the desired outcome. Blending at the level of the individual investment through a transaction-by-transaction pipeline of projects may deliver transformational outcomes for bigger-ticket investments such as public transport systems. On the other hand, a higher-level systemic blending of public fiscal resources with development finance institutions through the

greater capitalization of development banks could enable systemic support to the local financial ecosystem with guarantees or recycling of finance through local financial institutions (UNCDF, 2020d). This systemic-level blending may have a greater catalytic effect than deploying blended finance to make individual transactions bankable. Chapter 4, beginning on [p. 121](#), provides some examples in this regard.

Leading economist Jeffrey Sachs (2021) urged the UN Economic and Social Council to explore the creation of institutional infrastructure financing mechanisms through public capitalization of development banks (with ODA). This would enable these development banks to leverage their solid credit ratings and cheap capital access to systemically scale up their activities in countries and provide both the public goods (for natural monopolies such as piped water) and the blending at scale for private sector opportunities unlocked by the public

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INTO ENGINES OF
TRANSFORMATION.**

investment. The AAA credit rating of development finance institutions is based on the credit rating of their shareholders (OECD countries), not of their borrowers (developing countries)¹⁸. While developing countries have capital needs but lack creditworthiness, development finance institutions are creditworthy but undercapitalized. Sachs comments that there have been calls for the private sector to fund development for 20 years (dating back before Addis) and that it is not configured to perform this task alone and without systemic reforms. Instead, institutions like the US Federal Reserve Bank, the European Central Bank and the Bank of China should purchase development finance institution green bonds at scale.

Such systemic reforms would improve the financial framework for implementation of the Malaga policy agenda explored in the next section of this chapter. For example, it would provide a source of capital for the subnational finan-

cial intermediary institutions discussed in chapter 8, beginning on [p. 219](#).

An increase in the capitalization of development finance institutions would have a great impact. As identified here, it would enable the provision of the required public goods (related to natural monopolies) and the required blending to turn capital markets into engines of transformation.

Currently, most private finance mobilized in LDCs is concentrated in the energy, banking and mining sectors (IFC, 2021b). Development and social sectors such as health, water and sanitation, environmental protection, education and transport receive the least blended finance. The OECD and UNCDF (2020) blended finance report recommends (i) targeting sectors that are critical for inclusive, resilient and sustainable development and (ii) ensuring the quality

of local transformative impact of blended finance investments. The systemic blending advocated here mitigates against the risk of blending delivering worse development outcomes than would be obtained by direct provision by the public sector alone. While the track record of transaction-by-transaction blending in the social sectors is disputed, the scope for SDG advancement through systemic blending is higher.

Whatever the level of blending, a strong public sector capacity and legal/regulatory environment are critical to the effective deployment of blended finance. The issue of capacity is addressed in the next subsection.

In conclusion, it is not the job of blended finance to increase the number of bankable projects. Instead, blended finance should be deployed either to make transformative projects financeable, or to turn merely bankable projects into transformative ones. The disruptions of climate change and urbanization are urgent and existential, and require immediate action. This book argues that if done correctly, systemic blending of increased volumes of public and private resources deployed through subnational financial mechanisms to local and regional governments can effectively accelerate the necessary investment.

Addis and the subnational level: the potential of local transformative finance

The Addis agenda contains an overlooked passage, paragraph 34, that opens the door for increased subnational finance. This subsection examines paragraph 34 in detail and explores its policy prescriptions, while noting that many have not been implemented. One objective of this book is to remind development financiers of paragraph 34 and to assert that the twin disruptions of climate crisis and urbanization require us to refocus attention on it. Paragraph 34 states:

We further acknowledge that expenditures and investments in sustainable development are being devolved to the subnational level, which often lacks adequate technical and technological capacity, financing and support. We therefore commit to scaling up international cooperation to strengthen capacities of municipalities and other local authorities. We will support cities and local authorities of developing countries, particularly in least developed countries and small island developing States, in implementing resilient and environmentally sound infrastructure, including energy, transport, water and sanitation, and sustainable and resilient buildings using local materials. We will strive to support local governments in their efforts to mobilize revenues as appropriate. We will enhance inclusive and sustainable urbanization and strengthen economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning, within the context of national sustainable development strategies. We will work to strengthen debt

management, and where appropriate to establish or strengthen municipal bond markets, to help subnational authorities to finance necessary investments. We will also promote lending from financial institutions and development banks, along with risk mitigation mechanisms, such as the Multilateral Investment Guarantee Agency, while managing currency risk. In these efforts, we will encourage the participation of local communities in decisions affecting their communities, such as in improving drinking water and sanitation management. By 2020, we will increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change and resilience to disasters. We will develop and implement holistic disaster risk management at all levels in line with the Sendai Framework. In this regard, we will support national and local capacity for prevention, adaptation and mitigation of external shocks and management (UN, 2015a, pp. 16–17).

Paragraph 34 is prescient in recognizing the importance of the sustainable and transformative infrastructure outlined in section 2 of this chapter. It also makes reference to (i) regional and local government capacity (including environmental planning) and (ii) subnational finance and capital markets. We shall examine its references to capacity and finance in turn.

Paragraph 34 commits to building strong regional and local government capacity, which is fundamental for the catalytic impact of both public and private finance as outlined below.

Regional and local government capacity as a driver of development

A strong and capable local public sector is a prerequisite for transformational finance, especially for rapidly urbanizing towns and cities. Without this feature in place, the tendency of private finance to veer towards (mere) bankability will

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remain unchecked and the ability of public finance to provide complementary transformational infrastructure and services will decrease. The physical environment of the city is an indicator of the strength and effectiveness of the local public sector. Accountable decision-making, spatial planning, economic planning, land use management, public financial management, contract management, and efficient and transparent procurement are fundamental capacity attributes identified by the World Bank and others (e.g. Farvacque-Vitkovic and Kopanyi, 2014).

Public administration capacity can only be generated by doing. Experience shows that freeing up cities and local governments to experiment and innovate, with the appropriately designed fiduciary and legal oversight,

produces highly beneficial outcomes (Berrisford and McAuslan, 2017; Paulais, 2012; UNCDF, 2021c). There are internationally recognized tools for local capacity such as the subnational Public Expenditure and Financial Accountability assessments (PEFA, 2020). On the other hand, constraining cities and local governments and then expecting capacity to emerge is counterproductive to successfully embracing urbanization and addressing the climate emergency. This is often a political dilemma for central authorities keen to boost sustainable investment but unappreciative of the national value of local development and wary of what may be perceived as ceding power to the local level (see box 1.4 and UNCDF, 2020l). While cities and local government associations supported the drafting of paragraph 34 (UCLG, 2015), it was eventually adopted by central governments sensitive to these concerns. The final text, therefore, mentions capacity but excludes any reference to local democracy or means of local representation (UNCDF, 2020e).

Regional and local government capacity for peacebuilding

Local government capacity, when matched with appropriate resources, can play a role in peacebuilding and state building. In many places, the local polity and local governance institutions preceded the national institutions, which were founded and consolidated later. Cities and provinces are often associated with cultural or historical features. The local level is where the citizen connects with the state and where perceptions of the state's utility and legitimacy are formed. Education, health, housing, transport, and cultural and political expression are manifested most viscerally at this level.

There are many examples from around the world of how governments have deployed this capacity in the aftermath of conflict to build peace and prosperity and to unite, legitimize and make sense of the sovereign nation (Jackson, 2013). Often, an important element is the availability of fiscal resources for local investment (Jackson, 2007). This can include the earmarking of royalties or revenues from economic activity (such as natural resource extraction) within the local area for reinvesting at the same level of subnational government¹⁹. Another example is investing in peace through water, discussed in chapter 14, beginning on [p. 359](#), by providing long-term capacity building to transboundary water organizations and municipalities, allowing them to develop master plans and have access to new forms of capital. This function of local government capacity is closely related to that of stimulating private sector development, discussed below.

THE LOCAL LEVEL IS WHERE THE CITIZEN CONNECTS WITH THE STATE AND WHERE PERCEPTIONS OF THE STATE'S UTILITY AND LEGITIMACY ARE FORMED.

Regional and local government capacity for private sector development

Capable regional and local governments play a major role in private sector development and are essential for local economic development. There is a symbiotic relationship between local governments and the private sector because neither can thrive without the other. Local goods and services are procured by the public sector from private providers; local labour markets are critical to generating the spending power that filters into the local fiscal space through taxes and fees.

Although the basic principles of this relationship remain the same, they are manifested differently depending on the context. For example, in fragile states and weak economies, local government can be the largest client for private sector services. If managed correctly, local public procurement can kick-start self-sustaining private sector networks (Jackson, 2007, 2013). In post-conflict and weak economies, the local private sector can be almost non-existent, with infrastructure provision carried out by centrally procured contractors – sometimes international contractors. Since the 1990s, local development funds, inspired by UNCDF, reversed this arrangement by locating procurement of goods, services and – crucially – capital investment with local governments (UNCDF, 2005, 2021c). This not only activates the local private sector for construction and supply contracts but also builds local private sector capacity for

LOCAL ECONOMIC DEVELOPMENT REQUIRES SPECIALIZATION AND INVESTMENT IN PLACE-BASED UNIQUENESS.

associated services such as accountancy, works supervision, training, legal services and contract management (UNCDF, 2013)²⁰. Once these local financing mechanisms go to scale, the impact on the local private sector is significant. Large volumes of infrastructure finance have been channelled to the local level in weak economic environments, with a direct stimulus effect on the local economy (UNCDF, 2021c).

The role of local governments in private sector development remains equally important at the other end of the spectrum in stronger economies. As described in box 1.4, local economic development requires specialization and investment in place-based uniqueness. The role of local governments is not only to create an enabling regulatory environment but also to ensure the concomitant public infrastructure is in place, such as education and training, affordable housing, green spaces and mass transport to ensure efficient, specialized labour markets. It also includes marketing and awareness raising about the unique space/place value proposition, whether in tourism or high-end technology. There are many well-known examples in this regard, including the high-profile 'I Love New York' tourism campaign of the 1970s (Bernabi, 2013). But equally important are the

under-the-radar examples that speak to the role of local governments in promoting mutually reinforcing clusters of specialized private sector activity within their jurisdictions and in addressing adversity by building on their unique space/place characteristics²¹.

Concomitant to local government capacity is a financially empowered local public sector and domestic capital market. Paragraph 34 commits to boosting subnational public finance and subnational capital markets, as discussed respectively in the next two subsections.

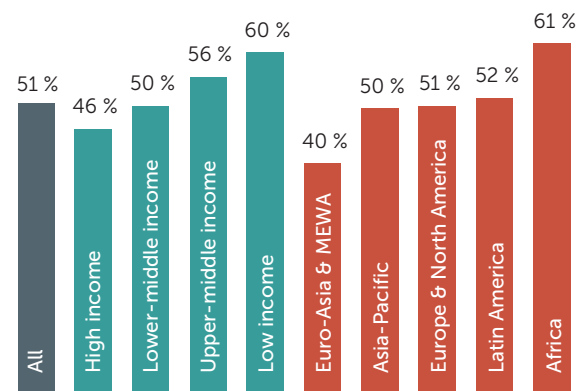
Subnational public finance

Intergovernmental fiscal transfers (IGFTs, or grants and subsidies) from the central to local government are a key component of local government finance in all countries, as discussed in chapter 3, beginning on [p. 89](#). While proportions and volumes differ (Alam, 2014), this is equally the case in rich and poor countries and in urban and rural areas (see figure 1.6), accounting for, on aggregate, 51 per cent of local government revenue (OECD and UCLG, 2019b). Globally, the IGFT share of subnational revenue

is below 25 per cent in 17 countries (with the lowest shares for Iceland, Zimbabwe, Argentina and Jordan) and over 80 per cent in 14 countries (with Uganda, Peru, Malta, Mexico and Tanzania having the highest shares). On average, in low-income countries, IGFTs accounted for 60 per cent of subnational government revenue in 2016, compared to 46 per cent in high-income countries (OECD and UCLG, 2019a). For rural areas in poor countries, IGFTs usually comprise a large percentage of available resources for public infrastructure and services (OECD and UCLG, 2019a; UNCDF, 2010).

Inspired by **UNCDF's local development fund model**, many IGFTs in LDCs now include a development budget component in addition to resources for basic local government operations, as described in chapter 3, beginning on [p. 89](#). In urban areas with greater own source revenues, the equation is different, but central government funding is still indispensable (OECD and UCLG, 2019b).

Figure 1.6 Grants and subsidies as a share of subnational government revenue by income group and geographical area, 2016



Source: OECD and UCLG (2019b).

Note: $n = 96$ countries; average is unweighted. MEWA = Middle East and Western Asia.

IGFTs are also an effective vehicle for channelling climate adaptation finance. All adaptation is inherently local, and local governments have both the mandate for the required investment and the comparative advantage to carry it out. Climate adaptation requires land use planning and specific investments tailored to local circumstances. The experience of the countries that implement the Local Climate Adaptive Living Facility (LoCAL) is that local adaptation finance is more effectively planned and delivered at scale by local institutions than by projects managed by ministries of environment (which are essentially regulatory bodies). This arrangement frees up the ministry to regulate the local financing. LoCAL is a global mechanism that uses IGFTs to deliver climate adaptation by embedding a UNFCCC-approved assessment and reporting methodology into national IGFT systems (De Coninck, 2018). This enables global climate resources

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to be effectively spent locally while accelerating delivery of global goals – an example of the spirit of paragraph 34 and the title of this book. LoCAL was developed on the foundation of UNCDF's support to IGFTs (UNCDF, 2021c; UNCDF, UNDP and UNEP, 2010). This mechanism is further described in chapter 11, beginning on [p. 287](#).

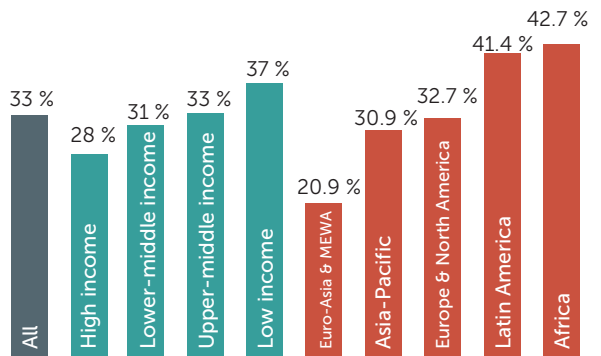
This ability to deploy IGFTs to enable and encourage holistic responses to territory-wide challenges was acknowledged in the mid-term review of the 2005–2015 Hyogo Framework for Action on disaster risk reduction (Jackson, 2011; UNISDR, 2011). More recently, the COVID-19 pandemic demonstrated the effectiveness of targeted but fungible discretionary IGFTs for an effective response to an unexpected challenge. The pandemic is another example of an emergency that required a localized but multisectoral 'whole of government' mobilization. The UNCDF (2020k) guidance note on the local government finance response to COVID-19 received wide acknowledgment. Some of the lessons learned from the application of this guidance are highlighted in chapter 9, beginning on [p. 247](#).

Notwithstanding the importance and pervasiveness of IGFTs, the final text of paragraph 34 approved by central governments omits reference to them, perhaps understandably. Signatory governments have different fiscal decentralization mechanisms and different views on the role of IGFTs in national development. Achieving consensus on the action agenda ruled out a prescriptive statement in this area (UNCDF, 2020e), even though there was a request to include IGFT as a development instrument (UCLG, 2015). Correcting this omission of IGFT is part of the Malaga agenda explored in the final section of this chapter.

Instead of IGFTs, paragraph 34 focuses on another essential element of local government public finance: **own source revenues**, which are the taxes and fees that a local government is authorized to collect. Tax revenues are the second largest source of subnational own source revenue (33 per cent) followed by user charges and fees (9 per cent) and property income (2 per cent) (OECD and UCLG, 2019b). The share of own source revenues in total local government revenue varies greatly between local governments and also by income groups and geographical areas (see figures 1.7 and 1.8).

Policies that can be taken to boost own source revenues include expanding the scope and scale of local government autonomy (see chapter 6, beginning on [p. 161](#)) and creatively using technology to make collection easier; chapters 5, 6 and 15 (beginning on [p. 139](#), [p. 161](#) and [p. 375](#), respectively) touch on the mixed experiences in this area. Own source revenues are critical to transformative infrastructure because, while rarely contributing to upfront investment costs, they often support the operation and maintenance of assets. Asset management is as important as construction and bears a higher proportion of the total costs. The actual construction or acquisition cost of an infrastructure asset only accounts for 15–30 per cent of overall expenditures, while 70–85 per cent of the costs of an asset are attributable to operations and maintenance (UN, 2021). The quality of asset management is visibly evidenced in the built environment as a marker of local public financial management capacity, as above, the form of the financing and the capacity of the local

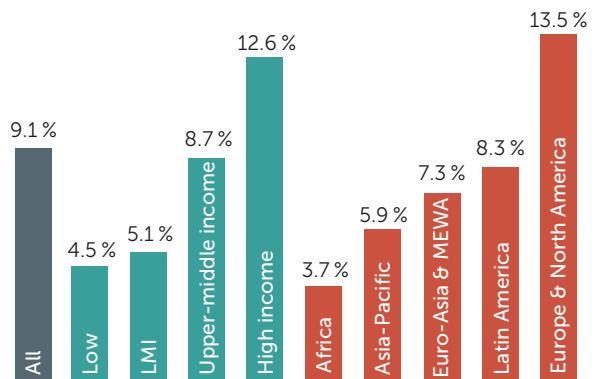
Figure 1.7 Tax revenue as a share of total subnational government revenue by income groups and geographical areas, 2016



Source: OECD and UCLG (2019b).

Note: $n = 96$ countries; average is unweighted. MEWA = Middle East and Western Asia.

Figure 1.8 User charges and fees as a share of subnational government revenue by income groups and geographical areas, 2016



Source: OECD and UCLG (2019b).

Note: $n = 96$ countries; average is unweighted. LMI = lower middle income; MEWA = Middle East and Western Asia.

public sector shapes what the city looks like. Chapter 7, beginning on [p. 193](#), demonstrates how critical asset management is.

Central governments sometimes place more emphasis on own source revenues than IGFTs – somewhat understandably, as own source revenues do not require expenditure allocations in the national budget. The final language of paragraph 34 may reflect this sort of thinking. Indeed, there is some evidence that certain types of IGFTs can provide a perverse incentive against building up own source revenues, as discussed in chapter 5, beginning on [p. 139](#). How-

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ever, IGFTs are indispensable. The devil is in the details, and the solution is to recognize the specific role of each revenue stream in a well-managed local fiscal entity and to appreciate that IGFTs are a form of reimbursement to the territory of the resources it generates (see chapter 3, beginning on [p. 89](#)). To grasp the opportunity of subnational public finance, central governments will need to authorize additional revenue collection authority to subnational governments – something they are often reluctant to do, for reasons that are explored in section 4. They will also need to maintain IGFTs and make

them more predictable through tools such as formula-based allocations linked to national economic resources.

Subnational capital markets

Access to capital markets by cities and local governments is a prerequisite for attracting investment at scale and is encouraged by paragraph 34. We have outlined how a strong public sector can encourage private sector investment in transformation rather than (only) bankability. Own source revenues, asset management and IGFT all create the stable finances and transparent local public sector that are supportive to transformative blended finance.

Paragraph 34 makes specific reference to debt management, municipal bonds, subnational lending and guarantees. **Municipal bond markets** remain significantly underdeveloped in most parts of the world, despite the inherent value proposition of investing in municipal infrastructure (growing population and demand for infrastructure and services, increasing land values, expanding local fiscal space). Municipal bonds require domestic capital markets with depth, diversity and liquidity. They require structuring of underlying assets and financing of these through revenue bonds (payable from income streams directly derived from specific assets) or general obligation bonds (payable from the general balance sheet of the local government). They require creditworthy cities with solid public financial management, further emphasizing the symbiotic relationship

between strong public and strong private sectors. At first glance this may appear a tall order, yet there have been examples of success. For instance, as part of the accession process to the European Union, some countries in Eastern Europe not only fast-tracked the development of domestic capital markets but were forward-thinking enough to include municipal bond markets in this package. Poland, for example, is now in a position to lead its climate emergency response with local government finance. South Africa is another example of a developing country that has innovated with success²². More examples are discussed in chapter 4, beginning on [p. 121](#), and UNCDF (2020).

One of the advantages of subnational bond markets is their potential to link up with a route to the systemic approach to blended finance argued for in section 1 – for example, through guarantees and concessional arrangements to underpin domestic capital markets as they develop depth and liquidity.

Paragraph 34 also calls for lending and for guarantees. While its use poses many challenges, the municipal bond has the potential to provide a structure more in tune with the specificities of local government finance and is more scalable than direct municipal borrowing²³.

Nevertheless, local governments do directly take out **loans** or establish special purpose vehicles (SPVs), which are companies set up for an express purpose – for example, to build a large bridge or power plant – which themselves borrow funds. One of the advantages of SPVs is that the company, not the local government stakeholder, is liable for any loan taken out, and the company has assets to cover this liability. SPVs can be an option in cases where legislation prohibits direct borrowing by local governments. The local government can capitalize the SPV through the lease of land, for example²⁴.

In many countries, local government direct borrowing – if allowed – is highly regulated, with formulas limiting the amount of debt and linking it to revenue to service debt²⁵. Two important features of local government borrowing are (i) the importance of securing repayments across the terms of different elected administrations (in jurisdictions where elections are held) and (ii) the use of the most appropriate revenue stream for repayment (e.g. it is not considered good practice to service loans from IGFTs). Notwithstanding these difficulties, local government borrowing – and the issuance of bonds by local governments – is part of the answer for sustainable and transformative infrastructure finance. Chapter 10, beginning on [p. 277](#), showcases this potential with an example from Bangladesh.

Guarantees are critical for any local government borrowing and are often a component of blended finance. Concessional or publicly funded guarantees

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can unlock commercial financing for transformative investments. Guarantee structures need to be designed in line with the specific characteristics of local government finance. The reference to the Multilateral Investment Guarantee Agency (MIGA) in paragraph 34 is not a recognition that MIGA offers these types of guarantees (it does not) but rather an indication that there is a demand for them. In fact, MIGA is used more for political risk guarantees associated with sovereign governments and the private sector. To date, it has not engaged in subnational transactions (MIGA, 2021).

Mitigation of currency risk is another element of paragraph 34 that has yet to be developed in the international global financial architecture. The development of domestic capital markets is a prerequisite for the required deployment at scale of recycled domestic deposits and savings, such as pension funds. Lacking this, the alternative is to seek global sources, which are available at a premium partly because they are supplied in a different currency; devaluation of the borrower's currency increases the cost of repayment, and fluctuations increase risk. There has been some progress on international hedging mechanisms, such as TCX, to facilitate international investment in local currency-denominated infrastructure projects (*Development Finance*, 2018), but much more is needed to provide enough capital at the right price.

It is recognized that many of the financing options presented in paragraph 34 have not been developed since the approval of Addis. While the effective demand

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and potential exist, they may appear difficult to realize in the current circumstances of many countries (EIB, 2020). Notwithstanding these specific technical and capacity challenges, significant structural obstacles remain, which are addressed in section 4.

The scale of the climate emergency and the speed of urbanization require us to remove these obstacles and build a financial system fit for purpose. While paragraph 34 has not been implemented, the reference it makes to sustainable transformative subnational infrastructure was farsighted in 2015 and has become urgent in 2022. Paragraph 34 recognizes the role of infrastructure in the interdependent productive, green and urban transitions introduced in section 1. The final section of this chapter highlights how the aspirations of paragraph 34 can be brought up to date and fully realized. In doing so, the section will introduce the rest of the book.

4. Paying for it: fixing Addis through subnational finance

In 2018, some members of the network that contributed to drafting the language of paragraph 34 – specifically, UNCDF and United Cities and Local Governments (UCLG) and its technical partner, the Global Fund for Cities Development (FMDV) – regrouped to form Malaga Global Coalition for Municipal Finance²⁶; box 1.5 presents milestone events in the coalition’s evolution. The coalition is driven by the belief that the twin disruptions of urbanization and climate change make local government finance an indispensable component of development finance – not just for the transformation of developing countries, but for the green and resilient transition of towns and cities in all countries. There will be no

Box 1.5 The Malaga Coalition conferences

Inaugural Conference: Towards a Financial Ecosystem that Works for Cities and Local Government. On 9 April 2018, UNCDF and UCLG held a High-Level Policy Dialogue in Malaga, Spain, Transforming Municipal Finance: Towards a Financial Ecosystem for Municipalities to Achieve the SDGs. The meeting’s participants formed the Malaga Coalition, which aims to promote global policy to unlock finance for cities, tackling issues of public accounting on national debt, pooled financing and asset allocation strategies of institutional investors. The coalition includes a network of cities and financial institutions that are actively demonstrating what can be done.

Second Conference: Progress Review and Presentation of the International Municipal Investment Fund. On 3 October 2019, UCLG, UNCDF and the City of Malaga organized a second annual conference: Towards a Financial Ecosystem for Municipalities to Achieve the SDGs. The conference took stock of progress and officially launched the International Municipal Investment Fund (IMIF). The conference brought together more than 100 representatives of national governments, mayors, financial institutions and other partners to debate subnational government financing and exchange innovative tools to create a financial ecosystem that works for municipalities to achieve the SDGs.

Preparatory Meeting Towards the Third Conference: Putting in Place the Foundations of the New Financial Ecosystem. On 14 June 2021, UCLG convened a meeting designed as a first step in preparation for the third conference of the Malaga Coalition in 2022. The preparatory meeting aimed to provide a space for local and regional governments and their associations and networks to exchange information on the impacts of the COVID-19 crisis on local finances and to share their positions, proposals and expectations towards regional and national institutions in the definition and implementation of the recovery plans and fiscal stimulus packages in response to the pandemic. The Malaga Coalition policy agenda described in this chapter was presented at this preparatory meeting (UNCDF, UCLG and FMDV, 2021); it will be discussed at a second preparatory meeting with key actors in the international and domestic financial sectors.

solution without reforms to the global financial ecosystem that make it work for all cities and local governments.

Exploring the way forward: the Malaga Coalition

The coalition is motivated by an appreciation that much of paragraph 34 remains to be implemented. The current global financial ecosystem continues to work primarily for sovereign governments which set the rules; have a monopoly on taxation; and can administer currency, trade, bank rates and other features of the global financial system. The global financial ecosystem also works for large financial institutions and large companies that can deploy their balance sheets to move markets, shift capital between countries, and manage taxation liabilities as far as possible. Regional and local governments, along with most local businesses, operate with limited access to capital on terms set by these two large beneficiaries of the global financial system. Some of the reforms the Malaga Coalition seeks to explore are described in the following subsections.

Reforming sovereign finance

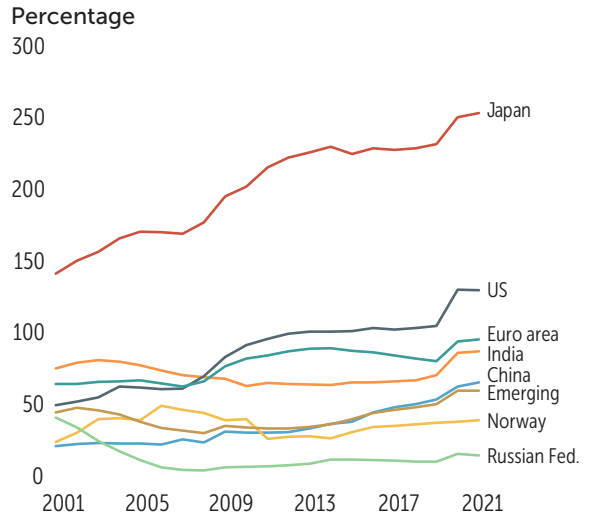
Broadly speaking, sovereign finance is composed of fiscal revenues and national borrowing which provide income that is deployed through government expenditure including debt repayments. Almost all countries borrow. Figure 1.9 shows the ratio of government debt as a proportion of GDP for a selected illustrative group. The appropriate level of borrowing is a hotly debated topic among economists (Pescatori, Sandri and Simon, 2014). Japan's ballooning debt and the US debt are often considered to be special cases: Japan's is largely owed to itself (the Bank of Japan) and denominated in domestic currency; the US has increased its borrowing to fund COVID relief and other infrastructure packages but, as the dollar is the global reserve currency, US debt is also effectively denominated in domestic currency. India and the Euro area are both approaching a debt level equal to their GDPs. China and emerging market debt levels are increasing but remain modest when measured as a proportion of GDP. Commodity producers, including fossil fuel exporters like Norway and the Russian Federation (before the 2022 war), have less debt in relation to GDP.

Figure 1.9 includes government debt owed to domestic and foreign entities and does not give an indication of the burden of this borrowing. A more meaningful measure is the percentage of government resources required, paid in foreign currency, to service foreign debt. Figure 1.10 illustrates the significant increase in foreign debt service as a proportion of government expenditure since 2015. This increase is the result of a triple squeeze: (i) the reduction in fiscal space due to the COVID-19 pandemic leading to reduced domestic tax receipts, reduced

remittances of foreign currency from abroad, and more demands on government spending; (ii) the reduction in exports, tourism and foreign investment due to the wider effects of the pandemic; and (iii) the increase in interest rates from their historically low levels (UN-Habitat and UNCDF, 2021). In many countries, there is limited appetite – or capacity – for significant additional borrowing until these factors are reversed.

Nevertheless, the fact remains that sovereign governments benefit from access to capital on relatively favourable terms, particularly from development finance institutions. Sovereign default is rare and has painful consequences; governments are keen to pay creditors because they will invariably be returning for more. This gives rise to the paradox found in small countries with large cities. The cities contribute the lion's share of GDP and have the mandate and responsibility for many of the urgent investments required – as outlined in section 2 – yet lack direct access to capital. The national authority, on the other hand, has greater access to the capital required but can be less effective at investing in the transformations described in this book – and cannot borrow enough in foreign currency to finance the needed investment. Given this situation, international sovereign borrowing, even at concessional rates, is unlikely to be able to provide the necessary resources for transformation within the current financial architecture.

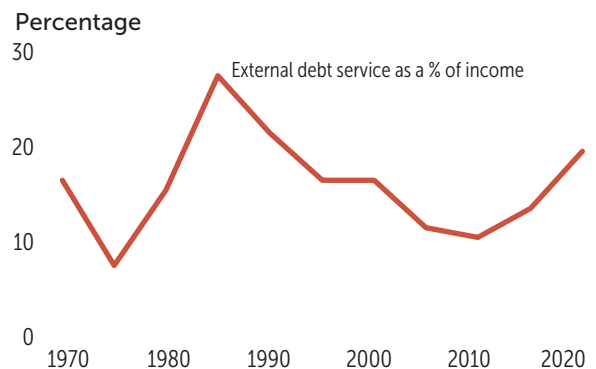
Figure 1.9 Government debt levels: gross debt as a percentage of GDP



Source: IMF Datamapper.

Note: Emerging = emerging market and developing economies. The International Monetary Fund considers general government debt to comprise the debt obligations of the central government, local governments and other agencies.

Figure 1.10 Foreign debt burden for developing economies



Source: World Bank, [International Debt Statistics](#).

Note: Figure shows average total external debt service of 123 emerging market and developing economies as a percentage of goods, services and primary income.

Another area of sovereign finance where reforms can be considered is the architecture of government expenditure. While the national fiscal pie is generated across the breadth of the territory, it is not always redistributed accordingly through the fiscal transfer system. The IGFT mechanism can be useful for effective revenue and tax sharing by returning money to the parts of the country that generated it, or through earmarked transfers for specific purposes such as climate adaptation or equalization transfers to poorer parts of the country for local economic development as described in chapters 3 and 11 (beginning, respectively, on [p. 89](#) and [p. 287](#)). The COVID-19 pandemic proved

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the effectiveness of targeted IGFTs for effective response (UNCDF, 2020k); this theme is also explored in chapter 9, beginning on [p. 247](#). Yet IGFTs are not always sufficiently utilized by governments as a key tool in national development (see UNCDF, 2020f). The biannual World Observatory on Subnational Government Finance and Investment monitors the territorial deployment of fiscal revenues and is a useful compendium of data across OECD and non-OECD countries (OECD and UCLG, 2019b). Chapter 2, beginning on [p. 71](#), applies these data and correlates IGFT with development outcomes.

Some alternative approaches to sovereign finance can overcome these obstacles that impede resources from reaching the subnational level and thereby meeting the needs of cities and local governments. Incorporated in the Malaga policy agenda, these proposals, highlighted in box 1.6 (see [p. 52](#)), build on the arguments made in section 3 and include the following:

- **Better government priorities.** Governments often do not fully appreciate the importance of productive and sustainable cities to their national development objectives (UNCDF, 2020g; UN-Habitat, 2020). Political debate is typically focused on broader cultural and ideological fault lines that capture the public imagination. Local government finance is rarely a national political priority, and leaders at the central government level are sometimes reluctant to give the limelight to their local counterparts (UNCDF, 2020j).

Despite their effectiveness, IGFTs are not always seen as a tool for national transformation. One potential solution would be to remove IGFTs from annual resource allocation discussions by defining a transparent formula for their allocation that is index linked to government income or a percentage of GDP. This approach could be mandated through constitutional amendment. Chapter 3, beginning on [p. 89](#), provides some indications of how these formulas could work. A related consideration is the potential of IGFTs to provide governments with the means to access

and efficiently deploy global green finance, such as for climate adaptation, that can supplement government revenues and leverage existing government expenditure on climate adaptation. A potential reform to enable this would be the adoption by the parties to the UNFCCC of multilevel financing schemes as non-market mechanisms under the 2021 climate agreement²⁷. Chapter 11, beginning on [p. 287](#), describes LoCAL, one of these mechanisms.

- **Contingent liability, borrowing limits and credit ratings.** Under current arrangements in most countries, municipal and local government borrowing is counted as part of the total liability of central governments, because it is assumed that governments will ultimately underwrite any subnational debt. In this scenario, the debt performance of local governments affects the credit rating and capital access of central governments (IMF, 2001). Consequently, many governments prefer not to risk their access to capital, from development finance institutions or otherwise. There is little scope to change this situation under the existing global financial framework (IMF, 2020). Therefore, subsovereign borrowing is discouraged.

A potential path to resolving this would be examining – and possibly seeking amendments to – the International Monetary Fund’s classification system (IMF, 2001) to enable certain types of local government borrowing (perhaps through SPVs or specifically designed intermediary institutions) to be classified as liabilities of sectors other than the general government and public sectors for the purposes of national debt. This would require institutional structures and a global consensus that do not now exist (UNCDF, 2020a). Chapters 4 and 8, beginning on [p. 121](#) and [p. 219](#), respectively, provide some pointers in this direction, while highlighting the inevitable challenges. Chapter 14, beginning on [p. 359](#), describes an initiative towards supra-national pooled finance institutions that could also play a role in enabling local finance without adding to national contingent liabilities.

**IMPROVING
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- **Crowding out.** Associated with the above point is the effect on subnational finance, both public and private, of sovereign loans that are used to fund local infrastructure. When governments use money borrowed centrally and (relatively) cheaply to fund local infrastructure, it can have a perverse effect on performance incentives to local governments. For example, using these loans to pay for road upgrading crowds out more sustainable

long-term solutions that use IGFTs and own source revenues for this purpose. Also, using these loans to pay for urban investments can crowd out the option of financing these through blended finance or even municipal bonds – which could potentially free up sovereign credit for other purposes while strengthening domestic capital markets. These perverse incentives and their crowding out are explored and analysed in chapter 5, beginning on [p. 139](#).

- **Fiscal space and COVID recovery.** The COVID crisis has constrained fiscal space (UN-Habitat and UNCDF, 2021). The rebuilding of government resources prioritizes national taxation and debt relief. Transfers to local governments are often targets for savings. This shrinking fiscal space is exacerbated by the reduction in local government own source revenues as a result of the pandemic, which – among other actions – has accelerated moves to online providers for retail, transport and hospitality services that sometimes contribute less to local taxes and employment than the brick-and-mortar services they replace that are not taxed locally²⁸. Both national and international relief efforts have not recognized this impact on local fiscal space, which will need to be addressed in order to create a financial ecosystem that works for local transformation. Chapter 9, beginning on [p. 247](#), details this loss in fiscal space; and chapter 15, beginning on [p. 375](#), discusses the impact of online platforms on local fiscal space.

Strengthening domestic capital markets; diversifying global capital

Capital markets are where financial instruments are traded. They can be physical or digital and trade equities (stocks and shares), currencies, or bonds and securities (effectively trading debt obligations of a third party). Primary markets are those used to raise new capital – for example, an initial public offering (IPO) by a hitherto private company seeking to issue shares that can be publicly traded for the first time. A secondary market is the term given to the trading of already issued financial instruments.

The liquidity of a capital market reflects how fluid it is, that is, how rapidly and easily financial instruments change hands. The depth of a capital market is a measure of the total value of these instruments and the money used to trade them. The breadth of a capital market is about the variety of asset classes and types of instruments traded. By all these measures, the US capital markets are the largest by far.

Figure 1.11 shows the size of equity markets around the world. Figure 1.12 shows the size of global bond markets (SIFMA, 2021). In Africa, the only market

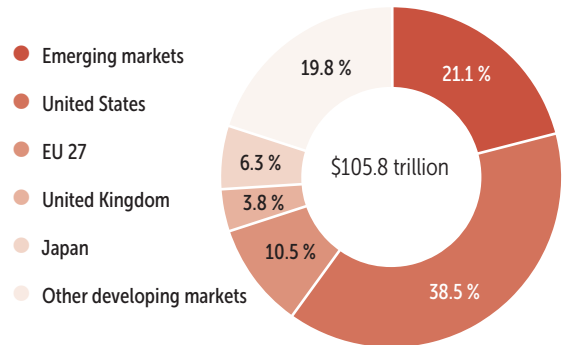
with a capitalization of over \$1 trillion in 2020 was the Johannesburg Stock Exchange, with a total capitalization of \$1.1 trillion. Similar geographical patterns can be seen in the concentration of equity and bond markets.

Globally, in 2020, the total capitalization of public companies on equity markets whose business is largely to extract and produce fossil fuels was \$4 trillion (this is the sum of the value of all their publicly traded shares). For comparison, according to the International Monetary Fund, the total cumulative value of green bonds (bonds that finance debt for investments contributing to the green transition) rose to \$1 trillion in 2020 from less than \$40 billion in 2014 and zero a decade prior to this (IFC, 2021a). One priority is increasing the depth, breadth and liquidity of capital raised and traded for the transformation highlighted in section 2. The growth of green bonds indicates that this is beginning to happen.

However, bond (green or otherwise) trades on the big markets will not be sufficient to finance the transformative investment required. The location of the deepest capital markets and the currency denomination in which they trade is highly skewed towards a limited number of countries and regions, particularly OECD countries and China. These markets are governed by the regulations of their location and largely operate in that currency. Investment funds can raise capital there, including potentially through the issue of green bonds, but the target investments may be elsewhere, in other countries.

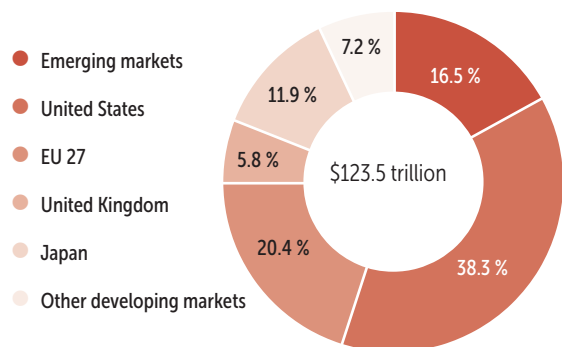
This phenomenon gives rise to the call by international asset managers and investment funds for the 'bankable projects' discussed earlier. A project must be bankable enough to mitigate against currency and other perceived risks, as repayment is in the currency of the capital market. It must be bankable enough

Figure 1.11 Global equity market cap, 2020



Source: World Federation of Exchanges, SIFMA estimates.

Figure 1.12 Global bond market outstanding, 2020



Source: World Federation of Exchanges, SIFMA estimates.

to contribute to the target return of the fund. Rising interest rates could put these repayments at risk. In such an environment, it is difficult for cities and local governments to access this debt capital – except in the most bankable (and often least transformative) of cases. This partly explains why there has been limited implementation of paragraph 34.

Some alternative approaches can be considered and are incorporated in the Malaga policy agenda highlighted in box 1.6 and later in this section. These proposals are designed to overcome these structural obstacles and encourage the systemic approach to blended finance described in section 3. Some of these proposals are outlined below.

- **Domestic capital markets and domestic currency transactions.** Finance in domestic currencies can be potentially more effective for municipal and local government finance. In most countries, domestic capital markets are insufficiently developed for this purpose. The public stock markets are small and there is no market for trading municipal bonds. Local governments are either not legally allowed to borrow or do not have creditworthiness, credit history and the wherewithal to borrow even when it is legally permissible. Subnational development banks exist in some countries as intermediary institutions, but they need to be strengthened to meet the challenge at scale (see chapter 8, beginning on [p. 219](#)). Progress is slowly being made. For example, the International Finance Corporation (IFC) has supported green bonds in domestic currencies, such as the Mabuhay green bond in the Philippines which offers the opportunity for domestic financial institutions such as pension funds to recycle their savings²⁹. While this example is not at the subnational level, it expands the depth of the domestic green bond market and increases the potential for subnational bonds by expanding the breadth and liquidity of the domestic market.

A small but growing number of countries are moving in this direction (UNCDF, 2020d). For example, UNCDF is working with Bangladesh (discussed in chapter 10, beginning on [p. 277](#)), Cambodia (see chapter 15, beginning on [p. 375](#)) and Tanzania on domestic currency bonds; some countries are including municipal bonds in their reforms. In Tanzania, the Minister of Finance's budget speech to the Parliament set out this policy (United Republic of Tanzania, 2021). In some countries, domestic banks are starting to lend in local currency to SPVs created to enable investment in local transformative infrastructure³⁰. This type of domestic financing is a start in overcoming some of the obstacles to transformative finance.

- **Guarantees.** Guarantees are a mechanism to mitigate risk and bring down the cost of capital. A system of bespoke guarantee mechanisms could

address some of the shortcomings of sovereign and private finance with respect to the financing of local infrastructure. Some guarantors operate a business model similar to insurance, collecting a premium for a guarantee (a percentage of the value to be guaranteed) and providing either a full or partial guarantee to the lender in the event of default.

One guarantor – the World Bank Group’s MIGA – is mentioned in paragraph 34. Yet it largely operates at the sovereign level for priority projects of national governments. For example, MIGA mitigates political and other risks for high-value transactions (MIGA, 2021). Private guarantors like GuarantCo and the Private Infrastructure Development Group are starting to play a role in local currency guarantees for sustainable infrastructure³¹. Few public or private guarantors operate in the subsovereign infrastructure space; one such example is the US International Development Finance Corporation³². This lack is partly a function of the limitations of sovereign and private finance mentioned above, along with the policy and/or regulatory restrictions on subsovereign finance. There is a small market of transactions to guarantee.

A large non-sovereign guarantee facility that could underpin both domestically and internationally financed transactions of both the retail and architectural variety would be a significant contribution to accelerating transformative investment – especially if the global policy environment enabled its guarantees to resolve the issue of the contingent liability to central governments of local government debt. Such a facility does not currently exist.

- **Long-term equity.** Another route to the required investment is long-term equity partnerships, where risk is mitigated by an investor owning the asset (or a large stake in the asset) for a significant period and managing it privately while producing the transformative outcome required. This type of solution can work for certain infrastructure investments with dedicated revenue streams, such as mass transit systems. The Malaga Coalition has led the creation of the International Municipal Investment Fund for this purpose (Déau, 2019; UNCDF, UCLG and FMDV, 2019). This fund has been designed as a ‘city-friendly’ one which will build partnerships with cities and local governments in developing countries. As an instrument of the Malaga Coalition, it will prove concept and demonstrate the potential of municipal and local government finance to national regulatory authorities and international investors.
- **Securitization.** Securitization pools financial assets that provide revenue (such as a collection of loans issued by a bank to different borrowers) into

a group and then sells this package to investors. In effect, the investor then becomes the new ‘creditor’ – even though it did not issue the loan in the first place. Normally, the borrower continues to repay the debt on the same terms and conditions. These regular repayments are what make the security an attractive proposition. Securitization offers opportunities for investors and frees up capital for banks to originate new investments, both of which promote liquidity.

Securitization acquired a bad reputation with the excessive selling of mortgage-backed securities that were underpinned with loans that defaulted, contributing to the 2008 global financial crisis. However, securitization could be a valuable tool towards the outcomes argued for in this chapter. It could enable development finance institutions to offload performing loans to other financial institutions and free up their balance sheets for some of the innovations proposed in this book. UNCDF and FirstRand Bank have proposed such a securitization platform: the Exchange Listed Investment Platform for Sustainable Infrastructure Securitization (ELIPSIS) was one of the winners of a British government competition for financial solutions to mobilize public stock markets to invest in the green transition (FCDO, 2021). ELIPSIS will pool performing loans from sub-Saharan Africa and sell them on the London Stock Exchange to institutional investors.

Reforming the global financial ecosystem to make it work for cities and local governments

This chapter has exposed the gap in the financial architecture that needs to be filled by a broad variety of both proven and innovative financial instruments and funding mechanisms, as sketched out in this section – including more IGFTs, enhanced own source revenue, deeper subsovereign bond markets, supra-national guarantee facilities for subsovereign entities, long-term equity funds and project finance vehicles. During the lead-up to and approval of the New Urban Agenda, there were appeals for financial mechanisms to ensure the agenda was paid for adequately. For example, Aníbal Gaviria, then mayor of Medellín, Colombia’s second city (4 million inhabitants in 2021), called for a multilateral bank for cities in 2015 (Moss, 2015). There was also a call for fusion between green concessional finance and the urban agenda to make transformative urban investments financeable at scale (Jackson, 2016).

There are many possible reasons why urgent reforms do not materialize (UNCDF, 2020b). These include institutional inertia and lack of urgency, lack of leadership, insufficient trust, reluctance to change established business models,

and disagreement with the premise of the case that has been made. The **Over-ton Window** refers to the boundaries of acceptable discourse within a particular field of endeavour. Solutions that are considered politically unacceptable or technically impossible in one era can become mainstream in the next³³. 'It is impossible until it happens' is the phrase Nelson Mandela used about the end of Apartheid in South Africa. The purpose of the Malaga Coalition is to widen the window of discourse and practice for the ideas and proposals included in this book.

A draft policy agenda was presented at the first preparatory meeting to the third Malaga conference. This policy agenda, which draws from the cases presented in this book, is summarized in box 1.6.

The challenge shares some similarities with previous experiences, as pointed out in publications by the European Investment Bank (2020) and the European Union and UN-Habitat (2021). Parts of Europe and Asia have transformed themselves within a generation driven by holistic strategies and significant funding, such as the European Union's support to new member states and the greening of China. But in these cases, the volume of grant and concessional finance was significantly greater than that available to LDCs and other developing countries today (Sachs, 2021). The volume of ODA for the LDCs called for at Addis has not yet materialized. Institutions like the Green Climate Fund, the Climate Investment Funds, the Adaptation Fund, the Land Degradation Neutrality Fund and the Global Environment Facility are significantly undercapitalized given the scale of the emergency³⁴.

Perhaps it is unrealistic to expect transformational results with the current financial arrangements. While progress has been made, the Over-ton Window has not yet sufficiently widened. Yet, in a timeless study, Tendler (1997) illustrates the positive impact local leadership can make. **High-level blending** is one step; another is to appreciate that capacitated cities and local governments, within the right regulatory environment, are equally well suited as development finance institutions – to design holistic solutions, manage complexity, intersect the three transitions and mediate competing local interests. **Expanded local fiscal space and domestic capital markets** have the potential to reduce bottlenecks in sovereign finance and enable recycling of capital on better terms and in greater quantity.

A **multilateral bank for cities** could only succeed with reforms to the global financial ecosystem. The bank would operate differently in each country. It would be regulated by international and national agreements and supra-national guarantee mechanisms to defray sovereign liability. It would need a governance and

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Box 1.6 Malaga Coalition policy agenda

(Re)build local fiscal space

The capacity of local and regional governments to generate own source revenues and secure stable revenue streams through IGFTs is instrumental to fostering local economic development and facilitating the emergence of virtuous cycles of investment at the local scale. Yet local fiscal space has been severely affected by the COVID-19 pandemic, particularly for local and regional governments that rely primarily on elastic sources of revenue which are sensitive to economic fluctuations, such as taxes on local economic activity. These revenues were already affected by the digital transformation, with most digital providers not subject to local tax collection; COVID-19 has accelerated this trend. Four priority areas for action are identified:

- Re-emphasize the importance of **transparent and formula-based systems of IGFTs** that provide local and regional governments with stable, predictable, adequate and flexible resources to deliver on their mandate. This is also a key condition for them to create a virtuous circle of revenue generation and raise additional finance.
- Identify **new streams of local revenue**, in particular through reforms of property tax systems, land value capture mechanisms and appropriate taxation models for digital providers that require and use local infrastructure and services but do not pay for them.
- Design and apply **innovative local taxation and tax-sharing policies** to enhance local accountability and revenues.
- Advocate for **greater fiscal decentralization** and share evidence of how autonomous local financial and administrative institutions are economic multipliers for national development.

Build effective partnerships for financing and managing local infrastructure assets

Local and regional governments do not finance and manage local investment alone. Other external partners including public institutions, financial organizations and private entities are often engaged in the investment in and management of local infrastructure alongside local and regional governments, which are ultimately held accountable for the services provided. Stable local revenue streams and strong local government engagement are key prerequisites for successful partnerships with public and private investors at the local level to finance infrastructure assets and secure funding for their maintenance and operation. When properly managed, assets provide greater financial flows to local governments. Five priority areas for action are identified:

- Implement policies for **improved human resource capacity at local levels** by sharing the pool of talent across the national territory, including professional recognition, status renewal and improved compensation, and expanding training.
- Explore how local infrastructure assets can contribute more to **local fiscal space** and/or increase flows of capital for transformative investments at the local level.

(continued)

Box 1.6 Malaga Coalition policy agenda *(continued)*

- Design and implement **equity and ownership models for local infrastructure assets** that attract external finance, improve efficiency and pool risk while retaining and enhancing local accountability.
- Establish and build **intermediary institutions that support infrastructure asset management** and pool equity investments in local transformative assets while increasing local accountability.
- Advocate for **local financial and asset management** as a national development priority and an accelerator of the green and just transformation.

Leverage financing mechanisms to increase capital flows for transformative financeable investments at the local level

The third policy area relates to the enabling factors that are required for transformative and financeable local investments to materialize. Several policy, legal and institutional prerequisites must be in place to create an ecosystem of financial partners that can support each other and work to secure the financing needed for transformative local investments. Long-term institutional infrastructure finance must be directed to local government-led transformative investments. Sovereign debt alone cannot deliver the necessary volume of investment at the local level. There is a need to address the issue of sovereign contingent liability for subsovereign credit in order to crowd in the required finance. Eight priority areas for action are identified:

- Promote the development of **domestic capital markets and municipal bonds**.
- Promote investment vehicles (debt) that can **lend to local and regional governments** and other investment vehicles on their terms to finance projects that are transformative in nature and financially sustainable for local and regional governments.
- Promote investment vehicles (equity) that **crowd in investment to local projects** from other domestic and international investors and build confidence through replicable projects.
- Encourage the creation of **specific budget lines at the country level** to provide technical assistance for local and regional governments to build their capacity to structure transformative financeable projects.
- Establish and increase **intermediary instruments** that channel climate finance directly to local and regional governments for effective public and private investment.
- Support the creation of **non-sovereign regional or global guarantee facilities** for local transformative investments.
- Promote the development of **blended financing instruments and new public-private alliances** that can meet the investment needs of all cities.
- Advocate for **local infrastructure investment as a prerequisite for national survival** in the face of complex emergencies.

shareholding structure that reflects the interests of its clients, citizens of their towns and cities. It would keep the cost of capital down by reinvesting its surplus. Such an arrangement would require a recalibration of the sovereign-based business model of the Bretton Woods institutions. It would require a renewed appreciation of the role of IGFT in national development. It would also require significantly improved capacity for public financial management on the part of many local and regional governments. Certainly, these preconditions are not all in place at this time. But this is all the more reason to accelerate the move towards them.

In his 1912 poem 'Caminante, no hay camino', the Spanish poet Antonio Machado reminds us that 'Traveller, there is no path, the path is made by walking'³⁵. We have no choice but to continue putting one foot in front of the other on the journey to our destiny. While this book brings into focus the uphill route and tangled terrain, it also reveals the steps already taken. Sustenance for the

journey ahead is derived from the progress already made. The road towards transformative investment for human prosperity, realization and planetary health is not an elevated highway. Instead, it winds at ground level through every town and city. In Machado's poem, the traveller looking back sees footprints never to be trodden again. Fortunately, unlike Machado's lone traveller, we can trace the footsteps of others. This book will have served its purpose if it leads readers to appreciate that local government finance is development finance and inspires them to add their efforts to achieving the vision of the Coalition.

As stated in its Strategic Framework 2022–2025 (UNCDF, 2022), UNCDF's mission is to serve as the UN's flagship catalytic financing entity for the LDCs, to strengthen financing mechanisms and systems for structural transformation. The

Strategic Framework indicates that through its Local Transformative Finance Practice, UNCDF will expand its role as the UN hub for subnational finance by working with governments, UN entities, city networks, and towns and cities to create local financing mechanisms for the productive, urban and green transitions. This book serves as a policy companion and guide for the partnerships, programmes and investments of UNCDF's Local Transformative Finance Practice for 2022–2025.

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Digging into the details: introducing the rest of the book

This chapter has stressed the importance of local government finance in human development and environmental sustainability. It introduces the three necessary transitions for human and planetary health – green, urban and productive – and examines the data on transformative investment. Focusing on the key elements of local government finance, it illustrates that while the Addis Ababa Action Agenda on Financing for Development does recognize the role of subnational finance in its paragraph 34, the architecture of the international financial system means that implementation has been slow. The chapter explains how the global financial ecosystem is not working for cities and local governments and puts forward the agenda of the Malaga Coalition as a solution.

In chapter 2 (beginning on [p. 71](#)), UNCDF technical advisor Christel Alvergne and UNCDF policy advisor Nan Zhang apply fiscal decentralization and local government finance as a lens through which to view LDCs' progress towards graduation to middle-income country status. The chapter argues that fiscal decentralization contributes to development. It presents two processes and the interaction between them: (i) the development process through different LDC graduation paths and (ii) the decentralization process through three dimensions (financial, technical and political). These three dimensions of decentralization encompass the features of local government capacity and subnational finance described in section 3 of this chapter. Each country has a unique development path due to its geographical characteristics, economic profile and territorial approach to development. Chapter 2 shows the relevance of local development to national development strategies and provides further evidence that growth does not equate to transformation.

In chapter 3 (beginning on [p. 89](#)), Jesper Steffensen, a long-time advisor to UNCDF, discusses the untapped potential of IGFTs in driving local transformation, reinforcing the argument for the developmental role of IGFT made in section 3 and in the Malaga policy agenda. Starting with the basic principles, Jesper illustrates how IGFTs are a fundamental part of local government finance globally (notwithstanding its omission in paragraph 34). Many countries miss the opportunity to use these systems to spread prosperity across the national territory, catalyse local development and increase their national social and economic well-being. The chapter presents lessons learned from local development fund pilots and scale-ups over the last two decades, as well as new instruments of IGFT that are being used to tackle emerging development challenges such as climate change and pandemic response. One key takeaway from the chapter is the importance of the distinction between IGFTs that are fungible and can be used at local governments' discretion versus those whose deployment is conditional.

In chapter 4 (beginning on [p. 121](#)), Rajivan Krishnaswamy, a senior advisor to Cities Alliance and UNCDF, focuses on how to mobilize domestic capital for the investments described in section 2 through blended finance and domestic capital markets with reference to the systemic blending advocated in section 3 of this chapter. Rajivan identifies national- and city-level actions that enable leverage of public funding with private sources of finance and highlights some of the successful policy innovations in this area. The chapter maintains that blended finance and the accompanying leverage for transformation can only be achieved when there is a borrowing framework that provides access to capital for cities of all sizes, alongside national and municipal policies that strengthen local revenue streams (IGFT and own source revenues) to service debt. International experience indicates that municipal finance is a result of the fiscal empowerment of cities (demand) and local fiscal space (supply). The chapter concludes with a call to link municipal investment with domestic finance in line with the Malaga policy agenda.

In chapter 5 (beginning on [p. 139](#)), Lennart Fleck, a leading expert on own source revenue at UN-Habitat, builds on the importance of own source revenue and the risk of perverse incentives through poorly designed IGFTs and central borrowing. The chapter examines the bottlenecks to expanding own source revenue and recognizes that this remains a significant challenge for many local governments, especially in low-income countries. Three factors that contribute to low own source revenue performance are capacity, authority and incentive. Lennart explains these factors with a case study and provides thoughtful analysis on understanding the underlying, interconnected own source revenue constraints in order to fully leverage local tax potential.

In chapter 6 (beginning on [p. 161](#)), Dmitry Pozhidaev, a UNCDF technical advisor for local transformative finance, suggests that adequate, flexible and resilient local fiscal space built on local revenue generation is critical for unlocking the fiscal potential of local governments. Central governments need to shift their mindset to establish an effective enabling environment based on central-local collaboration for local government own revenues. Within this environment, local governments can contribute to the achievement of national strategies and long-term development goals. Dmitry provides data, analysis and case studies from Uganda and elsewhere that detail specific tools to increase own source revenue, including the use of digital financial payment methods. The chapter also touches on some of the macroeconomic questions dealt with in section 4 of this chapter about the dynamics of sovereign (national) government finance and its relationship with the local level.

In chapter 7 (beginning on [p. 193](#)), Daniel Platz, Suresh Balakrishnan, Linda Newton and Claire Chan highlight that asset management is often a greater part

of the cost of infrastructure over its life cycle than the initial capital expenditure. Underinvestment in infrastructure maintenance is costly and disrupts essential services such as transport, water and sanitation, and solid waste management. Integrating the financial, human and material resources needed to conduct proper infrastructure asset management into public investment strategies will strengthen the sustainability of public investments, thereby supporting reliable, inclusive and resilient basic services. Drawing on the new UN handbook on infrastructure asset management (UN, 2021), this chapter presents the basics of asset management; its role in the landscape of urban infrastructure finance; and concrete tools for effective planning, budgeting and financing of infrastructure over its lifespan. Daniel Platz is Senior Economic Affairs Officer at the UN Department of Economic and Social Affairs, Financing for Sustainable Development Office. Daniel spearheaded the UN handbook on infrastructure asset management; Suresh is a local transformative finance technical advisor at UNCDF; Linda is an expert in strategic asset management; and Claire was a consultant in asset management at the UN Department of Economic and Social Affairs.

In chapter 8 (beginning on [p. 219](#)), Paul Smoke, a New York University professor of public finance and planning and a contributor for the last 20 years to the design of UNCDF local development finance initiatives, analyses the role of municipal borrowing and local development finance from the angle of special financial intermediaries that operate between local governments and capital markets. Municipal development banks and other such intermediaries, managed or highly regulated by government, can be a mechanism for overcoming some of the obstacles to subsovereign finance highlighted in this chapter. If properly constituted, these institutions offer a route for achieving some of the Malaga policy objectives. However, insufficient attention to developing special financial intermediaries persists due to a lack of good practices and knowledge sharing. The chapter also emphasizes the importance of reforming intergovernmental fiscal frameworks and expanding local fiscal space with a more integrated strategic approach to developing subnational borrowing and local development finance.

In chapter 9 (beginning on [p. 247](#)), Dmitry Pozhidaev – co-author, with the author of the present chapter, of the UNCDF guidance on local government response to COVID-19 (UNCDF, 2020k) – addresses the impact of COVID-19 on the local government finance issues discussed in this book. The pandemic showed that local governments are ‘essential institutions’ on the frontline of service delivery, citizen engagement and economic development. The fiscal space of local governments is significantly contracting under the dual challenge of increasing expenditure and declining revenue. The chapter highlights three

key actions to rebuild local fiscal space for effective pandemic response and economic recovery: (i) protect the roles of local governments and safeguard an adequate fiscal space, (ii) transform local fiscal space to be more flexible and suitable for post-pandemic recovery (iii) and improve the resilience of local fiscal space to absorb future shocks.

Part II presents six case studies that place the arguments of this book in real-world contexts. The case studies elaborate how the green transition, urban transition and productive transition can be achieved through innovative and effective local government finance.

In chapter 10 (beginning on [p. 277](#)), Suresh Balakrishnan, a UNCDF technical advisor, and Jesmul Hasan, who for 10 years led the design and implementation of UNCDF's local development finance work in Bangladesh, describe the multi-year journey in Bangladesh from early fiscal decentralization reforms through IGFTs and the local development funds mentioned above towards more evolved municipal domestic capital market transactions such as bonds. The chapter highlights the policy debates about how to finance the green, urban and productive transitions and provides another example of the intermediary institutions detailed in chapter 8. The case study demonstrates the arguments made in this chapter about the importance of local government capacity for transformative blended finance on domestic capital markets.

In chapter 11 (beginning on [p. 287](#)), Sophie De Coninck, LoCAL global manager, and Sarah Harris, LoCAL's communications specialist, expand on the discussion provided here about the Local Climate Adaptive Living Facility and the role of IGFTs in driving the green transition. LoCAL was built on the foundation of UNCDF's local development funds in 2010 to support governments in accelerating climate adaptation and to efficiently access and deploy climate finance in line with their commitments to the UNFCCC process. LoCAL is an internationally recognized, country-based mechanism that supports countries to channel climate finance to and for the local level. By adapting locally and reporting globally, LoCAL combines the efficiency of country IGFT systems with the verification of climate expenditures and impacts according to transparent and recognized standards. LoCAL's performance-based element builds on some of the principles outlined in chapter 3 and offers strong incentives for improved effectiveness. LoCAL is an example of how the Malaga policy agenda can deliver transformation at scale.

In chapter 12 (beginning on [p. 311](#)), Dmitry Pozhidaev provides a case study that illustrates the challenges of creating and maintaining the liveable city called for in section 2. Urban growth puts pressure on accessible green space. This chapter demonstrates the real-world problems that prevent cities from simultaneously navigating the three transitions described above. In Uganda, secondary cities are

growing faster than the capital metropolitan area, but without a matching quality in their urban environment. There is a lack of land use planning and shrinking public green spaces. Accessible and safe green public spaces have significant environmental, social and economic value, particularly as municipal assets and a channel for own source revenues. Building on chapters 5 and 6, this case study calls for protection and development of green and public spaces through effective political leadership, effective management systems and broad-based local partnerships.

In chapter 13 (beginning on [p. 331](#)), Paul Martin, a UNCDF technical advisor based in Bangkok, discusses building public-private partnerships (PPPs) at the local level in the Association of Southeast Asian Nations (ASEAN) region. PPPs are acknowledged in the Malaga policy agenda as a potential means to bridge the local infrastructure financing gap. Yet the details of the PPP arrangement are critical to the outcome. To date, PPPs in the ASEAN regional have mostly addressed infrastructure needs at the national rather than subnational level. This case study argues for PPPs in ASEAN as a local financing instrument. It discusses successful subnational PPP models across the ASEAN member states for investment solutions to urban transformation and for local government partnerships. The case study illustrates the development of regulations in this area and also provides a good example of how the Addis agenda has been interpreted by policymakers.

In chapter 14 (beginning on [p. 359](#)), Pio Wennubst, Jaffer Machano, Rukan Manaz, Johan Gély, Isabella Pagotto and Francesca Valentini demonstrate how enhanced local capacity together with access to capital for non-sovereign entities along a water basin can contribute to building peace. The Blue Peace initiative provides long-term capacity building to transboundary water organizations and municipalities, allowing them to develop master plans and have access to new forms of capital by issuing a Blue Peace bond. Investments are undertaken as a result of negotiated political agreements among widely diverging interests which define how to share common water resources. The master planning approach to sustainable water projects is designed to ensure transformational impact as well as bankability (in line with the criteria indicated above) and will unlock access to additional capital for municipalities and transboundary waterbodies, providing new and larger private-based capital to local infrastructure investments for the green, urban and productive transitions. Pio Wennubst is Ambassador of Switzerland to the UN multilateral agencies in Rome and one of the leads in launching the Blue Peace movement. Jaffer Machano is the global manager of UNCDF's Municipal Investment Finance Programme. Rukan Manaz is a Blue Peace programme specialist. Johan Gély leads the Swiss Cooperation Office in Juba, South Sudan. Isabella Pagotto is Senior Advisor at the Swiss Agency for Development and Cooperation, and Francesca Valentini is a consultant for public sectors.

In chapter 15 (beginning on [p. 375](#)), Shade Amole, an attorney in national security and local government finance in the United States, provides a case study on own source revenue, local fiscal space and the challenge for local governments that has arisen from the reduction in taxable property-based services (shops, hotels, taxis) and their replacement with online platform services such as mail order and the short-term subletting of residential units. The COVID-19 pandemic has exacerbated this trend, which has posed fiscal challenges for local governments, particularly in developing countries. There is a lack of legislative, policy and regulatory frameworks for taxing digital businesses. This case study features Internet-based short-term vacation rentals whose adverse effects on housing supply, fiscal revenue, labour market and service delivery are borne by local governments. Developing countries can consider indirect taxation on digital businesses at the local level, but regulatory reform and technical capacity are needed to accompany implementation and adapt to a rapidly changing environment. Without these reforms, the continuing loss of local fiscal space will limit the scope for transformative investment.

Notes

1. Deepak Lal (1983) and others criticized the premise of development economics and instead spearheaded a focus on 'getting prices right'. However, the global financial crisis and, more recently, the COVID-19 pandemic appear to validate the development economics perspective.
2. LDC5 will define the next 10-year international programme of action for the LDCs. For more information, see the [LDC5 web page](#).
3. Source: United Nations Department of Economic and Social Affairs [Creation of the LDC Category and Timeline of Changes to LDC Membership and Criteria web page](#).
4. UNCDF was officially established in 1966 as an 'autonomous organization within the United Nations' with the purpose of assisting 'developing countries in the development of their economies by supplementing existing sources of capital assistance by means of grants and loans' (UNGA, 1967).
5. For official data on LDCs, criteria for inclusion and graduation, and information on each country, see the United Nations Department of Economic and Social Affairs [Least Developed Countries web page](#).
6. For more information on these measures, see the [UN LDC Portal](#), International Support Measures for Least Developed Countries.
7. For more on the Rio Summit, see the UN [Conferences: Environment and Sustainable Development web page](#).
8. Source: [World Bank Open Data website](#).
9. The aggregate contribution of gross fixed capital formation to GDP has fluctuated slightly over time, from 25.6 per cent in 1970 to 23.6 per cent in 2018. Exports of goods and services as a share of GDP grew from 13.6 per cent to 30.1 per cent over this period, and imports of goods and services grew from 13.7 per cent to 29.3 per cent. Source: [World Bank Open Data website](#).
10. See Collier (2017) and UN-Habitat (2021). Duranton and Puga (2004) associate urbanization with higher prosperity and growth through better sharing, matching and learning.

11. See the Urban Italy web page, [Turin XXI C Architecture](#), for an example of how the design principles in photo 1.4 continue to manifest themselves in contemporary urban design in Turin.
12. Source: World Cities Culture Forum [online database](#), % of public green space (parks and gardens).
13. See e.g. UNCTAD's online [Productive Capacities Index](#) and the joint UNCDF–UN Department of Economic and Social Affairs project, Implementing the Addis Ababa Action Agenda and the Sustainable Development Goals: The Importance of Strengthening Municipal Finance, discussed on the UN Department of Economic and Social Affairs [Municipal Finance web page](#).
14. In fact, failure may confirm astrophysicist Avi Loeb's interpretation of the Fermi paradox, which posits that if it is mathematically likely that there are many other civilizations on other planets, why have we not yet met them? Loeb's answer is that civilizations (like ours) that are capable of exploring the universe are also vulnerable to self-annihilation: 'Perhaps the reason no one has shown up is that there's no one left to make the trip' (Kolbert, 2021). Other civilizations may have discovered too late that extractive economies based on environmentally unsustainable fuels and a concept of permanent economic growth (such as the carbon-fuelled planet Earth) eventually sow the seeds of planetary destruction by exhausting the resources and habitat required for life. This could be a cosmic life cycle and would mean that arguments similar to those presented in this chapter have been written before – in vain – on other galaxies.
15. For instance, the World Urban Forum in 2020 called for bankable urban development projects to be submitted to the [UN Cities Investment Facility](#); the ICLEI–Local Governments for Sustainability [Transformative Actions Program \(TAP\)](#) focuses on calling for bankable project ideas; and the [Leadership for Urban Climate Finance \(LUCI\)](#) initiatives by the International Climate Initiatives (IKI). UN-Habitat and UNCDF are collaborating on the Cities Investment Facility through the Dual Key pipeline management system that assesses both the financial performance and transformational impact of investments.
16. Jeffrey Sachs, keynote speech to Stakeholder Workshop on Financing Sustainable Infrastructure chaired by ECOSOC President Ambassador Munir Akram, United Nations, 15 May 2021.
17. For a discussion of blended finance in the water sector, see Vidal (2020) and OECD (2019). A UK National Audit report (2018) highlighted shortcomings in blended finance. For alternative viewpoints about blended finance in the education sector, see Caerus Capital (2020) and Evans and Acosta (2021). For a discussion on the mixed record of blended finance in the United Kingdom, see Gammons, Druce and Grayburn (2018).
18. The shareholders are governments. Examples of major development finance institutions to be capitalized by their shareholders include the Asian Infrastructure Investment Bank (AIIB), the Inter-American Development Bank (IDB), the Asian Development Bank (ADB), the African Development Bank (AfDB) as well as bilateral development finance institutions and Bretton Woods institutions.
19. For example, since 2017, UNCDF has been supporting Guinea through a programme to reinvest mining royalties in local government finance, SME development and local economy.
20. Jackson (2007) describes an example of this process in Mozambique. See also Platz and others (2017).
21. An example of the former is Chefchaouen, Morocco, which sought to compensate for the dramatic loss in Chinese tourists due to the COVID-19 pandemic by marketing high-value organic olive oil to those regions in China where the erstwhile tourists live, the message being that they could enjoy Chefchaouen from a distance. This is part of a larger strategy by the city to promote its organic and high-value-added products to tourists (UNCDF, 2020i). For an example of the latter, see Wainwright (2021); this is the kind of local development championed by John Tomaney (UNCDF, 2020c).
22. In Eastern Europe, the European Bank for Reconstruction and Development has invested in the City of Bucharest's bond programme (Romania); this is discussed on the bank's [Bucharest Bond Issue project summary description web page](#). In Poland, Katarzyna Szwarc, Capital Market Development Strategy Representative of the Finance Minister, notes that the strategy 'includes several measures in favour of sustainable financing, including the development of a green bond market and the introduction of a low-carbon index. Poland was the first country to issue green sovereign bonds. We want to follow up on that success in other market segments, including corporate and municipal bonds. We hope that Poland will become the regional hub of green financing

in this part of Europe' (GPW, 2021). And in South Africa, the City of Johannesburg has issued seven bonds since 2004 to finance large-scale infrastructure projects in the context of limited resources from the national government. One of the most well-known examples is the Jozibond that financed the Gautrain rail link to the airport and included a retail component (Joburg, 2018). Also, Global Fund for Cities Development has implemented a project on pooled green bonds for financing sustainable urban infrastructure in secondary municipalities in South Africa (FMDV, 2021). Prior to the 2022 war, UNCDF had provided technical advice to IFC in Ukraine on municipal access to domestic capital markets.

23. For example, local governments in California are increasingly favouring bank loans rather than bonds, which raises concerns about lack of transparency, financial risks to local governments and reducing their future access to public capital in event of default (Nguyen, Volla and Wong, 2017).
24. In Tanzania, UNCDF has successfully supported the establishment of several local government SPVs. The experience shows that SPVs play a vital role in local development infrastructure projects such as industrial parks, commercial fish farms, markets, bus terminals etc., with significant potential to generate revenue to ensure financial and operational sustainability. See UNCDF (2020).
25. For example, while they are allowed to borrow, local governments in Australia are formally constrained to a formula that links their borrowing limits to public financial management and own source revenue indicators.
26. The Malaga Coalition provides a unique space for dialogue between the main stakeholders engaged on municipal finance – including local governments and government networks, national governments, UN agencies, development finance institutions, development banks, commercial banks and academia – to explore innovative financial instruments and capital available for local governments to deal with the financial challenges in advancing sustainable development. The Malaga Coalition has been convened twice by UNCDF and UCLG in collaboration with FMDV and the City of Malaga. One of its main outcomes includes setting up an International Municipal Investment Fund to facilitate local and regional governments' access to external financing for local transformative projects. The arguments and case studies in this book have benefited from webinars supported by UCLG, including the [strategic retreats](#) in February 2021 and 2022 and the first preparatory meeting for the third Malaga conference (UCLG and UNCDF, 2021) – and will in turn contribute to the third meeting.
27. See the UNFCCC web page on [COP26 Outcomes: Market mechanisms and non-market approaches \(Article 6\)](#).
28. A UNCDF study, Rebuilding Local Fiscal Space Initiative, looked at the impact of the pandemic on local fiscal space in five pilot cities (Kumasi, Chandpur, Telita, Gulu and Chiapas) and found that own source revenues, IGFTs and local economic activity were all severely affected. These findings are detailed in the 2020 UNCDF Local Fiscal Space Conference (available on [YouTube](#)) and in the study's phase I report (Steffensen, Löffler and Engen, 2020).
29. See IFC (2018) for a description of how IFC is purposely deploying its AAA rating to build domestic capital market financing of clean energy.
30. Bangladesh, Bolivia, India, Senegal, South Africa, Tanzania and Uganda are examples of developing countries that have started this work. Early results are mixed, but the potential is growing.
31. For example, GuarantCo, according to its [website](#), has closed 57 transactions in 22 countries, enabling \$5.8 billion of infrastructure investment.
32. The U.S. International Development Finance Corporation provides direct loans and guarantees of up to \$1 billion for tenors as long as 25 years (OPIC, 2019). Similarly, ARIZ (Support for the Risk of Financing Private Investment in AFD's Areas of Operation) is a final loss guarantee offered to financial institutions by the Agence Française de Développement (AFD); for more, see AFD's [Guarantees: An Instrument to Mobilize Local Instruments web page](#). Sida's guarantee instrument enables mobilization of capital for development purposes (SIDA, 2019). However, the guarantee portfolios are a very small share of their overall investment portfolios, and the local government portfolios are an even smaller share.
33. The Overton window is explained on Mackinac Center for Public Policy [Overton Window web page](#).
34. According to IPCC estimates, an annual investment of \$2.4 trillion is needed in the energy system alone until 2035 to limit temperature rise to below 1.5°C. However, capitalization of the

climate funds is far short of what is required. The Green Climate Fund's total committed financing is \$10.3 billion, as noted on its [Resource Mobilisation web page](#); the Climate Investment Funds has received donor contributions of \$8.5 billion since its establishment, as noted on its [Donors and MDBs web page](#); the Adaptation Fund's total contributions received are \$1.1 billion, as noted on its [web page](#); the Land Degradation Neutrality Fund has commitments of \$100 million from investors, as noted on the [LDN Fund web page](#) of the United Nations Convention to Combat Desertification; and the Global Environment Facility's replenishments since 1991 total \$24.75 billion, according to its [Funding web page](#).

35. The full text of 'Caminante no hay camino' is on the Favorite Poem Project [website](#).

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PART I

Local government finance in developing countries



A watercolor illustration of a village scene with a large green number 2 overlaid. The illustration shows a cluster of small, simple houses with thatched roofs, surrounded by trees and a path. The style is soft and painterly, with muted colors. The number 2 is a solid green color and is positioned in the center of the page, partially overlapping the illustration and the title area.

2

Decentralization and Graduation in the Least Developed Countries

CHRISTEL ALVERGNE AND NAN ZHANG

In the 1980s and 1990s, in both the developed and developing world, a significant number of countries engaged in processes of decentralization. As a result, over the last 30 years, decentralization has become the norm in about 95 per cent of the democratized world (Cheema and Rondinelli, 2007; see also Rodríguez-Pose and Gill, 2005). The actual level of decentralization in a country reflects the relationships between government and civil society as a partner to government seeking new ways of service delivery; the decisions made largely reflect political rather than technical priorities. Regardless, decentralization has created new alignments between national and local actors, with the result that subnational governments play a significant role in the majority of people's lives in terms of providing basic services, building infrastructure and implementing development plans.

Least developed countries (LDCs) have not been impervious to this global evolution. In fact, decentralization was promoted as part of the democratic process taking root in the 1990s and expressed in the national conferences in West Africa at that time as part of the political and institutional transformation in which countries were engaging. The focus soon shifted from this initial political transformation to a more technical determination of responsibilities and division of labour. Though decentralization is first and foremost a political process, it is also recognized that subnational governments can better deliver services, promote local economic development and build the social contract.

The development partner community promoting and facilitating decentralization largely acknowledges a strong relationship between decentralization and

development. Indeed, alongside the rising decentralization trend, much of the donor community has played a significant role in supporting governments on this path. Soon after the national conferences, advocacy on decentralization began to be of a more technical nature as subnational governments' role in poverty reduction strategies was demonstrated. As now envisioned, decentralization offers a greater potential for development, more efficient allocation of resources and improved governance of the entire system¹.

The push to put local governments at the centre of poverty reduction and development processes was buoyed by a municipal movement, spearheaded by the United Cities and Local Governments (UCLG) and other international organizations that have long promoted the role of subnational governments and advocated for the added value of actors at the local level. This approach

paves the way for broader acknowledgement of subnational governments as actors in Sustainable Development Goal (SDG) achievement, particularly SDG 11 (sustainable cities and communities).

This shift in global perspective towards recognition of local governments' potential for a solid, technical contribution to development highlights an urgent information gap. Specifically, what are the relationships between decentralization and development?

Identifying a potential relationship between decentralization and development requires an understanding of local development. It implies bottom-up development, initiated at the local level and then transforming the national level in terms of access to services, economic growth and cultural changes. But decentralization and development lie in two very different worlds and may even be considered to be diametrically opposed. Decentralization refers to a system of power and location of responsibilities; local development implies a consideration of social realities. Where the former refers to redistribution, the second implies participation. The relationship between decentralization and development can be seen as having two aspects.

The first aspect sees decentralization as a top-down process to transfer responsibilities and grants to subnational governments, which as recognized as viable service providers. Decentralization begins with an allocation mechanism. The form can vary from one country to another, ranging from conditional to unconditional block grants. The size of the grants and the allocation mechanisms account for a large portion of the political discussion on decentralization. The decentralization system relies on the capacity of local governments to deliver services in a transparent and accountable manner.

**IDENTIFYING
A POTENTIAL
RELATIONSHIP
BETWEEN
DECENTRALIZATION
AND DEVELOPMENT
REQUIRES AN
UNDERSTANDING
OF LOCAL
DEVELOPMENT.**

The second aspect entails the role of subnational governments as an agent for change. Decentralization should catalyse a new social contract between the public sector and the citizen. Unlike the traditional social contract concept, which is based on the legitimacy of state authority over the individual, decentralization is more participatory, with citizens and local communities contributing to the process. It involves new principles in the decision-making process, more transparent use of funding, accountability mechanisms etc.

In this context, is it possible to measure decentralization in terms of its extent/degree and potential contribution to development? If we consider that an increase in the role of subnational governments can result in more development, analysing the fiscal space of those local actors could be a good indicator of the decentralization system and its potential contribution to development.

This chapter analyses two main processes:

- The **development process** through the graduation path of LDCs in order to understand countries' evolution through a growth versus transformation path. Graduation criteria give us a reference to qualitatively assess the type of development path taken by LDCs.
- The **decentralization process** through a review of its three main components – **financial**, by looking at local fiscal space; **technical**, in terms of capacity of local governments to deliver services; and **political**, looking at local-level democratic activity.

**DECENTRALIZATION
SHOULD CATALYSE
A NEW SOCIAL
CONTRACT BETWEEN
THE PUBLIC SECTOR
AND THE CITIZEN,
WITH CITIZENS AND
LOCAL COMMUNITIES
CONTRIBUTING TO
THE PROCESS.**

We then compare the potential correlation between these processes and discuss the relations between decentralization and development.

Least developed country graduation process and paths

The three dimensions of the graduation process

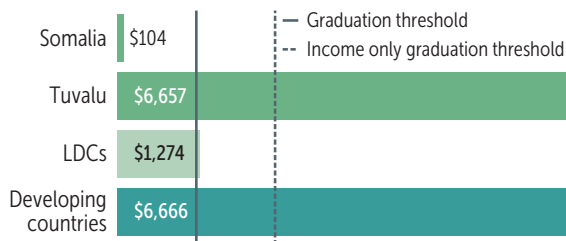
LDCs are low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets². Currently, there are 46 LDCs in the world, as determined by the United Nations Economic and Social Council's Committee for Development Policy (CDP), which reviews the status of LDCs and monitors their progress after graduation from the category.

The LDC graduation criteria are a useful way to track LDC development progress; these criteria cover three dimensions – income, human assets, and

economic and environmental vulnerability. Respectively, each of these is measured by gross national income (GNI) per capita, the Human Assets Index (HAI), and the Economic and Environmental Vulnerability Index (EVI). The three criteria are measured using key indicators that reflect long-term structural handicaps. Countries graduate from the LDC category when they meet defined graduation thresholds for any two of the three criteria, or when GNI per capita is at least twice the graduation threshold in two consecutive triennial CDP reviews (income-only criterion).

According to the CDP, the income criterion – GNI per capita – provides information on the income status of and overall level of resources available to

Figure 2.1 Per capita gross national income and graduation threshold, 2021



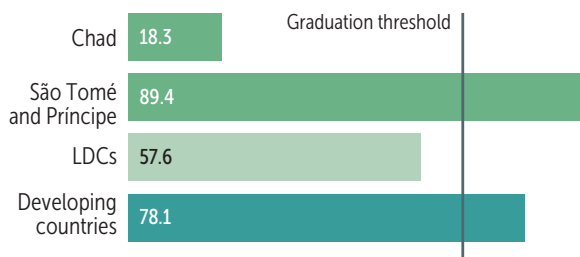
Source: CDP (2021).

a country. The inclusion threshold is the three-year average of the level of GNI per capita ($\leq \$1,018$ at the 2021 review; CDP, 2021). The graduation threshold is set at 20 per cent above the inclusion threshold ($\geq \$1,222$ at the 2021 review). The income-only graduation threshold is twice the graduation threshold ($\geq \$2,444$ at the 2021 review). As shown in figure 2.1, in the 2021 triennial CDP review, Tuvalu had the highest GNI per capita

(\$6,657) among all LDCs and Somalia the lowest (\$104).

The HAI is a measure of a country's level of human capital. The index is composed of health and education subindices, with three equally weighted indicators in these: under-5 mortality rate, prevalence of stunting, mater-

Figure 2.2 Human Asset Index and graduation threshold, 2021



Source: CDP (2021).

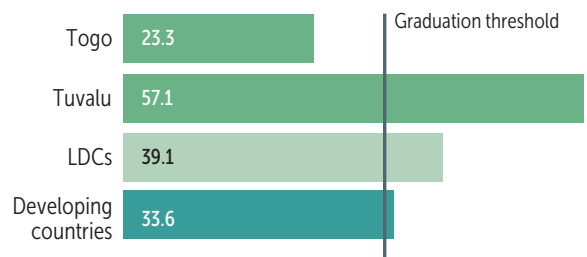
nal mortality ratio, gross secondary school enrolment ratio, adult literacy rate and gender parity index for gross secondary school enrolment. Low levels of human assets indicate major structural impediments to sustainable development; thus, a lower HAI represents a lower development of human capital. As of 2021, the inclusion threshold is at 62; and the graduation threshold is 66. In the 2021 triennial review, São Tomé and

Príncipe had the highest HAI (89.4) among all the LDCs and Chad the lowest (18.3) (see figure 2.2).

The EVI is a measure of structural vulnerability to economic and environmental shocks. High vulnerability indicates major structural impediments to sustainable development. The index is composed of two subindices with eight indicators. The economic vulnerability subindex includes share of agriculture, forestry and fisheries in gross domestic product; remoteness and land-lockedness; merchandise and export concentration; and instability of exports of goods and services. The environmental vulnerability subindex consists of share of population in low elevated coastal zones, share of population living in drylands, instability of agricultural production and victims of disasters. The inclusion threshold as of 2021 was at 36 and the graduation threshold was 32. In the 2021 triennial review, Tuvalu had the highest EVI (57.1) among all the LDCs and Togo the lowest (23.3) (see figure 2.3).

Theoretically, the decentralization process can strengthen local economic development, which would contribute to higher income; it can enhance local basic service delivery, which would lead to higher human assets; it can also promote local strategic resilience planning, which would result in lower economic and environmental vulnerability. But is this the case in reality? Will decentralization accelerate the achievement of graduation thresholds and eventually realize LDC graduation?

Figure 2.3 Economic and Environmental Vulnerability Index and graduation threshold, 2021



Source: CDP (2021).

Least developed country graduation paths

Each country has a unique path to graduation based on their geographic characteristics, economic profiles and approach to development. According to the CDP, there are five paths to LDC graduation:

- Income only
- Income–HAI
- Income–EVI
- HAI–EVI
- Income–HAI–EVI

For each of the LDCs, we analysed the data for the three graduation criteria and paths to graduation³. If the level of one criterion is between the LDC average

and the graduation threshold, that criterion is projected to meet the graduation threshold soon. The combination of the two or three criteria that meet this projection is the profile of the country's graduation path. The exception is the income-only path, which only requires meeting twice the graduation threshold.

Income only

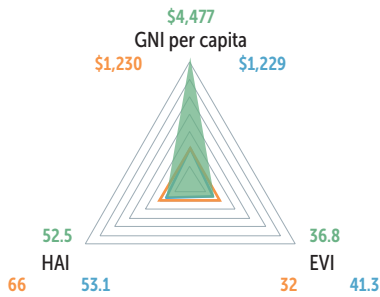
Of the five LDCs (Tuvalu, Angola, Vanuatu, Kiribati and Timor-Leste) whose GNI per capita was more than twice that of the graduation threshold, Angola was projected to be the only case that would follow the income-only graduation path (see figure 2.4a). Angola's GNI per capita as of 2018 was \$4,477, well above the graduation threshold; while its HAI and EVI scores did not meet the graduation criteria. Angola's economy is largely dependent on oil and associated extractive industries. Oil production contributes to more than 50 per cent of the nation's gross domestic product and about 89 per cent of its exports⁴. Even during the 2008–2009 global economic crisis, its economic growth was still rapid and steady, making Angola one of the fastest-growing economies at that time. However, income inequality is significant, and the wealth has not been invested enough in education and health and in building resilience to economic and environmental shocks. The highly concentrated economic sector and high instability in export values contribute to its economic vulnerability and low productive capacity. This profile is similar to that of a recently graduated LDC, Equatorial Guinea (see figure 2.4d) – although that country's government pledged to promote diversification for graduation in its National Development Plan 2020. A concern for this graduation path is whether national economic prosperity will propel structural transformation and real development at the local level, thus ensuring sustainable graduation and transition.

Income–HAI

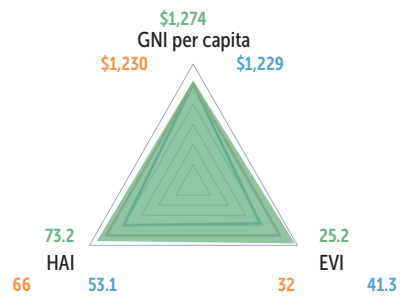
The income–HAI graduation path seems to be common and relatively easy to achieve (at least compared to income–EVI) among LDCs. Five of the six already graduated LDCs took this path – Botswana, Cabo Verde, Maldives, Samoa and Vanuatu. Of the 17 LDCs that meet the income graduation threshold, 10 have met the HAI graduation threshold. Top countries with outstanding performance in HAI include Kiribati, São Tomé and Príncipe, Solomon Islands, Tuvalu and Vanuatu. Most LDCs that have followed or will follow this path are also characterized as small island developing states (SIDS), whose exposure to external economic or environmental shocks remains the major challenge for their achieving sustained growth. These countries usually choose to accelerate their graduation by increasing income and investing in human assets. However, it is

Figure 2.4 Differences in LDC graduation paths (2018 triennial review)

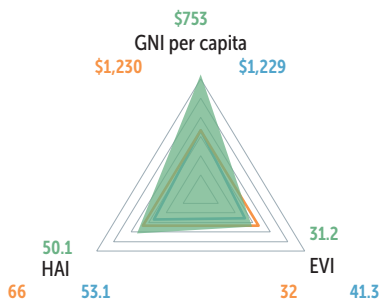
a. Angola



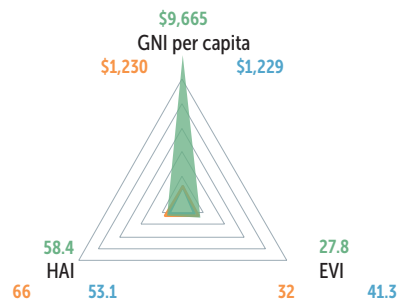
b. Bangladesh



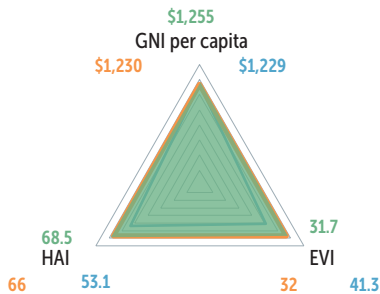
c. Bhutan



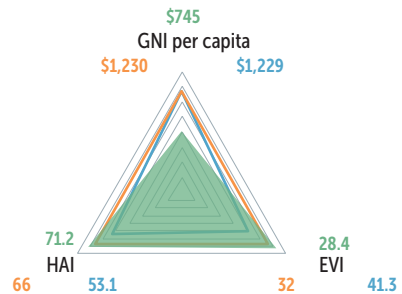
d. Equatorial Guinea



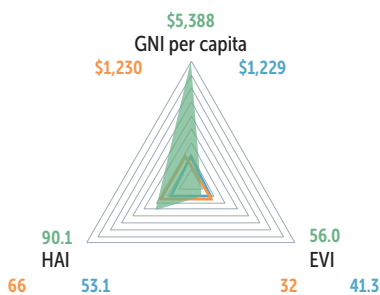
e. Myanmar



f. Nepal



g. Tuvalu



■ Average LDC
 ■ LDC threshold
 ■ Country

Source: Data from UN Department of Economic and Social Affairs Economic Analysis, [official triennial review dataset \(2000–2021\)](#).

critical to build climate and economic resilience in these countries, particularly at the local level, for sustainable graduation and transition.

Income–EVI

Income–EVI is a graduation path that is difficult to achieve because of the persistent structural challenge of lessening economic vulnerability and building resilience to external shocks in LDCs. Equatorial Guinea graduated from the LDC category in 2017, and it met both GNI per capita and EVI graduation thresholds in the 2018 review. But it is considered an income-only graduation case because the improvement in its EVI score was mostly due to the recent decrease in export instability as a statistical outcome instead of a fundamental change in the economy's instability (CDP, 2016). Equatorial Guinea is still vulnerable to volatile changes in international commodity prices because of its heavy reliance on oil revenues, despite the country's efforts to implement economic policies to improve basic infrastructure in support of social welfare and greater diversification.

In general, countries that meet income and EVI criteria also do relatively well in terms of HAI. In the 2018 review, Bangladesh and Myanmar have met income, EVI and HAI criteria (see figure 2.4b and 2.4e). Lao PDR and Bhutan are nearing the graduation threshold for EVI and have met both GNI per capita and HAI criteria. However, on Bhutan's meeting the EVI criteria, the CDP notes that '3 of the 8 components of Bhutan's underplay the structural disadvantages of land-lockedness and the country's exposure to serious physical risks' (CDP, 2018c).

HAI–EVI

The HAI–EVI path is an unusual graduation path because low income is a key characteristic of LDCs which can reflect the low material well-being of its citizens. Aside from Bangladesh and Myanmar, which met all three criteria in the 2018 review, Nepal is the only country that met both the HAI and EVI criteria. It was projected that Nepal would be the first country to graduate from LDC status without meeting the per capita income threshold. According to the CDP (2018d), HAI has reflected Nepal's social development well, while EVI may underestimate Nepal's economic vulnerability. More importantly, GNI per capita may not accurately reflect Nepal's economy because of relative underreporting of remittances from Nepalese living abroad and a lack of clarity on income distribution.

Income–HAI–EVI

In theory, the income–HAI–EVI graduation path should be the ideal way to achieve LDC sustainable transition and growth. But it is definitely not easy to achieve, given the extreme structural challenges facing LDCs. In the 2018 review, Bhutan was found eligible for graduation with the income–HAI approach for the second consecutive time (CDP, 2018b). Given the country's impressive progress in advancing on all three criteria based on its 12th National Development Plan (2018–2023), it was plausible to assume Bhutan would meet the EVI graduation line in 2021 and become the first LDC to meet all three graduation criteria (CDP, 2018c).

At the 2018 triennial review, Bangladesh, Lao PDR and Myanmar were found eligible for graduation for the first time (CDP, 2018b). Both Bangladesh and Myanmar met all three graduation criteria; Lao PDR is slightly above the EVI criterion as well as meeting the income and HAI thresholds. The three countries' efforts for building national income, building resilience and investing in social development might lead to this balanced and sustainable graduation path.

According to the United Nations Department of Economic and Social Affairs timeline for LDC graduation from 2021 to 2024, Angola would fulfil the income-only graduation profile, Bhutan might achieve the income–HAI–EVI graduation path, and São Tomé and Príncipe and Solomon Islands would follow the income–HAI path.

This analysis clearly shows that the evolutions, processes and mechanisms leading up to graduation can be very different. This is also true at the local perspective: the role of local actors, particularly the contribution of municipalities, brings an additional understanding of what is happening in reality. In other words, what does graduation mean at the local level, and how can local governments contribute to the LDC graduation as a nation?

National achievement of LDC graduation cannot be realized without action and progress at the local level. As demonstrated by their being at the forefront of the economic recovery from COVID-19, local governments are fundamental in spearheading sustainable and resilient infrastructure investments, building productive capacity as part of a strategy for economic transformation, and creating higher-value jobs in domestic value chains that drive increased productivity. In order for them to do all this, local governments need support in terms of sustainable sources of local development finance coupled with an enabling policy framework and technical capacity.

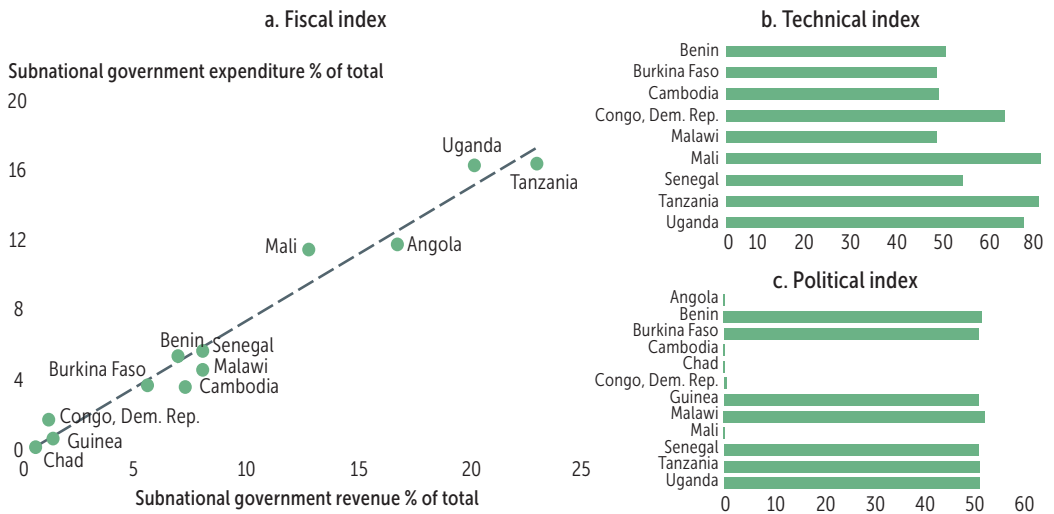
Decentralization and graduation

Assessing decentralization processes in least developed countries

The decentralization process contributes to the expansion of local fiscal space, local technical capacities and local political dynamics. We have designed a **Decentralization Index** composed of three subindices – fiscal, technical and political – using a similar methodology as the LDC graduation criteria calculation⁵.

The **Fiscal Index** is the average of subnational government expenditure as a percentage of total public spending and subnational government revenue as a percentage of total public revenue; it indicates the status of a country's fiscal decentralization. Twelve LDCs (Angola, Benin, Burkina Faso, Cambodia, Chad, the Democratic Republic of the Congo, Guinea, Malawi, Mali, Senegal, Tanzania and Uganda) were sampled for this analysis given the availability of their fiscal data from the World Observatory on Subnational Government Finance and Investment (2016 pilot study)⁶. In general, there is a positive correlation between subnational government revenue and expenditure. If a country's subnational governments have more revenue, including from taxes and grants, they tend to have higher expenditure. Using this index, Angola, Mali, Tanzania and Uganda are seen as having a higher level of fiscal decentralization (see figure 2.5a). The other countries score relatively low, with Chad, the Democratic Republic of the Congo and Guinea being at the lowest level.

The **Technical Index** is the average of subnational government staff expenditure on public spending and whether there are policies to develop rural infrastructure and facilities. Subnational government staff expenditure can be a proxy for local authorities' technical capacity. As emphasized in *The Least Developed Countries Report 2016*, rural development is key to 'graduation with momentum' (UNCTAD, 2016). Therefore, these two indicators were chosen to represent a country's technical decentralization. Nine countries were analysed for this index (Benin, Burkina Faso, Cambodia, the Democratic Republic of the Congo, Malawi, Mali, Senegal, Tanzania and Uganda), drawing on data on staff expenditure and rural infrastructure development policy from, respectively, the World Observatory on Subnational Government Finance and Investment (2016 pilot study) and UN DESA (2016). Of the nine countries analysed, the Democratic Republic of the Congo, Mali, Tanzania and Uganda had relatively high Technical Index scores (more than 70). The remaining countries had an average score of around 50 (see figure 2.5b). All nine countries adopted a policy for the development of rural infrastructure and facilities. Therefore, the difference between them primarily reflects the amount of subnational government expenditure on staff.

Figure 2.5 Comparison of fiscal, technical and political decentralization (2016)

Source: Data from OECD and UCLG (2016) and UN DESA (2016).

The **Political Index** indicates the political environment for decentralization. It is made up of municipal representation (average size of municipality / total population) and whether the government has adopted policies or strategies in the past five years to decentralize large urban centres to smaller urban, suburban or rural areas. Based on data from the World Observatory on Subnational Government Finance and Investment (2016 pilot study) and UN DESA (2016), 12 countries were analysed for this index (Angola, Benin, Burkina Faso, Cambodia, Chad, the Democratic Republic of the Congo, Guinea, Malawi, Mali, Senegal, Tanzania and Uganda). There is a clear divide between the sample countries. Countries scoring high on the Political Index include Benin, Burkina Faso, Guinea, Malawi, Senegal, Uganda and Tanzania (see figure 2.5c). All of the countries have a similar score in terms of municipal representation; the major difference comes from the adoption of policies or strategies to decentralize large urban centres.

Examining the relationship between decentralization and graduation paths

The Decentralization Index is the average of the three subindices (fiscal, technical and political). Nine countries whose subindices were available were sampled for this analysis (Benin, Burkina Faso, Cambodia, the Democratic Republic of the Congo, Malawi, Mali, Senegal, Tanzania and Uganda).

Fiscal decentralization and graduation criteria

There is not a strong correlation between the Fiscal Index and EVI (see figure 2.6a). Countries that have less fiscal decentralization could be either more or less vulnerable to external shocks, as is the case for Chad and Guinea. Another observation is that if the 12 sample countries are grouped as having either high fiscal decentralization or low, countries in the latter group are generally more vulnerable to economic or environmental shocks. The relation between the Fiscal Index and HAI corresponds to this grouping as well (see figure 2.6b). A clearer positive correlation can be seen in the low fiscal decentralization group. On average, if a country is more fiscally decentralized, it tends to have a higher HAI score, indicating better social development performance.

Technical decentralization and graduation criteria

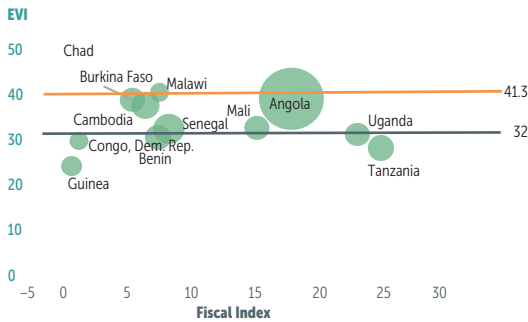
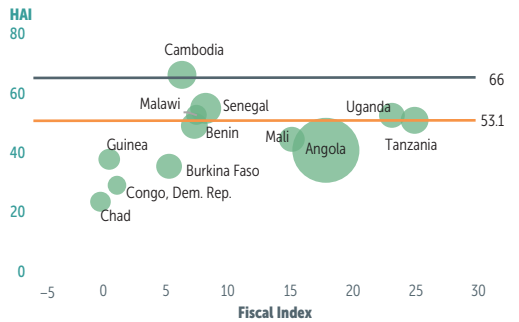
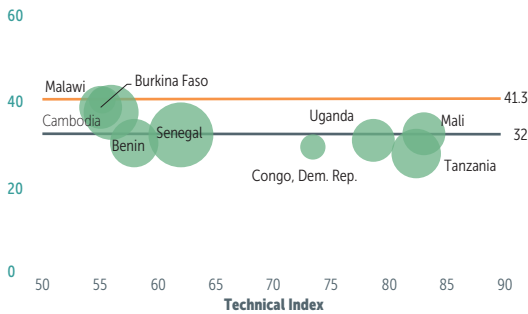
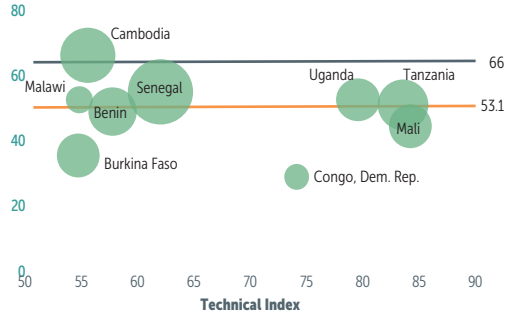
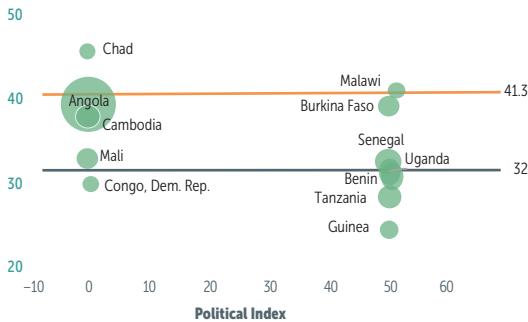
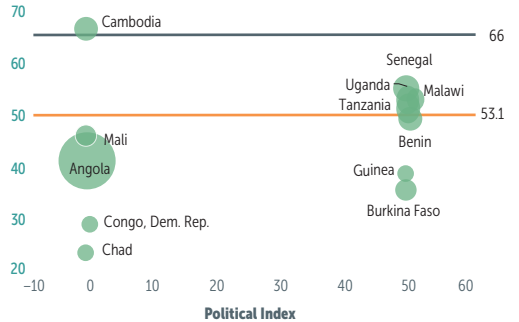
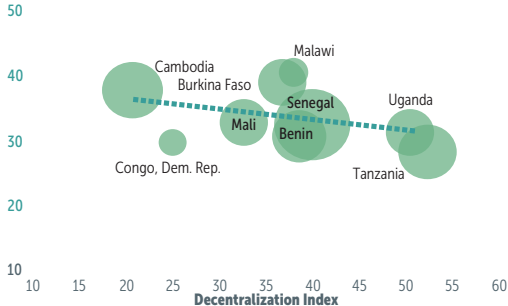
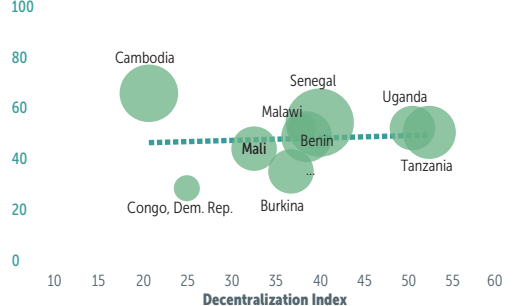
Countries with a high Technical Index generally have a lower EVI score (see figure 2.6c), which suggests that better technical capacity is beneficial in decreasing vulnerability to economic shocks. There is no obvious trend when comparing the Technical Index and HAI (see figure 2.6d), but Cambodia presents an interesting case. It is the only country that has met the HAI criteria among the sample countries, but has a low Technical Index. Because Cambodia is a highly centralized country, its political regime ensures delivery of good public services for social development, even if technical capacity at the local level is not high. In contrast, Tanzania and Uganda have much higher Technical Index scores, but their HAI scores are lower. Indeed, every country has a different scenario.

Political decentralization and graduation criteria

It is apparent that the policy indicator has created a drastic division between the countries (see figure 2.6e). Some countries have adopted decentralization policies while others have not. Generally speaking, countries with a high Political Index have a lower EVI than those with a lower Political Index. Similarly, countries scoring high on the Political Index have a higher HAI than those with a lower Political Index, except Cambodia (see figure 2.6f). Therefore, countries with an enabling political environment tend to be less vulnerable to external shocks and have better human asset development.

Decentralization as a composite mechanism and graduation criteria

A clear negative correlation between the Decentralization Index and EVI can be seen in figure 2.6g. For example, Uganda and Tanzania have higher Decentralization Index scores and lower EVI scores, which means their economic structure

Figure 2.6 Decentralization subindices and LDC graduation criteria (2016)**a. EVI and Fiscal Index****b. HAI and Fiscal Index****c. EVI and Technical Index****d. HAI and Technical Index****e. EVI and Political Index****f. HAI and Political Index****g. EVI and Decentralization Index****h. HAI and Decentralization Index**

Source: Data from OECD and UCLG (2016) and UN DESA (2016). — graduation threshold; — LDC average.

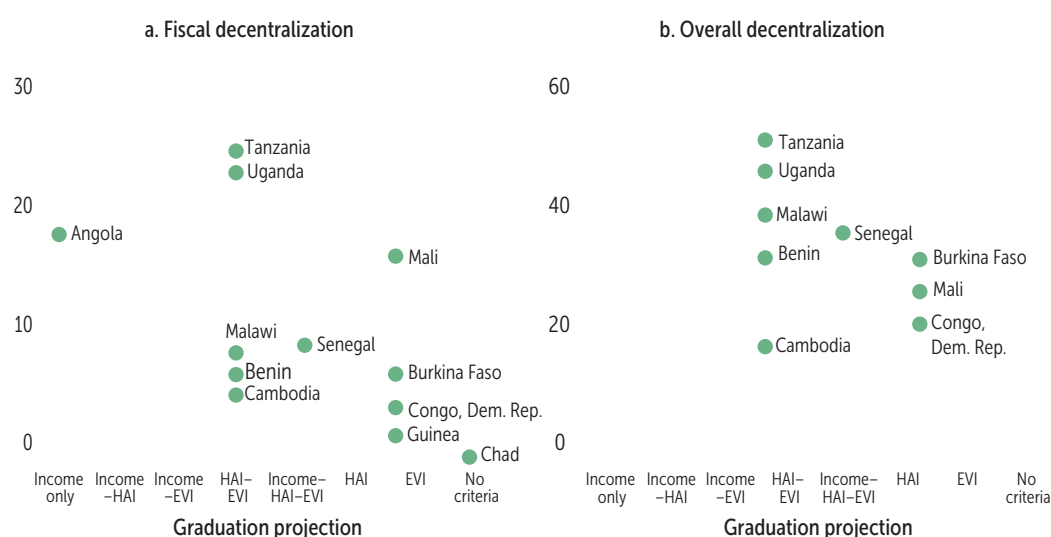
is more diversified and stable, and less vulnerable to external shocks. Similarly, the Decentralization Index and HAI have a positive correlation, although it is not very obvious (see figure 2.6h). It is worth noting that Tanzania and Uganda have high Decentralization Index scores and relatively high HAI scores as well. This implies that decentralization is favourable for human asset development. But again, Cambodia is an exception – which shows that a good centralized system can also deliver effective public services.

Decentralization and graduation paths

Finally, in terms of the relationship between fiscal decentralization and the LDC graduation path (see figure 2.7a), it seems that most of the LDCs in the sample would graduate with the HAI–EVI path, except Angola. This indicates that it could be difficult to improve income compared to HAI and EVI. This is where the United Nations Capital Development Fund (UNCDF) adds value, because our work focuses on basic services and resilient infrastructure – which contributes to higher HAI and EVI. Generally, LDCs that are predicted to graduate soon have higher fiscal decentralization.

With regard to how overall decentralization contributes to LDC graduation, figure 2.7b shows that LDCs have different levels of decentralization. This analysis helps to understand the territorial approach of development for each country. Decentralization would be beneficial to LDC graduation and

Figure 2.7 Decentralization and LDC graduation path projection (2016)



Source: Data from OECD and UCLG (2016) and UN DESA (2016).

development, but not the necessary approach. Overall, the empowerment of local governments would definitely accelerate national achievement of sustainable development.

Conclusion: the decentralization process as a contributor to graduation

This chapter sheds light on the relationship between decentralization and development in the LDCs, which are represented by, respectively, three dimensions of decentralization (fiscal, technical and political) and the LDC graduation process. The analysis demonstrates great diversity in graduation paths and in countries' development approaches. A holistic approach to achieving graduation that ensures human assets and economic and environmental resilience while emphasizing economic growth is fundamental to the sustainability of LDCs' development. The analysis also reveals that decentralization correlates with human asset development and structural resilience to economic and environmental shocks, which indicates the important role of local governments in long-term development.

Graduation is not an end to LDC development. Rather, it is a measurable means to more sustainable, resilient and inclusive development in the long run, even after countries transition to middle-income-country status. Neither the nature of decentralization nor its contribution to development is straightforward, but the analysis in this chapter shows that this contribution does exist and can be a powerful solution for countries. Enhancing economic transformation and productive capacities at the local level will accelerate LDCs' national recovery from the COVID-19 pandemic and bridge their development gaps. With its unique understanding of LDC structural transformation through local transformative finance, UNCDF will leverage its technical expertise and financial instruments to support LDCs and their local governments in strengthening basic service provision; improve governance and accountability; and smooth their urban, green and productive transitions.

GRADUATION IS NOT AN END TO LDC DEVELOPMENT. RATHER, IT IS A MEASURABLE MEANS TO MORE SUSTAINABLE, RESILIENT AND INCLUSIVE DEVELOPMENT IN THE LONG RUN.

Notes

1. This understanding prompted numerous publications at the beginning of the new millennium, including by the United Nations (2003) and the World Bank (2004).
2. Source: United Nations Department of Economic and Social Affairs, [Least Developed Countries web page](#) definition.
3. This analysis is based on the 2018 set of LDCs, their data and the prevailing graduation thresholds; this information was taken from CDP (2018a).
4. Source: Organization of the Petroleum Exporting Countries (OPEC) website, [Angola Facts and Figures](#).
5. The max-min procedure was used to design the three indices, inspired by the LDC graduation criteria calculation. The original data are converted into indices ranging from 0 to 100, based on minimum and maximum values in a set of reference countries. $I = [(V - \min) / (\max - \min)] \times 100$ or $II = [(\max - V) / (\max - \min)] \times 100$; V = observed value for a certain indicator; $I = 100 - II$.
6. Much of the fiscal data analysis in this chapter relies on data from the World Observatory on Subnational Government Finance and Investment (SNG-WOFI), an initiative of the Organisation for Economic Co-operation and Development and UCLG supported by UNCDF that is the world's 'leading source of internationally comparable data and analysis on subnational government structure and finance' (see the [SNG-WOFI website](#)). It provides data and information on multilevel governance frameworks, territorial organization, subnational government responsibilities and subnational government finance.

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A watercolor illustration of a village scene with a large yellow number 3 overlaid. The scene depicts a cluster of small, simple houses with dark roofs and light-colored walls, nestled together. The style is soft and painterly, with visible brushstrokes and a muted color palette of greys, browns, and whites. The number 3 is a bright, solid yellow, positioned centrally over the illustration.

3

The Untapped Potential of Intergovernmental Fiscal Transfers

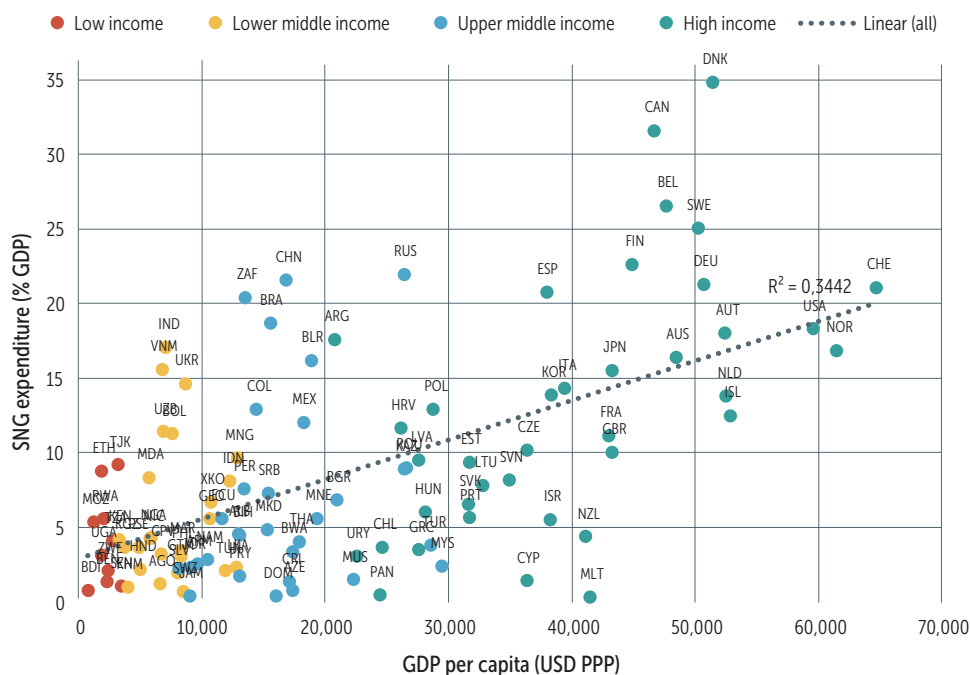
JESPER STEFFENSEN

Many countries are missing the opportunity to use their intergovernmental fiscal transfer system (IGFTS) to drive local development and increase their national social and economic well-being¹. This chapter outlines challenges in IGFTS design and implementation; it then provides examples of how these challenges are being addressed in individual countries as well as regionally and globally. It provides examples of promising new modalities – many of which are discussed in greater detail later in this book – and of how the all-too-often overlooked IGFTS can be used to accelerate development objectives.

The importance of subnational government finance and intergovernmental fiscal transfers

Subnational governments² (SNGs) and the features of their funding systems are critical for overall fiscal and economic development in most countries; this is reflected in their allocation of national expenditure and as a percentage of gross domestic product (GDP). Based on a review of 106 countries, the average SNG share is 9 per cent of GDP (as shown in figure 3.1) and 24 per cent of public expenditures (OECD and UCLG, 2019b). However, the SNG share of total government budget varies greatly (see figure 3.2). In low-income countries, the SNG share of total public expenditures is on average 17 per cent versus 29 per cent in high-income countries; and there is a correlation between SNG share and country wealth (OECD and UCLG, 2019b).

Figure 3.1 Subnational government expenditures as a percentage of GDP and GDP per capita by country income group, 2016



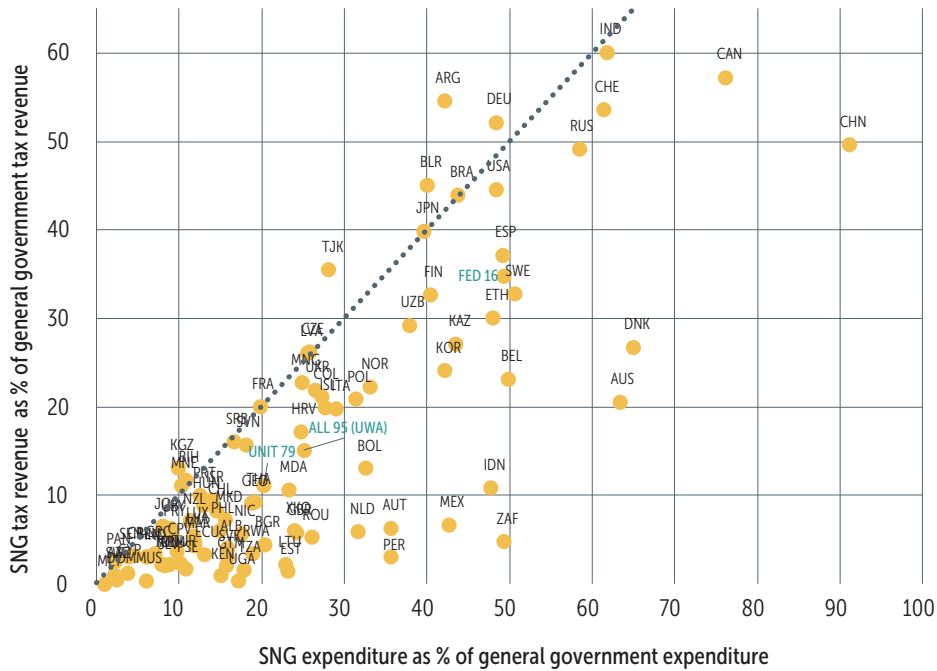
Source: OECD and UCLG (2019b).

Note: Luxembourg and Ireland are not included as they represent extreme cases due to their high GDP per capita.

All countries have some type of IGFTS in place, and hardly any SNG anywhere in the world can function without some fiscal support – even urban local governments with better access to own source revenues. In general, inter-governmental transfers are the most important source of revenue for SNGs, constituting on average more than 50 per cent of total SNG revenues in a review of 96 countries, and 46 per cent in high-income countries (OECD and UCLG, 2019a; see figure 3.3). Not surprisingly, there is great variation informing that average, from a low of 1 per cent in Jordan to a high of 90 per cent in Tanzania; and in many countries, notably in Asia (e.g. China) and Africa (e.g. Uganda), transfers to local governments constitute more than 80 per cent of total local government revenues. In fact, the share of grants and subsidies in subnational revenue falls below 25 per cent in only 17 countries and is above 80 per cent in 14 countries (OECD and UCLG, 2019a).

Despite the significant relative share of transfers of total SNG revenue, transfers as a share of public expenditure and as a strategic tool to promote local development are greatly underutilized. This is especially true for developing countries, which tend to be more centralized. And, in most developing

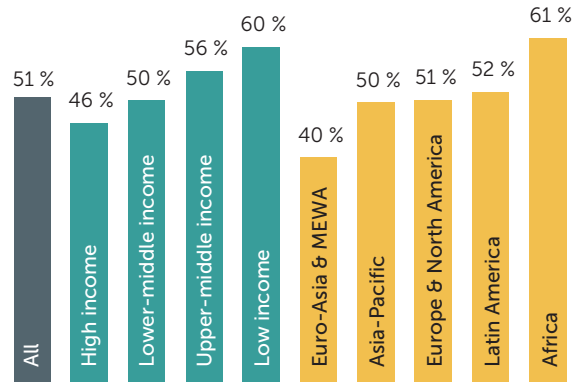
Figure 3.2 Subnational government expenditures and revenues as percentages of general government expenditures and revenues, 2016



Source: OECD and UCLG (2019b).

and middle-income countries where SNG shares of total public expenditures and GDP are low, the size of transfers are correspondingly low. For example, in Bangladesh, Ghana, Malawi, Zambia and Zimbabwe, total transfers constitute less than \$15 per capita and less than 10 per cent of total public expenditures (Dege Consult ApS, 2020). These low financing levels challenge SNGs' ability to deliver service consistently and efficiently and – given the critical importance of such funds for local development – hinder achievement of the Sustainable Development Goals (SDGs) and equity.

Figure 3.3 Grants and subsidies as a share of subnational government revenue by income group and geographical area, 2016



Source: OECD and UCLG (2019b).

Note: $n = 96$ countries; average is unweighted. MEWA = Middle East and Western Asia.

Intergovernmental fiscal transfer systems: objectives, challenges and reform initiatives

IGFTS design and implementation has important implications for the efficiency and equity of public services, incentives and accountability systems. An IGFTS can serve multiple purposes, and it is generally acknowledged that one of the most important principles in IGFTS design is to have clearly defined objectives for the transfers and to design the system accordingly. In practice, there are several objectives in play, often interlinked. Table 3.1 discusses the most common of these, along with their associated design and implementation challenges, and untapped potential and good practices.

Table 3.1 Objectives, challenges and good practices of intergovernmental fiscal transfer systems

Objectives	Typical challenges and problems	Initiatives to strengthen IGFTS and good practices
<p>Correct or adjust vertical imbalances; i.e. close the fiscal gap between expenditure and revenue assignments</p> <p>An IGFTS may be used to ensure that SNGs have adequate revenues to discharge designated functions, especially when other types of revenue (taxes, user fees, charges etc.) suitable for SNG-level collection cannot generate adequate revenue. Many taxes are more effectively collected at the central level, with the proceeds then transferred to SNGs. Also, it is often easier to decentralize functions than finance.</p> <p>Transfers are to be seen as reimbursement of national wealth back to the territory that generated it. Fiscal receipts from across the country are transferred back to the local bodies, which are tasked with providing services and infrastructure.</p>	<ul style="list-style-type: none"> ■ Insufficient compensation to close the fiscal gap; grants are often only \$1–\$2 per capita, despite large public budgets, and largely inadequate to provide a meaningful level of local service. Several least developed countries, especially in Africa, have even seen reductions over time (UN DESA and UNCDF, 2017). ■ Lack of predictability. ■ Very few countries have calculated/measured the costs of service standards vis-à-vis grant size. ■ Numerous country examples of underfunding of SNGs leading to challenges with service delivery, informal borrowing and fiscal distress (see e.g. Wingender, 2018). 	<ul style="list-style-type: none"> ■ Ensure longer-term predictability by safeguarding grant size in medium-term expenditure and/or budget framework; in agreements between central and local government levels; and/or by providing a clear framework for adjusting transfers against tasks. ■ Ensure that SNGs have dedicated shares of buoyant revenue sources and/or clear and stable IGFTS regimes. ■ Explore ways to determine up-to-date expenditure needs to find the right balance and provide rough estimates of a fair share of total public revenues. This was done during early phases of decentralization in Indonesia and the Philippines by determining the size of the General Allocation Fund and the internal revenue allotment, respectively.
<p>Compensate SNGs for complying with central government requirements or implementing central government programmes delegated to SNGs (e.g. pension schemes)</p>	<ul style="list-style-type: none"> ■ Unfunded mandates transferred to SNGs (multiple examples of this in the United States and China; see e.g. Wingender, 2018) ■ Salary increases affecting SNG costs (e.g. Uganda and Zambia) ■ Underfunded mandates leading to informal borrowing (e.g. in China; Wingender, 2018) 	<p>System for ensuring continued balance between tasks and finance (e.g. as in Scandinavia). This may be done through yearly calculations of the impact of new legislation/decisions on transfers of tasks and/or set and agreed-upon adjustments of grant size.</p>

(continued)

Table 3.1 Objectives, challenges and good practices of intergovernmental fiscal transfer systems *(continued)*

Objectives	Typical challenges and problems	Initiatives to strengthen IGFTS and good practices
<p>Correct or adjust horizontal imbalances; i.e. equalization</p> <p>Transfers can be used to equalize the SNGs' conditions for service provision and bring SNGs closer to all potentially having about the same ability to provide basic services to citizens. Extra resources are typically transferred to SNGs with lower fiscal (tax) capacity and/or higher expenditure needs/costs than the average national level.</p>	<ul style="list-style-type: none"> ■ Insufficient equalization or biased allocations towards certain SNGs. ■ Incorrect use of needs-/cost-based indices (e.g. using poverty indices without weighting). ■ Inconsistent use of formulas or lack of clear formulas (e.g. as in Lao PDR, Mongolia, Myanmar, Zambia and Zimbabwe; see RuralNet Associates, 2019; Shotton and Gankhuyag, 2019). ■ Including factors that disincentivize SNGs (e.g. to mobilize revenues). ■ Gap-filling grants that provide no incentives to improve or even reward poor performance. 	<ul style="list-style-type: none"> ■ Base grants on simple, clear and transparent criteria for revenue potential, expenditure needs and costs, based on available and reliable data (Steffensen, 2010). ■ Consider incentives created and avoid allocating transfers on the basis of the stock of inputs (e.g. staff and facilities), as it will encourage SNGs to overinvest in these inputs. Allocations based on service delivery outputs (e.g. number of school-age students by average cost per student) provide more positive incentives for efficient service delivery, as is practiced in Viet Nam (Shotton and Gankhuyag, 2019). ■ Use a simple targeting system that can be understood by all stakeholders.
<p>Correct or adjust negative or positive externalities with public goods provision</p> <p>Grants may be used to compensate SNGs for services they provide that affect areas beyond their jurisdictions – i.e. where there are positive or negative spillover effects. For example, the provision of education services in an SNG may benefit other parts of the country (positive impact), and environmental pollution may affect areas beyond local government borders (negative impact). SNGs tend to look only at their own local needs, not seeing the impacts their service provision may have on other local governments, which can lead to suboptimal provision in a country.</p>	<ul style="list-style-type: none"> ■ Multiple grants and proliferation of schemes can cause high transaction costs, high grant management costs etc. ■ Use of complex revenue-sharing models. ■ Multiple earmarked transfer funds encourage or even obligate SNGs and communities to engage in separate planning exercises for each, through various sector-specific community group and committee arrangements; this leads to problems with overall system integrity and increases monitoring burden and transaction costs. ■ Example: India before recent reforms to improve the IGFTS with multiple central (earmarked) schemes. 	<ul style="list-style-type: none"> ■ Develop clear and harmonized guidelines. ■ Use common reporting and monitoring systems. ■ Reduce the number of grants to a minimum. ■ Support new initiatives such as COVID-19 targeted grants and LoCAL grants for climate resilience.
<p>Coordinate, harmonize and influence local government spending with central government priorities</p> <p>Various types of grants may be used to stimulate SNG spending within national priority areas/standards (see Boadway and Shah, 2009). To the extent possible, the IGFTS should ensure budget autonomy and flexibility at the SNG level and not lead to micromanagement of SNG expenditure priorities, as this will reduce efficiency.</p>	<ul style="list-style-type: none"> ■ Excessive central control and interference in SNG planning processes. ■ Fragmentation of funding in multiple schemes, overloading SNGs and leading to high transaction costs. ■ Bias of expenditures towards an inefficient mix of expenditure items not suited for the local area. 	<ul style="list-style-type: none"> ■ Select grant streams strategically, and ensure a limited number of transfers for only core strategic functions. ■ Provide as much discretion to SNGs as possible, in light of other objectives (e.g. national policy, targets).

(continued)

Table 3.1 Objectives, challenges and good practices of intergovernmental fiscal transfer systems *(continued)*

Objectives	Typical challenges and problems	Initiatives to strengthen IGFTS and good practices
<p>Ensure efficiency in SNG operations, e.g. revenue mobilization, financial management and utilization of funds</p> <p>Transfers should not create negative incentives for SNG revenue mobilization and expenditure management. Grants may, however, be used more actively to stimulate SNG performance, e.g. in terms of taxation, financial management, good governance and/or other areas (UNCDF, 2010).</p>	<ul style="list-style-type: none"> ■ Mixed signals in formulas. ■ Examples of formulas where collected revenues are included directly in the formula, causing disincentives to mobilize own source revenues. 	<ul style="list-style-type: none"> ■ Design intelligent, performance-based grant systems focusing on key bottlenecks and weaknesses in SNG performance and incentives. ■ Ensure that criteria do not lead to inefficiency in revenue collection or ineffective practices in use of funds.
<p>Provide central government with adequate flexibility to pursue macro-economic stabilization policy and influence overall activity levels</p> <p>The central government may wish to adjust overall activity levels in the national economy, and the size and distribution of fiscal transfers may be an important element in this. This objective should be balanced against the need to ensure that transfers are predictable, stable and transparent from the SNG perspective so as to ensure appropriate local planning and budgeting processes.</p>	<ul style="list-style-type: none"> ■ Failure to find the right balance, which would then require bailouts etc. ■ Lack of activities to boost the economy, or problems with contributions that may lead to overheating of the economy, in terms of growth and available production factors. 	<ul style="list-style-type: none"> ■ COVID-19 responses in several countries (e.g. Denmark) to boost local government spending, advance investments etc. through the grant allocation system and budget agreements. ■ Boosting of e.g. capital grants in cases where investments are needed to improve infrastructure and the economy in situations such as the COVID-19 pandemic or fiscal crisis.
<p>Promote other funding that can be mobilized and unlocked</p>	<p>Loans conditioned on receipt of mixed grants may lead to distortions if not well designed.</p>	<ul style="list-style-type: none"> ■ Ensure the IGFTS provides stable and predictable rule-based funding, which is a factor in external lending agencies' review. ■ Support the capacity of SNGs to enhance their creditworthiness.
<p>Informal objectives</p> <p>These might include central government efforts to control SNGs, to offload underfunded functions, and/or to push unfunded mandates onto SNGs with insufficient compensation as part of a strategy to reduce the central government budget deficit. In some countries, SNGs with greater political representation per capita benefit from larger transfers (Caldeira, 2011). Many systems benefit from the establishment of new SNGs (politically driven) through a high equal share component in criteria.</p>	<ul style="list-style-type: none"> ■ Unfunded mandates lead to under-provision of services (see Ouedraogo, 2003, for examples from francophone African countries; in Zambia, functions were not properly funded and there were incentives to create debt). ■ Rent-seeking. ■ Allocating equal shares across SNGs can benefit certain areas or political constituencies to the detriment of meeting objective, needs-based criteria. In Ghana and Uganda, large equal shares were applied in the transfer formula (around 45 % and 25 %, respectively). 	<ul style="list-style-type: none"> ■ Avoid such circumstances to the extent possible, and formalize all funding by establishing clear procedures for updating formulas. ■ Review horizontal formulas and work on measures to avoid incentivizing fragmentation. ■ Avoid overreliance on equal share allocation across all SNGs.

(continued)

Table 3.1 Objectives, challenges and good practices of intergovernmental fiscal transfer systems *(continued)*

Objectives	Typical challenges and problems	Initiatives to strengthen IGFTS and good practices
Finance specific projects , e.g. challenge funds (with project funding requests) and other gap-filling initiatives	<ul style="list-style-type: none"> Very high transaction costs, and resentment from non-recipients. Wish list approach. Client-patron relationship with negotiations and discussions. Often lack transparency. Example: Lao PDR's District Development Fund II challenge funds; also see Shotton and Gankhuyag (2019) and Mahy and Vixatthep (2019). 	Use sparingly for a few large projects, targeting a few SNGs, and as a top-up of the existing grant system (if needed at all). Limit use to the extent possible.
Respond to local political claims , e.g. on shared revenues from natural resources	Unequal distribution of revenues to the SNGs that appear to have the resources.	Be careful in sizing and balancing these. Funding should only cover additional costs of infrastructure and service provision, perhaps along with a smaller incentive.

Source: Author compilation.

Design of the transfer system and its allocation criteria will largely depend on its primary focus and specific priorities. In all cases, the design features discussed in this section should be taken into account in any reform of SNG finance, as overall IGFTS architecture affects SNG options and autonomy in delivering services.

The core IGFTS design dimensions entail determination of (i) the **transfer pool**, i.e. the total resources to be transferred; (ii) the **distribution criteria**, i.e. how these resources are to be divided among subnational units; and (iii) the type of **conditionality** for eligibility, including any incentives for SNGs in the use of the transferred resources.

Transfer pool and distribution criteria

Table 3.2 provides an overview of methodologies for determining the total transfer pool and for allocating the pool among local governments – i.e. the first two IGFTS design dimensions. The A–E typology presented in the table builds on that developed by Bahl and Linn (1992) and is further informed by a United Nations Development Programme primer on fiscal decentralization and poverty reduction (UNDP, 2005); it also includes performance-based grants.

Transfers can be distributed to local governments as (conditional or unconditional) **formula-based transfers** (Type B1, B2 and B3 transfers). Alternatively, transfers can be designed as **ad hoc grants** with the central government having discretionary power (Type D1, D2 and D3 transfers), or as full or partial **reimbursement** of actual local expenditure (Type C1, C2 and C3 transfers). Formula-based transfers are

Table 3.2 Taxonomy of intergovernmental transfer programmes and examples

Method of allocating divisible pool among eligible local governments	Method of determining total divisible pool between central and local governments			
	Share of national tax revenues	Ad hoc decision or programme specific	Reimbursement of expenditures	Allocation based on estimates/measures of relative total local government expenditure needs and revenue mobilization capacity
1 Origin of tax collection	A Philippines; several taxes in Belarus, Viet Nam, China	—	—	Latvia
2 Formula	B1 Philippines ¹ , Indonesia, Ghana, Rwanda, Zambia, Zimbabwe, Kenya, India	B2 Various urban programmes in India	—	B3 Some Nordic countries (Denmark, Sweden etc.); Philippines ¹
3 Total/partial cost reimbursement	C1	C2	C3 Several OECD countries (e.g. Denmark)	—
4 Ad hoc decision	D1	D2 Many developing and transitional countries (e.g. Lao PDR)	E.g. challenge funds; some COVID-19 activity funding schemes	D3
5 Performance based (may be combined with 1–4)	E1 Ghana, Bhutan (annual block grants), Indonesia	E2 Serbia and Kosovo (pilots); Italy and several other OECD countries; Uganda (several grants); Ethiopia (Urban Institutional and Infrastructure Development Program); Nepal (Local Governance and Community Development Programme up to 2016); Ghana (District Development Facility), Bangladesh (Local Governance Support Project), and several other Asian countries; focus on climate change (e.g. via LoCAL in Ghana, Mali, Mozambique, Tuvalu etc. ³)	E3 E.g. Denmark, Japan, Canada ²	E4

Source: Adapted from Bahl (2000) and Bahl and Linn (1992); combined with features of the performance-based grant system.

Note: OECD = Organisation for Economic Co-operation and Development.

¹A rough estimation of the expenditure needs of each tier was conducted at the start-up of devolution, but this is currently being up-dated. The adjustment has been in group B1 as it is now a fixed % of the national revenues.

²Kind of performance-based funding given the many conditions attached to some of the grants.

³See chapter 11, beginning on [p. 287](#), for further details.

sometimes based on detailed calculations of the overall expenditure needs of local governments (Type B3)³. The size of the overall ad hoc distributed transfer pool (with no clear formula applied) also may be based on some overall measures of the total need of all local governments (Type D3), but this model is rarely seen. Several countries, including China, Indonesia, Solomon Islands and Viet Nam, have been moving from ad hoc towards more objective formula-based allocations.

Transfers can also be provided in the form of **revenue sharing**, whereby local governments receive a share of certain revenues collected within their boundaries (Type A). Revenue sharing is considered a form of transfer when the local government has no control over the tax base, the tax rate, tax collections or the sharing rate; examples include the sharing of wealth taxes in the Philippines and of various taxes in Belarus, China and Viet Nam.

Finally, and more recently, some 20 countries have introduced **performance-based grant** allocation systems, where the size of the grants is adjusted against local government performance (Type E1, E2, E3 and E4 transfers). These transfers are typically based on calculations of appropriate expenditure needs to be covered by the system, rough estimates of availability of funding, reviews of absorptive capacity, the minimum level required for meaningful investment, the minimum level to create incentives etc.

As most performance-based grant systems have been launched by specific projects or national programmes, they are classified as Type E2, because the size of the funds is allocated based on overall programme-specific considerations. A formula-based basic allocation formula is used; allocations are then adjusted against local government performance. Some countries could potentially move towards Type E1 or Type E4 transfers when further studies of the overall fiscal system are conducted and overall local governments' fiscal need versus their revenue potential is further defined.

How the **size of grants** to local governments is determined varies greatly across countries, ranging from constitutional clauses (e.g. Ghana and Zimbabwe) or legal framework (e.g. Zambia from 2015 to 2019⁴ and Indonesia), to systems based on recommendations from fiscal commissions (e.g. India and South Africa) or through annual negotiations (e.g. the Scandinavian countries). There is no best practice for this, as it will depend on the specific context. To some extent and in some cases, in environments that lack predictability and security for regular transfers to local governments, legal clauses may provide some predictability and stability (as in Ghana). However, this may not be sufficient, as these clauses are not always followed in practice⁵. Several countries, especially in Europe (e.g. Denmark) have introduced rules to guarantee that the costs of newly decentralized tasks are fairly compensated, and that any reduction in tasks is similarly accounted for.

Conditionality

The third IGFTS design dimension involves the use of the grants– i.e. whether they are conditional or unconditional:

- **Conditional.** Funds are transferred for specific purposes (categorical), and the grants can only be spent on these specific functions.
- **Unconditional.** These grants are general purpose (non-categorical) and typically may be used to finance a broad range of services and SNG mandates.

Grants can be further distinguished as either **development grants** (which may be discretionary grants allowing local governments to prioritize sectors or be sector specific) or **recurrent grants** earmarked for recurrent costs. Many development partner support programmes focus on the first type of grants, and have increasingly included various types of performance incentives.

Both conditional and unconditional grants can be made for development or recurring purposes through either sector-specific or non-sectoral grants⁶. Systems vary greatly, ranging from sector-specific conditional grants to multi-sectoral unconditional grants and all variations in between; the trick is to find the balance that best serves a country's objectives. The general advantages and disadvantages of conditional and unconditional grants are summarized in table 3.3.

Table 3.3 Advantages and disadvantages of conditional and unconditional grants

Type of grant	Advantages	Disadvantages
Conditional	<ul style="list-style-type: none"> ■ Support a focus on national minimum standards of service ■ Stimulate services in core areas ■ Useful for agency functions and functions with externalities ■ May reduce various risks of decentralization 	<ul style="list-style-type: none"> ■ May lead to too much control and lack of clear accountability ■ Hard to measure and control; many transaction costs ■ May distort local priorities ■ Reduce local efficiency in resource allocation in accordance with local needs
Unconditional	<ul style="list-style-type: none"> ■ Support local autonomy and efficiency, local planning and budgeting ■ Easy to administer and reduce transaction costs ■ Strengthen downward accountability ■ Useful for devolved services ■ Useful for equalization purposes, as the aim is to ensure equal funding availability and not to influence local priorities ■ Reduce transaction costs of control 	<ul style="list-style-type: none"> ■ May lead to inefficient spending if local capacity to plan and prioritize is lacking ■ May lead to crowding out of local contribution to funding of services ■ May lead to a disconnect in focus on national objectives and targets ■ May lead to a lack of trust in fund transfers from the sectors ■ May lead to misuse of funds in some cases where there is no capacity or systems and practices for accountability

Administrative challenges

Typical IGFTS weaknesses include the following:

- Lack of stability and transparency
- Criteria for distribution not objectively defined
- Lack of a guiding legislative basis to ensure equitable distribution and prevent manipulation to serve political objectives/favouritism (Nixon and others, 2015)

In addition to the challenges discussed above, typical administrative and grant management problems associated with IGFTS are listed in table 3.4.

Table 3.4 Typical administrative/grant management challenges of intergovernmental fiscal transfer systems

Challenges	Responses
Non-predictability and delays in transfer lead to problems in planning and execution and inefficient spending	Timely releases and well-established schedule; clear and adhered-to principles for release, ensuring sufficient time for SNG planning and execution
Poor (perverse) incentives lead to spending without responsibilities and consequences, e.g. gap-filling support and bailout of fiscally distressed SNGs	<ul style="list-style-type: none"> ■ Avoid fiscal gap transfers ■ Ensure hard budget constraints for SNGs
Lack of incentives for proper fund utilization and to improve performance and accountability challenges	<ul style="list-style-type: none"> ■ Institute performance-based grants, such as LoCAL's performance-based climate resilience grants ■ Strengthen incentives, monitoring and evaluation systems, and inspection as well as other means of follow-up
Lack of guidelines to SNGs or inconsistent/poor guidance, leading to lack of efficiency	Issue annual grant guidelines with clear rules on flow of funds, eligibility on utilization, reporting and accountability, and consistent guidance across funding schemes
Funds lapses by end of year leading to inefficiency and random spending	Establish clear rules on options for funds roll-over and multi-year planning and execution, especially for capital funding
Design issues causing perverse incentives, i.e. to not collect own source revenues or poor financial management, leading to SNGs hoping for bailout	<ul style="list-style-type: none"> ■ Ensure incentives to mobilize own source revenues; ensure hard budget constraints ■ Include fiscal potential, or proxies for this, rather than collected revenues in the formula
For performance-based grants, delays in assessment or insufficient quality assurance of results, leading to lack of credibility and trust	Clear plan and execution to fit with SNG planning and budgeting process; clear and neutral external assessment and quality assurance

Note: See Pöschl and Weingast (2013) for an overview of the poor incentives IGFTS can generate; see Shotton and Gankhuyag (2019) for how some of these can be addressed.

Other considerations

Transfers may either be **lump sum**, i.e. a fixed amount; or based on a **matching** principle, implying that local governments have to cover a given percentage of the expenses, e.g. 5–10 per cent. The amounts of both lump sum and matching grants may depend on local government effort (e.g. with regard to taxes or financial management, such as reporting standards) and/or service output measures. Matching transfers can be closed-ended with a fixed maximum amount or open-ended, i.e. depending on actual costs and activity efforts by local governments. Most countries use a mix of systems.

Equalization grants are often multisectoral and discretionary, as SNGs are supposed to be able to spend the funds to close the gaps between high expenditure needs and/or low revenue potential; but even conditional sector grants may have an equalization purpose, as is the case in Uganda⁷.

Overall, there is no one ‘right’ way to design the three IGFTS parameters of size, allocation criteria and rules on utilization. Instead, there should be appropriate linkages between country context, the objectives of the transfers, the types of functions to be performed by the SNGs, SNG capacity and system design; as well as due consideration of basic principles such as predictability and stability. Unfortunately, this is not always the case.

Case studies: addressing challenges and promising reforms

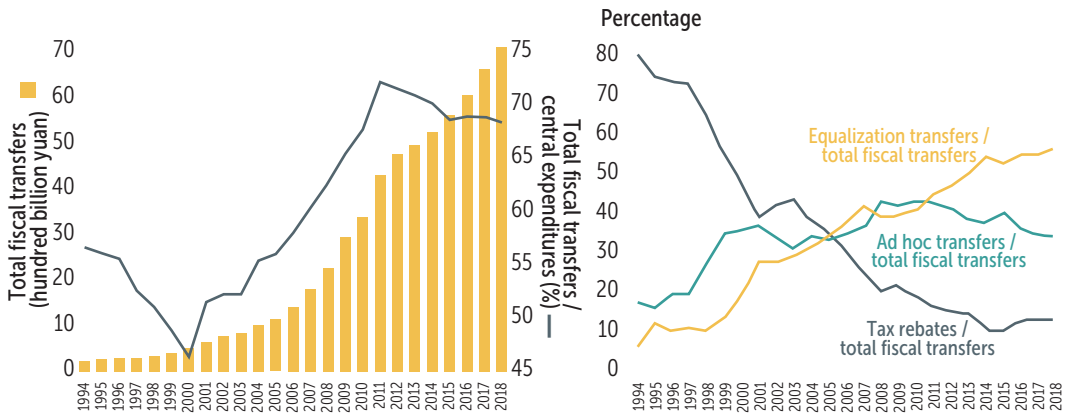
There are numerous country examples and global initiatives in the area of IGFTS from which lessons and proactive tools can be extracted to promote local, regional and global growth and development. Snapshots of a few of these follow.

Country examples of strategic use of intergovernmental fiscal transfer systems

China: decentralization to promote economic growth and ongoing reforms⁸

China is the world’s most decentralized country as measured by share of sub-national spending, which exceeds 85 per cent. Its system is highly reliant on revenue sharing, however, where the central government sets the bases, rates, and controls and transfers across the five tiers of government.

The main system, introduced in 1994, increased transfers significantly and intensified the focus on equalization grants to weaker SNGs (see figure 3.4).

Figure 3.4 Fiscal transfers and equalization transfers in China, 1994–2018

Source: Liu (2019).

The system encompasses three types of transfers: (i) general-purpose transfers, including a tax rebate, which was designed to compensate local governments for lost revenues after the 1994 and 2001 tax reforms; (ii) an equalization transfer, which was established in 1995 to reduce fiscal disparities across provinces; and (iii) other general transfers, which are mainly used to finance pension and social security obligations, government wages, public education and ad hoc allocations with less transparency.

There has been a gradual move towards defined allocation formulas. The relatively large centralization of revenues at the beginning of the reform meant that resources could be transferred from richer provinces to poorer ones in the central and western regions to support their socioeconomic development, increase their fiscal resources, and promote equity in the provision of basic public services. Use of the general transfer component has been increasing over time and now accounts for about 60 per cent of total transfers. General transfers have also become more redistributive over time. The correlation between transfers per capita and GDP per capita to ensure more equitable access to public service delivery is improving, and more people are covered by the social safety net, especially pensions and health insurance (IMF, 2018). Ongoing reforms are aimed at improving equalization (reducing disparities), consolidating multiple grants and enhancing accountability.

Lessons and progress include the following:

- The introduction of formula-based allocations rather than negotiated grants, combined with a strong element of equalization in grant allocations, ensures reduced disparities across territories.

- Using a combination of general and specific grants ensures both some local-level discretion and the pursuit of national targets.
- Gradual rules-based transfers and increased predictability of the funding system may be feasible.

Challenges and ongoing initiatives include the following:

- Despite the large share of transfers granted, unfunded mandates lead SNGs to borrow in areas where it may not always be effective⁹. The size of the funding pool for equalization grants should be increased, as these currently account for less than half of total transfers (IMF, 2018).
- There is a need to further reduce disparities in public service delivery and access, as richer counties are seeing the fastest increases in transfers (IMF, 2018).
- The system of revenue sharing (e.g. of value added tax, corporate tax, income tax) limits local governments' ability to set tax policy in accordance with local structural and cyclical priorities. The heavy reliance on revenue sharing exposes local governments to higher levels of uncertainty and periodicity in their revenue compared to rules-based transfers.
- The number of grants needs to be reduced and streamlined. Before 2017, there were over 200 conditional grant programmes accounting for around 20 per cent of local government revenues (World Bank and DRC, 2014). The number of programmes was reduced to 76 in 2017 (Liu, 2019). Even so, the system is perceived as overly complex, with high administrative costs at both the central and local levels. Several targeted transfers – accounting for around 40 per cent of total transfers in 2015 – were to be rationalized and consolidated into general transfer payments and more reliance accorded to equalization transfers (IMF, 2018).
- Ongoing work is addressing (i) clarification of expenditure responsibilities to minimize overlapping mandates, improve service delivery and increase accountability; (ii) recentralization of key functions that are currently under local government control; and (iii) consolidation and improvement of the transfer system, notably by increasing the fiscal resources of less-developed regions.
- A rules-based general transfer could eventually replace both the revenue-sharing and tax rebate transfer programmes. Fiscal disparities across areas could be reduced further by increasing the size of the equalization grants through more reliance on equalization transfers (IMF, 2018).

Indonesia: high level of decentralization to promote national unity¹⁰

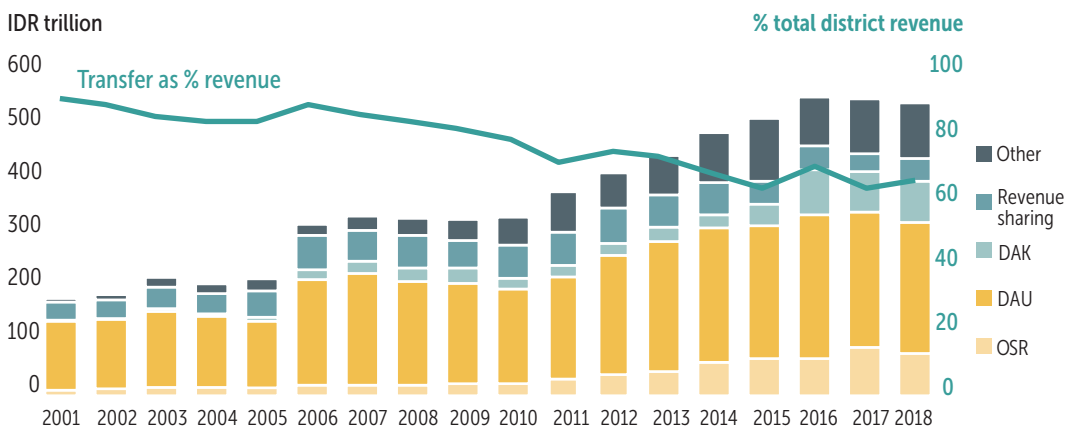
Indonesia's extensive and rapid decentralization reform process, which began in 2002, has generally been evaluated as positive and has contributed to increased stability, poverty reduction, economic growth (an average of 5.3 per cent per year), improved services and reduced inequality. Today, SNG expenditures account for about 38 per cent of general government spending.

Access to basic services has improved under decentralization: between 2000 and 2016, the country's electrification rate increased from 86.3 to 97.6 per cent. Household access to improved drinking water and improved sanitation services increased from 49 and 34 per cent, respectively, in 2001 to 73 and 69 per cent in 2018. Human development outcomes have also improved. Between 2000 and 2017, life expectancy increased from 66 to 69 years, and under-5 mortality declined from 52 to 25 per 1,000 live births. The central government has ramped up access to education, increasing net enrolment rates at the primary and secondary levels.

The SNG system is based on a strong focus on intergovernmental fiscal transfers as the major SNG revenue source. As of 2018, districts depended on transfers for an average of 78 per cent of their revenues; villages depended on these for 94 per cent of their revenues, as shown in figure 3.5. SNG own revenue mobilization is low, accounting for only 5 per cent of total public revenues.

There is a generally high level of SNG discretion regarding the transfers, as most of these are multisectoral (General Allocation Fund) and have a transparent

Figure 3.5 Composition of district government revenue (real terms), 2001–2018



Source: World Bank (2020).

Note: Other revenues include grants, emergency funds, revenue sharing from province/other districts, adjustment and special autonomy funds, and financial assistance from other provinces and districts. 2018 is budgeted data. DAK = Special Allocation grant; DAU = General Allocation grant; OSR = own source revenues.

allocation formula, as described below; they are backed up by sectoral grants for national priorities (Special Allocation Fund), which have tended to increase.

The General Allocation Fund formula measures districts' fiscal needs based on a transparent formula that accounts for major cost drivers, including population, the surface area of the district (to account for dis-economies of scale), a human development index and a cost adjustment factor. It seeks to finance the gap between districts' fiscal needs and their fiscal capacity.

Lessons and progress include the following:

- The allocation of SNG funding has significantly increased in line with the expanding SNG tasks and responsibilities.
- Different grants serve their specific objectives and priority areas.
- There are clear allocation criteria for the majority of grants.

Challenges and ongoing initiatives include the following:

- Over time, fragmentation has become apparent as the number of Special Allocation grants has increased. In 2003, these grants covered only 5 sectors; by 2014, they covered 19 sectors. As of 2018, they accounted for 26 per cent of all grants and 15 per cent of district revenues.
- Horizontal allocation formulas need to be improved. As suggested by the World Bank (2020) in its public expenditure review, per client allocations could be adjusted to account for regional differences in unit costs, driven inter alia by dis-economies of scale, and there is significant inequality in resource allocations across SNGs. Despite incremental improvements, fiscal transfers are still not allocated in a manner that reduces inequality between provinces and districts, or drives improvements in service delivery.
- The proposal-based allocation mechanism for Special Allocation grants could be improved by making allocations more predictable and better targeting districts with the greatest needs and higher focus on equity. Predictability could be enhanced by introducing indicative (per district and per sector) multi-year funding ceilings. Such ceilings would also help prevent districts from spending time on proposals that stand little chance of being funded. The proposal-based approach has also made allocations more volatile, making it difficult for SNGs to plan multi-year investments and thereby undermining effective targeting based on needs. To address this, the Ministry of Finance has tried to give districts greater budget certainty by providing early notification of which projects will be funded.

- The World Bank public expenditure review (2020) found the incentive components of grant allocations to be low, especially in terms of accountability and own source revenue mobilization.

Viet Nam: decentralization, high growth and reform¹¹

Viet Nam is an example of a high level of decentralized expenditure mandates combined with high growth and reform of the entire economy. Viet Nam's reforms (Doi Moi) initiated in 1986 have successfully transformed the country from one of the poorest in the world to lower-middle-income status. Since 1986, Viet Nam's GDP has expanded more than fivefold, per capita income has quadrupled and the poverty rate has declined markedly (from 49 per cent in 1993 to just 2.9 per cent in 2014). And there has been a significant shift of functional responsibilities for financing and human resources from the central government to SNGs (World Bank and Government of Vietnam, 2017).

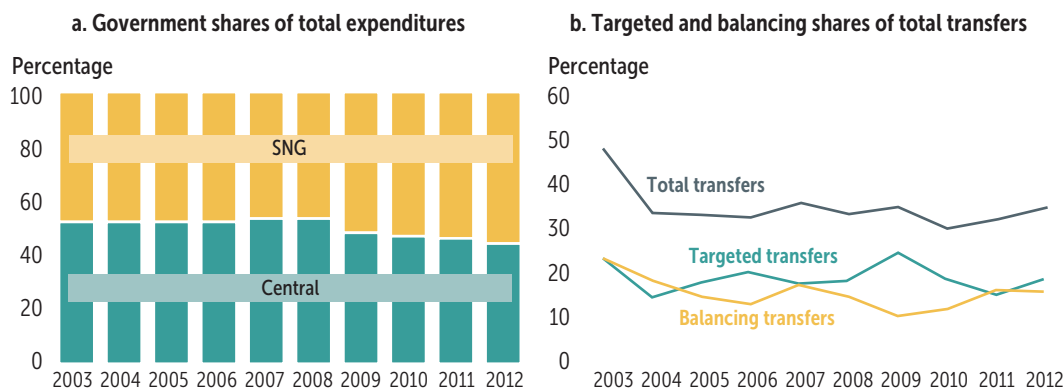
Local authorities in Viet Nam represent a large share of the local economy, particularly in poorer provinces. The latter have also seen higher levels of per capita spending compared to richer provinces, thanks to the redistributive nature of fiscal transfers in the country. Figure 3.6a shows that local authorities in Viet Nam are responsible for about 55 per cent of general government spending. They account for over 75 per cent of total capital spending in key social services. Local government spending has played an important role in delivering services to the poorest parts of the country, and local governments are in charge of core local functions such as education. SNGs account for nearly 70 per cent of total public investment, 85 per cent of education expenditures and nearly 80 per cent of health expenditures. However, fiscal transparency and accountability have not kept pace with this high level of fiscal decentralization. As noted in a recent national public expenditure review, over the longer term it will be important to define an optimal level of decentralization to avoid fragmentation of resources in pursuing the country's higher-level development objectives (World Bank and Government of Vietnam, 2017).

The Viet Nam IGFTS comprises (i) revenues shared 100 per cent with SNGs; (ii) revenue sharing of less than 100 per cent; and (iii) grants, especially with the objective of equalization (see figure 3.6b). Since the beginning of the reform effort, there has been a significant increase in the level of decentralization of expenditure assignments.

Lessons and progress include the following:

- Stable revenue shares were maintained for a fixed time period (five years).
- Significant equalization system is in place to support poorer SNGs.

Figure 3.6 Viet Nam: SNG share of total expenditures and share of balancing (equalization) transfers, 2003–2012



Source: Tuan (2014).

- Significant expenditure autonomy is combined with some targeting of funds towards priority expenditure areas.
- Core local functions have been decentralized.
- An integrated public financial management system is in place, and SNGs have been included in the reforms.

Challenges and ongoing initiatives include the following:

- SNGs are burdened with unfunded mandates (Tuan, 2014).
- Despite five years of stability, revenue sharing still lacks predictability (Tuan, 2014).
- Issues exist regarding monitoring and evaluation and accountability (Tuan, 2014).
- Managing multitier, highly decentralized local governments is complex. Viet Nam's rapid pace of expansion and decentralization has made the economy more complex to manage. Macro-fiscal and public financial and information management systems – as well as coordination between relevant parties – need to be further strengthened if these are to keep pace with the demands generated by ongoing transformation as well as new types of challenges (World Bank and Government of Vietnam, 2017).

Bhutan: development grants and climate change funding¹²

Bhutan has increased the importance of its SNGs (*dzongkhags* and *gewogs*) in its past three five-year plans. Thus, in the current 12th Five-Year Plan, SNGs

account for about 40 per cent of the total resource allocation, an increase from 20 per cent in the 10th Five-Year Plan. Clear criteria are delineated in the plan as to the allocation of capital as well as recurrent funding (GNHC, 2019).

Lessons and progress include the following:

- Grants and staffing levels have increased over the past 10–15 years. The SNGs have greatly benefited from this, and from their subsequent ability to make longer-term plans based on predictable and larger grants.
- Clear needs-based criteria for allocation are needed, with resources allocated between tiers of government based on transparent formulas.
- Resource allocation has been strongly focused on development.
- The SNGs can draw funds from the Treasury as and when needed throughout the fiscal year within their respective grant ceilings.
- Bhutan became the first Local Climate Adaptive Living Facility (LoCAL) pilot in 2011 (see [p. 112](#)), making it the first country to dispense climate resilience grants whose award is based on SNGs' meeting minimum conditions and performance measures; these grants have been gradually rolled out across the country to more SNGs.
- Holistic local government reform programmes addressing multiple elements (e.g. capacity building, IGFTS, guidelines) have been more successful than small, more narrowly focused projects.

Challenges and ongoing initiatives include the following:

- The IGFTS for urban SNGs has not yet been fully developed.
- The five-year plan period does not allow sufficient flexibility for the inclusion of new priorities.
- Historical adjustments of grants have been made during the fiscal year that are not in accordance with the prescribed formula.

Uganda: reforms to promote incentives, accountability and enhanced equity¹³

The Ugandan transfer system is complex and encompasses many of the aspects, objectives and types of grants listed in tables 3.1 and 3.3. It has evolved through a series of reforms since the start of decentralization in the country in 1993. A new round of reforms was launched in 2015, covering (i) consolidation of conditional transfers from 56 to 13 grant schemes; (ii) revision of allocation formulas and budget requirements, and consolidation of discretionary development transfers; (iii) reform of frameworks for accountability and strengthening of incentives for

performance; and (iv) a new fiscal decentralization architecture and improvements in the local government share of transfers (improving on the pool of resources to be allocated). Beginning in 2017, a second phase of the programme was launched with three objectives: (i) restore adequate financing for service delivery; (ii) ensure equity in allocation of funds to local governments for service delivery; and (iii) improve the efficiency of local governments in service delivery, especially through performance-based allocations (MoFPED, 2020).

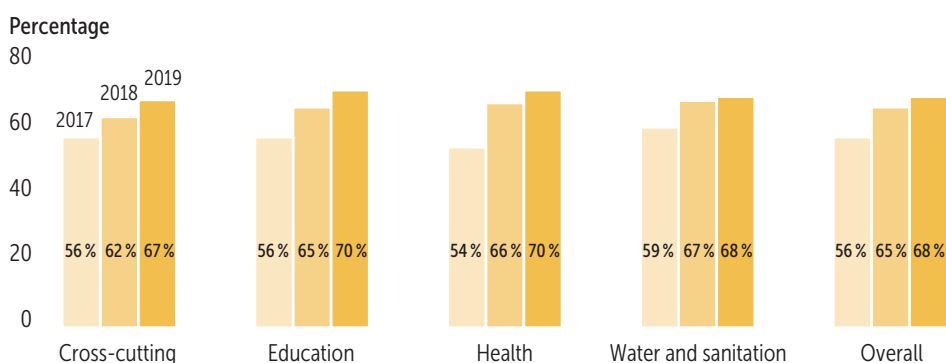
Transfers have improved in real terms since the reform, although not yet significantly as a share of total public expenditures and not sufficiently to restore the recommended historical balance¹⁴. The reform has also had a positive impact on the overall performance of local governments as well as on accountability for use of funds – and, to some extent, on equity and transparency in allocations.

A new performance assessment system linked to grant allocations has been instrumental in improving the performance of local governments in core areas of management and operations, as shown in figure 3.7.

Lessons and progress include the following:

- Current reforms of the IGFTS aim to address challenges holistically.
- Funds have been mobilized to address fiscal gaps. Specifically, there has been an increase in education and health non-wage recurrent and development grants resulting from implementation of the Intergovernmental Fiscal Transfer Programme for Results that began in fiscal year 2018/19.
- Use of performance incentives in grant allocations has affected SNG performance; these incentives have been gradually refined based on lessons learned.

Figure 3.7 Trends in Uganda local government performance on core procedure performance measures



Source: Republic of Uganda (2020).

- There has been a gradual move towards formula-based, transparent allocations for larger shares of the grants.
- Grant guidelines exist for every transfer, and these are updated annually.
- Transparency in grant allocation is ensured through Uganda's online management system (OTIMS/OPAMs), and public access to local government financial information.
- Consolidated support and coordinated technical assistance have been provided to all core agencies involved by ODI, with support from the UK Department for International Development (now the Foreign, Commonwealth and Development Office) and, subsequently, the World Bank and the European Union.

Challenges and ongoing initiatives include the following:

- Securing agreement on allocation formulas that address equity, and shifting from criteria based on existing structures to needs-based, people-centric criteria, remains a challenge.
- Fiscal gaps and vertical imbalances¹⁵ persist alongside resource constraints and multiple national priorities. The SNG share of total public expenditure is only about 15 per cent, yet SNGs are responsible for most service delivery in the core areas of health, education, water, sanitation, agriculture etc. Despite the growth of transfers in absolute per capita terms as noted above, allocations to local governments decreased as a proportion of total public spending.
- Central government and line ministries bypass local governments and handle local service provision directly, leading to a lack of transparency and equity.

In 2020, a new programme was initiated in Uganda, with support from the World Bank, aimed at further improvement of the IGFTS. It focuses on improving adequacy and equity and expanding the use of performance-based allocations to service delivery units as well as lower levels of local governments, and to improve the performance of core central government agencies.

Denmark: the IGFTS as a strategic tool to promote equity in development and economic stability¹⁶

Denmark is one of the world's most decentralized countries, with SNGs responsible for more than 60 per cent of expenditures and about 25 per cent of total public revenues. The SNGs operate with a relatively high level of own source revenues; nonetheless, intergovernmental fiscal transfers are a significant resource and

instrumental in closing the fiscal gap and in creating equality and stability in service delivery – especially in rural and relatively less-well-off areas. The grants are predictable, based on clear criteria for allocation (fiscal needs and revenue capacity). They consist of block grants as well as targeted earmarked grants in areas of national priorities/spillover. The grants are also used to stabilize the overall economy and tend to be increased during times of low economic activity; for example, they were used during the COVID-19 pandemic to boost investments and service delivery levels. Specifically, the 2021 Agreement on Municipal Economy (Ministry of Finance, 2020) between the central and local governments allocates about \$400 million to compensate local governments for extra health costs, prevention equipment and operating costs incurred in 2020 because of the pandemic; other initiatives were taken to improve the SNG economic and investment levels.

Lessons and progress include the following:

- There are clear and transparent criteria for allocation of equalization grants to provide stability and a certain level of services to all.
- Transfers are disbursed in a timely manner.
- A system is in place to enable annual agreement between the central government and the SNG level on overall funding and grant size and conditions.
- A system is in place to ensure compensation for all new functional assignments.
- A system is in place to adjust grants vis-à-vis the economic activity level in the country.

Challenges and ongoing initiatives include the following:

- Dialogue is ongoing to determine the most suitable criteria for expenditure needs and horizontal allocations, as well as the level of SNG autonomy on the revenue mobilization side. SNGs are under increased pressure as the number of elderly rises along with health expenditures.
- Multiple funding schemes make for a high level of complexity.

Solomon Islands: capacity building and incentives for provincial government to boost infrastructure and service delivery¹⁷

Since 2008, Solomon Islands has worked to reform its IGFTS towards a higher level of performance, shifting away from random, negotiated transfers to formula- and performance-based transfers. The system consists of two main grants, a recurrent grant and a capital grant. Annual capital transfers have increased from around SI\$ 15 million (approximately \$2 million) in 2013 to around SI\$ 35–50 million in 2020 (approximately \$4–\$6 million)¹⁸.

Lessons and progress include the following:

- There is an institutional framework for discussions and intergovernmental agreement on formulas for grant allocation and procedures.
- The system of recurrent and capital grants (multisectoral) is simple and streamlined.
- Resources have increased over time owing to increased trust in provincial governments.
- There is a clear and transparent horizontal allocation formula in place for resource transfers, based upon agreements with the SNGs at the inter-ministerial committee level.
- Credible and neutral annual performance assessment has had a significant impact on the allocation of funds and on provincial government accountability.
- There has been a strong focus on capacity building in all aspects of grant management and operations; and significant improvement in provincial government performance in critical areas of public financial management, governance and transparency.
- Strong coordination of transfers is maintained through intergovernmental committees and a joint oversight committee.
- There has been growing buy-in from development partners to use the IGFTS and performance-based grant scheme.

Challenges and ongoing initiatives include the following:

- A legal framework is needed to institutionalize reform of the transfer system.
- Work is ongoing on a revenue-sharing model.
- Expenditure assignments overlap across tiers of government.

Regional and global initiatives to use intergovernmental fiscal transfers more strategically

Several regional and/or global initiatives have been launched to address challenges facing local government finance and IGFTSs. Three examples of these are summarized below, two of which are detailed in later chapters of this book.

Lessons from local development funds supported by UNCDF

UNCDF began supporting the piloting of local development funds about 25 years ago¹⁹. Since the mid-1990s, UNCDF has supported SNGs in establishing

multisectoral grant systems characterized by transparent, objective allocation formulas; focused on local development; and linked with strengthening SNG capacity. With its first pilot in 1997 in Uganda, UNCDF explicitly linked grant allocation to SNG performance²⁰. The key innovation of these **performance-based grants** lay in their combination of three mutually supportive elements: (i) local development grants; (ii) incentives through performance assessments; and (iii) technical assistance and capacity-building support coupled, in some places, with support of policy reforms.

During the subsequent decades, UNCDF's promotion of local planning, local development and the establishment of initial grants to SNGs in multiple countries were scaled up from minor pilots to larger development grant systems with clear formulas for allocation, increased transparency and direct (and often performance-based) fund allocations. A recent study (UNCDF, 2021) found that the smaller pilots grew tremendously both in quantitative terms as countries quickly adapted and rolled out the new approaches, as well as qualitatively, as the country approaches were adapted and continuously strengthened²¹.

In recent years, intergovernmental fiscal transfers and performance-based funding have been used strategically to address new global concerns and challenges, especially with regard to climate change and health (i.e. COVID-19). Inspired by the initial pilots, performance-based grants are now used in more than 20 countries around the world, providing results-based funding for a range of sectors, including health and education etc.²² Since 2010, these grants have been increasingly applied towards sustainability efforts targeting challenges from climate change to strengthen SNGs' resilience and leveraged to mobilize other funding sources; this is described further in the next subsection.

The Local Climate Adaptive Living Facility²³

LoCAL was designed in 2010²⁴ and launched in Bhutan in 2011 by UNCDF with the aim of promoting climate change–resilient communities and local economies. LoCAL serves as a standard and internationally recognized country-based mechanism to channel climate finance to local government authorities in least developed countries and increase local resilience – thereby contributing to achievement of the Paris Agreement and the SDGs, particularly the goals of poverty eradication (SDG 1), sustainable cities and communities (SDG 11) and climate action (SDG 13). LoCAL increases awareness and capacities to respond to climate change at the local level, integrates climate change adaptation into SNG planning and budgeting systems in a participatory and gender-sensitive manner, and increases the amount of finance available to SNGs for climate change adaptation.

LoCAL combines performance-based climate resilience grants (PBCRGs) with technical and capacity-building support. The PBCRG can be seen as a targeted cross-sectoral grant with conditions attached to the use of its funding for climate change adaptation beyond business as usual. Combined with regular grant allocations, PBCRGs enable investments in climate-sensitive sectors to become climate resilient over time. They include a set of minimum conditions for access; performance measures, which determine access to and size of grants; and a defined menu of eligible investments. The system has the advantages of providing incentives for SNGs to strengthen attention on future climate change challenges, attracting funding from external sources for accountable application for climate change adaptation, and ensuring a sustainable and well-integrated system of funding that uses and augments existing government procedures in each LoCAL country. Chapter 11, beginning on [p. 287](#), details LoCAL experiences, successes and challenges.

Using the grant system to respond to COVID-19 challenges

Evidence shows that where SNGs are actively involved and strongly supported by central government through the IGFTS to respond to the challenges and costs of COVID-19, there is faster containment, health recovery, better service delivery and economic initiatives, with quick, targeted and relevant response (Pozhidaev, 2020; UNCDF, 2020).

However, SNGs are facing mounting financial challenges alongside the health challenges, and there is strong evidence that SNG tax revenues are declining in many places during the pandemic. For example, in Ghana's Kumasi Municipality, the budget declined 30 per cent – reduced by \$2 million – since COVID-19, and this has affected all projects (Antwi, 2020). More than 15 per cent of the expenditures are spent on issues related to COVID-19, while the central government is constrained and cannot provide much-needed support, with most of its funding now dedicated to health issues. Municipal funding is critical, and the city is pursuing other means such as borrowing as a future way to recover.

Similar evidence is available from a number of other cities, including Freetown, Sierra Leone, where the two main SNG revenue sources – fiscal transfers from the central government and own source revenues – have experienced a significant downturn (Aki-Sawyerr, 2020). The city had not received any transfers during the pandemic; its own source revenues derive mainly from property rates. Freetown is digitalizing its property rate system, geo-mapping the entire city and building an automated point-based system linked to the banking system. The digital system will improve transparency and accountability by allowing for the identification of payments made by wards and enabling residents to participate

in determining how the 20 per cent of revenue raised in the wards will be used. These efforts have been constrained by COVID-19, as Freetown has struggled to issue property rate demand notices during the pandemic. The mayor has stressed the importance of support from the national political leadership. Cities need both flexibility and the assurance that when they make commitments to deliver services, they will also have access to finance.

SNGs will need additional fiscal space to strengthen and reorganize services in health and related areas, including for equipment, mobility, information technology and communication, investments in infrastructure and new facilities, coordination, and water and sanitation. The COVID-19 pandemic calls for a sector-wide approach, which implies reallocation of funding between various sectors and increased non-capital and flexible expenditures for community awareness and mobilization, enforcement of public order and restructuring of public service delivery to ensure continuity. The IGFTS can be an effective vehicle for governments to implement their COVID-19 response strategies, and countries have used a variety of grant modalities – sectoral as well as multisector. For more on COVID-19 and intergovernmental transfers in response and recovery, see chapter 9, beginning on [p. 247](#).

Conclusions

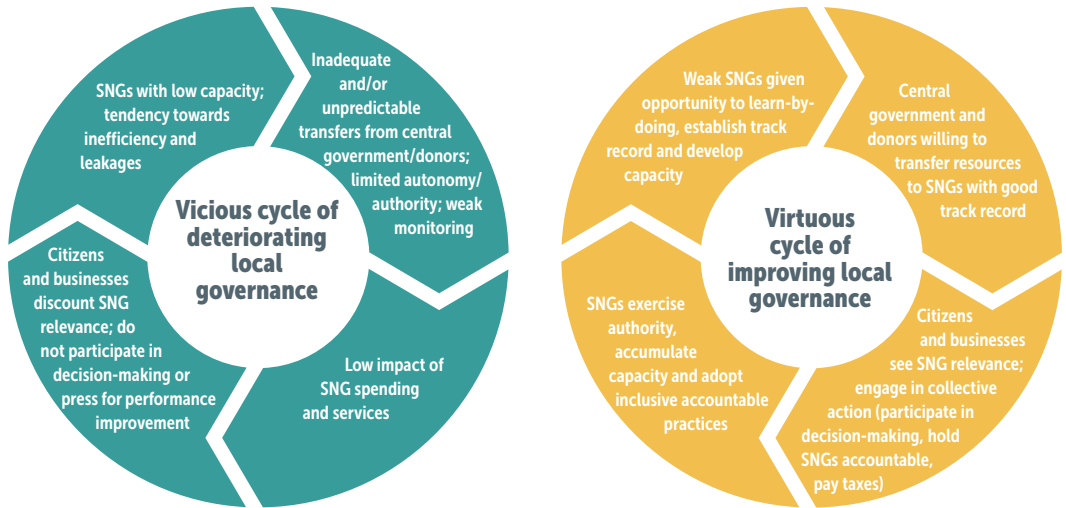
The IGFTS is a critical cornerstone of all fiscal systems and one of the most important sources of funding for nearly all SNGs around the world, urban as well as rural. Effective design as well as execution of IGFTS

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reforms – covering size, allocation criteria, flow of funds, targeting of funds, utilization including level of autonomy, monitoring and accountability etc. – are critical for efficiency of service delivery and targeting of core emerging challenges such as climate change and COVID-19, as well as for the general development of countries and achievement of the SDGs. Well-designed systems can help build trust in SNGs, and shift from vicious cycles of deteriorating local governance to virtuous ones of performance improvement (see figure 3.8).

Central governments have some inherent advantages in generating revenues, and SNGs have inherent advantages in providing certain key services. However, IGFTS objectives vary across countries, and the design of an effective IGFTS has to be carefully based on the objectives of the transfer. Further, the system should be managed efficiently in terms of the predictability, timeliness, and

Figure 3.8 Drivers of change and the role of the intergovernmental fiscal transfer system in local governance



Source: Adapted from ideas from Yongmei Zhou.

transparency of funds allocation; and be well-coordinated across government agencies and enable the strong involvement of the SNGs.

The investment needs at the SNG level are enormous. A recent World Bank estimate shows that, in order to maximize finance at the local level, the global investment needed for urban infrastructure alone is about \$4.5–\$5.4 trillion per year, including a 9–27 per cent premium to make this infrastructure low emission and climate resilient (Venice City Solutions 2030, 2018). These needs will increase with the impacts of COVID-19 and climate change.

There are numerous examples of failed IGFTSs and reforms, but promising initiatives have been launched in a range of countries as well as regionally and globally, from which lessons can be learned and innovative ideas generated. Most of these reforms began at a small scale and have been rolled out to new SNGs and countries and customized to their needs. Examples include LoCAL and initiatives to address the COVID-19 pandemic supported by UNCDF and conducted in collaboration with multiple partners.

IGFTS reforms need to take into account risks and bottlenecks, as well as opportunities, entailed in improving the fiscal space for SNGs. Attention should be paid to the predictability and timeliness of funding, targeting, equity of allocation, as well as improved performance, efficiency and accountability. Table 3.5 summarizes main principles for tackling current challenges in the design and execution of IGFTSs.

Table 3.5 Overall design and management principles for IGFTSs

Design principles: do's
<ul style="list-style-type: none"> ■ Keep the objectives clear and transparent. Keep the number of objectives to the bare minimum. Use the IGFTS to support innovative initiatives such as combating impact from climate change and COVID-19. ■ Contribute adequately to funding the vertical fiscal imbalance between assigned tasks and own revenue sources, and ensure clear principles for calculating the size of transfers based on SNG functional assignments. ■ Factor in differences in fiscal capacity and expenditure needs of local governments and equity concerns. ■ Preserve budget autonomy at the local level within the constraints provided by national priorities. ■ Support, rather than undermine, decentralization and local revenue-raising efforts. ■ Ensure a reasonable (low) number of different systems of transfers and transfer modalities. ■ Ensure transparent formula and needs-based allocation across SNGs to enhance horizontal equity (pro-poor). ■ Enable SNG flexibility balanced within national policy and to address emerging challenges (e.g. COVID-19, climate change). ■ Involve and strengthen the SNG structure and consider various types of units (one size does not fit all). ■ Ensure upward, downward and horizontal accountability, including simple, targeted, consolidated reporting systems. ■ Achieve public participation and transparency in all systems and procedures. ■ Base the system on availability of data and keep it as simple as possible. ■ Ensure proper incentives to improve administrative performance and service provision, e.g. through rewarding proper initiatives and addressing inefficiency. ■ Link transfer reforms to other local government reforms and initiatives, especially the local government finance system (taxes, user charges) and capacity-building activities, and new innovative finance. ■ Adjust the system to new SNG structures, tasks and responsibilities and ensure proper transition schemes. ■ Keep the overall system and allocation criteria as simple as possible to ensure understanding, support and feasibility.
Design principles: don'ts
<ul style="list-style-type: none"> ■ Base size of the transfers on existing infrastructure and services (service outlets), as gap-filling grants provide disincentives to improve and should not be designed to bail out mismanagement. ■ Bring about sudden and large changes (the system should consider whether SNGs should be held harmless during the transition). ■ Be subject to political interference in funds allocation during the fiscal year. ■ Cover deficit and financial malpractices, as this will create disincentives to improve financial management. ■ Base the system solely on an equal share approach (same amount for each SNG) as this does not take into account the different needs of different SNGs such as variations in population size. ■ Base the system on criteria that can be influenced and manipulated by the SNGs. ■ Establish multiple conditional grants, which undermine local autonomy and flexibility. ■ Be part of a strategy to move the fiscal deficit from the central to the SNG level(s).
Management principles
<ul style="list-style-type: none"> ■ Ensure medium-term stability in the size of transfers. ■ Ensure predictability; as part of this, announce grants in sufficient time to fit the SNG budget cycle. ■ Ensure timeliness in the transfers. ■ Ensure annual adjustment against transfers of new functions across tiers. ■ Keep track of actual system implementation, i.e. transfer flow. ■ Provide clear and simple grant management guidelines for SNGs. ■ Ensure strong monitoring and evaluation (M&E) of the flows and use of funds. ■ Ensure strong institutional coordination between central government agencies and between the central government and SNGs on future funding (commissions, committees etc.). ■ Introduce reforms in a sequenced, well-organized and customized manner (one system does not fit all). ■ Improve data collection and M&E systems to ensure an improved transfer system and strong reporting and accountability. ■ Continue to reform and refine based on lessons learned.

Source: Adapted from Steffensen (2010).

Strengthening the IGFTS is critical to improvement of SNG finance and for addressing emerging external factors. Stable, predictable and significant grants may also open doors for other types of finance, such as borrowing and blended finance. However, IGFTS reforms cannot stand alone. They need to be backed by other pillars in any SNG reform process – especially own source revenues and new, innovative methods of funds mobilization – along with initiatives and incentives to promote SNG openness and accountability, provide links with citizens and municipal budgetary processes, and transparent and prudent financial management.

Notes

1. As used here, intergovernmental fiscal transfers cover a wide range of financing instruments from grants and subsidies/subventions to revenue sharing, including tax sharing (note, however, that if local governments influence the tax base and/or tax rates, tax-sharing arrangements are considered part of own source revenues).
2. Subnational government is here used both broadly to refer to all tiers below the central level and to a specific tier of local government.
3. Efforts to make these overall calculations of the expenditure needs of various local government functions have been undertaken in, notably, Indonesia and Uganda, as well as in Estonia, Latvia and the Philippines. Although it is hard to define detailed needs, these surveys have provided some indication of outcomes of existing revenue-sharing arrangements and future directions in allocations.
4. Zambia's 2019 Local Government Act does not include a specific percentage, as was the case in previous acts.
5. E.g. Zimbabwe, where the constitutional rules have not been fully implemented yet, but are under elaboration.
6. This is an important distinction in many countries, including Cambodia, Ghana, Tanzania, Uganda and Yemen.
7. See Shah (1994), for a review of the importance of local government equalization systems, especially in developing countries. Such systems equalize net fiscal benefits across local government (promote equity) and discourage fiscally induced migration, reduce barriers to factor in mobility and thereby, if properly designed, facilitate economic efficiency.
8. This case study is based on Wingender (2018).
9. See Shotton and Gankhuyag (2019) for a review of issues associated with unfunded mandates.
10. This case study is based on World Bank (2020).
11. This case study is based on World Bank (2015).
12. Part of this case study is based on GNHC (2019).
13. This case study is based on MoFPED (2020).
14. See Tidemand and others (2017).
15. See Yilmaz and Zahir (2020) for a more detailed overview.
16. This case study is based on OECD and UCLG (2019a).
17. This case study is based on Ministry of Provincial Government and Institutional Strengthening (2020).

18. Based on, respectively, 1 June 2013 exchange rate of 1 Solomon Islands dollar = \$0.13850 and 30 June 2020 rate of SI\$ 1 = \$0.12250.
19. See Shotton and Winter (2006) for concepts and lessons learned in the early years of this enterprise.
20. See UNCDF (2010) for a detailed overview of the concept.
21. The review, prepared by Dege Consult ApS, covers and synthesizes the local development finance experiences of 10 UNCDF pilot countries. See the [Dege website](#) for related studies, and UNCDF (2010).
22. See Shotton and Gankhuyag (2019) and Mahy and Vixathep (2019).
23. See the [UNCDF LoCAL home page](#) and UNCDF (2010).
24. The design was launched and developed in pilot missions to Bhutan in July and December 2010.

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4

Linking City Financing Needs with Domestic Capital

RAJIVAN KRISHNASWAMY

Investing in city infrastructure is integral to most development strategies, and it is well recognized that such investments contribute to economic growth and human well-being. For example, improved roads and transport allow for greater mobility of people, goods and services; cleaner water and sanitation lower morbidity; and green spaces improve sustainability. There is also ample evidence that the huge infrastructure gaps in cities in developing countries lead to missed opportunities to reduce poverty and inequality (Fay and others, 2019).

Particularly since the 1990s, many countries have placed an increased emphasis on local empowerment in their national policies and legislation. Decentralization laws typically embody the principle that local public goods are best produced and financed locally, based on demand-driven needs articulated through community processes. This trend towards decentralization appears to be near-universal across countries of varying levels of economic development. It requires city governments to have the authority to plan, design, finance and pay for the public goods they produce¹.

Implementation of this decentralization agenda has been unbalanced in many countries, with the responsibilities transferred from national to local levels frequently unmatched by a transfer of necessary powers; this often leads to **functional fragmentation**: who does what in the city? There is also the issue of **geographical fragmentation** – governance boundaries are slow to catch up with the urban and often dense settlements outside city jurisdictions (which governance unit is responsible for services?). This situation is obvious in most metro cities (ESCAP, 2017); it often affects infrastructure creation and service delivery

in small and medium cities as well. Governance reform to reduce both types of fragmentation – by introducing the accountability of parastatals to local governments and flexible municipalization criteria to handle the physical expansion – are necessary and are underway in most countries.

Apart from the imbalances in powers and responsibilities, there are unfunded mandates caused by imperfect fiscal transfer rules. There is considerable variation in the share of these assigned revenues across and within countries, as well as in the predictability and timeliness of the transfers. Major differences exist across the shares and types of own source revenues that are allocated to local governments, including assessment and rate-setting powers, collection mechanisms and efficiency rewards. Reforms that improve the rationality of assigned sources and the efficiency and buoyancy of own sources are similarly necessary and underway in many countries.

Reforms to improve both assigned and own sources are important if local governments are to be empowered to take proactive decisions on infrastructure rather than continue as passive responders to scattered grants. Moreover, these reforms are a first step towards

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empowering local governments to blend public sources of finance with private sources, so local public goods can be created on a scale that lifts the city to higher growth trajectories in an equitable and environmentally responsible manner.

Given the gaps between the investments needed and the available public sources of finance, **blended finance** becomes critical to achieve leverage. Without leverage, cities will not achieve scale and will continue on low-level growth trajectories. Consequently, institutionalizing methods of blended finance has received increased policy attention in recent years, as promulgated by the 2015 Addis Ababa Action Agenda (UN, 2015).

Blended finance, and the leverage it provides, is typically achieved on a sustainable basis when there is a borrowing framework in place that enables repeated – as opposed to one-time-only – access to capital for cities of all sizes. For a municipal finance system to achieve leverage, city governments would have to demonstrate clear revenue streams to service debt. This implies national and municipal policies to strengthen the three pillars of municipal finance: own source revenues, intergovernmental fiscal rules and the borrowing framework.

This institutional agenda should provide links between city financing needs and domestic private capital, reduce risks, lower transaction costs and remove contingent liabilities for national governments. These outcomes require

transparent rules covering, for example, access to security mechanisms, such as escrow accounts; asset recognition; taxation; and provisioning norms.

This chapter aims to identify the key design issues, and hence the policy actions, that support blended finance and leverage. It describes the financing options and complements the work presented in other chapters of this book. Its specific purpose is to:

- Assist policymakers involved in development to use blended finance in developing country transformation so the growth process is sustainable
- Assist in identifying national- and city-level actions that enable leverage of public with private sources of finance
- Participate in ongoing international efforts and consensus, such as the Addis Ababa Action Agenda, the Paris Agreement and the 2030 Agenda for Sustainable Development
- Build on the ongoing municipal finance agenda of the Malaga Coalition created by the United Nations Capital Development Fund (UNCDF) and the United Cities and Local Governments (UCLG) for a global financial ecosystem that works for cities and local governments

The next section describes the features of the public goods that need financing at the municipal level, municipal financing instruments, and the types of finance that would be typically be available for local governments to leverage. Following this discussion, the chapter reviews relevant international experience with leverage, both in developed and developing countries, to support appropriate design for countries and cities in the Asia-Pacific region. The chapter concludes with a summary of main findings and potential policy actions.

Key concepts

Urban infrastructure: demand, supply and financing

Cities in developing countries face increasing demand for investments in growth-inducing infrastructure – roads, transport systems etc. – as well as environmental investments such as in water and sanitation. To attract private debt, cities must have the legal authority to borrow, create and pay for the use of the assets over time and be able to demonstrate a clear revenue stream to repay the borrowings for potential lenders to assess. Thus, the effective **demand** for debt financing would depend on the rationality of the intergovernmental fiscal rules and the stability of own source revenues (including powers to levy and raise user charges) – the two factors that principally determine municipal revenue streams.

On the **supply** side, economic growth generates high savings, and a key policy challenge has been to facilitate a mechanism for linking these growing city investment needs with the supply of long-term domestic debt finance (see FMDV, 2015). The sources of long-term domestic debt would essentially be insurance and pension funds, and, in some cases, direct subscription by the affluent in the city. The depth of supply of long-term debt would broadly depend on two sets of factors:

- Macro determinants such as the savings rate, dependency ratios etc.
- Policy variables such as fiscal incentives, which make available the use of these funds for longer-term infrastructure investments rather than public consumption and the fiscal space for local governments

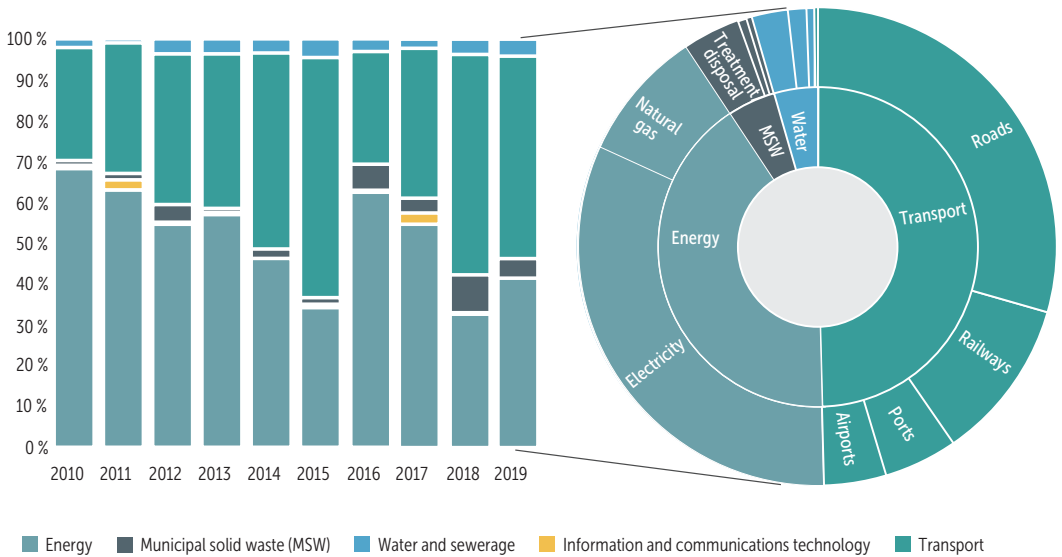
Since the 1990s, it has been accepted that urban infrastructure assets can be financed through private equity, and the equity returns can (through user charges or viability gap funding) reward the risks in these investments. This perception has probably been strengthened by growing disillusionment with public management and growing recognition of the seemingly impossible task of public sector reform. The viability gap financing model allows for grant payments for equity financing as an implicit subsidy for private profits and a presumable reward for this efficiency premium.

**TO ATTRACT PRIVATE
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AND PAY FOR
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CLEAR REVENUE
STREAM TO REPAY
THE BORROWINGS
FOR POTENTIAL
LENDERS TO ASSESS.**

Private equity would prefer to finance projects rather than cities through recourse financing as opposed to entity financing that debt can support through general obligation financing. Further, equity finance would need not only the stable revenue streams that debt financing provides but also project structures that provide a return on equity. But if these projects need long-term debt as well (because of low initial user charges and limited scale), this limits the return on equity (i.e. low tails, as debt period and concession terms are similar). Private equity would need additional legal advantages, as the investments are predicated on multiple cash flows, user charges, taxes etc.

Figure 4.1 shows the share of equity public-private partnerships (PPPs) in different sectors across emerging markets and developing economies; note the high shares for transport and energy and the relatively lower shares for water and sanitation and information and communications technology.

Figure 4.1 Share of sectoral investment commitments in infrastructure projects with private participation in emerging markets and developing economies, 2010–2019



Source: World Bank (2019).

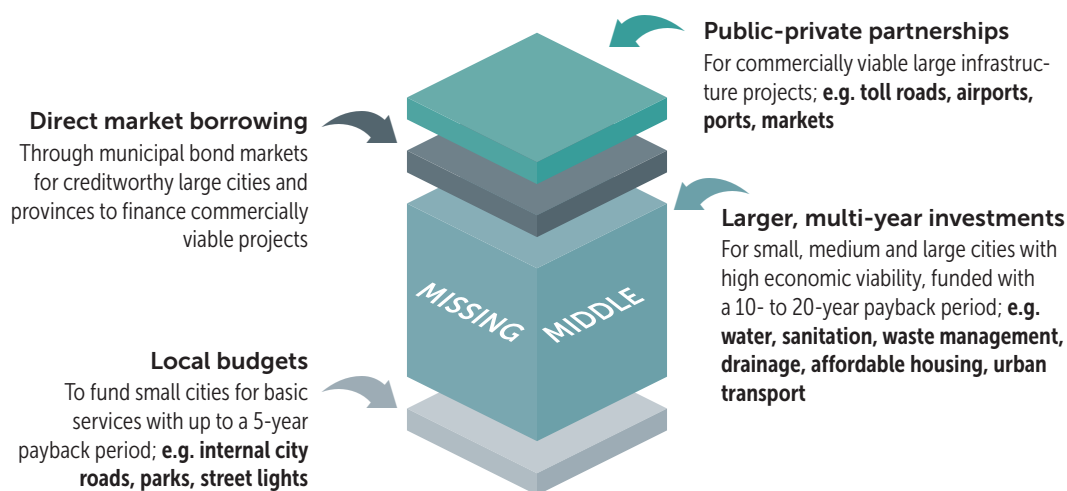
Categories of local public goods

From a financing perspective, urban infrastructure investments can be divided into three categories:

- Investments that are in the nature of public goods – parks, city roads etc. – and thus would require recourse to taxes to service debt
- Investments that are more private in nature but still need capital subsidies – for example, water, waste water, solid waste – where user charges and taxes can be used to service debt
- Pure revenue projects like toll roads where recourse is directly to user charges to service debt and equity

The financing challenge would appear to be greater in the second category, thus comprising a ‘missing middle’ (see figure 4.2) where private capital needs to be blended with public funds.

The above categorization is useful analytically, but from an institutional (and taxpayer) perspective, it is clear that a city’s financial strength should be assessed as an integrated entity. If, for example, some assets such as toll roads can service private equity investments solely by user charges, then the city’s balance sheet is freed up to use its own revenues for projects that do not generate cash flows

Figure 4.2 The missing middle of urban infrastructure finance

Source: AIIB (2017).

such as parks. On the other hand, if the toll road concessions need recourse to municipal own revenues, then the concession limits the potential projects the city can undertake.

This **entity** nature of financing implies choices regarding future revenues for a particular investment path chosen in the present. This concept of binding future generations would seem to require institutional rules for obtaining the consent of the governed. Some countries have such rules in place. In the United States, for example, intended use plans statutorily specify the process for seeking taxpayer approvals. In many developing countries, however, there are very few such institutional requirements, which makes borrowing decisions and PPPs contentious, and subject to frequent and non-transparent renegotiations.

Financing instruments: debt and equity

Most urban infrastructure investments – especially environmental ones – are long term and capital-intensive, and generate externalities across municipal boundaries. Their long life implies that benefits accrue over at least a generation; hence the costs should be similarly multigenerational, spread in the form of long-term debt. For example, water and sewer mains are typically replaced every 30 years. The characteristics of public (non-excludable) goods generally imply that user charges alone can rarely be expected to cover capital costs, maintenance and replacement. Subventions are either needed as grants in the capital financing or subsidized interest rates.

In smaller cities (which limit the economies of scale) and lower-income countries, the potential for full user charges are further constrained. For example, a waste water system can, at best, take three years to build and involves construction and connection risks, with little or no cash flows during this period. This implies the need for initial repayment moratoriums – and also perhaps the need to complement debt with grants, especially if low-income populations constrain the ability to pay. In small towns, the low volume of connections would keep the user charges needed for debt service high.

These facts suggest the appropriateness of long-term debt finance, which allows user charges to grow gradually over time (e.g. as water and waste water connections increase). Debt for municipal infrastructure would need to be denominated in the local currency, since most of these assets do not earn foreign currency revenues, and exchange rate volatility could pose major shocks for financial viability.

**LONG-TERM DEBT
FINANCE ALLOWS
USER CHARGES TO
GROW GRADUALLY
OVER TIME.**

Equity is a preferred instrument if urban infrastructure investments can generate robust third-party sales (as is the case for telecommunications and power) with users paying for products. Equity can also be used in intercity toll roads and commercial investments such as municipal shopping markets. On the other hand, the prospects for mobilizing equity appear limited for the first two categories of investments listed on [p. 125](#) without substantial subsidies.

Institutionally, there would have to be a process in place guiding choice of concessionaire (unsolicited offers versus competitive bidding), rules for handling multiple ownership (a city water concession may depend on adequate flows from a source owned by the state), and security for the lenders (step-in rights etc.).

Leverage: international experience

This section looks at international experience in mobilizing domestic finance for urban infrastructure, with the aim of identifying design features and mechanisms that can inform policy choices.

Types of leverage

Mobilizing private capital for financing city infrastructure needs is usually described as PPPs in policy debates. Analytically, there are various uses of the term, of which the first two below are of particular relevance to our discussion of leverage²:

- Private equity companies setting up project companies (special purpose vehicles) with recourse to project cash flows and other revenue streams (capital grants upfront or taxes to supplement user charges)
- Private debt by public authorities (i.e. cities) to design, finance and create infrastructure and repay debt from project and municipal revenues
- Methods of capturing values that arise through improved infrastructure (this is particularly relevant in transport financing and is more of a cost recovery tool than an upfront method of capital mobilization)
- Partnerships between municipalities and communities in sharing the costs (usually maintenance) of assets (typically sanitation) created in low-income neighbourhoods; although the institutional framework for these partnerships is often unclear, they are important from a poverty perspective and in terms of more inclusive investments in these neighbourhoods)

This chapter's primary focus is on the first two types of PPPs, particularly with regard to mobilization of financing. PPPs – especially equity PPPs – are expected to enhance managerial efficiencies; this aspect, however, is not a specific focus here, as their relative rarity makes rigorous comparison with the operational efficiencies of publicly managed systems difficult.

Leveraging with debt: developed countries

Mobilizing private debt for municipally owned infrastructure can be handled in two basic ways: (i) a capital market approach based on bond banks and state revolving funds (dominant in the United States) or (ii) through commercial banks (used mostly in Europe). Both models link city financing needs with domestic debt through intermediation, usually set up with public ownership. The key difference between the two is that in the commercial bank model, the risks of default fall on the bank. Given these risks, the loans would have to price in (include) dividends based on the risk-reward appetite of the lenders and the credit risks of the borrower. On the other hand, bond banks have low equity, with repayments relying on local governments cash flows and credit enhancements. As a consequence, the need for dividends being a high proportion of loans is limited.

Bond banks were created in the United States for three distinct purposes: (i) to provide access to capital markets for small municipal governments, (ii) to reduce transaction costs through the pooling of projects and (iii) to raise domestic debts at the lowest possible cost to borrowers and hence taxpayers. A private ownership–dividend-paying structure is not part of the model.

Complementing bond banks are state revolving funds specifically designed for water and sanitation investments and mandated in the United States by environmental regulations of the Clean Water Act passed in 1972. State revolving funds assist local governments in financing environmental infrastructure by leveraging state grants with domestic debt (USAID, 2005).

The key feature of this type of financing is the legal structure of the transaction and not the balance sheet of the issuer. In evaluating bond bank financing, investors and rating agencies look to the rights and remedies provided to bondholders in the trust indenture, the credit enhancement facilities, and the structure of the financing rather than a bond bank's balance sheet, which does not constrain the ability to raise debt.

Another essential feature is the involvement of federal or state governments in water and sanitation financing through the state revolving funds. These funds receive seed capital from the national government and are highly effective at leveraging private sector financing for local clean water infrastructure projects. Under this model, state revolving funds place seed capital in reserve accounts designed to enhance credit financing for pooled local projects. As repayments of local loans flow back to investors, the revolving funds are able to redeploy their seed capital to enhance credit for new projects. The advantage of this direct market access through pooling is that the costs of credit are kept to a minimum – especially since the ratepayer is the ultimate beneficiary, as tax funds are used in capitalizing the state revolving funds (USAID, 2005).

State revolving funds enable states to leverage their loan funds in the municipal bond market. As of 2015, around \$2 trillion worth of municipal assets had been financed through the municipal bond market and are expected to be a significant source for future financing (Municipal Bonds for America, n.d.).

The European experience indicates that the major source of debt finance for local governments is specialized institutions, although some local governments have succeeded in raising resources directly from bond issues in the market. However, even in these cases, the issuing local governments are large entities with greater financial powers than average. The data indicate that when direct borrowing by local governments or through specialized institutions are both options, the choice rests on the size of the city and its balance sheet (Andersson, 2014).

The differences between the US and European approaches can be overstated, as many of the specialized European intermediaries – such as the Norwegian Municipal Bank and the recently formed Agence France Locale in France – are predominantly or completely owned by municipalities. The main

**BOTH THE US
AND EUROPEAN
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LEVERAGING
GOVERNMENT
GRANTS WITH
PRIVATE FINANCE.**

conclusion is that both models have been remarkably successful in leveraging government grants with private finance in a manner that is systematic and enables open access for all size classes of cities. The Scandinavian and Dutch funds alone had mobilized up to €125 billion as of 2014; by 2015, the US and European systems had together leveraged \$1 trillion (FMDV, 2015).

Leveraging with debt: developing countries

We now turn to a discussion of developing country experiences with mobilizing debt. Up to the mid-1990s, traditional methods of financing in most countries – especially for small and medium cities – entailed intergovernmental loans and guarantees. Typically, these methods involved financing preselected, rather than demand-driven, projects, contracted out to parastatals. As city governments

**EMERGING
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INVESTED IN
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POOL DEMANDS
AND LOWER RISKS
THROUGH EFFICIENT
INTERMEDIATION.**

were usually not involved in project design or implementation, collecting user charges and repayments was problematic and loans ended up in default in several countries³.

Subsequently, and especially after decentralization, reforms were launched in most countries. City governments have been encouraged to plan, design, raise finances and pay for infrastructure on the basis of local priorities. Such reforms have been underway across diverse countries such as Bangladesh, Colombia and Ghana; as well as across provinces within larger, federal countries such as Brazil and India, where municipal reforms are typically a provincial responsibility.

These reforms typically consist of policies that empower local governments through rationalizing intergovernmental flows (Colombia, the Philippines, South Africa), strengthening own revenues (Ethiopia, Ghana, Indonesia) and using specialized financial intermediaries for small and medium city financing (Brazil, the Philippines). Further, recognizing that smaller and medium city needs are perceived as too small (high transaction costs) for direct market access, many of these emerging economies have invested in structures to pool these demands and lower risks through efficient intermediation (as in the Indian states of Karnataka and Tamil Nadu). As of 2015, pooled finance mechanisms had raised more than \$2.6 billion for small and medium city infrastructure (FMDV, 2015).

The outcomes of these major institutional reform efforts on both the demand and supply sides include the following:

- Larger cities with medium-term investment plans have been able to repeatedly access local capital markets and establish a credit relationship with the private sector. Examples include Ahmadabad, Ho-Chi Min and Shanghai. Table 4.1 shows the Indian case.

Table 4.1 Recent municipal bonds in India, by issuer and year

Feature	Pune Municipal Corporation (2017)	Indore Municipal Corporation (2018)	Greater Hyderabad Municipal Corporation (2018)	AP Capital Region Development Authority (2018)
Loan size (Rs Crore)	200	140	395 (in two tranches of 200 and 195)	2,000
Coupon	7.59 %	9.25 %	8.90 % and 9.38 %	10.32 %
Tenor	10 years	10 years (call/put option in 7 years)	10 years	10 year (5-year moratorium)
Credit rating	AA+ (SO) by India Ratings and CARE	AA (SO) by Brickwork and SMERA	AA by CARE and India Ratings	AA- (SO) by Brickwork A+ (SO) by CRISIL
Security	Unsecured	Secured	Unsecured	Unsecured
Guarantee	None	None	None	State
Issue of proceeds	24/7 water supply (smart city)	AMRUT project	Strategic road development plan	City infrastructure

Source: Author compilation.

- Smaller and medium cities have found ways to access the capital market through intermediaries. Examples include Colombia (Findeter – Financiera de Desarrollo Territorial), South Africa (Development Bank of Southern Africa), India (state of Tamil Nadu) and Indonesia (PT SMI).

Some of these major national-level reform efforts – specifically, Colombia, South Africa and Tamil Nadu – are highlighted below. Taken together, these examples suggest that when reforms have been concerted and efforts focused on intergovernmental fiscal resources, own source revenues and the borrowing framework, leverage has tended to be substantial and sustainable.

Colombia: integrated municipal reform⁴

Colombia provides an outstanding example of decentralizing both responsibilities and resources. Since the country's 1991 Constitution, transfers of central government revenues to municipalities and urban regions increased from an already substantial 36.5 per cent of current revenues to 46.5 per cent in 2014.

On the supply side, Findeter, a second-level financial intermediary, has assisted commercial banks in participating in municipal lending and now accounts for 15 per cent of such lending. Prudent legal requirements set out in 1997 legislation – known as the 'traffic light' system (see table 4.2) – have managed to keep defaults low. Despite this strong financial performance, Findeter's domestic sources are short term while it lends long term, reflecting the lack

Table 4.2 Colombia's traffic light system for regulating subnational borrowing

Rating	Indicator	Borrowing restrictions
Green	Interest as percentage of operational savings < 40 % and debt stock as percentage of current revenues < 80 %	No restrictions
Yellow	Interest as percentage of operational savings 40–60 % and debt stock as percentage of current revenues < 80 %	Loans with Ministry of Finance approval
Red	Interest as percentage of operational savings > 60 % or debt stock as percentage of current revenues > 80 %	No lending without adjustment plan

of long-term capital in the domestic market. Since the mid-2000s, this constraint has been eased by extending maturities up to 12 years for municipal loans (compared to average loan maturities of 3–5 years), as Findeter is able to raise longer-term debt.

South Africa: post-Apartheid municipal transformation⁵

Post-Apartheid, South Africa's efforts at building national-city government relationships deserve special mention since they are a good example of national government working in tandem with city governments and the financial market on municipal finance. Enabling policies and actions by the national government include the following:

- Legal framework for local government reform through the Municipal Structures Act of 1998 and the Municipal Systems Act of 2000
- Financial framework for municipal budgeting, accounting and borrowing provided by the Municipal Finance Management Act of 2003 and National Treasury rules of 1998
- Definitive intergovernmental finance framework ensuring stable flow of financial resources to city governments from higher tiers as well as a three-year indicative allocation of such transfers

Using this enabling framework, the city of Johannesburg:

- Developed and implemented a three-year strategic plan (Egoli 2002)
- Improved its liquidity by improving billing and revenue collection
- Changed the orientation of municipal service delivery by corporatizing and converting service delivery to autonomous utilities under city ownership
- Successfully issued municipal bonds in 2004 and 2005 to finance its capital investment requirements

Tamil Nadu State, India: empowering municipal decisions⁶

Recognizing the need to empower municipalities' autonomy for decision-making and position municipalities as proactive creators of infrastructure, major political, legal, administrative and financial reforms were undertaken in the Indian state of Tamil Nadu in the mid-1990s. These reforms included linking fiscal transfers to state taxes (rule-based rather than patronage), strengthening own revenue sources (including powers to set rates) and establishing a supply-side intermediary.

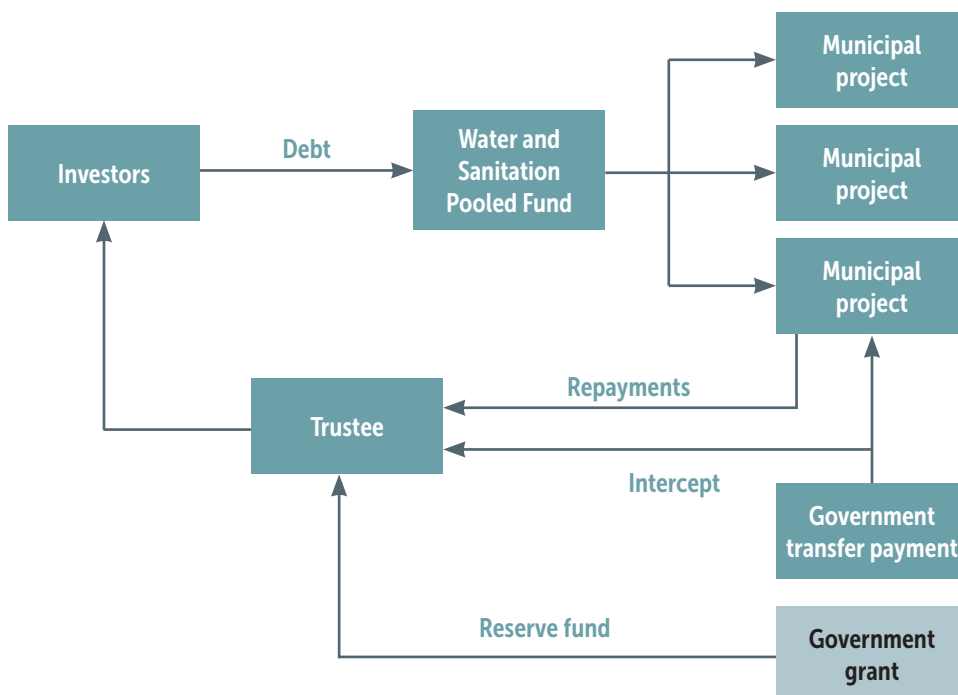
Based on needs in the water and sanitation sector and the necessity to lower the cost of these projects, the state government established a Water and Sanitation Pooled Fund in 2003, as a trust with limited equity and no dividend expectations. With little recourse to the capital, the fund relied on credit enhancements of a debt service reserve fund and repayment from borrower taxes and fees. The average size of projects was \$1 million (drinking water connections, pumping stations etc.). By pooling these demands, the fund raised \$10 million through a bond issue (rated as AA with a spread of about 70 basis points over state government borrowing cost). A study of the bond issue demonstrated that domestic private debt can finance municipal infrastructure at low cost, if sufficient attention is given to the design of the intermediary's capital and security structures.

Figure 4.3 explains the nature of the financing, with municipalities bearing the risks of repayment. The initial investors in the bond were commercial banks, and the project size (less than \$10 million individually) shows the efficacy of intermediation. Secondary investors in the bonds were private pension funds – evidence of the maturing of the debt market, and the ability to sell municipal obligations to long-term private funds seeking fixed-income returns.

Main findings and policy actions

The main findings from a review of international experience include the following.

- In **developed economies**, the leveraging of public finances with private debt is a dominant source of finance, and the institutional mechanisms – rules for fiscal assignments and pledges, credit enhancement mechanisms – have evolved to suit city financing needs. In **developing economies**, decentralization has encouraged policy actions to facilitate debt finance through intermediation. These are works in progress.
- International experience shows certain obvious **commonalities on the demand and supply sides** of financing small and medium cities' environmental

Figure 4.3 Tamil Nadu: Water and Sanitation Pooled Fund

Source: Krishnaswamy (2013).

infrastructure. These include the need for local, long-term debt to finance these investments; and the importance of pooling in enabling criteria-based, open access to finance for cities of all size classes.

- The Colombian, South African and Tamil Nadu experiences indicate that **successful leverage is dependent on national-level actions** to undertake reforms that empower local governments and municipal decision-making. If local governments are constrained in their basic functions – planning, design and revenues – and institutionally hampered by functional and geographical fragmentation, leverage will be limited. On the other hand, if local governments are respected and transferred their share of taxes, they can be expected to leverage their finances and create infrastructure. In such situations, an efficient intermediation system makes leverage possible and sustainable.

It is useful to categorize the municipal financing situation of countries so policies and interventions can be designed to suit specific contexts. Cities Alliance (2005) proposes a typology based on two basic premises:

- On the **demand side**, the ability of cities to attract private domestic debt on a sustained basis depends on the stability of revenue streams over the life of the loan. This, in turn, crucially depends on the predictability of internal and external sources of revenue. Rational and rule-based intergovernmental fiscal transfers and buoyant own sources of revenue bring stability to revenue streams and facilitate private finance's ability to assess risks.
- On the **supply side** is the availability of domestic savings (often generated by growth in cities) as long-term debt for urban infrastructure development. Factors that constrain supply include excessive borrowing at the national level, which has the effect of reducing the fiscal space for cities to borrow locally and invest in infrastructure. This pre-emption of available savings would also increase borrowing costs for cities – and, in extreme cases, stimulate capital flight, thus making long-term money scarce.

The urban finance situation in any given country is therefore an outcome of demand and supply factors. The demand side would depend upon the level of fiscal empowerment of cities, as well as technical and managerial capacity that would determine effective demand and borrowing capacity. The supply-side determinants would include the fiscal space available for cities after the borrowing needs of national governments from domestic markets have been met, as well as the underlying regulatory framework for infrastructure lending. Clearly, prudent fiscal policies would ensure the availability of finance for cities at reasonable costs.

This broad categorization enables us to distinguish at least three cases of interest from a policy perspective:

- In countries where the devolution framework continues to be ad hoc and the supply of savings remains weak, the policy emphasis should be to strengthen intergovernmental fiscal resources.
- In countries where demand-side factors are relatively developed but supply-side factors limit debt, especially longer-term debt, policy attention should focus on supply-side actions to improve the regulatory framework for lending.
- In countries where the linkages between markets and cities are emerging, the possibility of higher levels of government pre-empting the supply of debt for cities or reversals of decentralization cannot be ruled out. In such cases, policy actions that allow crowding in of private finance, such as credit enhancements that are available to all lenders, would enhance leverage.

**THE URBAN FINANCE
SITUATION IN ANY
GIVEN COUNTRY
IS THEREFORE
AN OUTCOME OF
DEMAND AND SUPPLY
FACTORS.**

Given the Addis Ababa Action Agenda resolve to strengthen local initiatives with respect to basic public goods, it would be useful for development partners to assist national and city governments in identifying a core basic agenda that improves leverage and promotes scale and sustainability. The time for linking municipal demands with domestic finance is now.

Notes

1. Examples include the French decentralization laws of 1983, India's 74th Constitutional Amendment of 1992, South Africa's Municipal Finance Management Act and the Philippines' Local Government Code of 1991.
2. See Streeter (2011) for further distinctions between these two.
3. Lewis (2017) and UCLG (2007, graph 14) cover examples of this in Indonesia.
4. Source: Kehew, Matsukawa and Peterson (2005).
5. Source: Hunter (2004).
6. Source: Krishnaswamy (2013).

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5

Towards a Framework for Own Source Revenue Optimization

LENNART FLECK

Optimizing own source revenue (OSR) is critical to closing the urban infrastructure financing gap, delivering the promises of decentralization and enhancing local governance – especially in low-income countries. While the importance of OSR is commonly accepted, the reform measures undertaken to optimize it have not yet brought about significant improvements. This chapter argues that OSR reform efforts can be enhanced by more accurately diagnosing the root cause of low OSR performance. It outlines three key bottlenecks: lack of OSR authority, lack of OSR capacity and lack of political incentives for OSR reform. It puts forward a parsimonious framework for identifying which of these three bottlenecks is the most binding and should thus be prioritized when designing OSR reforms. It suggests that unless the importance of OSR reform incentives are taken more seriously, many OSR reforms are unlikely to reap their intended benefits. Acknowledging the importance of OSR reform incentives may also prompt us to reconsider the complementarity of different municipal finance interventions more broadly.

The importance of own source revenue

Decentralization can be considered one of the most significant government reform processes of recent times. A majority of states around the world have engaged in some degree of devolution/decentralization of political authority to the local level (see Torrisi and others, 2011). Decentralization promised a mechanism to accommodate subnational demands for autonomy and, most

importantly, improve overall governance. The closer government moved to citizens, the more easily it could identify their needs and supply the appropriate form and level of public services (Oates, 1972; Rondinelli, McCullough and Johnson, 1989).

Yet for devolution to deliver on its promise of improved local governance, there also needed to be a reasonable level of local revenue generation or OSR¹ (Bird, 2010; Martinez-Vazquez and Smoke, 2010; Wekwete, 2007). For how are local governments to directly respond to the demands of their citizens and deliver services effectively if they do not have the budgetary authority to decide on the services they wish to provide or are financially affected by the manner in which they deliver them? OSR and user fees in particular provide a means for local governments to collect information about the level and quality of public services their citizens desire (see Bird, 2001). As local governments attempt

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to increase OSR, they will commonly need to strengthen the reciprocal arrangements with their citizens and provide improved services and/or representation in exchange for tax contributions (Fjeldstad and Semboja, 2000; Livingstone and Charlton, 1998; Slack, 2009; Westergaard and Alam, 1995; World Bank, 2001). As the share of local revenues in local budgets increases, the share of expenditures on service delivery often does as well (Hoffman and Gibson, 2005). It is this virtuous cycle that OSR optimization can kick-start in local governments to enhance accountability and overall governance (Oates, 1998; Shah, 1998).

In addition to fostering accountability, increasing OSR can provide funding to cash-strapped local authorities whose functional/service delivery responsibilities often surpass the funding they receive from the national government. It has the potential to facilitate access to credit (Bond, Platz and Magnusson, 2012) and can be used for regulatory purposes to incentivize a socially optimal consumption of goods at the local level (see e.g. Avi-Yonah, 2011; Meijer and Jonkman, 2020). A tax on vacant land will, for instance, generally lead to more dense urban development, thereby creating economies of agglomeration, often decreasing carbon dioxide emissions², reducing per capita costs of public service delivery, and fostering overall innovation and economic growth.

This is not to say that OSR is without flaw or limitation. As with any tax or charge, OSR needs to be levied carefully to minimize the creation of economic distortions via, for example, overly cumbersome compliance regulations on local business (Farvacque-Vitkovic and Kopanyi, 2014). Complete reliance

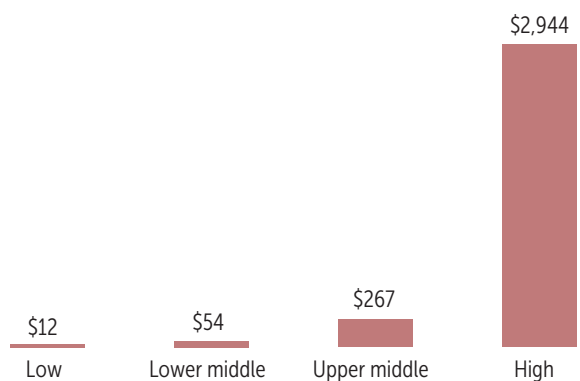
on OSR at the local level would also not be advisable, as there is a need for intergovernmental transfers to support smaller and less administratively / economically advanced communities to avoid increasing regional inequality (Bird, 2010). In fact, most national taxes do not lend themselves to local control and collection, as they could spur unhealthy tax competition and a 'race to the bottom' which cannibalizes overall national tax revenue. They could also fail to incorporate externalities (Taliercio, 2005) and lead to inefficient duplications of government structures (Bahl and Bird, 2008), as national governments can leverage economies of scale in tax collection processes with inherent advantages of centralized information and administrative capacity (see e.g. Farvacque-Vitkovic and Kopanyi, 2014).

Ultimately, the expectation is not for all local governments to rely exclusively on OSR. Local governments will generally require several sources of revenue to meet their expenditure needs. Nonetheless, it is clear that OSR offers distinct benefits and should constitute a vital and significant part of local government overall revenues.

OSR performance in lower-income countries

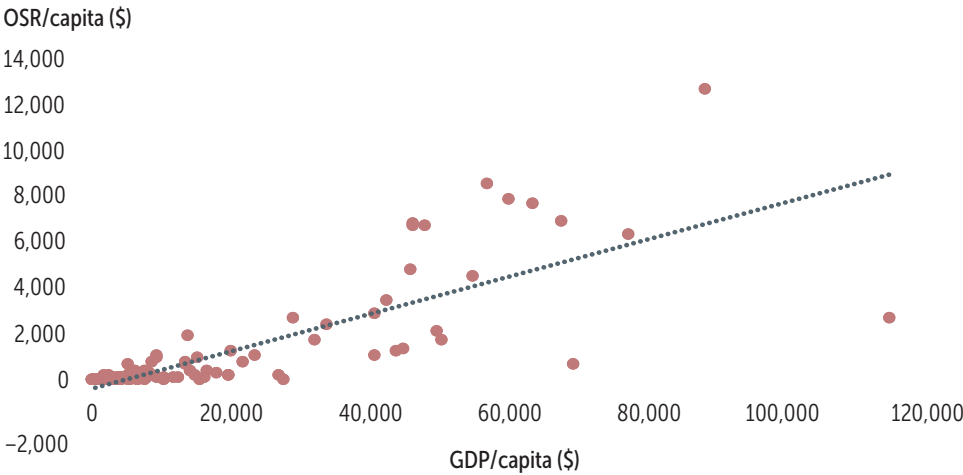
While the merits of OSR are widely accepted, actually using OSR systems³ in an adequate, effective and efficient manner remains a challenge for many local governments, especially in low-income countries (Bahl and Linn, 1992; Bardhan and Mookherjee, 2006; Shah, 2006; Slack, 2009; Tanzi, 2001). Local governments in low-income countries generate around \$12 per capita per year from OSR compared with \$2,944 per capita per year in high-income countries (see figure 5.1). The strong positive correlation between per capita gross domestic product (GDP) and per capita OSR (see figure 5.2) is to be expected, given that higher-income countries will naturally also have a larger tax base. The challenges lower-income countries face at the national level in generating tax revenues⁴ (see figure 5.3) appear equally at the subnational level. Statistical analysis suggests that per capita GDP explains 62 per cent of the variation in per capita OSR, with a correlation

Figure 5.1 Annual per capita OSR by country income category



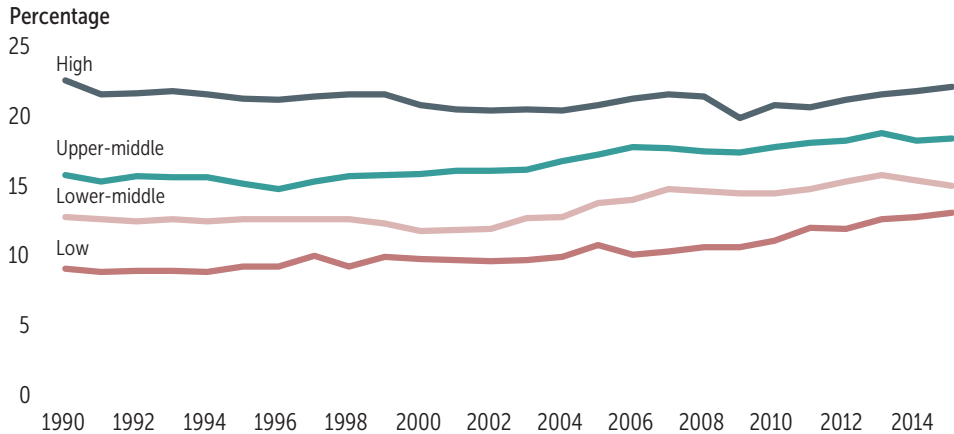
Source: OECD and UCLG (2016); UNU-WIDER Dataset 2020.

Figure 5.2 Relationship between per capita GDP and per capita OSR across countries



Source: OECD and UCLG (2016); UNU-WIDER Dataset 2020.

Figure 5.3 Tax revenue as a percentage of GDP by country income group



Source: OECD and UCLG (2016); UNU-WIDER Dataset 2020.

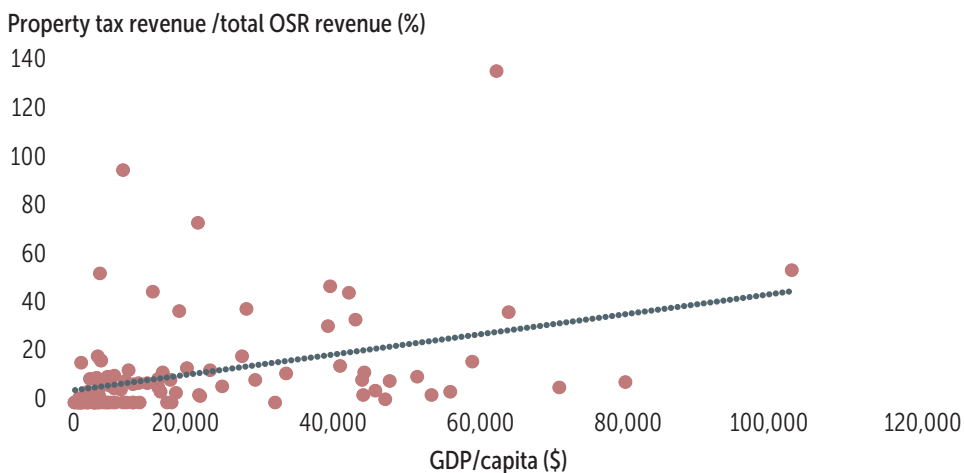
coefficient of 0.8. GDP per capita and the tax revenue ratio (i.e. the percentage of GDP captured as tax revenue) together explain 82 per cent of the variation in overall OSR, with a correlation coefficient of 0.9. This means that the variation in OSR performance between lower- and higher-income countries can primarily be explained by GDP/capita and overall structural factors of the economy. A third and final variable that likely explains these trends is the fact that lower-income

countries tend to engage in less fiscal decentralization: 90 per cent of revenues and expenditures in low-income countries occur at the national level, compared with 70 per cent in higher-income countries (UNCDF, 2016). It is clear that OSR systems at present do not sufficiently facilitate local governments in lower-income countries in meeting their significant expenditure needs.

OSR systems in lower-income countries also do not appear to be equitable or cost-effective. Literature from individual countries suggests that OSR systems in fact often exacerbate inequality (Fjeldstad and Heggstad, 2012). OSR systems in lower-income countries are less reliant on property taxation (see figure 5.4; see Franzsen and McCluskey, 2017; UNCDF, 2016), which is widely accepted to be one of the more progressive local revenue streams (Slack, 2009)⁵.

OSR systems in developing countries have also been found to be distortionary, costly to administer, arbitrary, coercive and corrupt (Bahiigwa and others, 2004; Fjeldstad and Therkildsen, 2008; Juul, 2006; Pimhidzai and Fox, 2011; Prichard, 2010). Business levies are often imposed in an exorbitant fashion and charged irrespective of business size or type (Misch, Koh and Paustian, 2011). Too often, local governments seem to raise whatever taxes, fees and charges they can without worrying excessively about the economic distortions and distribution effects these instruments may create (Fjeldstad and Heggstad, 2012). For OSR in lower-income countries to fulfil its important role within decentralized political systems, and for it to help close the growing subnational infrastructure gap, it is clear that OSR systems need to be optimized.

Figure 5.4 Relationship between GDP/capita and property tax/total OSR across countries

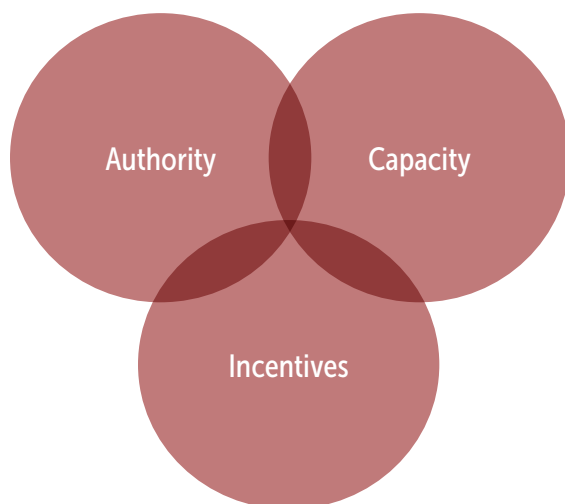


Source: OECD and UCLG (2016); UNU-WIDER Dataset 2020.

OSR bottlenecks

Over the past decade, governments and development partners alike have recognized the importance of OSR optimization. The success of their initiatives remains modest with a few exceptions that seem to prove the rule (see Bakibinga and Ngabirano, 2019; Oseni, 2018). While policy implications and good practices have been documented based on these success stories, scaling and replication have

Figure 5.5 Key OSR bottlenecks and causes of OSR underperformance



proven difficult. The three bottlenecks commonly found in the literature to explain OSR underperformance are insufficient capacity, inadequate OSR authority and/or lack of OSR reform incentives (see figure 5.5). The first two bottlenecks prompt immediate, visible answers and are thus often the focus of OSR reform. The bottleneck we are calling lack of reform incentives is more commonly referred to in the literature as lack of local government leadership. While leadership is critical, leaders do not operate in a vacuum. Even where leaders may wish to undertake reform, they may not ultimately support reforms where

these would trigger significant political resistance. OSR systems are a reflection of political power (Smoke, 2014)⁶; since that power rarely resides exclusively within the political leadership, it would be overly simplistic to link reform ‘will’ solely to leadership. This chapter argues that part of the explanation for the lack of success to date in OSR reform is the narrow conceptualization of the interaction of these bottlenecks, the insufficient diagnosis of the key binding constraint – and specifically, neglect for OSR reform incentives at the local level.

The authority bottleneck

The authority bottleneck has to do with the legal rights of local governments to use and administer revenue sources. Authority is a function of national-level processes and usually set out in a variety of national legislation. While local governments can influence this legislation, their agency in this space is ultimately limited. One of the most common issues with regard to autonomy is simply the lack of sufficient OSR authority. Taxation as a key component of government power and authority is not always easily or sufficiently devolved. National

governments are often quicker to devolve functional responsibilities for service delivery than they are to provide corresponding funding means and OSR authority, creating a vertical fiscal imbalance (Fjeldstadt, 2016; IMF, 2011). Some suggest that this is sometimes done on purpose by national governments to keep subnational administrations relatively weak and divided (Piracha and Moore, 2015). Others note that local governments are equally reluctant to take on board OSR authority, knowing that this will require them to raise politically unpopular taxes (see Bahl, Linn and Wetzel, 2013). It is also clear that a certain conservatism in terms of devolving OSR authority is required because not all taxes lend themselves to decentralization and can incur the risk of increasing regional inequality, duplicating tax structures and so on, as outlined above (Bahl and Bird, 2008; Jibao and Prichard, 2015).

Nonetheless, it does appear 'most developing countries err on the conservative side and assign fewer revenue sources than could be justified by fiscal federalism principles, often, keeping the most productive sources for the national budget' (Smoke, 2014). Consequentially, the subnational tax share of total taxes in developing countries is only about 10 per cent versus 20 per cent in industrialized countries (Bahl and Bird, 2008). While unfunded mandates can be partially met by increasing intergovernmental transfers, the benefits of OSR as outlined above create the need for additional devolvement of OSR authority (see e.g. Fjeldstad and Heggstad, 2012; UCLG, 2010).

Even where OSR authority in the form of a sufficient range of types of OSR has been granted to local governments, other aspects of that authority may undermine effective OSR performance. Commonly, local governments lack sufficient enforcement rights to sanction taxpayer non-compliance. In Kenya, for instance, OSR is essentially not legally enforceable by county governments – predicated OSR compliance on the 'ignorance of the taxpayer' (Fleck, 2021). Another common issue is the lack of clarity in terms of OSR responsibilities and associated devolved functional mandates across levels of government (Smoke, 2014). Where citizens are not sure which taxes go to the local governments and which services their OSR contributions are used for, compliance becomes far more challenging. Challenges could also arise for local governments where they are mandated to use administrative systems for budgeting and reporting purposes that are faulty and/or not fit for purpose.

Addressing the various issues that may emerge around the authority of local governments to use OSR usually requires interacting with national government institutions to make specific tweaks to the overall OSR-related regulations and the fiscal decentralization framework more broadly. These reforms can be

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extremely powerful, as they will tend to address issues that all local governments within a national jurisdiction are facing. Given the weight of changes to these national-level regulations, the processes required for changing them are usually lengthy and cumbersome. Nonetheless, the onerous nature of making changes to OSR authority should not dissuade reformers from tackling this pillar of OSR performance.

The capacity bottleneck

Developing the right OSR policies⁷ and building effective administrative systems to implement those policies require significant capacity. Yet local governments in developing countries are often small and underfunded, lacking the human resources needed to develop OSR systems for a populace with little tradition in

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local taxation (Farvacque-Vitkovic and Kopanyi, 2014). These challenges are compounded by the fact that the taxes and fees devolved to local governments are often not the easiest to administer or preside over politically. Taxes on land or property are arguably ideal local OSR, but require costly, complicated and contentious valuation rolls and are notoriously difficult to enforce politically against the will of wealthy local landowning elites (Slack, 2011; Slack and Bird, 2014).

As a consequence of insufficient capacity, local governments introduce inadequate OSR policy: they simply do not put the right rules in place to effectively leverage their existing OSR authority⁸. One common instance of poor policy is when local governments employ too many different revenue streams (Brosio, 2000; Fjeldstad and Semboja, 2000; Fjeldstad, 2016). As a result, citizens are burdened with a host of different taxes that they struggle to understand, while overall administrative complexity (and costs) are increased and opportunities created for tax collector malpractice (Fjeldstad and Heggstad, 2012). Similar effects are observed where local governments set overly complex rates and exemptions and/or introduce frequent changes to their OSR systems (see Fjeldstad, 2016).

Even when local governments adopt effective OSR policies, lack of capacity undermines the development of effective administrative practices. One common shortcoming in this regard is that local governments are not able to accurately determine taxpayer liabilities. Such determination is important for OSR, especially for land or property taxes that require periodic manual updates of tax bases (valuation rolls) to ensure property/land values approximate market prices. Significant revenue potential is lost as a result of old and incomplete valuation rolls and land cadastres (Bird, 2010).

Another very important issue for local governments revolves around taxpayer compliance. A study of six African countries found that 30–70 per cent more revenue could be collected at the local level if people paid what they were supposed to (Action Aid, 2011). Deficiencies in billing taxpayers, sensitizing them to the purposes of OSR, providing simple payment options, instituting participatory processes (Smoke, 2014; UNCDF, 2016), and clearly linking local taxation to service delivery greatly undermine voluntary compliance (Bahiigwa and others, 2004; Bakibinga and Ngabirano, 2019; Fjeldstad, 2009; Fjeldstad and Heggstad, 2012; Fjeldstad, Schulz-Herzenberg and Sjursen, 2012; Levi, 1988; Smoke, 2014). These issues are compounded by serious shortcomings as to tax collector management and the slow adoption of technological options to minimize tax collector malpractice.

To address this bottleneck, reform initiatives often focus on capacity building of local civil servants. In these instances, civil servants are supported in a variety of ways to devise and implement improved OSR policies and administration practices and to contextualize good practices to local economic, cultural and historic realities (Bahl and Bird, 2008; Smoke, 2014; UN-Habitat, 2015). More recently, additional funding has been provided to address resourcing/technology gaps or the development of diagnostic tools such as the Rapid Own Source Revenue Analysis (ROSRA) developed by UN-Habitat. The assumption of this diagnostic approach is that although civil servants working on OSR systems are familiar with the problems at hand, they struggle to diagnose the key binding constraints of their respective OSR systems and thus struggle to prioritize reform initiatives appropriately.

OSR system reform initiatives often comprise long, elaborate lists (Piracha and Moore, 2015). Yet revenue administrations have limited capacity and need to focus on those issues that deliver the most bang for the reform buck. Prioritization is critical, since OSR systems are only as strong as the weakest link (McCluskey and others, 2018). Running a new valuation roll could be required to address assessment issues; yet it could fail to increase revenues if other compliance issues exist downstream (McCluskey and Franzsen, 2013). To facilitate diagnostic abilities, local governments can thus either use existing tools or develop their own analysis by building data systems that allow for the estimation of revenue gaps, profitability of different OSRs etc.

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REFORM BUCK.**

The incentive bottleneck

The incentive bottleneck has to do with the interests of key stakeholders in optimizing OSR systems. This political dimension is critical as an explanatory variable

since capacity differentials alone cannot explain the varied success of OSR reforms. For example, local governments with no clear capacity advantage such as Kampala, Uganda, manage to successfully reform their OSR systems (Bakibinga and Ngabirano, 2019). This success cannot solely be attributed to the quality of the policy decisions, as successful reforms tend to be replicated with varying results. Outsourcing of tax collection and digitalization worked well in Arusha, Tanzania, but not so well in Kiambu, Kenya, or Zambia (see McCluskey and others, 2018).

To explain the varied success of OSR reforms, the literature commonly highlights the need for customization as well as the important role of political leadership (Farvacque-Vitkovic and Kopanyi, 2014; Jibao and Prichard, 2015; Kopanyi, 2015). Yet, leadership and high-level support for OSR reform are often pre-empted due to strong interests in maintaining the status quo (Piracha and Moore, 2015; Prichard, 2017). In fact, effective OSR policies and systems frequently are not in the interests of tax collectors, politicians or economic elites, all of whom benefit from tax loopholes, lack of enforcement or reduced business/property tax rates (see e.g. Fjeldstad and Semboja, 2000; Prichard, 2017; Tanzi, 1998). Tax collection, like policing, can be a major channel for state-licensed rent-seeking (Piracha and Moore, 2015). The way these benefits are distributed differs, but their relative importance as a percentage of incomes tends to be higher for revenue officials and tax collection personnel, who have evolved ways of 'buffering their activities against regular attempts to improve short-term collection performance and sporadic efforts at more structural reform' (Piracha

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and Moore, 2015, p. 7). Tax systems also serve higher-level politicians for whom the OSR system 'provides a visible arena to play out their political aspirations vis-à-vis their constituents' (Fjeldstad and Semboja, 2000). Powerful taxpayers and economic elites may also wish to retain systems that impose minimal business taxes and/or enable de facto land and property tax evasion (Burgess and Stern, 1993; Franzsen, 2007). Since raising taxes is generally politically unpopular⁹, local governments are often unlikely to willingly optimize OSR – especially when they have access to politically 'cheaper'

sources of funding/finance (Bahl and Bird, 2008; Bird and Slack, 2014).

Poor OSR policies/processes are not always an accident, an outcome of insufficient capacity. On the contrary, OSR systems can be dysfunctional by design, carefully matching underpinning power realities. Any attempts to reform these dysfunctional but stable systems will trigger resistance from key beneficiaries whose interests are not aligned with the public good. Since this resistance often cannot be expressed in legitimate terms, it may take a more covert form, hollowing out promising reform initiatives from the inside (Fleck,

2021). Strengthening reform incentives is thus critical to avoid OSR systems getting stuck or sinking ‘to a low-level equilibrium – of weak administration, low revenue, rent-taking, low legitimacy, low operating budgets’ (Piracha and Moore, 2015, p. 19).

Current OSR reform initiatives frequently do not focus explicitly on reform incentives. Further research is needed on how incentives for OSR reform can be strengthened. One important means of doing so is to develop adequate data management, reporting and control systems. Inadequate information systems make it difficult for government decision makers as well as the public to hold government officials accountable. Lack of information also makes it difficult to understand the status quo, identify culprits and uncover financial malpractice. In such an environment, decision makers will find it difficult to defend the need for reform initiatives as they lack the evidence to describe the gravity of the need for reform. They also lack the tools to understand why reforms are not meeting their intended targets and to adjust their course. Unlike other reform initiatives that directly challenge the status quo, creating information systems is a more indirect way of limiting the power of vested interest groups and thus more likely to avoid push-back. National governments can play a major role in this space, putting in place standardized data management and reporting systems for local governments.

Another effective way of strengthening reform incentives without simultaneously restricting the autonomy of local governments is to refine intergovernmental transfer formulas (McCluskey and others, 2017). When local governments violate public financial management regulations, fail to provide crucial OSR-related data, and – more broadly – underperform on OSR objectives, they should experience transfer reductions. Given the importance of OSR in enhancing local governments’ financial position, it would be a loss not to use this powerful resource lever to incentivize more serious optimization of OSR reform and concomitant solidification of the rule of law, the social contract and government accountability.

A third and final means of strengthening incentives may be to cast OSR optimization as a precondition for accessing other sources of finance (see Fleck, 2021). While OSR optimization is generally viewed as a stepping-stone by development partners – a means of improving creditworthiness – this optimization is often undertaken in parallel with other initiatives to facilitate access to external funding/finance. It is questionable, however, to what extent these reform options are mutually reinforcing. Can we really be confident that the governance and

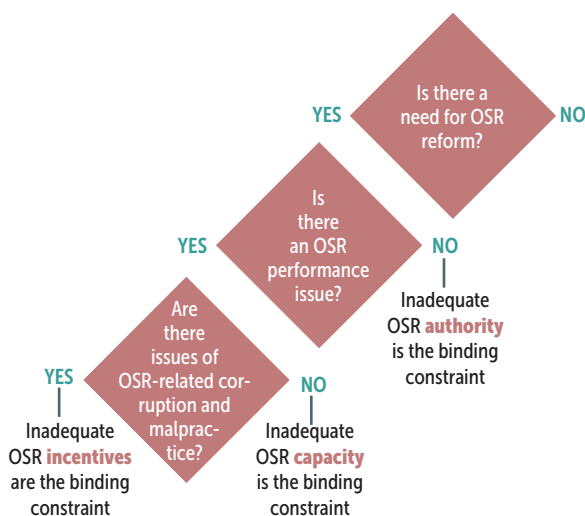
**OSR REFORM
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FINANCE.**

public financial management–related shortcomings that underpin deficient OSR systems will not crop up on the expenditure side once local governments have increased their overall budgets via external credits, bonds etc.? Perhaps these risks are more manageable in the context of project finance, but do the benefits of these projects outweigh the overall disincentives they create for developing sustainable foundational state capacities – especially given the mixed record of subnational public-private partnerships in developing countries?

Determining the binding constraints

Identifying which of the three key OSR bottlenecks are present is important, as

Figure 5.6 OSR decision-making tree for determine binding constraints



the remedies needed to address them differ. For instance, it may not help to expand OSR authority if a local government does not have the capacity or will to use that additional authority. In addition to identifying which OSR bottlenecks are present, we need a way of prioritizing among them – a way of identifying which is the most binding: which, when relieved, would bring about the greatest improvement in OSR systems. Figure 5.6 outlines a decision-making tree with a key set of questions that can be used to identify the binding bottleneck – i.e. the bottleneck on which to focus.

Is there a need for OSR reform?

Before considering the different OSR reform options, we need to figure out whether there is a need for OSR reform in the first place. In doing so, local governments should consider (i) their resource requirements, (ii) access to non-OSR revenues and (iii) efficiency of public expenditure. Where local governments do not need additional resources, have access to non-OSR revenues and/or are already efficient with regard to their public expenditure, they may not need to engage in significant OSR reform. Assessing these different drivers of the need for OSR reform can be done via a multitude of variables. Some of the most useful are outlined in table 5.1 along with benchmark values, where available, and an interpretation of the variables.

Table 5.1 Variables for determining OSR reform need

Reform drivers	Benchmarks ¹	Interpretation
Resource requirements		
Per capita GDP	Lower quartile: \$2,118; median: \$6,566; upper quartile: \$17,435	The resource need is high if GDP/capita is low, revenue/capita is low and the extent of fiscal decentralization is high.
Per capita total local annual revenue	Lower quartile: \$89; median: \$326; upper quartile: \$1,730	
Subnational expenditure as % of total expenditure	Lower quartile: 11 %; median: 19 %; upper quartile: 36 %	
Subnational expenditure as % of total GDP	Lower quartile: 3 %; median: 6 %; upper quartile: 11 %	
External resource potential		
Intergovernmental transfers as % of total revenues	Lower quartile: 28 %; median: 46 %; upper quartile: 69 %	The greater the percentage of local budgets made up of transfers, the less likely these are to increase further, especially where national debt service levels are high already. Access to credit is likely to be low where local debt as a percentage of total budget is low and where OSR covers only a small percentage of current expenditure. FDI in public service provision is unlikely where national FDI is low.
Total debt service (% of exports of goods and services)	Lower quartile: 7.3 %; median: 12.2 %; upper quartile: 19.7 %	
Debt service as % of total revenue	Insufficient data	
OSR as % of current expenditure	Insufficient data	
Foreign direct investment (FDI; measured at national level)	Lower quartile: \$214 million; median: \$1.5 billion; upper quartile: \$16 billion	
Accountability		
Actual capital expenditure as % of total expenditure	Insufficient data	A high actual capital expenditure combined with a low wage-related expenditure and high participation of the public in budgeting processes would be signs of expenditure effectiveness.
Wage-related expenditure as % of total expenditure	Insufficient data	
Public participation in budgeting processes (number of meetings, attendance, % of budget decided on by public)	Insufficient data	

¹ Benchmarks were determined based on compilation of data from around the world; data sources include the World Bank, United Cities and Local Governments, UNU-WIDER and the Organisation for Economic Co-operation and Development.

Is there an OSR performance issue?

If the assessment suggests that there is a reform need, the second step is to determine whether the OSR system is performing (see table 5.2). Performance in this case should be assessed based on an existing legal context to determine whether the local government is effectively using its existing tax authority. Most

Table 5.2 Variables for determining OSR performance

Performance drivers	Interpretation
Annual per capita OSR comparison with annual per capita OSR of peer local governments in same country, controlling for per capita GDP differentials ¹	If per capita OSR is low compared with peer governments with similar per capita GDP, the OSR system is likely to underperform.
Average per capita OSR growth as % of average per capita GDP growth	Per capita OSR should increase at least as quickly as per capita GDP.
Actual as % of budgeted OSR	Per capita OSR should not diverge greatly from budgeted OSR.
Total cost of OSR administration as % of total annual OSR revenue	Total cost of OSR administration should not exceed 10 % of total OSR.
Registered taxpayers as % of total taxpayers for top 5 revenue streams	Large registration, billing and compliance gaps suggest poor OSR performance.
Billed taxpayers as % of total registered taxpayers for top 5 revenue streams	
Compliant taxpayers as % of total billed taxpayers for top 5 revenue streams	

Note: In looking at OSR performance, variables that could be affected by OSR authority should be excluded – e.g. cross-country comparisons should be avoided, as authority differs from country to country; the focus should instead be on internal comparisons and benchmarks.

¹ Because per capita GDP is a key determinant of OSR performance, it is important to control for subnational diversity in per capita GDP. While many other factors affect OSR potential (see Langford and Ohlenburg, 2015), it would not be feasible to control for all of them.

of the variables in table 5.2, except the first one, are sensitive to differences in OSR authority. Only if this assessment finds that the OSR system is performing should we proceed to consider reform of OSR authority. If there is an OSR performance issue, that does not rule out the existence of authority issues as well; however, in that case authority is not the binding constraint. Providing authority before the capacity or reform incentives are present to use that authority may provide further scope for inefficiencies to take root and further reduce overall national tax revenue. It would appear to make little sense to expand authority where local governments are already experiencing capacity constraints (i.e. are understaffed and underfunded). If incentive issues are fuelling the underperformance, better performance should be incentivized as a precondition to additional authority and reform of the fiscal decentralization framework, rather than vice versa. OSR systems have their own inertia and become more difficult to fix once inefficiencies have taken root. Inefficiencies will likely be to the benefit of certain individuals who will then oppose reform. Local governments should be incentivized to address shortcomings in their control, rather than enabling deflection of responsibility to other levels of government. While there may be exceptions to this rule, it might be less risky and more promising – at least in the short run – to focus on optimizing existing authority before providing additional authority.

Are there issues of OSR-related corruption and malpractice?

If the assessment suggests that the OSR system is not operating effectively, the third step is to determine whether there are gross irregularities and issues of malpractice within the system (see table 5.3). These irregularities are a proxy for the existence of an incentive bottleneck. Where incentives are not aligned with serious OSR reform, glaring malpractice is commonly tolerated or only cosmetically addressed. In fact, malpractice (and policy/administrative inefficiencies more broadly) are not necessarily the outcome of lack of capacity, but frequently of a deliberate strategy of civil servants and tax officials to facilitate corruption and derive personal benefits (Fleck, 2021; Tanzi, 1998; UN-Habitat, 2015).

Where incentives and political interests do not align with meaningful OSR reform, capacity-building projects alone are likely to get derailed or diluted during implementation. Capacity building often becomes a go-to donor intervention for all OSR-related challenges, which commonly peters out with little impact in the absence of adequate reform incentives. This is not surprising, as it will not help to provide accurate policy guidance if political will is lacking to implement those policies, or if reforms are purposefully kept cosmetic – changing what OSR systems look like, but not how they actually function. Consequently, capacity-building measures should only be undertaken where there is no glaring incentive bottleneck – or if they are designed to specifically tackle an incentive problem.

**PROVIDING
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COSMETIC.**

Conclusion

This chapter outlines the overall importance of OSR optimization and provides some data around the overall performance of OSR systems, specifically in developing countries. We find that while OSR optimization is critical to addressing urban financial challenges as well for enhancing governance more broadly, overall success in creating effective OSR systems has been modest to date.

The chapter has examined three key OSR bottlenecks: authority, capacity and incentives. It suggests that many local governments in low-income countries remain shackled by fiscal frameworks that devolve only limited or inadequate taxation authority. Property taxes, the primary local government tax, are technically complex and rather visible, making them politically unpopular and thus a tempting candidate for decentralization for national governments (Bahl and Wallace, 2008). Even when local governments do have appropriate

Table 5.3 Variables for determining OSR malpractice

Indicators of malpractice	Description/interpretation
High variation over time of stable OSR streams	If year-on-year or month-on-month variation of stable revenue streams ¹ (e.g. hospital user fees, property taxes) is significant, it suggests that there are irregularities in the administrative processes rather than capacity constraints.
Tax effort focus on revenue streams prone to malpractice	OSR administrations that have a disproportionate number of tax collectors and overhead are associated with the collection of OSR streams that are prone to malpractice.
Outsourcing without reliable baseline	If an OSR administration outsources tax collection to a third party, it needs to have a reliable baseline in place to determine the revenue targets of the third party. Where overly simple or inaccurate methodologies are used to gage baselines, third-party service providers will likely receive very high margins.
Lack of tax collector management	Where OSR administrations do not use common best practices for tax collector management, and no mechanisms exist for controlling tax collectors and incentivizing performance, incentives are likely missing to root out malpractice.
Lack of quality of internal audit	Because malpractice is common in tax administrations of lower-income countries, internal control mechanisms should be developed that monitor performance of civil servants; where these mechanisms are not used, internal audit teams are understaffed and recommendations are not taken up, there is likely to be an incentive problem.
Lack of alignment of OSR figures in budget documents	Where figures differ substantially in internal budget documents, it is likely that some extent of creative accounting is taking place.
Audit report (other indicator of corruption)	Where national audits cannot approve local government expenditure, there is likely to be a high level of malpractice within public financial management practices that are likely to have taken root in the OSR administration.
Loss of critical data	Where data in OSR systems are suddenly lost or destroyed, the possibility exists for the system to be manipulated in the interest of specific individuals.
Inexplicable administrative shortcomings	Some administrative shortcomings are so significant they are unlikely to be the result of lack of capacity (e.g. local government demand notices are not distributed/printed).
Legal sanction	Where no legal sanction has been taken against taxpayers for non-compliance or against tax officials for malpractice, there is likely to be little interest in uncovering malpractice and enhancing the system. While some local governments may not have the capacity to enforce their taxes, there are always local by-laws and other means for legal sanction.
Stalling on necessary known OSR reform, policy and improvements	Where local governments are well aware of existing shortcomings and have solutions available to address them, it is likely that there is an incentive shortcoming.
No update on valuation rolls for property taxation	Where new valuation rolls are not deterred by a lack of legislation or finance to launch them, there likely is an incentive issue.

Note: In looking at OSR performance, variables that could be affected by OSR authority should be excluded – e.g. cross-country comparisons should be avoided, as authority differs from country to country; the focus should instead be on internal comparisons and benchmarks.

¹ OSR that is insensitive to business cycles and other socioeconomic fluctuations.

² OSR that is prone to malpractice will be context dependent, but it will generally be the OSRs which are not automated, where payments are made on a frequent basis, such that there is a higher level of overall transactions.

and sufficient authority to leverage local revenue streams, they often struggle to do so effectively. They frequently lack the institutional capacity and cultural tradition to effectively use their taxation authority, enforce compliance and create an effective tax collection process (Smoke, 2014). Given the difficulty in implementing politically unpopular land-based taxes – which tend to stir up opposition among wealthy and influential landowners – and the opportunities for corruption that arise from broken collection systems, the necessary political incentives are frequently lacking to meaningfully exploit local tax potential.

To effectively address these three bottlenecks, it is important to understand which is in fact the most binding one. We provide a decision tree in this chapter that details the key variables for determining the binding constraint. Some of the outlined variables are quantitative and easily comparable with existing benchmarks; others lack benchmarks or are more qualitative and subjective in nature.

To validate and refine this framework, further research and testing of some of its underlying assumptions are needed. One area that deserves particular attention is the interplay between incentive and capacity constraints. To what extent can capacity-building initiatives, the strengthening of data systems, the introduction of new technology and/or increases in transparency nudge OSR systems in the right direction towards comprehensive reform (UN-Habitat, 2015), and when will such capacity building only create the allure of change while cushioning existing systems from reform pressure? Can capacity building be used to address incentive bottlenecks, or do we need to find other ways of addressing incentives as a prerequisite to successful OSR reform? Can digitalization of OSR processes work where there are no reform incentives, or are the right enabling environment and incentives needed that will prevent those vested in inefficient OSR systems from derailing the adoption of technology?

This chapter places incentives at the heart of OSR reform. It outlines the need for more research to better understand how we can address the critical incentive constraint of local governments. While the importance of concerted political leadership has been extensively documented, there has been surprisingly little research on why political leadership OSR reform emerges in the first place (Jibao and Prichard, 2015). We need to better understand which incentives work for which types of stakeholders and situations, when actors support and when they oppose changes in OSR systems, and what can be done to bring reluctant stakeholders on board (UN-Habitat, 2015) – or, as Miller (1997) notes, ‘when actors can be constrained (or constrain themselves) not to pursue their self-interest’.

MANY LOCAL GOVERNMENTS IN LOW-INCOME COUNTRIES REMAIN SHACKLED BY FISCAL FRAMEWORKS THAT DEVOLVE LIMITED OR INADEQUATE TAXATION AUTHORITY.

Only by fully acknowledging underlying power dynamics will it be possible to create reform environments conducive to creating more effective OSR systems.

Lastly, this chapter prompts us to reconsider the complementarity of different municipal finance interventions. As tempting as it may be to recommend 'leapfrogging' deficient OSR systems (see e.g. Farvacque-Vitkovic and Kopanyi, 2014), based on the idea that the infrastructure financing gap is too large and the development pressure too high¹⁰ to allow for the tedious fixing of underlying OSR systems, we need to be aware that this will directly undermine the incentives for OSR reform. Where OSR reform incentives are the key binding constraint, facilitating access to finance will undermine the building of successful OSR systems. The trade-offs between pursuing these different municipal finance interventions prompt us to prioritize and sequence them, to reflect on where OSR should be framed as a prerequisite to pursuing other financing options as opposed to just being a stepping stone.

Notes

1. OSR here refers to revenue streams (taxes, licenses and fees) that are controlled and levied directly by local governments.
2. Dense urban development will tend to shorten commuting times and the need for cars, and reduce the energy needs of houses for heating and cooling.
3. 'OSR systems' refer to all rules and regulations that relate to OSR, including actual OSR policy, OSR administration and the OSR enabling environment (as far as it is locally determined) – i.e. how the roles and responsibilities around OSR are distributed within local governments and how processes of interaction and reporting lines are defined across these roles and responsibilities.
4. This relationship is explained by largely structural economic factors, e.g. larger agricultural and informal sectors in low-income countries, as well as issues around governance (see IMF, 2011).
5. Generally land and property ownership tends to increase with income, and so taxing it is likely to be progressive. However, it is difficult to speak in a general sense about the progressiveness of a land and property tax as it will depend on the rate structure, the tax base and the enforcement mechanisms.
6. Tax systems have an important political dimension; Holcombe (1998, p. 359) goes so far as to say that 'tax policy is the product of political decision-making, with economic analysis playing only a supporting role'.
7. This refers to the overall design of OSR systems, e.g. the number of OSRs, the rating systems used, the definition of tax bases, exemptions etc.
8. OSR authority is explained in more detail below, but generally refers to the types of OSR streams that were devolved to local governments, as well as the enforcement and collection practices allowed/mandated by national government.
9. While all taxes are unpopular, property tax, the commonly most important local tax, is particularly unpopular (Slack, 2009).
10. Reference is made here to the time pressure of meeting the Sustainable Development Goals and of decreasing the overall divergence between high- and low-income countries.

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6

Building an Enabling Environment for Local Own Source Revenue: Political Economy Considerations

DMITRY POZHIDAEV

Even before the COVID-19 crisis, it was estimated that low-income countries would have to increase their annual public spending by up to 30 per cent of gross domestic product (GDP) to achieve the Sustainable Development Goals (IMF, 2017). The pandemic has exacerbated this challenge, causing a decline in the fiscal space of low-income countries – including all least developed countries (LDCs) – due to a drop in official development assistance inflows, dwindling domestic revenues and rising spending for containment of the pandemic. For example, for sub-Saharan Africa, World Bank (2020) calculations suggest that government revenues could decline by 12–16 per cent compared to a non-COVID-19 baseline scenario. As a consequence, fiscal deficits could deteriorate by about 2.7–3.5 percentage points of GDP. Lockdowns and containment measures have imposed a heavy toll on national and local government fiscal space, with the latter having contracted about 30 per cent in most LDCs (UNCDF, 2020b, 2020c; UN-Habitat and others, 2020).

As this chapter argues, local government finance is a type of development finance in its own right. To fully realize its development potential, local government finance requires an adequate enabling environment. An enabling environment for fiscal decentralization is based on constitutional or legal mandates that define the level of autonomy, rights and responsibilities for local governments. While this provides a foundation on which to build and develop

decentralization, it does not guarantee successful fiscal decentralization, as numerous examples around the world demonstrate.

Decentralization as an inherently contradictory process

Decentralization poses a fundamental puzzle. Any decentralization tends to 'reduce the power and authority of national politicians relative to subnational actors but the same national politicians formally control the decision to decentralize' (World Bank, 2011). Central governments, in particular the ministry of finance but also powerful sector ministries, play the decisive role in defining the scope of fiscal authority of local governments. The central government's position and its willingness to share fiscal authority with local governments is determined by the process of decentralization in general and fiscal decentralization in particular. The COVID-19 crisis has demonstrated with abundant clarity

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that local governments can deliver an effective response to the pandemic only to the extent they are empowered by central governments. Hence, the political economy of decentralization, together with more technical considerations, plays an important role in defining the boundaries of the fiscal authority and comprehensiveness of enabling policies and regulations for local governments.

Despite a global trend of fiscal decentralization (including various aspects of fiscal autonomy of local governments) as indicated by Bahl and Bird (2018), this process has been uneven and driven by various factors. These range from attempts to strengthen the political legitimacy of the state (post-Khmer Rouge Cambodia, post-Suharto Indonesia, and post-Amin Uganda, among others) to efforts to improve public service delivery (as in Ethiopia, Lao PDR, Rwanda and many others) or some combination thereof (as discussed e.g. in Bardhan and Mookherjee, 2006).

A number of researchers highlight conflicts at the heart of fiscal decentralization and point to the implications of the political economy of decentralization for the fiscal autonomy of local governments and their access to own source revenues (Dafflon and Madiès, 2013; Shah and Shah, 2006; Smoke, 2015). These conflicts can be grouped into two categories and are discussed in the next two sections of this chapter:

- Political, grounded in non-economic goals of decentralization
- Non-political (technical), caused by (mis)alignment between different economic goals

As Dafflon and Madiès (2013, p. 16) argue, the ways of resolving these conflicts are ‘most often normative, guided by value judgments rather than purely economic, rational criteria’. Some choices are not necessarily better than others: economically suboptimal decisions may be preferable in certain situations to prevent a breakdown in formal or informal institutions and maintain social solidarity. According to Dafflon and Madiès (2013, p. 301), ‘resolution of these conflicts incorporates noneconomic and economic criteria into a cross-cutting, multicriteria approach that ensures the coherence and coordination of the choices adopted’.

Ultimately, the extent of fiscal decentralization in the general and fiscal autonomy of local governments in particular is defined by political decisions. The Center for Global Development, which has been studying revenue mobilization in four countries in sub-Saharan Africa (Kenya, Nigeria, Senegal and Zambia) and one in Asia (Bangladesh), concludes that the real constraint to raising more revenues and improving spending quality has been political in nature (Gupta and Liu, 2020).

Political and non-political conflicts may result in four possible outcomes.

- **Legal and regulatory frameworks remain underdeveloped.** Often, fiscal decentralization is represented at the level of high-level policies and strategies that outline future intentions rather than practical progress in devolution of fiscal responsibilities to local governments. In 2008, Yemen adopted a comprehensive National Strategy to Move Toward a Local Government System by 2020 to complement its 2000 Local Authorities Law. However, further legal and regulatory development, particularly in the area of fiscal decentralization, did not materialize because of the government’s hesitation in establishing an implementable national programme, a lack of engagement of major aid providers, and, ultimately, the crisis of 2011. Afghanistan revealed its Subnational Governance Strategy in 2012 and Subnational Governance Implementation Framework two years later, but their provisions remained unimplemented in subsequent years as the promise of revised laws on local administration, provincial councils and municipalities remained unfulfilled up to the day Ghana’s government fell (Brown, 2021).
- **The legal framework is sufficiently developed but regulations are lacking.** Organic laws on decentralization including its fiscal aspects and the fiscal autonomy of local governments are in place, but the implementation modalities are not defined through relevant regulation, leaving legal provisions hanging in the air. This is particularly true for the own revenue space. For example, the law may stipulate the right of local governments to borrow

subject to applicable regulations. Such regulations should define the process, approval stages, borrowing restrictions and so on. But if such regulations do not exist, the legal right to borrow remains just a declarative statement. As an example, the Lesotho Local Government Act (1997) legally empowers councils to raise a variety of own revenues including taxes, rates and charges, licenses and permits, and fines and penalties. The law provides that 'the Minister shall publish in a gazette a list of items from which councils may collect revenues by way of tax or levy of charge'. To date, however, the relevant minister has not published such information. Consequently, district councils have had no own source of revenue even though they are legally entitled to it. Similarly, the Democratic Republic of the Congo Law on Self-Administration of Provinces and Local Governments envisages a public investment fund, the Caisse Nationale de Péréquation, an important intergovernmental fiscal transfer mechanism. However, more than a decade after the law was passed, this mechanism has yet to be operationalized.

- **Laws and regulations exist and are sufficiently developed, but there is a large gap between the legal and actual fiscal autonomy of local governments as circumscribed by existing regulations.** With respect to own source revenues, this situation applies when, for example, regulations establish very low borrowing limits (often in combination with a lengthy and cumbersome approval process), which makes borrowing irrelevant as a source of finance in practice. Another typical example is when local governments have a legal right to set their own tax and fee rates, but in reality regulations assign this responsibility to the central government (together with multiple exemptions from taxes and fees) and leave a very narrow corridor for local governments to decide on rates.
- **The effectiveness of existing laws and regulations granting broad autonomy to local governments is hampered by a lack of actual implementation and practices.** This situation is typical for a number of developing countries, particularly in Africa, where the gap between existing legal and regulatory frameworks and actual practice is common and particularly wide (Dickovick and Riedl, 2014). As a result, even among Africa's most decentralized and democratic countries, decentralization has produced 'limited advancement with respect to enhancing subnational autonomy, downward accountability, and governance capacity' (Dickovick and Riedl, 2014, p. 249). In the Democratic Republic of the Congo, provinces typically fail to transfer to local governments the legally required 40 per cent of their revenues. In 2012, for example, they transferred an average of 3 per cent (Englebert

and Mungongo, 2016). Panday (2017) argues that the introduction of the *upazila* parishad (a subdistrict, the second-lowest tier of regional administration) in Bangladesh has not lived up to the promise and expectations of effective local government because of a lack of proper transfer of power and responsibility to the elected representatives, centrally controlled administration and planning, and extensive interference on the part of politicians and bureaucrats. Often, recentralization of fiscal arrangements plays a role. For instance, in Uganda, the central government took on the appointment of local government chief executives, thereby transferring the ultimate financial authority at the local level to the central government. Rwanda has replaced capital block grants intended to assist districts in undertaking their local development projects with a centrally managed Common Development Fund which implements all local-level investment projects on behalf of local governments.

Conflicts with non-economic goals

Dafflon and Madiès (2013, p. 16) argue that ‘public policies based on purely economic objectives (allocative and productive efficiency, macroeconomic stability, and so forth) may be at odds with the non-economic objectives of decentralization, such as autonomy, solidarity, or protection of special interests’, which will affect the degree of fiscal autonomy of subnational governments. Englebert and Mungongo (2016) point out that an enduring feature of African decentralization has been ‘the frequent disconnect between governance reforms and deeper politics’.

This is not to say that political objectives are always in conflict with economic objectives. There are many examples in the world where political and economic objectives come together in a mutually reinforcing manner to implement substantive and far-reaching decentralization reforms, including as in Bolivia, Indonesia, Uganda in the 1990s, and post-1994 South Africa (Bardhan and Mookherjee, 2006). But in some cases, the central government may pursue objectives that are in conflict with public sector economic functions such as stabilization, distribution and allocation (Musgrave, 1959). As a result, fiscal decentralization and local government autonomy may be significantly restricted even if the potential for better delivery of economic functions exists. Typical reasons for such conflicts are discussed below.

THE CENTRAL
GOVERNMENT
MAY PURSUE
OBJECTIVES THAT
ARE IN CONFLICT
WITH PUBLIC
SECTOR ECONOMIC
FUNCTIONS.

Building state and national unity

Sometimes devolution of revenue assignments and the fiscal autonomy of local governments are at odds with the broader state-building agenda as understood by the central government. One such example is Afghanistan. By the time the Taliban regime was overthrown in 2001, Afghanistan had been a de facto highly decentralized state where provinces and even smaller local governments raised their own revenues with little or no reliance on cen-

**SOMETIMES
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tral government transfers. The post-Taliban governments recentralized those functions (at least in the territories under its control). Since then, there has been heavy investment in building a strong, centralized system of government focused on Kabul-based institutions (Nijat and others, 2016; Saltmarshe and Medhi, 2011). To prevent a return to the fragmentation that prevailed in 1991–2001, the Afghan Government, until its fall in August 2020, carefully avoided devolving financial (or indeed any other) authority to sub-national governments, using community development approaches implemented directly by the central government in partnership with civil society organizations or centrally managed regional development agencies. During its 20 years in power, the Government of Afghanistan was unable to enact a single piece of decentralization legislation (Brown, 2021). If the past is any guide to the future, the new Taliban administration is unlikely to pursue a decentralization agenda for a mix of practical and ideological

reasons and will maintain a strongly centralized system based on the personal accountability of local officials to the supreme leader.

In other cases, the state-building agenda may stop fiscal devolution at a certain level of subnational government. In Ethiopia, decentralization reforms ‘consciously empowered ethnically identified states to hold the country together’, and did not deal with local governments until many years later and then only to some extent (Smoke, 2015, p. 36). However, the state-building agenda may also serve as a catalyst for deeper decentralization, as in Uganda where the objectives of rebuilding state legitimacy and improving service delivery prompted comprehensive decentralization along local government units, relegating the ethnically based kingdoms to the status of cultural institutions (Pozhidaev, 2020a).

Maintaining monopoly (oligopoly) on political power

In some cases, decentralization is used to prop up the legitimacy of incumbent political elites – but without tipping the balance too much and creating unnecessary competition (Smoke, 2001). In such situations, powerful local governments with significant budget and fiscal autonomy are viewed by the incumbent political elites as rival centres in the political marketplace (de Waal, 2015), regardless of the economic outcomes. In such situations, the central government prefers local governments that are financially dependent and can therefore be easily handled within a system of political patronage to distribute rewards for loyalty. De Waal (2015, p. 213) argues that such systems are found in locations (countries and parts of countries) in which the following conditions apply: ‘political finance is in the hands of individuals with political, military or business interests; control over the instruments of violence is dispersed or contested; and political disputes are not resolved by institutional rules and procedures (law is subordinate to political contingency)’.

Restructuring of power-sharing arrangements

Sometimes, decentralization is about co-opting other political forces in governance; these can be former opposition parties or former warring factions, as has been the case in some African and Latin American countries.

Decentralization creates additional political opportunities at the local level and offers access to public resources to previously marginalized political forces. However, if these partners view the new arrangement as a power-sharing scheme between themselves rather than between different layers of government, decentralization does not result in greater autonomy of local governments (including budget and fiscal aspects), but instead becomes a form of political patronage.

**SOMETIMES
DECENTRALIZATION
IS ABOUT CO-OPTING
OTHER POLITICAL
FORCES IN
GOVERNANCE.**

Sources of local government finance will remain limited and highly regulated to ensure a strong degree of control at the centre. One possible outcome of such power sharing is provincial or regional centralization, where provinces replicate the behaviour of the central government vis-à-vis local governments stifling genuine fiscal decentralization (Englebert and Mungongo, 2016). The debates at Yemen’s National Dialogue Conference (before it collapsed) brought to light the difference between the **political** perspective of regional elites on the one hand and the **developmental** perspective of civil society and development advocates on the other. The former focused on the federalization (or strong regionalization) of the country as a way to enlarge and reconfigure the composition of a new national power block, or eventually return to an independent

South; the latter focused on the empowerment of lower-level authorities and communities to mobilize resources and promote local development to address the country's development challenges.

Of course, it is also possible that new power-sharing arrangements can lead to genuine decentralization and increases in the autonomy of local governments.

Reducing the influence of regional elites

It is no surprise that some decentralization reforms were driven by the central government's desire to reduce the powers of provincial and regional elites in the wake of provincial centralization, as was the case in Tanzania in the 1990s and Cambodia in early 2000s. Such reforms usually enable greater fiscal autonomy of local governments, as fiscal powers are redistributed from provincial administrations in favour of the lower-level (district) governments. This redistribution however may create unnecessary competition and rivalry between various levels of subnational government, leading to suboptimal outcomes in resource allocation due to the loss of advantage of economies of scale.

Response to external agendas, political rent-seeking

In some cases, the decentralization agenda is not home-grown but externally driven by international partners and donors, particularly in the context of a peace-

**IN SOME CASES, THE
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building/reconciliation process (e.g. in Afghanistan as argued by Brown, 2021) or as part of socioeconomic transition (e.g. in East European countries and the former Soviet Union, as discussed in Pozhidaev, 2020b). As Eaton, Kaiser and Smoke (2011, p. xix) argue in a World Bank publication on the political economy of decentralization reforms, 'the international development community has played a major role in promoting and supporting decentralization in developing countries, especially in those that are heavily dependent on foreign assistance'. But equally important in shaping decentralization agendas are various continental and regional structures, political and economic – such as the African Union, the Association of Southeast Asian Nations, the East African Community and others – many of which advance their own decentralization programmes. Typically, a large amount of external pressure (as well as resources) is applied by external partners on the expectation that national political elites should deliver on decentralization results.

National politicians may view this external pressure as a rent-seeking opportunity in the context of a multifaceted and globalized 'new rentierism' (de Waal,

2015) to obtain additional international resources and support in pursuit of their own political objectives. National politicians might adapt to the externally driven agenda by adopting the formal language of decentralization without making substantive progress to power devolution to local governments – particularly with respect to fiscal decentralization, which is seen as the most powerful aspect of power redistribution. Fiscal devolution in such cases will be characterized by slow and uneven progress and periods of recentralization as well as a strong de facto central government control over local government fiscal space; this is true even when relevant responsibilities are formally devolved (e.g. by keeping a high proportion of earmarked grants, restricting local governments' own source revenue space or establishing cumbersome approval procedures for discretionary spending).

Conflicts with economic goals

The viewpoints of local governments often differ from those of the central government in the area of redistributive and macroeconomic policies. Thus, local governments may favour local and regional stabilization and growth as opposed to national growth, natural resource use and environmental protection. This section analyses conflicts that may be due to the divergence of views and differing economic priorities of central and subnational governments based on three public sector economic functions: macroeconomic stabilization, redistribution and allocation of resources (IMF, 2013; Musgrave, 1959).

Macroeconomic stabilization

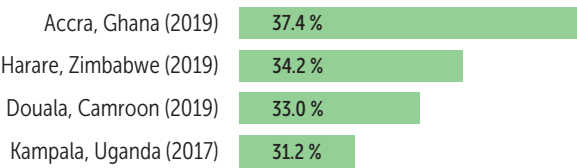
Growing share of urban economies

The central government is traditionally assigned primary responsibility for stabilization. From the perspective of the central government, devolving stabilization functions to local governments is neither possible nor desirable. It is believed that local governments cannot conduct their own economic policy because they do not have independent control over their own money supply and because the size of their economies is too small in relation to the national economy to produce a tangible macroeconomic impact. Also, deficit finance policies at the local level have not been considered desirable because local government indebtedness – and possible default – may lead to destabilization on a national scale, and repayment would involve substantial real income transfers to creditors outside debtor jurisdictions (Smoke, 2001). Several LDCs have recently experienced a concerning increase in local government indebtedness: for example, the total debt of local governments in Zambia amounted

to K 1.6 billion (approximately \$135 million) at the end of December 2018 (Government of the Republic of Zambia, 2019)¹.

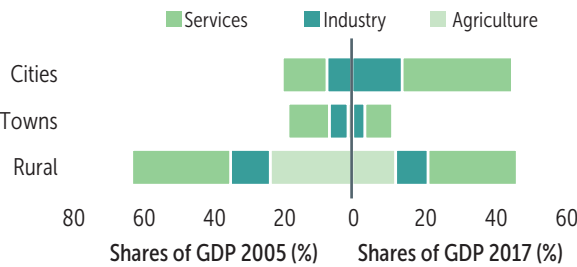
However, the stabilization argument against broader fiscal autonomy of local governments is somewhat contradictory. For one thing, most LDCs are categorized by an urban structure dominated by a primary city (e.g. Yangon in Myanmar, Kampala in Uganda, Addis Ababa in Ethiopia), which may account for

Figure 6.1 Gross city product (GCP) of select African primary cities as a percentage of national GDP



Source: Estimates from UNECA (2020).

Figure 6.2 GDP composition in Uganda by type of settlement



Source: Uganda Bureau of Statistics, [online annual statistical abstracts](#).

30 per cent or more of national GDP, as shown in figure 6.1 (UN-Habitat and others, 2020). While the size of individual local economies outside these primary cities may indeed be relatively small, their aggregate contribution to national GDP is close to 30 per cent; African cities collectively account for more than 50 per cent of the region’s GDP (UNECA, 2020).

Uganda’s development between 2005 and 2017 demonstrates the increasing importance of urban GDP (rising over the period from 24 per cent of national GDP to 40 per cent) to the national economy, as well as its structural transformation from agriculture to industrial production and services (see figure 6.2).

In fact, the role of local economies in stabilization is a matter of political choice. The argument about the weak stabilization effect of local economies becomes a self-fulfilling

prophecy when local governments are revenue constrained and do not have adequate fiscal space to develop their economies.

Unrealized fiscal potential of local governments

Research points to a significantly higher revenue potential of local governments. The revenue gap due to inefficient tax administration and leakages may reach as high as 90 per cent of actual revenue collection even in more developed and better-performing countries. For example, a study of Kenya’s county governments (Adam Smith International, 2018) indicates that the actual tax collection gaps are between 35 and 94 per cent for different county revenue sources (and

is particularly high for property tax), compared to the estimated potential. The study suggests that improved tax administration may result in a fivefold increase in county revenues. Similarly, some assessments for the Democratic Republic of the Congo put the loss from leakages in tax collection at 55 per cent of potential budget revenue (Englebert and Mungongo, 2016).

The modern service-based economy opens new, as yet untapped, potential sources of revenue for local governments. As argued by Shade Amole in chapter 15 (p. 375), taxation of the digital economy can become an important source of own revenues for local governments where digital platforms that offer short-term vacation rentals are operational. Unregulated short-term vacation rentals result in tax losses across all levels of government. Central governments can immediately impose indirect taxation on these digital platforms and remit same to local governments, measured by the short-term vacation stays in each local government area – to do so or not is, of course, a political choice. Taxation of online shopping and delivery platforms remains largely unregulated; such revenues are unavailable to local governments, although these platforms rely heavily on local government infrastructure, such as shopping facilities and roads, and services. The issue of taxing the service economy is broader than just digital services. In most cases, other large service providers such as banks and mobile network operators pay zero taxes to local governments, although they benefit immensely from the infrastructure and services maintained by local governments.

THE MODERN
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GOVERNMENTS.

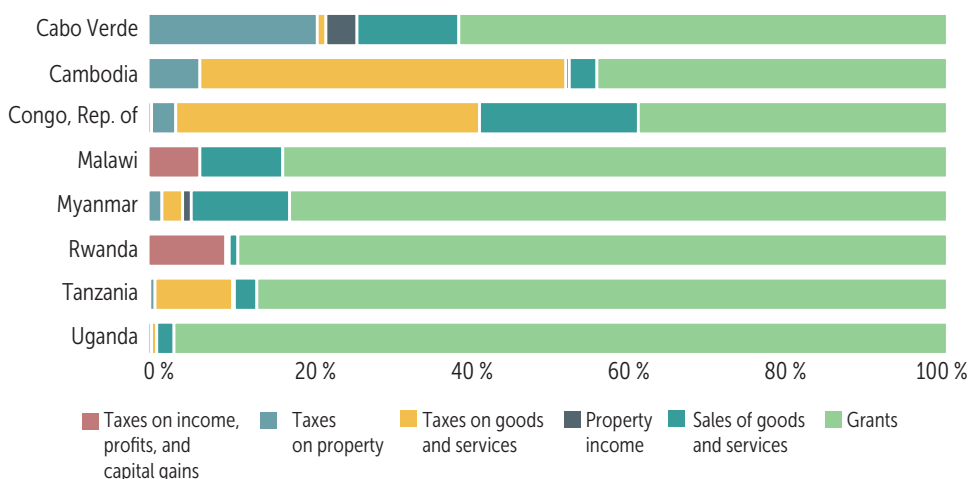
Another consideration that, in the opinion of the central government, makes fiscal devolution to local governments problematic in the context of macro-economic stabilization is their limited capacity to pursue appropriate fiscal policy. This lack is due to their very limited fiscal space and the types of revenues considered most appropriate for local governments, which tend to be income inelastic, such as taxes related to economic activity (agriculture, services, business and market). As Smoke (2001, p. 5) points out, these taxes are 'inelastic during growth, but the fragility of the local economy can result in dramatic yield reductions during contractions, undermining local ability to behave counter-cyclically'. This is what the COVID-19 crisis has demonstrated in many LDCs, including Uganda where local taxes linked to level of local economic activity have been particularly hard hit (see table 6.1).

However, tax assignment and degree of local government tax autonomy are driven by political choices. Even within the category of low-income and emerging economies, there are great variations in the local revenue space (see figure 6.3).

Table 6.1 COVID-19 impact on local economic activity taxes in Uganda

Type of tax	Decline (%)
Trading licenses and operational permits	15–30
Land rental fees	20
Market charges	30–60
Mining fees	30
Application/tender fees	75
Local hotel tax	90

Source: UNCDF (2020c).

Figure 6.3 Local government revenues, 2016

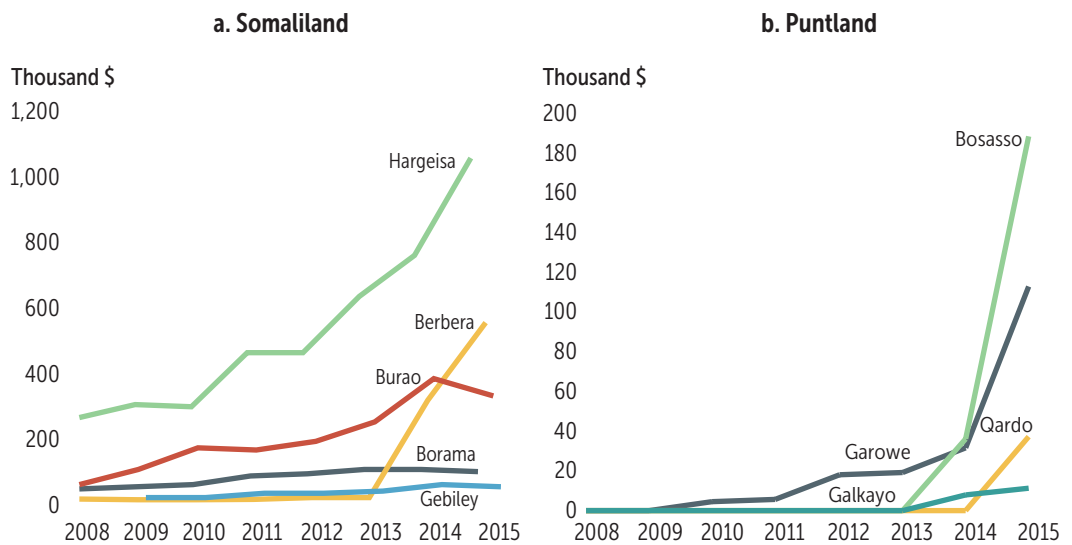
Source: International Monetary Fund [online database](#).

It is immediately observable that local governments in some countries are more financially self-sustainable than in others. The fiscal autonomy of local governments measured by the share of own source revenues versus central government grants and subsidies varies significantly, ranging from 61 per cent in the Republic of the Congo to 3 per cent in Uganda. The same is true for the share of tariffs and fees, which may play a countercyclical role. The total share of property taxes and sales of goods and services (as a proxy of charges) also differ significantly, from just 3 per cent in Uganda to 14 per cent in Myanmar, 17 per cent in Malawi and 34 per cent in Cabo Verde.

The composition of own source revenues in LDC local governments has changed in the past 20 years, although reliance on inelastic revenues persists.

Notably, an increasing number of local governments, particularly in urban areas, rely on more stable wealth-based taxes such as land and property as well as on charges (e.g. water, sewerage and waste management). The most striking case in this regard is Somalia, one of the most troubled countries among LDCs. Its revenues from local property tax have skyrocketed since 2008 by 485 per cent in Somaliland and 196 per cent in Puntland (see figure 6.4).

Figure 6.4 Increase in property tax collection in Somaliland and Puntland for selected local governments



Source: UN-Habitat (2016).

The foregoing discussion demonstrates that local government fiscal space is essentially a combination of political choices with respect to budget and fiscal autonomy. An effective revenue framework buttressed by well-developed regulations and relevant expertise is indispensable in expanding local government fiscal space. A limited local government fiscal space, particularly in terms of own source revenues, undermines the stabilization effect of local economies. The fiscal effort for expanding local government fiscal space by just 1 per cent may require a 10 per cent increase in local taxes and fees for a government with low own source revenues.

As discussed, in many cases, the central government does not introduce the specific regulatory provisions that could enable full utilization of local government resources and the application of more advanced approaches; this becomes the main constraining factor to expanding local government fiscal space and making it more sustainable and resilient.

Alternative sources of revenues for local governments

As financial approaches and instruments diversify and become more complex, local governments have begun experimenting with less traditional sources of finance, including the following.

- **Philanthropic finance** in the form of:
 - Corporate social responsibility finance (often in the context of extractive industries, as in Guinea where the Chamber of Mines and the mining industry are working with local governments to enhance local development impact)
 - Religious finance (as in Somalia where efforts are underway to establish District Development Zakat Funds)
 - Private donations from organizations or citizens (often targeting diasporas through hometown associations, neighbourhood and regional groups, ethnic and clan associations, and using different crowdfunding platforms, as in the city of Harare, Zimbabwe, where efforts are in progress to design an integrated crowdfunding model for community infrastructure rehabilitation)
- **Private finance in the form of equity** (in the context of local joint ventures or more formal public-private partnerships as in Senegal, Uganda and Tanzania)
- **Debt finance** in two major forms:
 - Bank loans
 - Local government general obligation or revenue bonds (this has so far been limited to a few municipalities in South Africa, but other subnational jurisdictions, both large – as in Kampala, Uganda – and small – as in Arusha, Mwanza and Tanga in Tanzania – are looking in this direction)
- **New sources of tax finance**, such as digital economy taxes (e.g. the taxation of Internet-based short-term vacation rentals described above and discussed at length in chapter 15, beginning on [p. 375](#))

To borrow or not to borrow?

The argument that local governments, if unrestrained, may engage in irresponsible borrowing and hence undermine macroeconomic stability, has some merit – but is by no means axiomatic. Local politicians are subject to the same short-termism and political myopia as national-level politicians, driven by the incentive to deliver on their promises and address community needs within their electoral mandate. This approach can result in spending programmes or

changes in revenues with no regard for future fiscal implications (IMF, 2013). However, this has never been an argument for stopping borrowing by the central government (although fiscal rules for deficit and debt are becoming more common and more effective).

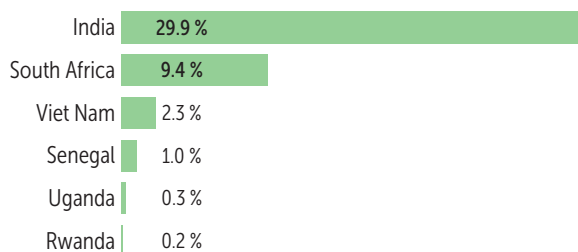
The impact of subnational borrowing on macroeconomic stability is determined by the same factors as government borrowing in general: fiscal responsibility frameworks, commitment to sustainable debt management, compliance with fiscal rules on deficit and borrowing, medium-term budget frameworks, and the like (Fölscher, 2007; IMF, 2013). Although, as discussed, there are examples of overborrowing by local governments beyond sustainable levels, international experience in emerging and low-income economies demonstrates that when such prerequisites are in place and enjoy the support and commitment of local politicians, subnational borrowing can be an important source of development finance for local governments without endangering their fiscal position or macroeconomic stability in general. As Freire and Kopanyi (2018, p. 2) argue, 'medium and long term borrowing/debt to finance infrastructure can expand development capacities substantially, while improving intergeneration equity, since the future generations not only enjoy the benefits of good road, water or transport networks, but also contribute their financing by paying taxes that are used to repay previous debts in instalments'.

A variety of successful debt finance mechanisms have sprung up in developing countries. These mechanisms range from general obligation municipal bonds (including their retail varieties) in South Africa; to pooled financing mechanisms relying on a combination of public, development and commercial finance such as the Municipal Development Fund in Bangladesh or the local government loans board in Tanzania, and the local loans and development fund in Sri Lanka; to blended finance schemes using a project finance approach mixing development finance and public finance without sovereign guarantees, such as reconstruction of Ouagadougou's central market in Burkina Faso with long-term credit from the Agence Française de Développement (UN DESA and UNCDF, 2017).

**A VARIETY OF
SUCCESSFUL
DEBT FINANCE
MECHANISMS
HAVE SPRUNG UP
IN DEVELOPING
COUNTRIES.**

Whereas the subnational debt as a percentage of general government debt is determined by the state structure (predictably, federal states or states with an intermediate government level, such as India and South Africa, have a higher proportion of subnational government debt), the difference between LDCs is quite significant (see figure 6.5). Ugandan local governments have a debt share twice that of Rwandan local governments, while Vietnamese local governments' share is seven times more than in Uganda. As is the case with local government

Figure 6.5 Total subnational government debt as a percentage of general government debt, 2016



Source: OECD-UCLG [World Observatory on Subnational Government Finance and Investment Database](#).

fiscal competences in general, the authority and flexibility to borrow at the local level is a matter of political choice (in addition to the borrowing capacity of local governments as a matter of course). On the other side of the spectrum are countries with no subnational debt, either because subnational governments are not allowed to contract any form of debt financing for development (Cambodia) or if they are legally allowed to borrow, relevant regulations and

facilities do not exist (Malawi).

The borrowing controls for local governments differ significantly by country. Most LDCs use an approach described by Ter-Minassian and Craig (1997) as 'administrative control', whereby the central government exercises direct control over subnational borrowings by authorizing every transaction (e.g. Ghana and Mozambique). Often, this control occurs in combination with a rules-based approach. Thus, the central government may establish limits on the level of indebtedness of subnational jurisdictions (in Uganda, local government borrowing is capped at 25 per cent of locally generated annual revenue; in Senegal, local government debt, together with other current expenses, must be below own source revenue collection in any given year). Alternatively, the central government may specify that borrowing can be resorted to only for specified purposes. In Mozambique, for example, subnational borrowing is restricted to three extraordinary situations: (i) reproductive investments and investments of social or cultural character; (ii) coverage of extraordinary expenses necessary to compensate for losses incurred in the event of a public disaster; and (iii) coverage of the needs of local authorities for financial recovery, following the execution of a previously concluded financial rebalancing agreement.

However, as Schick (IMF, 2013, p. 35) stresses, 'not every procedure should become a constraining rule because it may end up limiting the discretion of democratically elected leaders, introducing rigidity into the PFM [public financial management] system, and becoming an end in itself rather than a means to an end'. In this respect, there is a strong argument to be made in favour of a cooperative approach whereby limits on the indebtedness of subnational governments are not set by law or dictated by the centre, but are arrived at through negotiation between the federal and lower levels of government. This approach allows active involvement of subnational governments in formulating

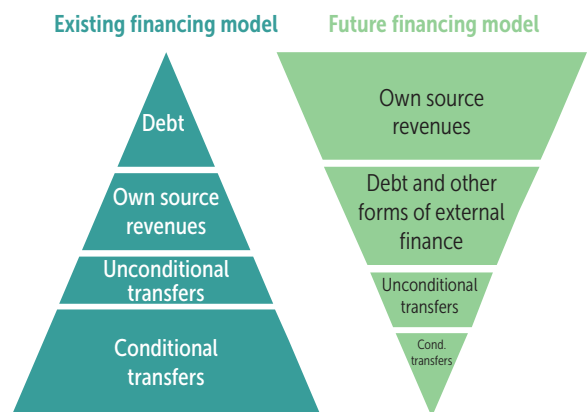
macroeconomic objectives and key fiscal parameters; it is therefore more effective than an approach based on the centre dictate (Rattsø, 2002; Ter-Minassian and Craig, 1997). Through this process, agreement is reached on the overall deficit targets for the general government, as well as on guidelines for growth of main items of revenue and expenditure. Specific limits are then agreed upon for the financing requirements of individual subnational jurisdictions. This collaborative process is in place in a number of more developed countries, but has yet to be tried in LDCs where local governments remain excluded from discussions on key fiscal parameters including debt levels.

COVID-19 and OSR: what is the evidence?

The COVID-19 crisis has demonstrated the indispensable role of local governments in effective response and recovery – and hence, stabilization. All local governments have adopted price control and stabilization measures as well as measures to support local employment (UNCDF, 2020a). That central governments recognize this crucial role is evidenced by different types of central government grants and dispensations earmarked for COVID-19 response by local governments in practically all LDCs, from Bangladesh and Viet Nam in Asia to Rwanda and Lesotho in Africa and Papua New Guinea in Oceania. However, in many LDCs, local governments have been playing an auxiliary role as conduits for implementation of central government policies and decisions. Where local governments had sufficient fiscal autonomy and space to design and implement their own customized response and recovery strategies, the results have been better and the impact of COVID-19 on local economies in terms of drops in output and employment less pronounced (UNCDF, 2020b).

In the longer term, efforts should be made to support a more sustainable financing model (see figure 6.6) that ensures local governments' contribution to macroeconomic stability and their fiscal resilience. This implies a transition from the current practice based predominantly on (conditional) central government grants towards one that uses independent sources including increased own source revenues, better access to financial markets, and a reduction of conditional transfers from the central government.

Figure 6.6 Towards the new financing model



Source: Author; based on UN-Habitat (2020b).

(Re)distribution

The central government's belief that it is better positioned to ensure income distribution (or the initial distribution of resources) is fair. That responsibility needs to be based in some higher-order social welfare function or other moral principle that would define the boundaries within which the distribution function should operate (the theoretical case for centralization of the distribution function was originally set forth by Oates in 1972). This function is gaining special importance in view of concerns about effectively addressing growing inequality worldwide –which affects the rate and quality of growth and may hamper progress towards the Sustainable Development Goals (Milanović, 2016; Piketty, 2019). The United Nations Economist Network report recognizes inequalities as one of the five megatrends that are shaping our world, stressing that 'by its very nature, inequality cannot be reconciled with the fundamental principle of the 2030 Agenda, to leave no one behind' (UN, 2020, p. 16). For this reason, understanding the role of local government in redistribution efforts to reduce inequalities is critical.

Smoke (2003) lists three arguments against a substantive role for local governments in distribution:

- Only the central government is in a position to redistribute resources from wealthier to poorer jurisdictions.
- Differential local redistribution programmes would be expected to create problems if factors of production were mobile.
- Local governments are constrained by their internal resources, so redistribution from richer to poorer areas must be the responsibility of central governments.

Smoke goes on to argue that local governments will not necessarily choose to pursue redistribution even in their jurisdictions internally unless forced to do so by broadly inclusive local political processes or interventionist central governments. For example, there are multiple examples when rural areas would receive less attention and funding because most funding would be directed to urban areas. On the other hand, the well-known challenge of an 'elite capture' may result in a high concentration of resource distribution in certain areas at the expense of others.

What role can local governments play in redistribution?

The case for **inter-jurisdictional** redistribution as a function of the central government is strong and clear. However, local governments can play a significant role

in **intra-jurisdictional** redistribution despite the challenges mentioned above (after all, national income redistribution policies also differ greatly between countries). Constraints on intra-jurisdictional redistribution in developing countries may be less problematic than in developed countries due to the limited living choices, which restrict the mobility of higher-income earners (Smoke, 2003). Consequently, as Dafflon and Madiès (2013) point out, redistributive policies implemented by decentralized authorities are unlikely to distort how factors of production are distributed or to lead to an implosion of the redistributive system.

The narrow fiscal space of most local governments, particularly in LDCs, makes execution of redistributive functions challenging. But, as discussed in the previous section, the boundaries of local government fiscal space and its composition are essentially political creations and can be modified within broad parameters. Whether local governments are intrinsically well suited to the redistribution function is a somewhat moot question, because many local governments either already play a significant role in such redistribution in their territory or are mandated to do so. Social assistance programmes – such as income support for food, utilities and housing – are often provided by local governments, with financial support and legal guidance from the central and, sometimes, state or provincial governments. For example, most South African municipalities (and many municipalities in other countries) deliberately try to subsidize the delivery of water supply to the poor. This is frequently done through a tariff system known as ‘increasing block tariffs’, whereby consumers pay for their water based on consumption blocks, with the first block being free or less costly (per unit of water consumed) than subsequent blocks.

THE NARROW FISCAL SPACE OF MOST LOCAL GOVERNMENTS MAKES EXECUTION OF REDISTRIBUTIVE FUNCTIONS CHALLENGING.

The United Nations Development Programme and the United Nations Capital Development Fund point out that the weak role of local governments in redistribution is explained primarily by the fact that safety net programmes and services remain underdeveloped in general; it is thus difficult to involve local governments in something that barely exists in many countries (UNDP and UNCDF, 2013). They argue for an enhanced redistributive role of local governments due to their potential to achieve better beneficiary selection (and targeting) processes, better grievance and redress processes, access to more information and greater disclosure, as well as their ability to adjust redistributive interventions to local conditions and circumstances.

COVID-19 and redistributive role of local government

The COVID-19 crisis has demonstrated the significant redistributive potential of local governments. This period has been marked by massive redistribution interventions by local governments, in cooperation with provincial and central government authorities. Almost all local governments organized food delivery and distribution of essentials (e.g. hygienic items and masks) to vulnerable and disadvantaged groups including low-income populations, homeless people, persons with disabilities, senior citizens, migrants and refugees, and street children. Even when such assistance was provided by central governments, they had to rely on the selection and targeting processes managed by local governments. For example, the city government of Dhaka in Bangladesh distributed food to the poor during lockdown based on information about vulnerable

**DURING THE
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LOW-INCOME
POPULATIONS.**

households collected with the support of the Urban Poor Federation of Dhaka North City – a coalition of 350 community development committees organized around savings groups. Community leaders from these committees swung into action by mobilizing their wide organizational network to identify the target groups and ensure delivery of food assistance.

Another example of local governments' redistributive activities during COVID-19 is their provision of emergency shelter for homeless people, street children and migrants as well as support to existing social assistance facilities, such as shelters for victims of gender violence. Local governments retrofitted disused public buildings, such as warehouses, municipal sport halls and other facilities, to accommodate such people. In this regard, Kampala City established a shelter for 70 street children in one of its divisions while providing food relief and setting up sanitation stations in others. As another example, a 1,000-bed camp for homeless migrants began operating in Bosnia's northern city of Bihać to cater to migrants for the duration of the pandemic.

Similarly, many local governments introduced relief measures from various municipal taxes and fees aiming at a redistribution effect, primarily for more vulnerable low-income populations – for example, enabling informal sector workers to continue to work. A common example is the waiving of municipal market taxes for informal vendors in cities like Accra (Ghana) and Kampala (Uganda), or deferring the rent paid by hawkers who operate in council-owned food courts, food kiosks and stalls in Subang Jaya (Indonesia). Other measures, such as bans on evictions from municipal and even privately owned properties,

were very important for informal micro and small enterprises operating from such locations. In some cases, as in Cape Town, South Africa, this measure was implemented in conjunction with financial support to property owners to support the rental market. Equally instrumental was a ban on disconnection from public utilities (water and electricity) for individual consumers and enterprises.

Many cities, including Kampala and Lima, organized their COVID-19 response around a territorial approach. This approach involves the application of an integrated package of response and recovery measures based on the needs of specific areas and districts in the city. It has proven particularly relevant in the case of informal settlements where one measure (e.g. humanitarian support) is ineffective without others (e.g. improvement in sanitation or decongesting public spaces). Lima applied a city-wide geospatial analysis to identify the availability of public and private infrastructure, population density, traffic intensity and other local characteristics so as to maximize the impact of specific measures in particular locations. In Kampala, the City Council and Capital City Authority together developed and implemented, based on a physical survey of informal settlements, a series of action plans to detail a complex of priority measures required in each informal settlement to minimize the social and economic impact of COVID-19. These measures included, for example, construction of additional water points, rearrangement and regulation of informal markets to make them compliant with COVID-19 health regulations, and improvement of communal latrines and sewage systems.

There are limits on the extent to which local governments can fulfil the redistributive function. But the remaining space is quite broad and well justified – particularly with respect to the intra-jurisdictional aspects of redistribution – allowing for their meaningful engagement in different capacities, including as facilitators and managers of centrally funded efforts, or funders and managers of their own redistribution schemes. Legal and regulatory frameworks should enable full utilization of the redistribution potential of local governments to maximize its effectiveness.

Allocation of resources

The rationale for decentralizing public spending and creating an adequate fiscal space for local governments entails having allocative and productive efficiencies correct for sources of inefficiency in the economic system. Oates (1972) argues

**MANY CITIES
ORGANIZED
THEIR COVID-19
RESPONSE AROUND
A TERRITORIAL
APPROACH,
APPLYING AN
INTEGRATED
PACKAGE OF
RESPONSE AND
RECOVERY MEASURES
BASED ON THE NEEDS
OF SPECIFIC AREAS
AND DISTRICTS.**

that local governments can better assess the needs of local communities, match diverse preferences, and therefore allocate resources more efficiently than the central government. Local governments also have the requisite information to select more cost-effective projects.

Arguments against assigning resource allocation function to local governments

**LOCAL GOVERNMENTS
CAN BETTER ASSESS
THE NEEDS OF LOCAL
COMMUNITIES,
MATCH DIVERSE
PREFERENCES,
AND THEREFORE
ALLOCATE
RESOURCES MORE
EFFICIENTLY THAN
THE CENTRAL
GOVERNMENT.**

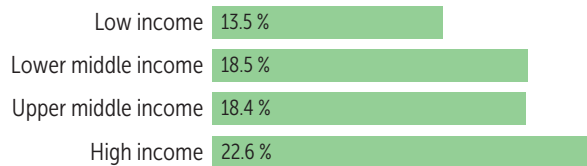
Devolution can undermine allocative and productive efficiencies if any or all of three conditions (summarized in IMF, 2013) exist: (i) preferences are homogeneous (subnational governments have no informational advantage over the centre), (ii) economies of scale are present (services cannot be provided efficiently by smaller jurisdictions), or (iii) externalities exist (subnational governments do not take into account the effects of their decisions on other jurisdictions). Concerns have been raised about subnational jurisdictions engaging in detrimental competition to attract mobile labour and capital (the 'race to the bottom' via a reduction of taxes, among others) and about the risk of local elite capture and corruption once central oversight is removed (IMF, 2013). Another common argument for centralization of allocation is that, while in theory local governments are well suited for the allocation function, their present capacity is too weak to be effective, as they suffer from unsatisfactory and often dysfunctional governance systems frequently characterized by rent-seeking and malfeasance (Shah, 2007b). In addition, they lack the managerial skills to oversee large and technically complex investment projects, not to mention low fiscal capacity. Hence, devolution of this function should be postponed until such time when capacity sufficiently improves.

Since effective resource allocation is the key argument in favour of fiscal devolution (and an expanded local fiscal space), fiscal autonomy of local governments becomes significantly circumscribed when the central government adopts this line of thinking. The impact on local fiscal space is threefold:

- The total budget envelope of local governments makes up a small percentage of the total general government budget (figure 6.7).
- The share of own source revenues is small in comparison to central government grants and transfers.
- The structure of central government transfers is dominated by special-purpose and earmarked grants with tight conditionality at

the expense of more flexible general-purpose unconditional grants, which do not exceed one fifth of all transfers (e.g. the share of non-earmarked grants of total grants and transfers is 12 per cent in Rwanda, and 17 per cent in Malawi and Uganda; see figure 6.3 on [p. 172](#)).

Figure 6.7 Total expenditure of local governments as a percentage of general government, 2016



Source: OECD-UCLG [World Observatory on Subnational Government Finance and Investment Database](#).

The overall result is a very narrow fiscal space for local governments and a low degree of fiscal resilience; this becomes particularly visible at a time of stress, as the COVID-19 crisis has demonstrated.

Challenges of local resource allocation are real but can be tackled

Let us consider the arguments against decentralized allocation of resources in the reverse order. Starting with the last argument about the **lack of capacities of local governments**, it is easy to see that this argument leads to circular logic. Capacity development is an iterative process grounded in practice. Once a weakness is identified, the relevant capacity gap is addressed and the enhanced skills and expertise are applied to a certain area to see if there are any remaining gaps that should be addressed in the next round of capacity building. There is no way local governments can improve their capacities if they do not have an opportunity to practice. Governments are addressing the capacity deficit at the local level in two ways:

- **Digital technologies and digital solutions for different public financial management areas to improve reliability, transparency, effectiveness and efficiency.** Financial management information systems, digitalized revenue administration platforms, digital asset management systems as well as standardized capital investment planning and project appraisal procedures serve to enhance local capacities in relevant public financial management areas.
- **Specialized facilities to offer additional expertise to local governments, particularly for capital investment and project development.** These facilities are established by the central government, a pool of local governments or, in some cases, development partners. They include technical assistance windows of local and municipal development funds (e.g. the Community Development Fund in Rwanda, the Municipal Development Fund in Bangladesh)

or stand-alone project preparation facilities (e.g. the Project Preparation Fund managed by the Development Bank of Southern Africa).

Moving next to the more general economic arguments as summarized in IMF (2013), the reasons that may mitigate the allocative and productive efficiencies of local governments should be given due consideration on a case-by-case basis. Cases when **preferences are homogeneous**, implying no informational advantage of subnational governments over the centre, are relatively rare (Shah, 2007a). Geography, climate and populations make for great variety in local government conditions with regard to economic activities, service delivery, factor availability and distribution, and so on.

Smoke (2001) argues that local conditions that are fairly common in developing countries can contribute to heterogeneity of local preferences and interests due to substantial spatial diversity in local environments and economic bases, and/or by the existence of widely dispersed and poorly linked settlements as well as a wide variety of cultural, political and institutional conditions. Since

THE SYSTEM OF
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FOR RESPONDING
EFFICIENTLY AND
EFFECTIVELY
TO DIFFERENT
INTERESTS.

these factors can vary across countries and can move the system in different directions, their relative importance must be understood in analysing a specific case. Local governments provide the institutional mechanism for responding to those differences. And the system of local fiscal administration is the means for responding efficiently and effectively to those different interests. A system of decentralized branches of the national government cannot hope to provide the diversity that is possible with devolved local sovereignty.

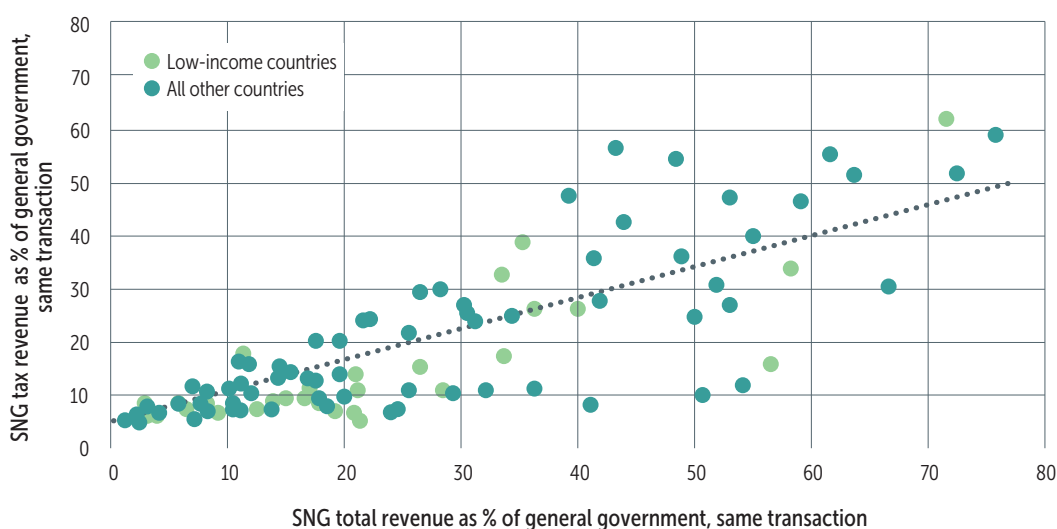
The presence of **economies of scale** is a valid consideration, justifying centralized delivery of certain projects and services.

Moreover, the proliferation of local governments in several African, Central European and Latin American countries – sometimes to the point where the average unit has become inefficiently small – is a real issue (World Bank, 2005). However, a constructive and as-yet underutilized response to this issue is inter-jurisdictional cooperation. Practically all countries have legal provisions for cooperation and joint project implementation between local governments, but these are rarely translated into a specific regulatory framework and even less rarely evoked in practice.

A solution to accounting for externalities (both negative and positive) also exists. Proper social, environmental, and economic appraisals of a local project should be able to identify such externalities and suggest ways of dealing with them through cooperative arrangements with other subnational jurisdictions and by adjusting the project design.

The **fiscal capacity of local governments** to undertake projects that require substantive investments is, as has been discussed throughout this chapter, never a given but a matter of political consensus subject to revisions and adjustments. Figure 6.8 demonstrates the general trend of decreasing dependency of local governments on central government grants as their own source revenue space increases. Increasing local governments' fiscal space is not a zero-sum game as perceived by many central governments. Smart expansion of local fiscal space is mutually beneficial and may improve the effectiveness and efficiency of central government finances, including the size of the budget envelope available to central governments.

Figure 6.8 Subnational government total revenues and tax revenues



Source: OECD-UCLG [World Observatory on Subnational Government Finance and Investment Database](#).

Contours of an effective enabling environment for local government own revenues

Local governments can and should contribute to the three objectives of public finance – stabilization, redistribution and allocation. Adequate, flexible and resilient local fiscal space built on local revenue generation is critical for unlocking the fiscal potential of local governments. For this, they require an effective enabling environment based on collaboration between central and subnational governments to overcome a zero-sum mentality. This approach promises a mutually beneficial outcome for all levels of government and for the country as a whole. Some essential characteristics of an effective enabling environment are discussed below.

Complementary and cooperative

An effective enabling framework should look at the revenue space of local governments from the perspective of its contributions to the three areas of stabilization, redistribution and allocation with the intent to fully unlock their revenue potential. Such a framework should create synergies and mutual complementarities between central government and local government finances, bringing out the best of the two worlds. It therefore should have a cooperative nature, explaining how the two sectors will collaborate on the delivery of the three key functions of public finance. In particular, an effective framework should allow for:

- Adequate coordination of spending, revenue raising and borrowing plans in aggregate to ensure macroeconomic stabilization
- Agreement on the allocation of resources among spending programmes so that, to the extent possible, they reinforce rather than contradict the allocative and redistributive policy goals of each tier
- Mutually agreed-upon and accurate forecasts of expenditures, revenues, the timing of cash inflows and outflows, and hence borrowing needs
- Coordination of the timing and amounts of borrowing to avoid undue pressures on financial markets

Implementation of the framework should also be cooperative and involve regular consultations and exchanges between central and local governments – not just one-way top down control as is usually the case.

The environment should be cooperative too at the level of local governments, allowing cooperation and intra-jurisdictional arrangements to address the issue of economies of scale and externalities. Subnational pooled financing mechanisms are an example of arrangements that allow subnationals to benefit from fiscal economies of scale.

Strong regulatory foundation

A legal framework, if not supported with regulations enabling implementation of legal provisions, is ineffective. An effective enabling environment should include regulations on how local governments can practically apply financing approaches, models and instruments discussed in this chapter, such as private equity and debt financing, alternative revenue-generating models, project financing and pooled financing mechanisms, and crowdfunding platforms. This is particularly relevant with respect to innovative finance approaches and instruments where little local expertise exists. Regulations should also address the facilities and conditions required for local governments to exercise their fiscal authority, such as access

to expertise for land and property valuation (which may not be readily available, hindering collection of property tax) or for project preparation and development.

Space for innovative finance

An effective enabling environment should create enough space for local governments to be able to tap into innovative sources of finance. These sources may include taxes on the digital economy, such as taxation of Internet-based short-term vacation rentals noted in this chapter. Innovative finance may also include known and tested approaches that are new in a particular local context. One example is land-based finance, which is significantly underutilized in LDCs and developing countries. Many land-based finance instruments are rarely, if at all, used: betterment levies, special assessments, land value increment tax etc. Another example is municipal credit markets. As discussed in this chapter, for many LDC local governments, this is not an option for the immediate future, but interest in and opportunities for this financing approach are growing. Debt finance includes many instruments in addition to plain vanilla bonds, such as green bonds, social impact bonds and energy efficiency loans. As countries and local governments recover better, cleaner and greener from COVID-19, these new instruments are likely to play an increasing role.

Resilience and flexibility

An effective enabling environment should foster the adequate resilience of local government own source revenue space. Overreliance on revenue sources linked to level of local economic activity makes local government vulnerable to economic and other shocks. Diversification of own revenues towards more income-elastic sources (such as land-based revenues) gains more importance to achieve a countercyclical effect and minimize the shocks. In addition, making the local revenue space more discretionary and increasing the budget and fiscal autonomy of local governments will take those local governments a long way to improved resilience.

Enhanced management of fiscal risks

While this chapter argues for enhanced fiscal and budget autonomy of local governments, it recognizes that increased authority should come with more responsibility (see box 6.1). An effective enabling environment should include mechanisms for robust management of local fiscal risks, including their identification, analysis and mitigation measures. In most cases, management of fiscal risks exists in a very rudimentary form, if at all, with no analysis of the external

and internal context within which the local government operates. Fiscal projections and control measures, if extant, are based on simple historic projections, which are often divorced not only from the domestic context but also from the central government fiscal risk policies where they exist. This again highlights the need for a collaborative enabling environment that envisages continuous exchanges between the national and subnational levels of government.

Box 6.1 UNCDF local revenue enhancement programmes: a practical approach

Through its Local Revenue Enhancement Initiative, UNCDF aims to unlock the revenue potential of local governments through revenue enhancement action planning (REAP). The initiative has been implemented in Kenya, Somalia and Uganda, among others, in partnership with the International Monetary Fund and other national and international stakeholders; it is generating a strong evidence base to demonstrate the potential of local governments and advocate for more comprehensive legal and regulatory reforms to improve their finance systems.

The initiative starts with a two-component local revenue administration **diagnostic**, undertaken with the involvement of local government officials and community representatives.

- The first component uses the International Monetary Fund's Tax Administration Diagnostic Tool to identify local government **compliance with good international experiences** in various areas of revenue administration. The diagnostics have revealed serious compliance issues, particularly incomplete and unreliable taxpayer data, inadequate risk management systems, problematic accounting practices such as unreconciled suspense accounts, and segmentation and fragmentation of revenue administration. The component also estimates losses incurred by local government along the revenue management chain. This has been an eye-opener for some local governments, which have found that 20–30 per cent of their revenue potential is eaten away by incomplete taxpayer data or that they are losing 20 per cent of revenues due to inadequate billing.
- The second component focuses on local government **revenue potential** from an economic perspective. This component helps answer the question of what the local economy's true revenue potential is now and in three to five years, given its essential characteristics. For example, can municipal infrastructure assets and land be used more productively to generate more revenues? What are the economic opportunities for expanding the taxpayer base?

The two components of the diagnostic paint a clear picture of weaknesses and opportunities for local revenue enhancement in both the short and medium term. Combined with more comprehensive and accurate forecasting techniques, they allow local government to set specific revenue mobilization targets over a medium-term period. This **target setting** is the second step of the REAP initiative. It helps identify the most promising sources of revenue and focus on action planning in the next step.

(continued)

Box 6.1 UNCDF local revenue enhancement programmes: a practical approach *(continued)*

Having developed their revenue-generation aspirations, local governments embark on **development of their REAPs**, which include specific budgeted actions to address weaknesses, capitalize on strengths and fully exploit available opportunities. Distinctions are made between 'low-hanging' revenues achievable within a year or so and those that will take more time to achieve.

REAP preparation is not limited to a few officials in municipal or district offices. It is a participatory exercise involving various relevant stakeholders, whose aim is to ensure broad local ownership of the proposed revenue-enhancement measures and to build political momentum and goodwill among local politicians, civil servants, the business community, non-governmental organizations and other stakeholders. REAPs usually focus on activities that strengthen local tax administration structures (e.g., digitization of taxpayer database and billing, provision of information technology and other equipment) as well as on awareness raising of the population to improve voluntary compliance.

UNCDF supports all REAP stages, including the last one, **implementation**, with technical advice and performance-based matching REAP grants. Local governments commit to co-financing a certain proportion of the REAP grant (varying from 20 to 50 per cent), but grant size is determined by the success achieved in revenue collection during the previous year. Those that perform better against the set targets are entitled to a larger matching grant.

Performance to date has differed across local governments and countries. But it has not been uncommon to achieve a 30–50 per cent increase in revenues in just one year by improving the tax collection rate – e.g. through more effective billing, enforcement and accounting systems, including digital solutions. Some local governments have seen an increase in revenues by 100 per cent over the medium term. The political support and genuine commitment of local government administrations and the broader community are critical in achieving better results.

Building on REAP success stories and new evidence, UNCDF helps local governments – in partnership with their associations and the relevant ministry in charge of local governments – formulate a **national reform agenda** in support of increased fiscal competence and autonomy of local governments. UNCDF helps its partners develop national fiscal decentralization strategies, conduct legal and regulatory reviews of local government finance systems, and create or strengthen the existing subnational pooled finance structures.

Note

1. Based on a 31 December 2018 exchange rate of 1 Zambian kwacha = \$0.08421.

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7

Leveraging Local Assets for the Sustainable Development Goals

DANIEL PLATZ, SURESH BALAKRISHNAN, LINDA NEWTON AND
CLAIRE CHAN

Developed and developing countries are exploring innovative financing mechanisms to mobilize trillions of dollars to fill the infrastructure financing gap in support of the Sustainable Development Goals. Allocations from national budgets and development assistance, both concessional and commercial, can strengthen the infrastructure required to deliver public services and enable economic transformation. But often, there is no budget allocated for the financial, human and material resources to manage infrastructure assets over their lifespan. As a result of a strong focus on the ‘new and shiny’, old assets are often neglected and new ones are built without putting in place an asset management framework that supports reliable, inclusive and sustainable essential services that leave no one behind. Such an oversight can be extremely costly. Underinvestment on maintenance of infrastructure has been estimated to cost some developing economies up to 2 per cent growth in gross domestic product (GDP) (Foster and Briceño-Garmendia, 2010). Underbudgeted and undermaintained infrastructure assets are more likely to fail, disrupting essential services such as transport, water and sanitation, and solid waste management.

Contrary to popular belief, the actual construction or acquisition cost of an infrastructure asset only accounts for 15–30 per cent of its overall expenditures; in fact, 70–85 per cent of costs are incurred over the asset’s life cycle once it is built (IPWEA, 2011). Consequently, integrating the financial, human and material resources needed to incorporate proper infrastructure asset management into public investment strategies will strengthen the sustainability of public investments.

This chapter highlights the strategic significance of asset management in the context of the various approaches adopted to expand and improve infrastructure, and the criticality of effective budgeting and financing of infrastructure over its entire life.

A new handbook on infrastructure asset management

Implementing sound infrastructure asset management requires a good grasp of relevant tools and techniques as well as long-term political commitment. In 2017, the United Nations Department of Economic and Social Affairs (UN DESA), together with the United Nations Capital Development Fund (UNCDF), responded to capacity development needs for asset management by designing and supporting the implementation of a comprehensive asset management toolkit for local governments in developing countries, included in the United Nations (UN) publication *Financing Sustainable Urban Development in the Least Developed Countries* (UN DESA and UNCDF, 2017). Since then, the two organizations have worked with local government leaders and technical experts in four

pilot countries (Bangladesh, Nepal, Tanzania and Uganda) to apply those tools in the field and at the central and local government levels.

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As a result, local officials from over 40 districts, cities and municipalities, as well as from national and subnational agencies involved in local asset management, have assessed asset management needs and undergone customized training in the application of a new UN diagnostic tool and in the design and implementation of asset management action plans. These latter comprise a range of actions to ensure that priority assets support the reliable, cost-efficient and sustainable delivery of essential services.

The tools and insights local and national governments have gained in their application are captured in a new UN publication, *Managing Infrastructure Assets for Sustainable Development: A Handbook for Local and National Governments*, here referred to as the Handbook. The Handbook offers much in the way of guidance to strengthen data collection and management; adjust to the challenges posed by COVID-19; build long-term resilience of infrastructure assets to external shocks, including health pandemics and the effects of climate change; and create an enabling policy and regulatory environment for asset management. After briefly contextualizing infrastructure asset management within the evolving landscape

of infrastructure finance, this chapter draws from the Handbook and highlights some of its key insights and recommendations spanning the fundamentals of asset management, the role of data and crisis-resilient asset management.

Infrastructure asset management in the context of evolving forms of infrastructure finance

The context in which the Handbook discusses infrastructure asset management reflects an implicit maturity model in the effort to finance infrastructure. Initial efforts to finance infrastructure in many developing countries were a function of the significant gaps in availability of capital in a post-conflict or post-independence scenario. They relied on mobilizing development assistance grants and the use of fiscal transfer mechanisms to ensure that investments in infrastructure for basic services were also made by subnational governments and entities. The political significance and visible impact of these investments crowded in a gradually increasing volume of investments at the subnational level, drawing on the growth of national revenues as well as often concessional sovereign borrowings in the second stage of grant-financed infrastructure expansion. The structural transformation of these economies brought in its wake a third stage. At this stage, strong demand for infrastructure financing reached a scale that was well beyond budget-based financing and called for revenue-generating infrastructure to be financed through debt using private enterprises, special purpose vehicles, public-private partnerships and the like. There was concurrent recognition that the value of these investments could only be realized when they were supported with budget provisions and internal revenues to meet the operational and maintenance expenditures. This called for a fourth stage of financing through asset management, operational expenditure block grants and cost-recovery mechanisms.

The criticality of infrastructure asset management stems from the growing sense of ownership and responsibility of local governments over the assets they own or manage. In these times of inadequate capital for investment, which constrain creation or expansion of infrastructure, the political imperative to deliver results has compelled elected leaders and bureaucrats to explore options around assets or infrastructure they already have at hand to extract greater outputs or value. Such an effort to extract greater value would call for relatively small but additional investments in infrastructure to further increase outputs, or maintain

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the infrastructure at existing levels of service. This realization introduced greater awareness of the value of existing assets – and the willingness to invest in them to extend their life and output instead of replacing them or adding new assets, particularly when they generate revenues. The use of prudent debt finance to transform assets into new infrastructure offers the opportunity to leverage these assets as equity or quasi-equity, and to unlock value to finance infrastructure development.

What exactly are assets?

The most basic definition of an asset is something that is of value to a person or an organization. Assets can belong to private or public organizations. They can be tangible, meaning they are physical and can be touched, or they can be intangible like financial assets. Physical public assets are tangible assets (e.g. physical infrastructure, buildings, equipment, property and natural assets) that are owned and/or managed by the government.

Since assets provide a service to users, owners and the community, they provide **service value**. Because they cost money to acquire, assets also have **financial value**. When managed effectively, both an asset's service value and its financial value contribute to the community's overall wealth. Typical government assets include the following.

- **Infrastructure** such as roads and signage, street lighting, water utilities (water supply, waste water and storm water systems), flood control systems such as dykes and levees, energy supply systems (electricity generation, transmission, distribution and storage), parks and recreational facilities, cultural facilities, telecommunications networks, ports and port facilities (wharves, docks and cranes) and information technology and systems
- **Equipment** such as garbage trucks, graders, computers and medical equipment
- **Land and natural assets** such as wetlands, forests and vegetation
- **Buildings** such as schools, health centres, community centres, jails and government offices

Assets with a high service value and/or high financial value are called **critical assets**. Countries around the world differ in their division of responsibilities for asset management; thus, depending on the government context, some critical assets might be managed at the local level, while others are the responsibility of the national government. In most cases, essential services such as water

and sanitation, solid waste management and road maintenance are assigned to local governments. It is important for all local and national governments to understand what services their assets deliver, why they are delivered and in what manner. The Handbook addresses these issues at both the fundamental level of asset management and in the midst of sweeping global changes that will require a more nuanced, innovative approach.

What is asset management?

The processes related to the acquisition, use, refurbishment and disposal of government-owned properties (Kaganova and McKellar, 2006) used to be known simply as the management of local government properties. The use of the term 'asset management' in the context of nationally and subnationally owned properties is relatively new and is rooted in the recognition that properties owned by local governments have intrinsic value and should provide benefits for the public (UN, 2021). Common conceptualizations of asset management emphasize such a normative element. For example, asset management is described as a process 'with the ultimate objective of providing the best possible service to local citizens' (Farvacque-Vitkovic; Kopany, 2014, p. 276) or 'to minimize the total cost of owning and operating these assets while delivering the desired service levels'¹. Consequently, the inclusion of the term 'asset' in local and national asset management marked the recognition on the part of many local and national governments to follow a proactive approach and consider ways to manage their assets more efficiently and effectively for the benefit of residents.

IT IS IMPORTANT FOR ALL LOCAL AND NATIONAL GOVERNMENTS TO UNDERSTAND WHAT SERVICES THEIR ASSETS DELIVER, WHY THEY ARE DELIVERED AND IN WHAT MANNER.

What are the benefits (and costs) of asset management?

The long-term benefits of asset management clearly outweigh its short-term costs. These short-term costs may lie in the introduction of new processes and policies, such as the establishment of a city-wide asset management framework, technical adjustments to integrated financial management systems to include asset management modules, regular meetings among government departments involved in asset management, better coordination with external stakeholders and a greater commitment to continuous learning. Yet costs are relatively low when compared to the significant social, financial and environmental

long-term benefits of asset management; these include, but are not limited to, the following:

- Economic sustainability is enhanced by reducing the cost of delivering services.
- Social equity and benefits are realized because the community has more resources for services and amenities.
- Environmental sustainability and reliance are stronger because resources are conserved, and attention is given to long-term solutions rather than short-term affordability or convenience.
- Comprehensive asset management systems protect natural assets, such as land, lakes, rivers and groundwater, allowing these assets to retain value.
- Citizens enjoy better, more dependable services without unexpected failures and indefinite interruptions.
- The financial viability of local – and ultimately national – governments is enhanced because future costs are anticipated and reserves set aside. Greater creditworthiness results, which helps to mobilize new investments.
- Assets can be transformed and leveraged for newer and high-priority purposes to deliver services and development impact.
- Well-managed and evaluated assets (e.g. properly titled, registered and valued land) can be used as collateral for future investments.
- Government transparency is enhanced, which leads to better communication with the public and greater public confidence in government.
- Communication is more effective with rate payers, elected officials, financial rating organizations, regulatory agencies and potential public or private investors because plans and results are documented and shared.

These benefits can ripple through the economy and the various levels of government. As local authorities improve their management of scarce resources, for example, the entire country is able to attract more capital and investment from domestic and foreign sources because of an improved credit rating.

Additional benefits that are often overlooked arise from the continuing operation and maintenance of assets over their life cycles. Governments make major investments when acquiring or constructing assets but often neglect to invest equally in the ongoing functionality and performance of those expensive assets. This reduces the level of service to citizens and wastes the initial investment.

The basics of asset management

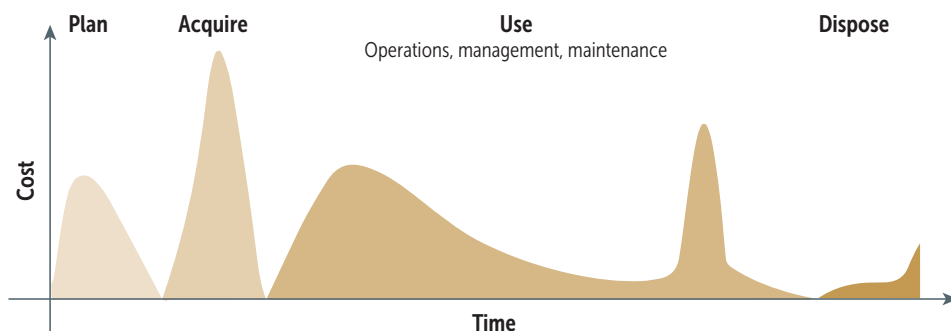
There are four key phases in an asset's life cycle: planning for its acquisition; acquiring it; using, operating and maintaining it; and disposing of it when it no longer meets the needs for which it was envisioned (see figure 7.1).

Planning is the most important and least expensive phase of the cycle, a fact that is often overlooked in discussions of infrastructure investment. It defines key performance requirements of an asset; decisions made at this point will affect assets over their entire life cycle. In this phase, planners must answer key questions such as why a particular asset is needed, what services it will deliver, how it can be acquired or established, and whether it can be afforded.

The **acquisition** phase, as shown in figure 7.1, somewhat counterintuitively accounts for only 15–30 per cent of the life cycle cost of an asset. The majority of the costs are actually incurred during the **operation and maintenance** phase. Here lies a central argument for the importance of systematic asset management: if local (and central) governments focus on the investment process at the expense of the management phase, they ignore the real costs of an asset and jeopardize the sustainability of their project.

The **disposal** phase of an asset can incur significant costs as well. When assets are not disposed of in a timely and efficient manner, they may deteriorate rapidly and drain local resources. For example, an old vehicle fleet owned by the local government can accumulate rust and be ravaged or scrapped for spare parts, all because red tape and/or poor planning prevents timely disposal.

Figure 7.1 Physical asset life cycle



Source: UN (2021).

The asset management framework

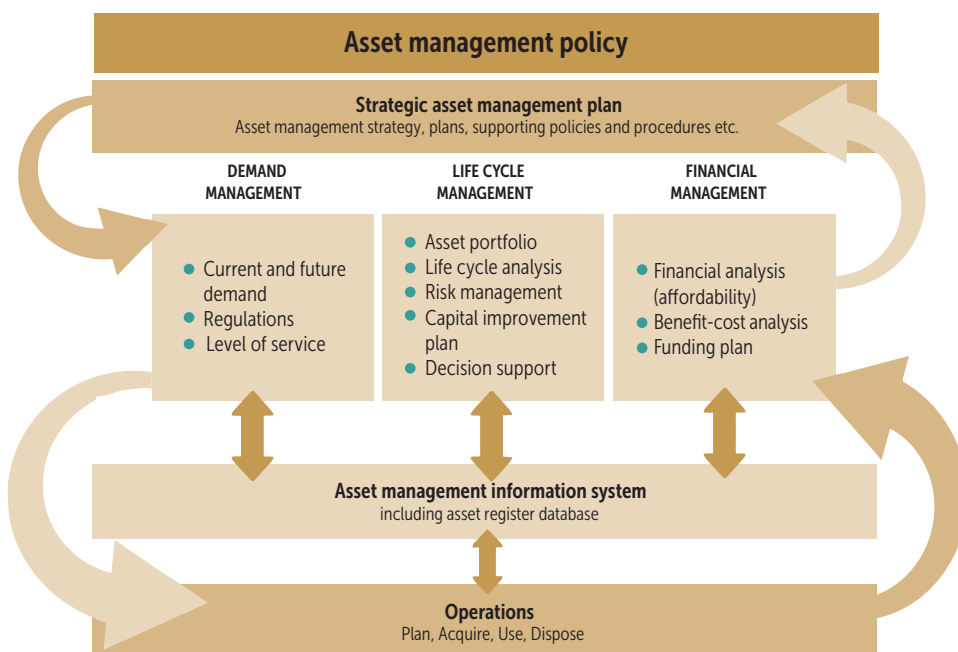
The asset management framework guides asset management activities and links these to the objectives of national and local governments. The framework is an essential route map, and all national and local government organizations that manage physical assets should have one (see figure 7.2).

An asset management framework comprises the asset management **policies and strategy** that tell asset managers what they are doing and why, the **strategy and direction** to help meet objectives and the three **pillars of asset management**:

- Demand management
- Life cycle management
- Financial management

An asset management framework allows asset managers to deliver needed community services while obtaining the maximum value from their assets. The asset management policy and strategy should be developed jointly by decision makers and stakeholders. Several rounds of consultation and communication can ensure that the needs of the community are taken into consideration, along with the experiences of those who manage the assets on a daily basis.

Figure 7.2 Asset management framework



Source: UN (2021).

Surveys, town hall meetings and other methods can be used to solicit input on areas such as levels of service, approaches to be taken and stakeholder expectations. All stakeholders should have the opportunity to understand how and why government makes decisions, even if they do not fully agree with a policy or strategy.

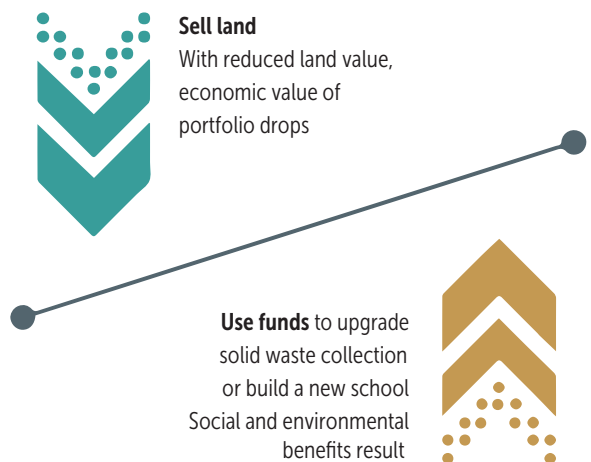
The easiest challenge to overcome is that of incomplete asset information and lack of awareness, but it is hard to know what we do not know, especially with a well-ingrained status quo. This is why multistakeholder discussions are crucial and can bring light too often overlooked issues or perspectives. The hardest challenge to overcome is that of funding: there will never be enough money. But with good asset management, governments can tackle any challenge in a reasonable amount of time by following the three pillars of asset management.

Portfolio management

The term **portfolio** describes a related group of assets that contribute to the overall wealth – both financial and physical – of the community serviced by those assets. Taking a portfolio management approach means managing assets collectively rather than as individual items. This enables decision-making that best serves the community from economic, social and environmental perspectives. The process compares alternatives across the portfolio, thus allowing asset managers to make a decision that maximizes benefits and minimizes costs.

It is easy to see why portfolio management is the best and most sensible approach to take for the economic and social welfare of the community. For example, consider the benefit of selling land to generate financial resources that can be directed to upgrading other assets such as a fleet of solid waste collection trucks or local schools (see figure 7.3). In such a scenario, the government trades a financial asset (the value of the land) for a physical asset (improved equipment or infrastructure). Such a transaction might reduce the immediate financial value

Figure 7.3 Comparing portfolio alternatives



Source: UN (2021).

of the asset portfolio, but this will be offset by an increase in social and environmental benefits. There will certainly be economic benefits, too, in the form of more efficient waste collection and/or a more educated labour force. Thus, the overall value of the asset portfolio increases.

Portfolio management is undertaken at the strategic and tactical levels. At the strategic level, we look at the best mix of assets to deliver services in the most effective and cost-efficient way possible. The example of selling land to generate financial resources to upgrade the solid waste collection fleet is an instance of strategic portfolio management.

Asset management enablers

The Handbook highlights asset operations and asset management enablers. Asset operations refer to the usage phase of an asset – i.e. the phase that incurs 65–80 per cent of its life cycle costs. This phase encompasses activities, people and equipment required to maintain high-quality, uninterrupted services. The costs of these resources accumulated over many years or decades are tremendous, and asset managers should minimize them as much as possible. The ‘law of five’ is a powerful argument for timely preventive maintenance. Local governments can undertake preventive maintenance by paying a small amount now to keep assets in good condition for longer. If they wait and defer minor repairs, they will have to undertake corrective maintenance through moderate repairs costing five times more than preventive maintenance, and eventually, reactive maintenance through major repairs costing another five times more (UN, 2021).

Asset management enablers refer to the ideal constellation and combination of people, resources and technology that promote effective asset management. Achieving this combination has four key prerequisites:

- Asset management must be clearly defined as a function.
- There must be a clear link between and reporting from senior staff to government.
- People and technology need to be well resourced.
- The asset management office or team needs to be visible within government and externally to the wider public and outside stakeholders.

The Handbook emphasizes three elements essential to successfully implementing asset management: an asset management **champion**, an asset management **team** and **political buy-in** from the local council and management.

The importance of data and information for asset management

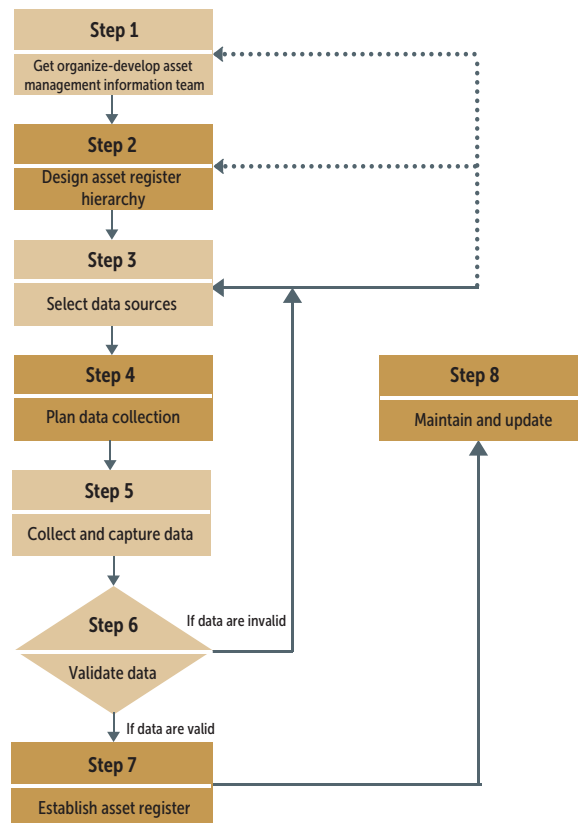
Having the right data and information is the very foundation of effective asset management. They will look different depending on local needs and circumstances, but all effective asset inventory systems, or asset register databases, share some common features and processes. The Handbook introduces a logical framework and step-by-step guide to building such a system to support better decision-making for asset management and, ultimately, improve efficiency. The process is made up of eight steps (see figure 7.4):

- Develop an asset management information team
- Design a hierarchy of assets
- Select data sources
- Plan data collection
- Collect and capture data
- Confirm and validate data
- Establish an asset register
- Maintain and update data in the asset register

People are at the forefront of asset inventorying, so building a competent and reliable asset management information team is essential. The asset management focal point should convene relevant personnel from the technical, operational and service departments of the local government on a regular basis who

are equipped and willing to fully support the wider asset management team through data collection activities. Each department likely already gathers data to some level of precision and regularity for their specific areas of work. Compiling data from these different sources onto a common platform reduces inefficiencies, allowing information to be more accessible and guide better

Figure 7.4 Key steps to build and maintain an asset register database



Source: UN (2021).

decision-making. Meeting frequently with the information team, the focal point should provide regular updates to the administrative and political leadership.

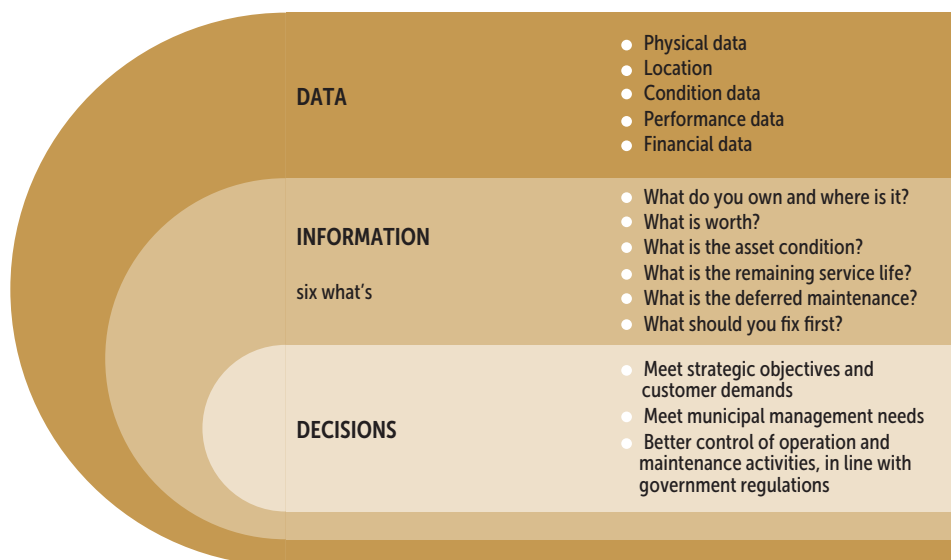
If not already done, the asset management information team should first work to establish a systematic representation of its assets that maps relationships between assets, related services, functions and accountabilities. Such mapping is the backbone of asset inventorying and its careful design is crucial to understanding what information to collect, when to collect it and what it means.

When it comes to asset data collection, the Handbook highlights the broad range of relevant data for a registry and the importance of conducting on-site assessments whenever possible. More specifically, it recommends that the basic information presented in figure 7.5 be collected and kept in an asset register, accessible to all those directly involved in managing assets.

At the outset, the asset management information team needs to label assets with unique identifiers that define it in terms of its position in the asset register; this typically follows a hierarchical structure. For example, solid waste collection is a service and may have an identification label such as SW1; a hauler truck is an asset category used for solid waste collection and thus should have a more specific label such as SW1.3.

Effective data collection requires a plan that identifies potential sources and the most suitable and effective methodology for collection. Key criteria for effective data collection include relevance, accuracy, consistency, reliability and

Figure 7.5 Asset information management



Source: UN (2021).

timeliness. Any plan should aim to log information about an asset's location, condition and performance as well as maintenance and financial data. That said, the level of accuracy, quantity and overall quality of data that the asset management information team plans to collect should result from a careful cost-benefit analysis, assessing the cost of data collection and the value and benefit associated with the data in question.

The 80/20 rule of thumb provides helpful guidance. In essence, it is important to recognize diminishing returns in data collection so as not to expend a majority of resources on efforts that will not yield much data. Thus, the asset management team can collect 80 per cent of data with 20 per cent of resources, but the last 20 per cent of data collection is likely to consume the last 80 per cent of the resources.

Once the data have been collected and captured, they should be reviewed by a team of experts with extensive asset management experience and familiarity with local assets to ensure that the aggregated data are relevant, representative and consistent. With the data thus validated, the asset management team is now in a position to create an asset register database appropriate to the nature, size, and complexity of the assets and the capacity of the municipality.

Over time, such data must be maintained, updated and reviewed as part of a continuous improvement loop of the asset register database and the wider asset management information system. The team should periodically assess whether the data are still serving the needs of the information system. Moreover, the asset management information team must periodically assess whether the information remains adequate to meet municipal officials' requirements for effective decision-making, and whether the results that are being achieved using this information are delivering the expected outcomes. Taking a regular pulse check will lead to improvements in many elements of the asset register database, including specifications of what data to collect, at what level of quality, information processing requirements and/or business processes and competences.

**RECOGNIZE
DIMINISHING
RETURNS IN DATA
COLLECTION TO
AVOID EXPENDING
A MAJORITY OF
RESOURCES ON
EFFORTS THAT WILL
NOT YIELD MUCH
DATA.**

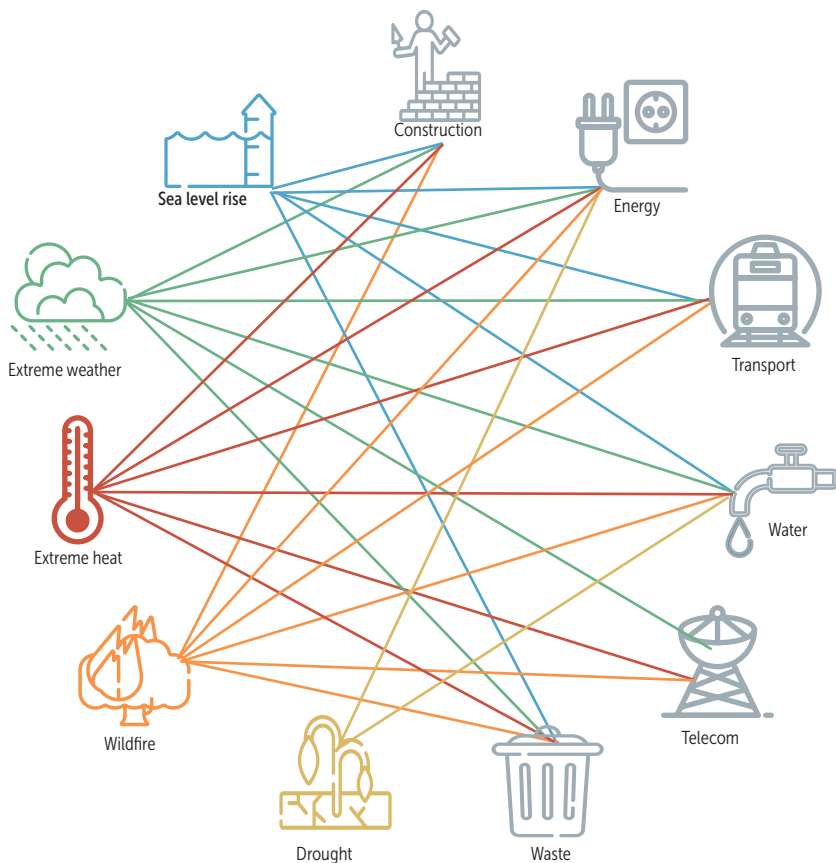
The contribution of asset management to climate change adaptation

With more than half of the world's population now living in cities (UN, 2014), climate change is, to a great degree, an urban issue, but it poses hazards to all communities. Climate change puts stress on local services and the assets they rely on, threatening residents' quality of life. It can have a potentially great impact on the effectiveness and lifespan of assets (see figure 7.6), which can

result in inconvenient, costly or even dangerous service failures. Depending on the characteristics and severity, climate events can cause asset operating thresholds to be exceeded, resulting in temporary loss of services and damage, destruction or critical failure.

Past examples of severe weather can provide indications of how severe climate change events can be in the absence of resilience-building activities. For instance, the 2011 flooding in eastern China caused major damage to 28 rail connections, 21,961 roads and 49 airports as well as power disruptions to millions of users (Hu, 2016). Similarly, the intensification of drought systems can critically imperil drinking water supplies, as was seen in São Paolo’s main reservoir in 2015 and in Cape Town between 2015 and 2018 (Muller, 2018). The economic implications of such events can be substantial. For example, it is estimated that a major disaster in Indonesia could cost the economy up to 0.3 per cent of its GDP (UNDRR, 2019).

Figure 7.6 Impact of climate change on infrastructure assets



Source: UN (2021).

While communities around the world are looking for ways to manage the impacts of climate change, most local governments already own some of the most cost-effective resources available in the form of natural infrastructure. This refers to existing, restored, enhanced or simulated combinations of land, water and vegetation. The natural environment can provide incredibly efficient resources to deliver services and bolster resiliency. Embracing natural infrastructure and managing it effectively can allow municipalities to increase the quality and resilience of services at lower costs.

Where engineered assets must be replaced once their useful lifespan ends, some natural infrastructure can provide services permanently while also providing co-benefits not available from engineered assets. Natural infrastructure can become even more valuable and effective over time with monitoring, maintenance and restoration.

The economic value of climate resilience is enormous. By reducing service and asset vulnerability to climate impacts, local governments can reduce the costs of disaster events while acquiring greater value from infrastructure investments.

The **climate risk assessment process** provides necessary information to mainstream climate resilience into municipal operations through asset management practices. The Handbook provides the reader with tools and resources to understand the local impact of a changing climate and puts forward a framework for climate-resilient asset management. The framework is built around risk identification, analysis and evaluation.

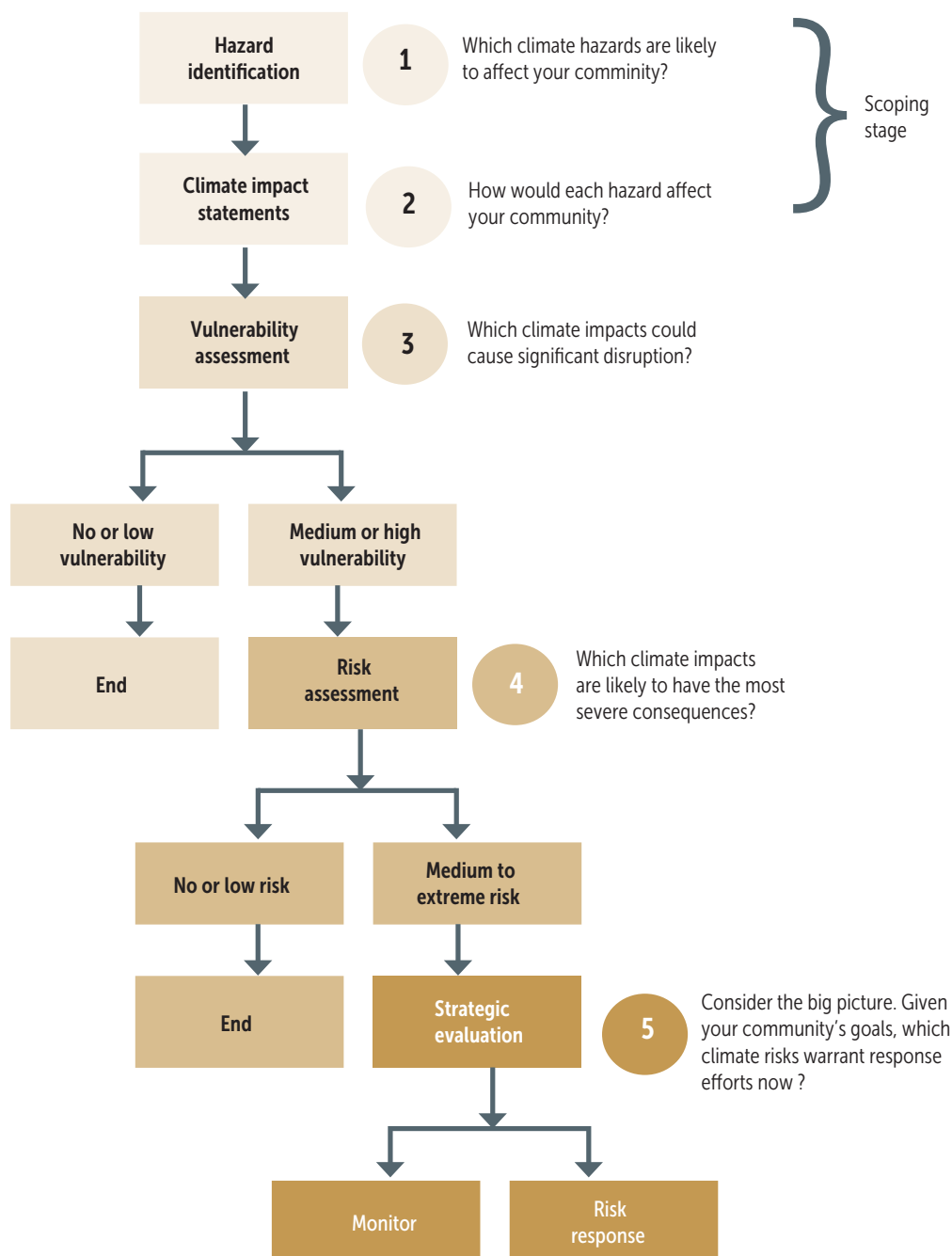
The handbook offers a step-by-step guide on how to integrate the potential impacts of climate change into the asset management framework (see figure 7.7). At the outset, the local government must understand how certain hazards posed by climate change – such as increased rainfall, droughts and other weather events – will affect assets and services.

The local government then conducts a **vulnerability assessment**. Such an assessment is a function of the risk exposure and the adaptive capacity of the local government. Exposure is a necessary, but not sufficient, determinant of the potential for harm. It is also possible to be exposed but not vulnerable to a hazard. The degree to which something can be exposed but not vulnerable is determined by its **adaptive capacity**. Adaptive capacity is a measure of a system's existing resilience to shocks or changes.

For instance, the owners of a building located in a floodplain could take precautions against flooding by keeping critical or valuable components such as electrical equipment out of at-risk areas. The owners have a high risk exposure,

**MOST LOCAL
GOVERNMENTS OWN
SOME OF THE MOST
COST-EFFECTIVE
RESOURCES
FOR MANAGING
CLIMATE CHANGE
IMPACTS: NATURAL
INFRASTRUCTURE.**

Figure 7.7 Step-by-step guide to assess potential impacts of climate change on asset management



Source: UN (2021); adapted from British Standards Institution (2018), pp. 8–14.

but can bolster their adaptive capacity (i.e. take precautions) to diminish their overall vulnerability to flooding.

Similarly, if drinking water is sourced from a large, fast-flowing river with a stable source, its adaptive capacity to extreme heat-related hazards such as algae formation or decreased availability would be high, thus protecting it from such vulnerabilities. Conversely, if the drainage system of an area is overwhelmed by frequent storm events with few protections in place, its adaptive capacity to extreme weather intensification would be very low.

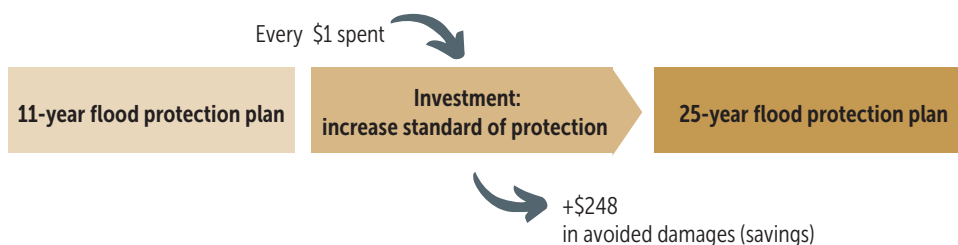
The results of the vulnerability assessment pave the way for a **risk assessment** that ultimately indicates how to coordinate the resources for mitigating or adapting to risks. Where the assessed vulnerability is high, the local government should assess the associated risk of potential disruptions to service delivery. The risk assessment process looks at the likelihood and consequence of impacts occurring. Potential impacts that should be examined with particular care include outcomes local government would be especially eager to avoid, such as effects on public safety, service interruptions, financial implications, environmental harm and asset damage.

Where the risk is significant, the local government should undertake a **strategic evaluation** to ensure that risk treatment priorities align with the community's broader strategic priorities. The criticality of assets, the committed levels of service and the interdependencies that exist between asset systems inform the strategic evaluation process. The strategic evaluation may conclude that no further action is warranted other than monitoring the situation. It may also conclude that a response is urgent.

Risk treatment options are not necessarily expensive capital interventions. Interventions relying on policies or regulations, or changes to operations and maintenance practices, can yield substantial benefits in reducing risk. Enhancing the climate resilience of existing infrastructure and building new climate-resilient infrastructure yields an average economic case where the benefits outweigh costs by 4:1 (Global Commission on Adaptation, 2019). And the business case for specific initiatives can be significantly greater. According to the World Resources Institute's Aqueduct Floods tool (WRI, 2020), every \$1 spent on flood protection assets in India that increases the standard of protection of an 11-year flood to a 25-year flood corresponds to \$248 in avoided damages (see figure 7.8). Similarly, investing \$1 in moving flood protection in Bangladesh from a 3-year storm standard to a 10-year standard yields \$123 in avoided damages.

**RISK TREATMENT
OPTIONS ARE
NOT NECESSARILY
EXPENSIVE CAPITAL
INTERVENTIONS.**

This return on investment means that every dollar invested in adaptation could result in multiple times the value in net economic benefits. The difference

Figure 7.8 Business case for investment in flood protection in India

Source: UN (2021); adapted from WRI (2020).

in the net benefits between outcomes resulting from a resilient project versus business as usual operations has been coined **resilience**.

There is no way to stop climate change impacts from materializing to some degree: With crises often come opportunities for climate-resilient renewal and the chance to build back better.

Asset management for disease preparedness and emergency response

The Handbook addresses a topic of paramount importance and urgency to all countries and their local governments, especially in light of present circumstances – how to strengthen infectious disease preparedness planning and emergency response. The onset of the coronavirus disease of 2019 saw many national and local governments scrambling to amass and coordinate resources for immediate relief. This relief has taken both direct (i.e. medical-grade equipment, doctors and nurses, hospitals) and indirect (i.e. stimulus checks, moratoriums, small business loans) forms. The Handbook stresses the significance of well-managed governments assets, especially at local levels, as the first line of defence against threats to public health. Building crisis-resilient asset management systems today is therefore critical in warding off diseases and reducing their impacts on the health and well-being of a community for generations to come.

Disease preparedness efforts go well beyond healthcare facilities and systems, as these also curb many knock-on effects from public health emergencies – including unemployment, social unrest and psychological development of youth – that may result from disruptions to waste collection, electricity generation and water distribution.

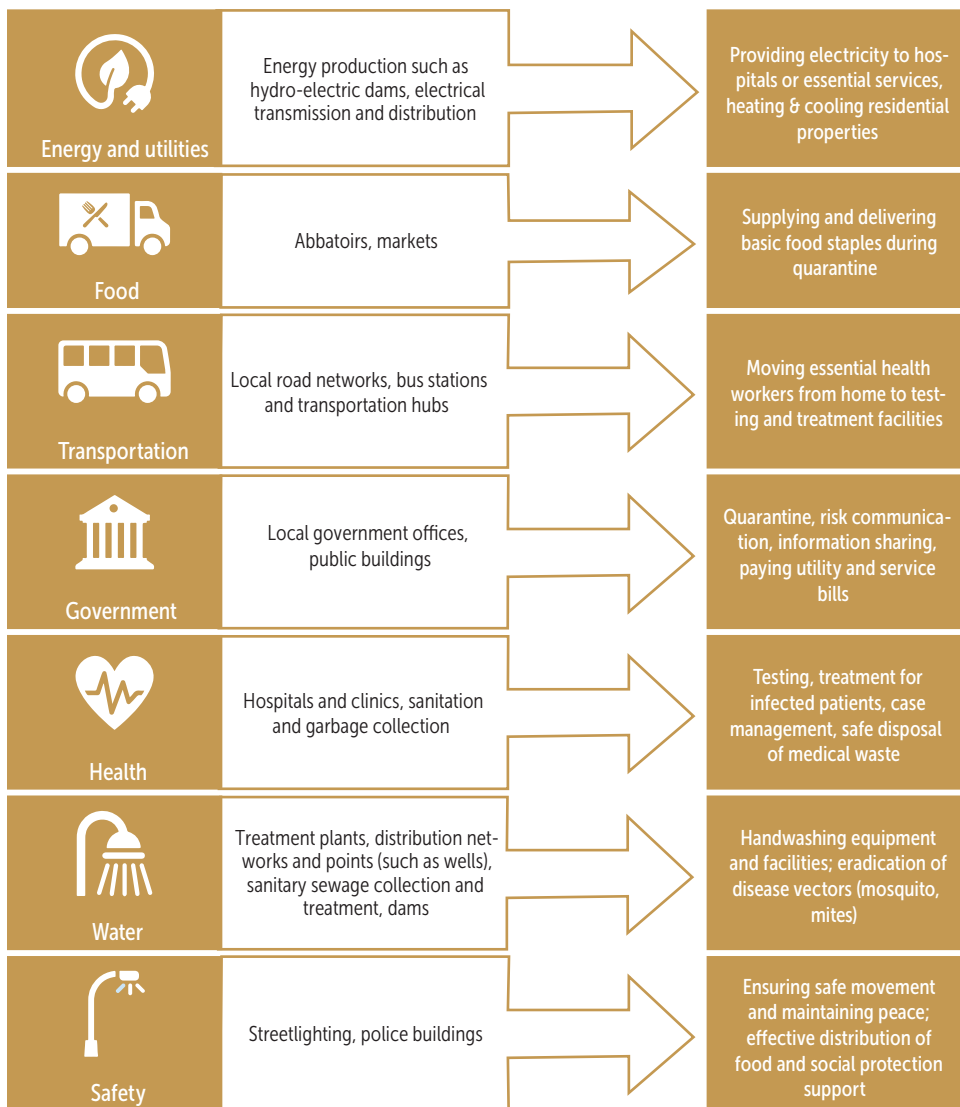
Assets make possible a range of health and emergency response services. Failure of one asset can increase or magnify a variety of direct and indirect effects

from initially small and controllable disease outbreaks. Figure 7.9 demonstrates this lesson.

The Handbook outlines six steps (see figure 7.10) that local governments can take to craft asset management strategies and an asset portfolio with built-in disease preparedness against the worst outbreak risks.

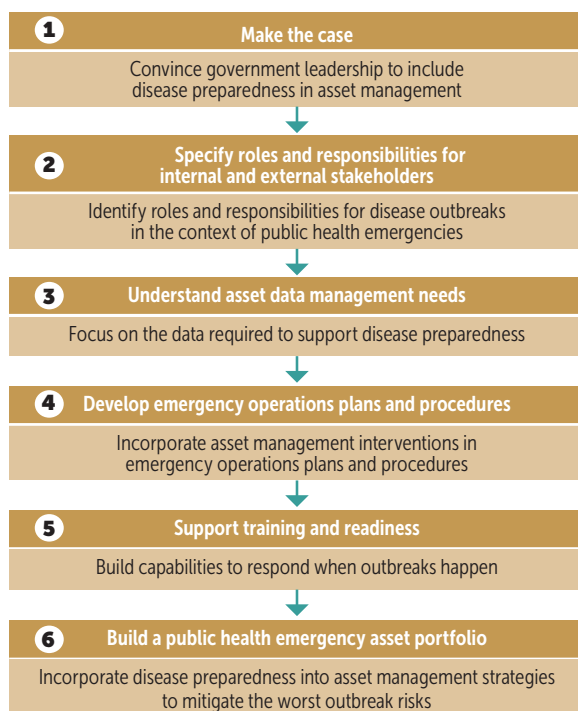
As with climate change adaptation, municipalities first need to connect the dots between existing and potential disease vectors and their impacts on service

Figure 7.9 Connection of assets to infectious disease control



Source: UN (2021).

Figure 7.10 Key steps to introduce or improve infectious disease preparedness in municipal asset management systems



Source: UN (2021).

delivery. This can be difficult where local expenditures are beholden to national budget considerations. However, it is imperative that asset managers make the case for disease preparedness to senior leaders, starting at the local level. From this basis, they can assert their need for technical and financial assistance from national or international entities.

Municipalities should also convene a special working group or intersectoral task force on infectious disease control and emergency response. If resources do not yet allow, they should at the very least identify the relevant internal and external stakeholders and rally them around the importance of protecting community-facing infrastructure services for public health efforts. This action will prove necessary for both acute public health events and their

potential cascade into something much more pernicious. Clarifying clear roles and responsibilities is critical and will also support gathering the necessary information on assets within the local disease risk context. Such data – on medical and health facilities as well as community resources, utilities and the population – provide evidence to support defensible policy decisions and rapid risk assessments on hazard, exposure and context by local health authorities.

Leading up to and amidst a disease outbreak, local governments should develop emergency operations plans and procedures. In this development phase, asset managers and their partners must establish standard precautions to take during a suspected outbreak and how they would apply to other service areas, such as schools, for municipal-wide preparedness. Emergency operations plans must also define activation triggers based on certain threshold conditions so that when events do come to a head, a response package is automatically released and implemented. This will not dispel uncertainty or negate sudden, unavoidable impacts, but it will help streamline decision-making by coordinating activities such as contractor agreements or personnel regulations well ahead of an emergency.

Having a plan is useless without training and educating personnel to navigate these high-risk, high-stress situations – which, as demonstrated by COVID-19, can last for a long time. Readiness stems from running drills that simulate real-world possibilities and conducting periodic trainings to instil knowledge and sustain awareness so as to prevent service disruptions, minimize transmission and save lives.

Local governments must shape public health planning to their specific contexts. Portfolio management helps with institutionalizing disease preparedness across the local asset management system. This approach brings to light necessary trade-offs between competing priorities in an emergency operations plan and ultimately enables local governments to prioritize resources in accordance with their unique circumstances. Issues around food markets, transportation, supply chains and other asset systems can lessen or magnify modes of community transmission.

The Handbook introduces an emergency response asset management action plan that is a better fit for rapid emergency response. Like its traditional counterpart, an emergency response asset management action plan seeks to fill the gaps and inefficiencies in existing emergency operations plans and bolster coordination, safety and response time through both reactive maintenance initially and proactive containment measures further on.

Reconciling activities for disease preparedness with national and subnational laws, regulations and policies – which themselves may be fluid in times of crisis – underpins effective asset management. These guidelines will inform designations of roles, responsibilities and requirements that local officials may not have the perspective to ascertain.

Assets are victims of public health disasters but also necessary components of economic and social recovery programmes to build back better. Local governments should take advantage of government-based emergency relief funds and other instruments for tactical asset planning (or replanning) and double down on public investment projects. By defending public health through better asset management, they will see infrastructure serve communities in new, efficient and more innovative ways.

**RECONCILING
ACTIVITIES
FOR DISEASE
PREPAREDNESS
WITH NATIONAL AND
SUBNATIONAL LAWS,
REGULATIONS AND
POLICIES UNDERPINS
EFFECTIVE ASSET
MANAGEMENT.**

Introducing an enabling environment

The Handbook highlights the importance of an enabling environment for asset management involving all levels of governance, from local to national. It starts with a basic breakdown of service responsibilities between local and national governments.

Local governments must maintain strategic, tactical and operational decision-making powers for local asset management. Local government officials are closest to the citizens who will experience the service impact of asset

**CENTRAL
GOVERNMENTS MUST
CREATE AN ENABLING
ENVIRONMENT THAT
MAXIMIZES LOCAL
CONTRIBUTIONS TO
IMPLEMENTATION
OF NATIONAL
SUSTAINABLE
DEVELOPMENT
STRATEGIES.**

management decisions. Consequently, they are best placed to make decisions on trade-offs of asset management that lie between the objectives of minimizing cost, minimizing risk, optimizing new opportunities and maximizing performance.

But where does this leave the central government? Central governments must create an enabling environment that maximizes local contributions – in the form of good asset management – to the implementation of national sustainable development strategies. National governments typically do so with legislation, policies and guidance that define the roles and responsibilities of local governments, set safety and performance standards, and contribute to the formulation of broader urban policies. However, there are many more proactive measures national governments can take to enable effective local asset management, such as capacity development, data and technical support, and advisory services and analyses.

A key objective for the central government is to encourage long-term planning and implementation that extends beyond the term-limited electoral cycles of local governments. To better align incentives, central governments should scale expectations for asset management according to the size and financial position of the local government sector. They could also make life cycle asset management that follows a portfolio management approach part of the criteria for infrastructure investment programme allocations. This will incentivize local governments to plan beyond their initial investments towards the long-term sustainability of their expensive assets, i.e. towards operation and maintenance.

The Handbook argues for a multitiered, multidisciplinary and multistakeholder approach to local asset management. That strategy is laid out in detail, and the Handbook provides a step-by-step guide for how central and local governments can collaborate to create an enabling environment (see figure 7.11). In the first phase, **Build Commitment**, the central government unit that provides lead support to local governments (e.g. the ministry of local governments)

Figure 7.11 Phases in creating an enabling environment

Source: UN (2021).

formally obtains high-level political endorsement for its policy programme to establish a common awareness and understanding of local asset management. Political support from senior government officials with appropriate levels of decision-making authority will provide the focal point with the political clout to convene and engage with groups outside the central government.

To foster those critical connections, the Handbook recommends establishing a well-rounded technical advisory committee made up of a mix of academics, consultants, municipal association representatives and local government employees. The committee's ultimate objective is to guide the central government in the second phase, **Develop the Enabling Environment**. Committee members should include representatives from the various local government departments and positions such as public works, engineering, finance, planning, and chief administrative officers. As a first step, the committee should consult with a diverse group of local governments, representing all regions of the country, to better understand how the national and local regulatory, legislative and policy environments shape local asset management practices. Based on these consultations, the committee can put forth a range of actions to help improve the enabling environment. Such recommendations will ideally centre on five action areas where the central government can provide and promote timely support, namely help with asset data collection, capital investment planning, understanding financial performance, and promoting capacity development and good governance. The proposed plan of action should be presented to local governments and revised to incorporate their feedback. The central government then rolls out the programme and begins implementing the enabling environment.

For the final phase, **Sustain the Enabling Environment**, the Handbook recommends concrete actions to ensure that local government organizations and their employees remain committed to sustained implementation of local asset management practices. To mitigate the risk of diminished interest in this, the

**TAKE CONCRETE
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OF LOCAL ASSET
MANAGEMENT
PRACTICES.**

community of practice and the central government should be responsive to the needs of local government through proper feedback loops. To keep the programme relevant to the local government sector's needs, the central government and its partners must know how needs evolve over time. New demand for specific knowledge areas may have emerged that require different programmes and initiatives to be developed. The quality and completeness of asset management action plans that are submitted by local governments can be assessed to determine knowledge gaps across the local government sector. Alternatively, compilation of local government readiness scale submissions can help determine training needs of the local government sector.

Actions towards an enabling environment for asset management remain vital for ensuring that local assets will realize their full value potential for current and future generations. Still, only through ongoing multistakeholder dialogue and collaboration can local and national governments enable and sustain an environment that engages communities to advances in achieving the Sustainable Development Goals.

Note

1. Source: US Environmental Protection Agency website, [Sustainable Water Infrastructure: Asset Management for Water and Wastewater Utilities](#).

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8

Reimagining the Role of Special Financial Intermediaries in Subnational Development Finance¹

PAUL SMOKE

The 21st century has witnessed a resurgence of interest in promoting subnational government (SNG) investment and development finance². Past initiatives produced some progress, but many underperformed. Although SNGs are key players in public investment in more advanced economies, this is not the case in poorer countries. According to a recent sample of 99 countries across the income spectrum, SNG investment as a share of total public investment averages 36.6 per cent, ranging from 43.0 per cent in high-income countries to 12.9 per cent in low-income countries (OECD and UCLG, 2019).

This chapter considers the imperative for SNGs to play a stronger role in infrastructure investment and local development, with a focus on the use of special financial intermediaries (SFIs) and associated strategies in developing countries. The next section summarizes the case for strengthening SNG access to development finance, followed by an overview of key challenges. The three subsequent sections respectively outline the landscape of subnational development finance options, present a justification for taking a more integrated strategic approach to developing subnational borrowing, and discuss selected recent experiences with a range of special entities designed to enhance SNG investment. The concluding section provides summary comments and recommendations.

Subnational development finance on the rise

The resurgent interest in a role for SNGs in financing public investment has been reinforced by a broader rethinking of national fiscal policy following the 2008–2009 financial crisis. In addition, major global development agendas, such as the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs), the Habitat III New Urban Agenda and the Addis Abba Action Agenda on financing for development, highlight a major SNG role in public investment.

Several other factors have contributed to the current interest in SNG finance³. First, although **decentralization** has been uneven in both practice and performance, it remains an important element of public sector reform in many countries⁴. Large infrastructure gaps often occur in sectors in which SNGs do or could have a significant role⁵.

Second, multiple SDGs and other global agenda priorities involve functions and sectors that require **integrated location-specific attention** (e.g. SDG 11 on sustainable cities and communities and SDG 16 on effective, accountable and inclusive governance). SNGs are certain to face increasing pressure to act and are often better placed than national agencies to think holistically about inte-

grated territorial development⁶. Recent work suggests that 103 of the 169 SDG targets, or 61 per cent, include a component that will require attention at the SNG level (Greene and Meixell, 2017).

Third, **population growth and urbanization** in middle- and lower-income countries will generate even greater demand for local infrastructure⁷. SNGs, particularly in larger urban and metropolitan areas, will need to make many additional public investments that serve these needs and also encourage private investment⁸.

Finally, the development community increasingly sees SNGs as key actors in responding to new and ongoing global challenges prioritized beyond their inclusion in the SDGs – climate change, energy shortages, food insecurity, health crises (including COVID-19), among others. Such issues require collaborative national and international measures, but

SNGs in some countries have already had an impact through climate adaptation policies, green growth strategies and other efforts, many of which require capital investments⁹.

**THE DEVELOPMENT
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SNGS AS KEY ACTORS
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TO NEW AND
ONGOING GLOBAL
CHALLENGES –
CLIMATE CHANGE,
ENERGY SHORTAGES,
FOOD INSECURITY,
HEALTH CRISES.**

Constraints on strengthening subnational development finance

Given the potential value of a stronger SNG role in public investment in developing countries, it may seem surprising that more progress has not occurred. On a general level, the challenges involved in public investment are well known, especially in low-income countries. Public finances, including development aid, are typically inadequate and often volatile, and financial markets are still maturing (World Bank, 2015). Investment requires long-term finance, but short-term finance is commonly more readily available.

Although the focus here is on subnational development finance, the role and challenges of recurrent finance for subnational borrowing must be recognized. A major hindrance to SNG creditworthiness in developing countries is the underdevelopment of the broader intergovernmental fiscal system and the fiscal underperformance of individual SNGs. Lack of clarity on specific functional SNG responsibilities and unfunded expenditure mandates often exacerbate fiscal challenges¹⁰. Many central governments decentralize less revenue authority than justified by fiscal principles and SNG needs¹¹. Various SNG revenue sources are typically available, but often hindered by policy and administrative weaknesses¹². SNGs are usually very dependent on intergovernmental fiscal transfers. Issues with design and implementation of transfers can substantially disadvantage SNGs¹³.

Widespread reforms have been undertaken to expand and enhance fiscal decentralization in recent years. Despite progress, multiple factors have weakened their impact, such as unsatisfactorily contextualized reform design, unrealistic time frames, overambitious expectations and political economy forces, including central reluctance to strengthen SNGs and problematic local politics. Effective future reforms will have to address such challenges and reflect variations in structures, responsibilities, capacity and performance across and within countries¹⁴.

HINDERING SNG CREDITWORTHINESS IN DEVELOPING COUNTRIES ARE UNDERDEVELOPMENT OF THE BROADER INTERGOVERNMENTAL FISCAL SYSTEM AND FISCAL UNDERPERFORMANCE OF INDIVIDUAL SNGS.

Landscape of subnational development finance options

SNGs, especially in less-developed countries, rely significantly on intergovernmental transfers for long-term development investment (OECD and UCLG, 2016, 2019). Financial market access is significant in advanced economies and in a few other countries, such as China. In low- and middle-income countries, however,

borrowing tends to face restrictions and is available mostly to intermediate-tier SNGs and some cities and urban areas. Much SNG borrowing flows through SFIs, reflecting the low creditworthiness of many SNGs – in turn, a result of weaknesses in national provisions needed to empower, fund and facilitate fiscally responsible SNGs¹⁵.

Sources of subnational development finance

Development transfers are common for SNG infrastructure, such as health facilities, schools, housing, roads and water. Some transfers are flexible, while others are restricted in whole or in part for development. Allocation mechanisms vary from ad hoc (SNG or project specific) to formula based. Matching grants (which require SNG contributions to project costs) are used but may be compromised by SNG revenue-generation capacity.

SNG debt (as measured in 76 countries across the income spectrum) accounts for an average of 11.5 per cent of total public debt – from 14.9 per cent in high-income to 6.3 per cent in lower-/middle-income countries (OECD and UCLG, 2019). The variation, however, is great; and many poor countries effectively have no SNG debt. The share is higher (32.2 per cent) in federal countries given the state role, but lower (16.6 per cent) in those federal countries that are not member states of the Organisation for Economic Co-operation and Development (OECD). Not surprisingly, SNG debt as a share of public debt is highly correlated with gross domestic product (GDP) per capita. The same study examines the stock of SNG debt (58 countries), which consists of financial debt (loans and debt securities from borrowing – 70 per cent) and non-financial debt (other accounts payable and pension liabilities – 30 per cent) (OECD and UCLG, 2019). Bond financing is more important in federal than in unitary countries (27 per cent versus 8 per cent of the SNG debt stock).

Reforming subnational development finance

Beyond general SNG fiscal reforms, many efforts to enhance development finance have been undertaken. Despite progress, reforms are fragmented and tend to focus on specific elements – transfers, municipal bonds, SFIs or public-private partnerships (PPPs) – rather than the larger issue. These mechanisms target different needs. Since most countries have a range of SNGs with diverse needs and capacities, development finance reform often requires a mix of mechanisms and other reforms to improve SNG capacity and creditworthiness over time.

In richer countries, subnational credit markets evolved gradually, often with central government supervision and support. Use of municipal bonds in

middle- and lower-income countries remains relatively limited; but Brazil, India, Mexico, the Philippines and South Africa, among others, have made progress, primarily in larger urban areas (Smoke, 2019).

SFIs managed or highly regulated by government, such as municipal development banks, have been a main mechanism in many developing countries, offering subsidized loans for SNGs unable to access credit markets. SFIs have had mixed performance (Freire and Petersen, 2004; Peterson, 2000). Early forms often monopolized SNG lending, blending most project investment functions – preparation, planning, assessment, supervision and evaluation – under a single entity. Many SFIs faced capacity constraints and problematic behaviour related to close linkages to central government and its resources. Lending decisions were politicized, such that loans were approved – at unjustifiably favourable terms – for non-creditworthy SNGs and for non-viable investments. Political interference also undermined loan repayment and precluded some SFIs from operating as revolving funds, thus requiring frequent recapitalization.

The global developments outlined above have renewed efforts in a growing number of countries to enhance SNG access to development finance. A foundational reform has been the adoption of SNG fiscal responsibility frameworks, borrowing regulations and development finance innovations¹⁶. Notable efforts on this front have included those by Argentina, Brazil, Colombia, India, Mexico, Peru and South Africa, although their efforts and results have been uneven.

Some reforms have reinvented SFIs to be more protected from political meddling and to focus on the core business of lending, with more independent provisions for SNG technical assistance and development project implementation. Efforts have also been made to ensure they operate more on market-based principles. Several countries, such as Colombia, the Czech Republic, the Philippines and South Africa, have progressively involved the private sector.

SFIs that attract private finance generally involve creating a separate legal entity structured to meet the requirements of commercial banks and investors. Typically, given their weak fiscal position, SNGs in many developing countries accessing such entities require credit support (such as discounted interest rates and partial guarantees) to qualify for a loan.

Enhancing subnational development finance systems through an integrated approach to subnational borrowing

The multifaceted, diverse and unevenly institutionalized SNG landscape underscores the need for sensible planning to augment SNG development finance in a specific country; this has not always been done. Mindful of concerns about

past SFI performance and in light of international agencies' wariness to support them, a number of countries at times placed too much faith in municipal bonds or PPPs. Countries unwilling or unable to pursue advanced options continued to rely too heavily on transfers to finance SNG infrastructure.

The reality is that many SNGs in many developing countries are not creditworthy. They require strategic support to develop fiscal capacity and access development finance. Yet some SNGs could responsibly assume loans, if not directly from financial markets then from properly designed SFIs and commercial banks (for collateralable projects). Fiscally weaker SNGs, however, are likely unable to borrow without SFIs.

The solution: a range of subnational lending mechanisms

Given the diversity noted above, it makes sense to offer countries a range of development finance mechanisms. Many countries will remain reliant on transfers (with relevant reforms), and in some cases municipal bonds can be a viable option. The focus here, however, is on SFIs. A basic schematic on the range of options is presented in table 8.1. At one extreme is an account managed by the ministry of finance and funded from the national budget. At the other extreme are private entities providing access to domestic and international funds through the financial market, commercial banks etc.

Arrangements could be modified on either extreme. A loan account in a ministry, for example, may receive funds from international agencies to on-lend to SNGs rather than rely exclusively on the public budget. Private entities may fear foreign exchange risks, so funds lent to SNGs might be restricted to domestic sources unless government assumes such risks.

Table 8.1 Range of subnational government lending entities

Management and finance	Ownership			
	Public agency	Publicly owned entity	Public-private partnership	Private entity
Principal entity/institution	Ministry (e.g. finance, planning, local government)	National or sub-national development bank or fund	National or sub-national development bank or fund	Commercial banks, financial markets
Prospective source(s) of finance	National government budget or external loans or donations	National government budget, SNG assessments/contributions, external donors or financial institutions	National government budget, SNG contributions, private investors, depositors, external investors	Private finance (domestic or external)

Note: These entities would typically be at the national level, but some large federal countries have lending mechanisms at the state/regional level.

Various SFI options fall in between the public and private entity options. Near-est to the public option would be a separate entity fully owned and operated by government. Sources of capitalization could include the national budget, SNG contributions (compulsory or voluntary), and grants or sovereign loans from external agencies. Moving a step closer to the private sector, a development bank or fund could be co-owned and operated by the national (or a state/regional) government and private investors. Funds could be blended from both public sources and private sources (banks, private investors, individual deposits etc.).

The public and private sector roles in managing these SFIs could also vary as appropriate and feasible. Even a fully government-owned entity could include private sector (and other non-government) members on the board of directors. In addition, selected aspects of the lending process (e.g. loan application appraisals) could be contracted to private firms, and private actors might invest funds in the expectation of appropriate returns.

The mix of SFI options in a country will vary with context and can evolve over time. Key considerations include SNG creditworthiness and the financial viability of infrastructure projects. Additional considerations include central government willingness to empower SNGs to borrow and to involve private sector actors in SNG lending, the maturing of financial markets, and investor confidence that SNGs will repay loans.

In the weakest countries, most SNG lending might initially flow through the ministry of finance, but over time the central government could establish a dedicated SFI outside of a ministry. At inception the SFI could be largely owned, operated and capitalized by the government (with external contributions as appropriate). As the SFI establishes credibility and SNG fiscal capacity and creditworthiness grow, the private sector could be involved in managing and financing a reconfigured entity operating at closer-to-market terms.

In some countries, it would be immediately feasible to allow several finance channels to serve different types of SNGs and development projects. Large cities might go directly to capital markets for self-financing projects, while fiscally weaker SNGs or those less able to recover investment costs will need options to offer more favourable (subsidized) loan terms. A set of SNGs will likely be unable to borrow and would remain dependent on development transfers.

Whatever form SFIs take, basic norms – some lacking in earlier SFIs – must be respected:

- National fiscal responsibility frameworks are needed.

**THE MIX OF SFI
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- SFIs need directors genuinely motivated to nurture productive SNG lending insulated from political interference.
- SFIs should focus on (or protect) lending operations to avoid potential conflicts of interest – as when the same entity, for example, designs and appraises development projects.
- SFIs need robust appraisal techniques to limit poor lending decisions.
- Interest rates and loan terms should be based on sound criteria to curtail subjective or arbitrary treatment.
- Repayment must be enforced to ensure SFI sustainability.
- Adequate and capable staffing is obviously essential for SFIs to succeed.

Determining the mix of subnational development finance instruments

In addition to the mix of SNG lending mechanisms, the mix of financial instruments is also important. Options could range from grants and subsidized (according to well-defined criteria) loans for fiscally weaker SNGs and non-self-financing projects to various types of closer-to-market loans for fiscally stronger SNGs and self-financing projects.

Table 8.2 presents a basic representation of how finance mechanisms might vary with SNG fiscal capacity and the cost-recoverability of development projects. These categories need to be defined carefully to limit subjectivity, and it is important to be clear about the actors and processes involved in assessing SNGs

Table 8.2 Indicative financing arrangements by investment type and SNG creditworthiness

Type of investment	SNG fiscal capacity/creditworthiness		
	Low	Medium	High
Self-financing	Blend of loans (any subsidy as per rules) and transfers	Blend of loans (any subsidy as per rules) and bonds (if viable)	Blend of bonds and loans
Partially revenue generating	Blend of loans (any subsidy as per rules) and transfers	Blend of loans (any subsidy as per rules) and transfers	Blend of loans (possibly subsidized) and transfers (as indicated per rules)
Non-self-financing / social purpose	Transfers only	Blend of loans (subsidy as per rules) and transfers	Blend of loans (possibly subsidized) and transfers (as per rules)

Note: The specific blend of financing instruments and any subsidization would have to be based on well-defined, objective criteria; and the financing source (table 8.1) would vary depending on options and specific criteria.

and projects. Over time, an increasing number of SNGs could improve creditworthiness, and the number of at least partially self-financing projects will grow with the local economy. SNGs may move across categories and pursue different types of projects as the conditions in which they operate and their capacity evolve.

The most formidable challenge in advancing SNG development finance is how SNGs with low fiscal capacity could move from full dependence on inter-governmental transfers and subsidized loans to growing engagement in credit markets. Development of the economy and basic institutions are important in this regard, and changing political conditions may also generate pressures for SNGs to think more developmentally and improve their performance. Equally relevant, there is scope for central governments to reform the overall intergovernmental framework, stimulate development of new systems and procedures, incentivize improved SNG fiscal behaviour, and provide SNGs with technical assistance and capacity development.

Grant-loan linkages

The above discussion suggests that a potentially productive approach to nurturing SNG creditworthiness would be to recognize and develop linkages between grant and loan financing options¹⁷. This is not a new idea, but it has been used only in limited ways. A basic premise is that a range of finance options should be organized to preclude award of grants for self-financing infrastructure to fiscally strong SNGs, which diverts funds from SNGs currently unable to borrow. Yet it is not desirable for SNGs that cannot access credit to remain permanently dependent on subsidies; they need to evolve.

Several SFIs already mix grants and loans in financing SNG investments, such as the Philippines Municipal Development Fund (MDF) discussed on [p. 232](#), but mostly with a fixed sharing ratio that does not vary with the nature of the project or SNG fiscal circumstances. A number of SFIs also create a link allowing central governments to intercept transfers to SNGs that fail to meet debt service obligations. This improves repayment but does not necessarily build fiscal responsibility.

A grant-loan linkage to encourage more careful use of development resources would start with the assumption that revenue-generating infrastructure should be financed by loans at an interest rate that reflects the cost of capital. A creditworthy SNG, national regulations permitting, should go to the private sector for such projects. In other cases, SNGs could be eligible to use an SFI that would offer subsidized loans, or a mix of grants and loans, and

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adjust loan terms on the basis of clear criteria – regarding, for example, SNG capacity, the extent to which a facility can recover costs and the social value/impacts of the project.

Development transfers could be structured and allocated to generate incentives for weaker SNGs to modify behaviour and develop capacity to borrow. If even weak SNGs are required to borrow (from SFIs at a subsidized rate) for a minor share of infrastructure project finance, and they are supported to build capacity and exercise the fiscal discipline required to repay the loan, they will have taken a step to emerge from full dependence on transfers.

Such an approach could obviously be complex and would require careful organization and operation in ways that cannot be covered here. But if properly conceived and implemented, SNGs developing a new infrastructure project would face incentives to operate more efficiently and recover costs from users. This tactic would also better serve equity: fiscally stronger SNGs and revenue-generating infrastructure would be financed more by loans, while fiscally weaker SNGs and projects that provide key services but cannot recoup costs would receive subsidies. This approach could improve the use of scarce capital and situate lower-capacity SNGs on a path to gradually build fiscal responsibility and creditworthiness.

Other supporting policies and mechanisms

National policies regarding the structure and management of SNG lending entities and various financial mechanisms are not sufficient to enhance SNG development finance. Other means will also need to be adopted to facilitate SNG credit access, such as risk mitigation strategies. These include comprehensive or partial credit guarantees from the central government or international development partners, co-financing initiatives, secondary market support, use of bond banks and credit pooling, and risk instruments offered by the insurance industry¹⁸.

**NATIONAL POLICIES
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DEVELOPMENT
FINANCE.**

There has been significant interest in using PPPs to support SNG infrastructure¹⁹. PPPs may provide expertise and credibility that help SNGs obtain SFI financing or even secure finance directly through the private partner. Broadly speaking, however, SNG PPPs face challenges, particularly in low-income countries (UCLG, 2013; UN DESA and UNCDF, 2017). Effective PPPs require a robust regulatory framework and adequate SNG capacity to negotiate and manage them. Despite challenges, PPPs could be productive for SNGs, especially at

the regional level and in urban areas, in operating and financing sustainable infrastructure projects as intergovernmental systems and SNGs mature. For more on PPPs and their challenges and potential, see chapter 13, beginning on [p. 331](#).

In an effort to help SNGs develop better infrastructure and secure financing, multiple development partners support or propose establishing project preparation facilities (GIZ, 2014; Schmidt-Traub and Sachs, 2015; WEF, 2014). These facilities take diverse forms. The Cities Development Initiative for Asia supports medium-sized cities in the Asia-Pacific region to develop infrastructure²⁰. Other examples, not all public or SNG specific but potentially relevant, include the International Finance Corporation's Global Infrastructure Project Development Fund, the African Development Bank's Infrastructure Project Preparation Facility and the Infrastructure Fund of the Association of Southeast Asian Nations (ASEAN)²¹. Several international agencies also have initiatives to promote PPPs and infrastructure financing; these include the Public-Private Infrastructure Advisory Facility, a World Bank-based multidonor facility, and the European Bank for Reconstruction and Development²². Country-specific initiatives also exist. The Project Development and Monitoring Facility in the Philippines, for example, is supported by the Asian Development Bank, Australia and Canada to assist in the preparation of infrastructure projects for a PPP Centre attached to the National Economic Development Authority²³. Many such initiatives are relatively new but growing and evolving – and demonstrating some impact.

A final potentially useful mechanism worth noting is performance-based transfers, which have been on the rise in SNG finance in recent years²⁴. Ideally, development finance capacity and performance are captured in SNG credit ratings, which as noted above tend to be weak in developing countries. Performance-based transfers have the potential to support the broader process of building SNG creditworthiness. In poorer and newly decentralizing countries, these transfers tend to be focused on process-oriented reforms for SNGs – generally in building routine capacity in financial management, planning, transparency, human resource management etc. See chapter 11, beginning on [p. 287](#), for more detail on performance-based transfers in the context of UNCDF's Local Climate Adaptive Living Facility (LoCAL).

**A POTENTIALLY
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IN RECENT YEARS.**

Selected experience with subnational finance intermediaries

Space and information limitations make it impossible to cover the extensive range of diverse SFIs that have been used or proposed globally. This section discusses a few cases that have had some success and/or hold promise:

- **Colombia**, which operates a well-known development bank linked to the Ministry of Finance but also supports a range of mechanisms with other partners to finance SNG development projects
- **Indonesia**, which has evolved from SNG borrowing primarily from a Ministry of Finance account to a state-owned enterprise
- **The Philippines**, which maintains a fund under the national Department of Finance but has other mechanisms as well, including a private loan guarantee facility
- **South Africa**, where the government's Development Bank of Southern Africa plays a major role, but there is increasing movement into financial markets

Colombia²⁵

Findeter (Financiera de Desarrollo Territorial) is a development bank created in 1989 to develop regional and municipal infrastructure projects in Colombia. Initially government funded, it began to blend public and private funds in 2011. The bank is linked to the Ministry of Finance and supervised by the Financial Superintendence of Colombia. The Findeter executive board includes Ministry of Finance and independent representation, as well as governors of departments (regional governments). Findeter is capitalized by Ministry of Finance contributions, multilateral banks and the private sector. Some funds are earmarked for specific purposes, but the executive board generally has flexibility in making decisions on lending, which can be offered to both public and private entities.

The Findeter business model includes planning, financing and execution. Plans are developed working in coordination with municipalities or regions incorporating multiple municipalities. Action plans identify possible investments to support sustainable development strategies, urban-rural linkages, and stimulating green and creative industries.

Findeter loans are offered at favourable rates and terms (e.g. long repayment periods) so municipalities can improve services and become more competitive. From 2010 to 2018, Findeter provided finance to 414 municipalities totalling Col\$ 18.3 trillion (approximately \$5.58 billion)²⁶. The supported projects cover a broad range of expenditure – infrastructure, transportation, housing, water,

sanitation, health, education, energy, information technology and communication, recreation, culture, environment and fiscal consolidation.

In the execution phase, Findeter offers municipalities technical and operational support to implement their development projects. It also works alongside various national development programmes spearheaded by the Ministry of Culture, the Ministry of Education and other agencies that target social infrastructure.

Findeter operates multiple programmes for local and regional development, including to support high-poverty municipalities. One of these is the Competitive and Sustainable Cities programme in which Findeter and the Inter-American Development Bank support strategic projects in medium-sized cities. This programme aims to finance investments totalling Col\$ 35 trillion (approximately \$8.73 billion) in around 50 cities. Thus far, it has supported Col\$ 1.9 trillion (about \$473.9 million) of investments as well as providing Col\$ 3.2 trillion (about \$798.2 million²⁷) for technical assistance. Findeter debt is classified as BBB international debt under Fitch Ratings and Standard & Poor's and as AAA national debt under Fitch Ratings. Findeter was accredited by the Green Climate Fund in 2018 for financing sustainable development projects, such as public lighting and renewables.

Findeter has had an important impact on SNG development finance in Colombia. It works closely with other government and private entities as well as with international development agencies. Learning from experience, Findeter has evolved over the years to broaden its sources of capital, its management and its programmatic activities.

Indonesia

Indonesian SNGs face growing demands for infrastructure investment but have had limited access to financial markets, which are not well developed to serve subnational borrowers (World Bank, 2017). Some public utilities have issued bonds, but no SNG has done so to date. Over the years, Indonesia has utilized various mechanisms to expand SNG debt access. Most of these, including the regional development account, the investment fund account and the subsidiary lending agreement, were capitalized by international financial institution loans on-lent to SNGs through the Ministry of Finance. All Ministry of Finance accounts realized sizeable arrears. The Indonesia Investment Agency, a now-defunct state-owned enterprise, was more successful but focused on small-scale investments. Some larger projects, such as rapid transit systems, have been financed through PPP agreements with a state-owned enterprise.

Given the urgency to improve SNG infrastructure, the central government recently created the Regional Infrastructure Development Fund (RIDF)²⁸. The

new entity is managed by the state-owned enterprise PT Sarana Multi Infrastruktur (SMI) rather than the Ministry of Finance; it targets a wide range of environmental, productive and social infrastructure. Initial capitalization blends debt (from the World Bank and the Asian Infrastructure Investment Bank, with the Ministry of Finance assuming foreign exchange risk) and equity (from the PT SMI balance sheet, including assets transferred from the Indonesia Investment Agency when it closed).

RIDF provides loans to eligible SNGs for qualified infrastructure projects. To be eligible, among other requirements, an SNG must not be in arrears or running a budget deficit and must meet audit standards. Eligible projects must be in the SNG development plan and be approved by the SNG legislature. Conditions regarding debt, such as debt service coverage ratios, also apply. RIDF uses clear standards for loan appraisal and to set interest rates and loan terms; various other reviews of SNG performance are also mandatory. Such provisions are standard for SFIs, but they did not exist or were not followed by previous Indonesia SNG lending entities, so they represent an advance. Moving operations to a state-owned enterprise is expected to improve lending practice.

A project development facility associated with RIDF but independently managed assists SNGs in preparing infrastructure projects for loan financing. Assistance can be provided for services to support design, feasibility studies, environmental and social assessments, financial management and procurement, and capacity development, among others. Since the project development facility operates as a separate business unit independent of RIDF, the potential conflicts of interest discussed above are not likely to arise. The facility helps to ensure that projects will meet RIDF guidelines and standards and to lower costs of project preparation to SNGs.

The Philippines

The Philippine Department of Finance Local Government Unit (LGU) Financing Framework of 1996 outlines a segmented approach to capital financing. The framework allows low-capacity LGUs to access subsidized government loans, while higher-income LGUs would seek private finance. LGUs in between these extremes would be served by various public mechanisms. Steps were also taken to facilitate PPPs and to provide for limited infrastructure transfers. The framework has not been fully adopted, but two mechanisms are noted for improving capital finance access to certain groups of LGUs.

MDF was created in 1984 to provide LGU access to capital finance for development projects²⁹. It is a revolving fund capitalized by grants and loans from international agencies. It helps harmonize LGU funding from these sources,

aligns disbursement mechanisms, and facilitates better monitoring of the disbursement and LGU utilization of international funds. For many (particularly smaller) LGUs, the MDF is the main source of development finance.

Since 1998, the fund has been managed by the Municipal Development Fund Office (MDFO) under the Department of Finance, which also manages other financing windows such as the Disaster Management Assistance Fund, the Municipio Fund, and the Public-Private Partnership Fund. These have different purposes and target groups, but all facilitate LGU financial access. A Policy Governing Board directs MDFO with representatives from relevant national agencies – the Department of Finance, the National Economic Development Authority, the Department of Budget and Management, the Department of Interior and Local Government, and the Department of Public Works and Highways.

Eligible LGUs or other SNG entities can apply for financing, which usually includes a mix of loans and grants. MDFO evaluates proposed projects and administers the resources, and it can provide assistance for selecting and formulating projects. MDFO also encourages efforts to raise private funding and other cooperation with the private sector, e.g. through the Public-Private Partnership Fund. In addition, MDFO promotes LGU fiscal discipline, capacity and transparency to increase creditworthiness. Through credit monitoring, MDFO facilitates the graduation of creditworthy LGUs to the private capital market.

The Local Government Unit Guarantee Corporation (LGUGC), a private financial entity incorporated in 1998 by the Bankers Association of the Philippines and the Development Bank of the Philippines, provides another type of mechanism to support LGU borrowing³⁰. It offers financial guarantees for LGUs and other public and private entities, such as water districts, electric cooperatives, renewable energy projects, and medium or large enterprises seeking to develop infrastructure with private and public capital.

The basic approach of LGUGC is to provide guarantees to partner financial institutions in case of borrower default. In return, the partner, usually a shareholder bank or subsidiary, lends to or underwrites bond issues. Borrowers pay a guarantee fee that ranges from 0.25 to 2.0 per cent per year of the amount borrowed, depending on the risk assessment. LGUGC also rates LGU creditworthiness. Only LGUs with a minimum investment grade rating are eligible for its guarantees.

South Africa³¹

The Municipal Finance Management Act of 2003 provides a framework for municipal finances in South Africa. It grants municipalities the legal power to borrow, but the National Treasury does not guarantee municipal debt. To limit

risk, municipalities may only borrow in South African currency, but without restriction on types of lenders or investors. These policies are intended to support infrastructure finance, prevent excessive municipal debt, and support fiscal responsibility and creditworthiness. The National Treasury is currently working on a new municipal borrowing framework.

Of the 257 municipalities in South Africa, only 124 report having long-term outstanding debt. Most debt, however, is accounted for by a relatively small number of larger urban entities. The eight metropolitan municipalities account for 86 per cent of total municipal debt, with Johannesburg alone holding 35 per cent (South Africa National Treasury, 2021).

A range of SNG finance options are available in South Africa. Only four metropolitan municipalities have issued municipal bonds to date, with the largest share of borrowing from SFIs and commercial banks. Outstanding municipal debt obligations are nearly evenly divided between the public and private sectors, with the latter recently gaining a small edge (48 per cent versus 52 per cent) (South Africa National Treasury, 2021). The largest holder of municipal debt is the Development Bank of Southern Africa (DBSA), a public entity that has consistently dominated the landscape since the late 1990s and has nearly double the debt share of commercial banks. Pension funds and insurers also hold significant municipal debt, with smaller shares held by households, other financial institutions and non-residents. A number of international institutions, including the Agence Française de Développement, the European Investment Bank and the International Finance Corporation have lent to a few large municipalities.

The lead public entity, DBSA was created in 1983 and reconstituted post-Apartheid as a stronger development finance institution under the Ministry of Finance, its sole shareholder. Its primary mission is to promote economic development by managing public and private resources from national and international sources. DBSA both lends and provides project planning and operational support. Key sectors include energy, information and communications technology, transport, water, health and education. As of 2020, it had a Ba2 rating from Moody's, a BB– rating from Standard & Poor's and a Green Climate Fund European Union six-pillar accreditation; and had delivered R 37 billion (about \$2.52 billion) in total infrastructure, R 3.5 billion (about \$238.63 million) in infrastructure implementation support and R 0.9 billion (about \$61.36 million) in infrastructure for underresourced municipalities³².

It is worth noting the rise and fall of the Infrastructure Finance Corporation (INCA), a private company established in 1996 to increase private sector involvement in South Africa's infrastructure funding market. INCA drew on local and international funds raised through bond issues and long-term loans

from international finance institutions, competing with DBSA to become a primary investor in infrastructure in South Africa. Shifts in the country's municipal market, including the emergence of municipal bonds and other channels of private finance, and a downgraded rating resulted in INCA's dismantling. This illustrates that development finance is dynamic, and adjustments need to be made.

Other experiences

A few additional SFI cases are briefly summarized in table 8.3 to provide a sense of the great diversity of experience³³. These include two national-level SFIs (in Cameroon and Nepal) and two state-level SFIs in federal countries (Brazil and India).

The Fond Spécial d'Équipement et d'Intervention intercommunale (FEICOM) in Cameroon is a public body financed from the national government budget. It can provide loans, grants, cash advances and guarantees to local authorities. The Town Development Fund in Nepal is an autonomous agency that is primarily financed from loans and grants from international financial institutions and development agencies. It provides grants as well as loans. Both FEICOM and the Town Development Fund offer a range of technical assistance and capacity development support.

Paranacidade is a non-profit corporate entity serving the Brazilian state of Parana. It is primarily financed by public funds in the state budget, including the State Urban Development Fund. It provides loans and technical assistance to municipalities in the state. The Tamil Nadu Development Fund is a joint public-private entity (with private majority ownership) in the Indian state of Tamil Nadu. It is capitalized from the state budget and private partners as well as with loans from international financial institutions and development agencies. This SFI provides both loans, including pooled finance options, and grants, particularly for poverty-targeted projects. Like the other entities, it offers support for technical assistance and capacity building.

Selected observations on the illustrative cases

The selected SFIs covered here portray varied and evolving approaches to supporting SNG development finance in different country contexts. The main SFIs in a few countries, such as in Cameroon and the Philippines MDF, are government administrative bodies. Some SFIs are associated with a ministry of finance but with broader involvement, as in Colombia and South Africa. Other cases have used state-owned enterprises (Indonesia), separate legal entities (Nepal and Parana State in Brazil), joint public-private entities (Tamil Nadu State in India) or even private entities for certain SNG lending purposes (LGUGC in

Table 8.3 Key characteristics of selected subnational financial intermediaries

	Name	Ownership/ management	Sources of finance	Target entities	Financial services	Other services
Brazil	Paranacidade	Non-profit corporate entity	Public funds, including State Urban Development Fund	Municipalities in the State of Parana	Loans	Administrative, technical and human resource assistance
Cameroon	Fonds Spécial d'Équipement et d'Intervention Intercommunale (FEICOM)	Public administrative body	Public funds from the national budget	Local authorities	Loans, grants, cash advances and guarantees	Municipal staff training; funds for redistribution; assists local governments seeking external funds
Colombia	Findeter (Financiera de Desarrollo Territorial)	Ministry of Finance; mixed public and private board with regional governors	Ministry of Finance and funds from financial institutions	Local governments and other public or private entities for infrastructure	Loans – direct credit and via financial partners	Development planning; project technical assistance
India	Tamil Nadu Development Fund	Public-private partnership (private majority)	State budget, private partners, international agency loans	Urban local bodies in Tamil Nadu State	Loans, pooled financing, poverty project grants	Technical assistance and capacity-building support
Indonesia	Regional Infrastructure Development Fund (RIDF)	State-owned enterprise	International agency loans and government equity	Subnational governments as per eligibility criteria	Loans	Project development facility (associated but separately managed)
Nepal	Town Development Fund	Autonomous intermediary	International agency loans and grants	Local governments as per eligibility criteria	Loans and grants	Technical assistance for financial reform and service delivery
Philippines	Municipal Development Fund (MDF)	Department of Finance MDF Office	International agency grants/loans	Local governments as per eligibility criteria	Loans and grants	Infrastructure project technical assistance
	Local Government Unit Guarantee Corporation	Private – Bankers Association and the Development Bank of the Philippines	Private sector financial institutions	Local governments and other public or private entities for infrastructure	Guarantees to financial institutions in case of default	Credit rating
South Africa	Development Bank of Southern Africa (DBSA)	Finance entity under the Ministry of Finance	Financial markets; profits; third-party funds	Municipalities, local government and public-private entities	Loans, grants and equity	Infrastructure project technical assistance
	Infrastructure Finance Corporation (INCA)	Private entity	Local/international funds from bonds	Municipal infrastructure projects	Bonds and long-term loans	Portfolio management

Source: Author compilation.

the Philippines and INCA in South Africa). The specific mechanism matters less than how it is financed and managed, which affect SFI motivations and performance. Greater reliance on private finance and broader management (non-governmental as well as governmental board membership) are likely to help moderate political interference in SFIs, increase the use of strong assessment tools that can approve more viable loans and improve incentives to enforce loan repayment.

The cases also reveal different mixes of SNG borrowing options and show that these evolve over time. The largest share of SNG borrowers in South Africa receive DBSA loans, but some creditworthy urban governments have been going directly to the market, over time reducing the need for the now-defunct INCA. SNGs in the Philippines have borrowed a fair amount, but mostly via SFIs with varying mixes of public and private funding that serve different types of SNGs and projects. Initially, the Ministry of Finance MDF dominated, but over time the private LGUGC and other mechanisms have come to play a stronger role in SNG lending. Such distinctions in sources and instruments and how they have evolved are generally consistent with SNG borrowing principles as outlined above – although how systematically various options have been created and used is difficult to definitively determine from secondary material.

In Colombia and Indonesia, SNGs have not issued bonds and have mostly borrowed through public mechanisms, but both countries have modified their systems. The main SFI in Colombia, Findeter, broadened sources of finance and management such that the private sector now plays a larger role despite the SFI's continued affiliation with the Ministry of Finance. For years, Indonesia had no dedicated SFI. Rather, SNGs borrowed through accounts capitalized by international financial institutions and operated by dedicated Ministry of Finance divisions. The new RIDF is managed by a state-owned enterprise instead of a government ministry.

Since these particular countries and their SNGs operate in dissimilar contexts with different intergovernmental frameworks and have uneven levels of experience in SNG investment, the SNG lending options they have developed, including SFIs, are understandably different. It is difficult to comparatively assess these mechanisms systematically without primary research, but it appears that many of them share, at least to some degree, characteristics that indicate progression: they are all trying to learn from previous efforts to support SNG investment, and generally attempting to improve on the SNG development finance systems used in the past. They are moving away from dominant central government

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management and are trying to engage the private sector more substantially. Each initiative has tried to define objective rule-based approaches to facilitate more efficient and equitable allocation of development resources. They have developed provisions to incentivize repayment – including, in some cases, intergovernmental transfer intercepts – in order to support sustainable revolving funds and limit past needs for continual recapitalization. In varying ways, they offer financial and/or technical assistance to support SNGs with project preparation and implementation – largely in ways that reduce past problems associated with mixing responsibility for multiple project development functions under a single entity.

A few of these entities combine the use of grants and loans to finance development projects, although in relatively simple ways rather than through the more systematic type of grant-loan linkage advocated for consideration above. It is also noteworthy that some of these SFIs started with significant external intervention. If they were not directly part of a development assistance project, the SFIs relied on international development partners for technical assistance and capital, which was then passed to SNGs in the form of grants and/or loans. Strategically trying to overcome this aid dependence is a key goal of some newer SFIs.

Concluding thoughts

Given the multifaceted, varied and asymmetrically developed landscape in which SNGs operate across and within developing countries, expanding sub-national development finance must reflect country context. In recent years, some countries have tried to engage too quickly in developing municipal bonds and/or have made overly ambitious use of PPPs; many have maintained significant use of development transfers for SNG infrastructure. Clearly, there is a case for a more strategic, mixed approach that might include SFIs. Insufficient attention to developing SFIs seems to result from concerns on the part of developing countries and international development partners about documented difficulties involved in making such entities work sustainably in the past – and, in some cases, unrealistic expectations regarding the role that municipal bonds can play in developing countries in the near term.

Caution regarding SFIs may seem warranted, but inadequate past performance often reflected avoidable defects in design and implementation rather than intrinsic flaws in the basic concept. Equally compelling, a large share

of SNGs in many developing countries are not creditworthy and will require considerable assistance to build the capacity needed to access development finance. The weakest SNGs may be unable to borrow in the near term. Yet there are likely to be SNGs in many countries capable of assuming debt, if not directly from financial markets, then from well-conceived SFIs.

There is no universal solution to expanding SNG borrowing. What is needed is a range of development finance mechanisms suitable to each country. Stronger SNGs should ideally have direct access to capital markets, subject to an appropriate regulatory framework. Those without direct market access could be served by SFIs organized and managed using accepted principles with appropriate blends of public and private sector involvement that can evolve over time. Means to mitigate risk, as discussed above, will often be required, at least for certain borrowers on an as-needed basis.

Improving SNG development finance will also require reforming broader intergovernmental fiscal frameworks and processes, as well as specific efforts to build fiscal responsibility and creditworthiness. SNGs require sufficient authority and fiscal space to be able to manage debt, so efforts are needed to build stronger frameworks and develop capacity. Strategic design and implementation of reforms, including incentive mechanisms such as grant-loan linkages and performance-based transfers, may be productive. In addition, initiatives to support project preparation and the development of viable PPPs, among others, may add considerable value in some cases. Determining what is needed and feasible in specific cases will require good diagnostics and strategic thinking about how to frame and sequence reforms. The potential benefits of doing so are clear, but much work remains to be done.

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Notes

1. This chapter was written with research assistance from Nicolas Garcia. Parts of the chapter are based on Smoke (2019) and UCLG (2015).
2. See Bahl and Bird (2018); Bahl, Linn and Wetzel (2013); Frank and Martinez-Vazquez (2016); UCLG (2015); and UN-Habitat and IDB (2017).
3. These factors are further detailed in Smoke (2017) and UCLG (2015).
4. Reviews of decentralization performance are provided in Bahl and Bird (2018), LDI (2013) and Smoke (2015).
5. See African Development Bank and others (2015); Ahmad (2014); EC (2016); Frank and Martinez-Vazquez (2016); Ingram, Liu and Brandt (2013); LDI (2013); and UCLG (2015).
6. Integrated territorial development and the general development mandate of subnational governments are discussed in CLGF (2007, 2013), EC (2016) and Romeo (2013).
7. See Frank and Martinez-Vazquez (2016); Ingram, Liu and Brandt (2013); UCLG (2010, 2013, 2017); UN (2015); and United Nations General Assembly (2014).
8. See, for example, McGranahan and Satterthwaite (2014) and UN (2017).
9. See IPCC (2018); Broto and Bulkeley (2013); Chu and others (2019); Hughes, Chu and Mason (2019); and UCLG (2013).
10. See for example, Bahl, Linn and Wetzel (2013); OECD and UCLG (2016, 2019); and UCLG (2010, 2015).
11. See OECD and UCLG (2016, 2019) and UCLG (2010, 2015).
12. Bahl and Bird (2008, 2018), Martinez-Vazquez (2013), Smoke (2014) and UN-Habitat (2015) provide overviews of SNG revenues.
13. Synthetic reviews of intergovernmental transfers include Bird and Smart (2002), Boadway and Shah (2007) and Shah (2013).
14. See, for example, Bahl, Linn and Wetzel (2013), Smoke (2017), UCLG (2010, 2015) and UN-Habitat (2015).
15. See, for example, Freire and Petersen (2004), KfW (2015), PPIAF (2013) and Smoke (2019).
16. Some treatment of borrowing frameworks and innovations can be found in Canuto and Liu (2013); Ingram, Liu and Brandt (2013); Kahkonen and Gupta (2015); Kehew, Matsukawa and Peterson (2005); Liu and Waibel (2010); Martinez-Vazquez and Vulovic (2017); Platz (2009); and Smoke (2013).
17. Grant-loan linkages are discussed and examples are presented in Freire and Petersen (2004) and Smoke (1999).
18. See, for example, Canuto and Liu (2013); de la Torre, Gozzi and Sch mukler (2017); Eichler, Wegener and Zimmerman (2012); Kehew, Matsukawa and Peterson (2005); Matsukawa and Habeck (2007); Petersen (2006); and Peterson and Annez (2007).
19. See, for example, ADB (2016); AFD and UNDP (2016); Brinkerhoff and Brinkerhoff (2011); FMDV (2015); Ingram, Liu and Brandt (2013); Jomo and others (2016); Marin (2009); OECD (2015); Pessoa (2008); and Saha (2018).
20. For more information, see the [Cities Development Initiative for Asia website](#).
21. For more information, see the respective web pages for the African Development Bank's [Africa50](#) and the Asian Development Bank's [ASEAN Infrastructure Fund](#).
22. For more information, see the respective web pages of the Government of Philippines's [Public-Private Partnership Center](#) and the European Bank for Reconstruction and Development's [Infrastructure Project Preparation Facility \(IPPF\)](#).
23. See ADB (2016) and the Government of Philippines's [Public-Private Partnership Center](#).

24. See, for example, Lewis and Smoke (2012), Shah (2010) and Steffensen (2010).
25. More information can be found at the [Findeter website](#) and the [Green Climate Fund web page](#) on Findeter. Also see Palau, de Hinstrosa and Puello (2018); Triana and Vanega (2018); and Navarro (2018).
26. Based on a 31 December 2018 exchange rate of 1 Colombian peso = \$0.000305.
27. Figures based on a 31 December 2021 exchange rate of Col\$ 1 = \$0.000249.
28. More information on RIDF can be found on the websites of parent agency [PT SMI](#) and the World Bank's [Regional Infrastructure Development Fund](#) and the Asian Infrastructure Investment Bank web page for [Indonesia: Regional Infrastructure Development Fund](#).
29. Detailed information can be found at the Philippines's [Municipal Development Fund Office](#).
30. Detailed information can be found at the International Institute for Sustainable Development web page on the Philippines's [Local Government Unit Guarantee Corporation](#). A more historical perspective on the evolution of subnational borrowing in the Philippines can be found in Petersen, Liu and Llanto (2013).
31. More information can be found at the South Africa National Treasury web pages for [Intergovernmental Fiscal Reviews](#) and the [Municipal Borrowing Bulletin](#), as well as the [City of Johannesburg web page on city bonds](#) and the [INCA website](#). Also see DBSA (2021) and Glasser (2020).
32. Based on a 31 December 2020 exchange rate of 1 South African rand = \$0.06818.
33. The information provided here and in table 8.3 was drawn from the following: Cameroon – Institutions and Development (2018); Nepal – [Town Development Fund website](#); Brazil – [Paranacidade website](#); India – [Tamil Nadu Urban Development Fund website](#), Venkatachalam (2005) and World Bank (2015).

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9

Local Government Fiscal Space During COVID-19 and Beyond

DMITRY POZHIDAEV

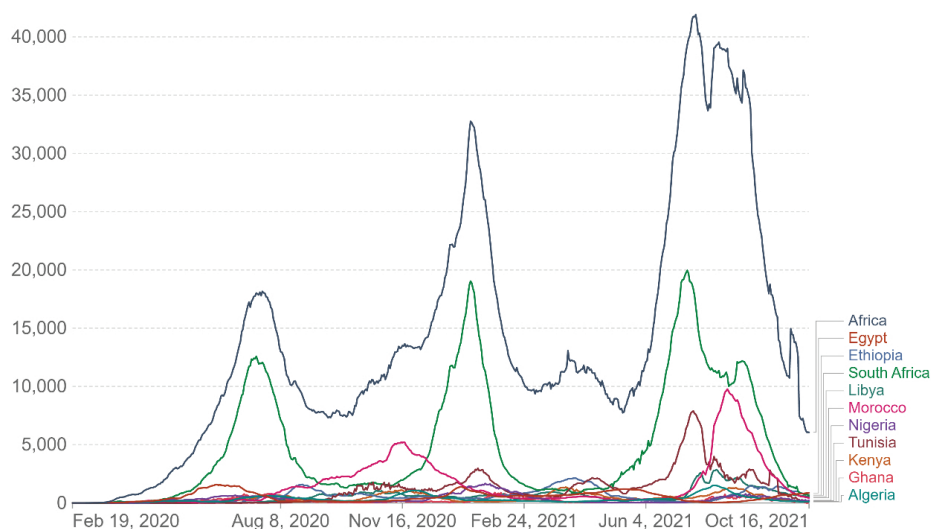
This chapter builds on three initiatives in which the United Nations Capital Development Fund (UNCDF) has been participating: one on the impact of COVID-19 on local government fiscal space and service delivery in Uganda (UNCDF, 2020b), one on the economic and fiscal resilience of African cities during COVID-19 and beyond, and one on rebuilding local fiscal space. These studies convincingly demonstrate that local governments have a legitimate role to play in managing COVID-19 response and recovery. Further, where they have had enough space, the impact has been less and the recovery faster. But in many cases, the existing legal and regulatory frameworks (including fiscal regulations) do not allow local governments to play a substantive role and to fully realize their development potential (Dougherty and de Biase, 2021).

COVID-19 and local fiscal space

This chapter uses the International Monetary Fund (IMF) definition of fiscal space as the room to raise spending or lower taxes relative to a pre-existing baseline, without endangering market access and debt sustainability (IMF, 2018). In light of this definition, COVID-19 resulted in the contraction of local government fiscal space in the short term – particularly during 2020, when many countries introduced strict national lockdown measures, bringing local economies to a halt. Many cities and local governments across Africa and in developing countries in other parts of the world have experienced two or three periods

of significant restriction on movement and economic activities in 2020–2021 coinciding with peaks in COVID-19 cases (see figure 9.1).

Figure 9.1 Daily new confirmed cases of COVID-19 in Africa



Source: Johns Hopkins University [CSSE COVID-19 Data](#).

Note: Shown is the rolling seven-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Immediate impacts on local fiscal space

Forecasts made at the beginning of the pandemic, in early to mid-2020, predicted a contraction from 10 per cent in the base case scenario to 70 per cent in 2020 in the worst case scenario (UN-Habitat and others, 2020). Indeed, this is what happened in 2020: the pandemic made a serious dent of up to 50 per cent in the local government fiscal space in the first six to nine months of 2020. The city of Kumasi in Ghana saw its fiscal space shrink by 25 per cent and the city of Harare, Zimbabwe, by 45 per cent in March–September 2020. Kampala, Uganda, registered a record 83 per cent decline in tax collection during lockdown. UNCDF (2020b) forecast a 15 per cent decrease in local government revenues in Uganda; some cities, such as Gulu in Northern Uganda, saw their revenues shrink by 40 per cent.

Part of this contraction was due to response measures taken by local governments. For example, many local governments waived or deferred municipal taxes or other charges to help citizens – particularly vulnerable groups – as well as local businesses withstand the worst impacts of COVID-19 and cope

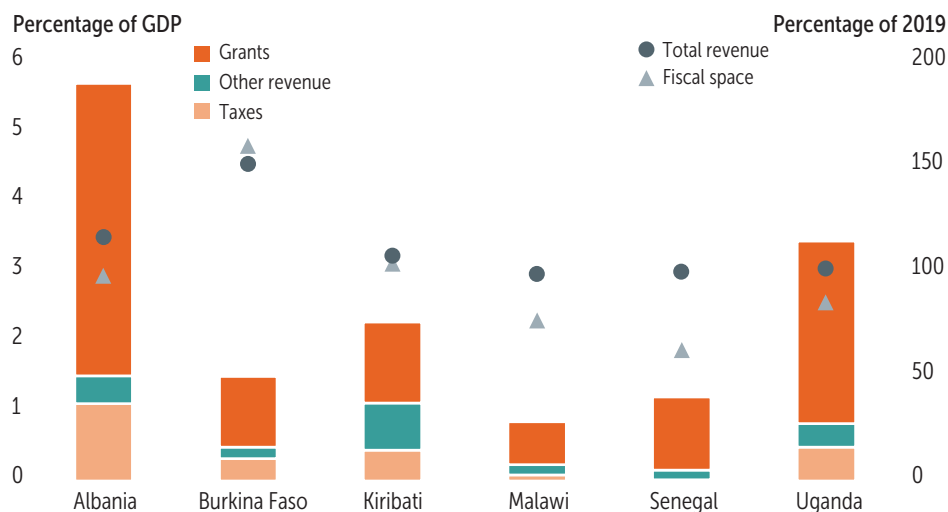
with containment measures introduced by central and local governments. The city of Kampala waived fees and other charges in all markets and facilities under its authority for March and April 2020 to help traders cope with the pandemic. South Africa's Cape Town Council announced that commercial property owners would be able to obtain rates relief if they could prove that their business income had been negatively affected by the crisis. All local governments took similar actions to the extent their existing competences allowed. In addition, there was a short-term drop in intergovernmental fiscal transfers across countries, reaching as much as 40 per cent, while central governments repositioned for an effective response and tried to raise additional finance internally and externally.

At the same time, the expenditures of local governments grew as they had to increase the provision of public healthcare and other municipal public services – such as transport for workers employed in critical sectors, retrofitting public facilities in compliance with COVID-19 protocols, providing shelter and food to socially disadvantaged groups etc. Some also had to deal with the return of expatriate workers from major remittance-sending countries due to COVID-19 restrictions in those countries; this was the case for Bangladesh, which saw the return of half a million guest workers. Local governments were facing an unprecedented double challenge of simultaneously combating the pandemic while looking to rebuild and recover local economies in the context of partial or complete lifting of containment measures.

Short- to medium-term impacts on local fiscal space

Financial data for many developing countries, particularly in Africa, tend to be hard to access, patchy and lagging (Jerven and Johnston, 2016). As of this writing, statistics for 2020 are available for only a handful of countries (and countries where the fiscal year ends on 30 June have not yet published their 2020/21 reports). These data indicate that, in the short to medium term, many local governments recovered from the initial shock of COVID-19 relatively quickly, restoring (or even increasing) their fiscal space by the end of 2020 or mid-2021.

Figure 9.2 presents available data on local government revenues for six countries for which 2020 revenue data are available (including some participating in the United Nations cities' economic and fiscal resilience project¹. The data show a minimum impact of COVID-19 on local government revenues. In all six countries, the total revenue of local governments by the end of 2020 was equal to or even higher than their revenue in 2019. The grant share of the local government budgets increased in all countries. However, the change in tax and non-tax revenues (which are the backbone of the local fiscal space) was more

Figure 9.2 Composition of local government revenues, 2020

Source: Data from IMF Government Finance Statistics, World Bank World Development Indicators, Uganda Local Government Finance Commission Databank.

Note: For Uganda, the data refer to fiscal year 2019/20.

varied. Three countries (Albania, Burkina Faso and Kiribati) recorded no change in the local government fiscal space or even an impressive increase. But the other three countries in the sample performed worse in 2020: as a percentage of 2019 fiscal space, their performance varied from 63 per cent in Senegal to 85 per cent in Uganda.

In addition to illustrating the impact of COVID-19 on various revenue sources, the data also show its impact on the financial response mechanisms central and local governments employed. The closure of local economies affected income-elastic revenues, but only to an extent. Some revenues (local business taxes and revenues from municipal enterprises such as markets) were lost for a relatively short period (in many countries, food markets continued to operate during lockdowns). Because of a high share of untaxed economy in least developed countries and emerging economies – reaching 80–85 per cent (Kanbur, 2014) – personal income tax (which relies on formal sector wages, particularly in the public sector) remained unaffected. Income-inelastic taxes, such as property tax – which is often the largest source of revenues, particularly for urban local governments – was deferred or rescheduled, but eventually received.

At the same time, some cities introduced property tax rebates. For instance, Johannesburg, South Africa, gave a three-month rates rebate on the first R 600,000 value of a property (approximately \$41,000) during the hard

lockdown². Revenues from other sources (trading licenses, business permits etc.) were sometimes lost, but in many cases simply delayed to be paid later as economic activities picked up. In some countries from the sample, local governments even increased their own source revenues due to the introduction of more efficient tax administration.

All countries saw an increase in grants between 0.2 and 1.0 per cent of gross domestic product (GDP), which largely offsets the losses in own source revenues. Central governments across the countries were able to maintain and even increase the level of grants to local governments; this was helped by their increased borrowing due to the World Bank Debt Suspension Initiative, which has delivered more than \$10.3 billion in relief to more than 40 eligible countries since 1 May 2020, \$56 billion in highly concessional funding or grants from the International Development Association to low-income countries, and IMF emergency lending and debt service relief of about \$250 billion³. In addition, many developing countries also received significant amounts of grants from bilateral or multilateral development organizations. According to the Organisation for Economic Co-operation and Development, official development assistance, which was showing a declining trend in 2017–2019, increased by 7 per cent in 2020 (OECD, 2021a).

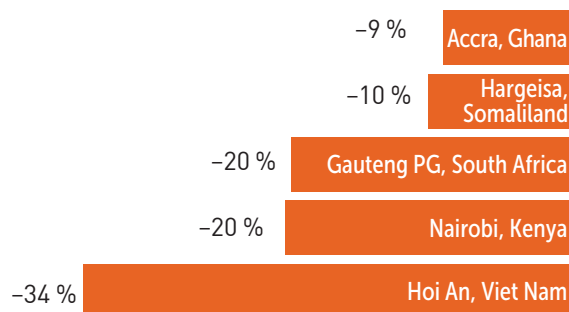
Whereas the total amount of central government grants did not change materially, their overall structure often did, with less discretionary funds and more earmarked grants, particularly in the context of the COVID-19 response (UN-Habitat and UNCDF, 2021). This resulted in further contraction of the local fiscal space, calculated as the sum of own source revenues and discretionary grants. Hence, the total change in local government fiscal space is likely to be underestimated, and the actual performance may be even worse than that presented in figure 9.2.

Moreover, the full brunt of COVID-19 is likely to materialize in the next two years. Previous studies suggest that grants are more volatile and also more pro-cyclical than local government tax revenues; they also tend to lag the economic cycle by one or two years as a result of their formulas (Blöchliger and others, 2010).

Impact on cities' fiscal space

Based on the incomplete data available globally, cities, particularly larger ones, appear to have experienced a stronger economic shock and decline in their fiscal space (see figure 9.3). These cities are more reliant on own source revenues and better integrated into international value chains, with a higher share of tradable goods and services in their economies. Cities had to cope with a

Figure 9.3 Impact on cities' own source revenues, 2019–2020



Source: Internal research data from UNCDF and the United Nations Economic Commission for Africa; South Africa [National Treasury data](#).

Note: For Gauteng Provincial Government, the data do not cover a full year but instead refer to the first nine months of fiscal year 2019/20 and nine months of 2020/21.

greater surge of demand for public services compared to smaller and rural local governments. At the same time, given the size of these cities, the central government was unable to compensate their loss in own source revenues as it did for smaller local governments.

The cities in the sample, including some participating in the joint project on urban economic resilience plus South Africa's Gauteng region recorded a drop in own source revenues (and therefore contraction of their fiscal space) by 10–35 per cent as of the end of 2020 (or even early 2021). This is an improvement over

the worst effect of COVID-19 of 50 per cent and more during and immediately after the first wave of lockdowns. Still, it is below the overall performance of local governments in tax revenue collection in 2020 indicated in figure 9.2.

Of course, there are also examples of cities that have managed to strike a balance between the needs of residents and their institutional ability to provide services, considering continued COVID-19 impacts. This was possible where cities had enough autonomy to regulate their fiscal space (see the subsection on reinforcing local government budget and fiscal autonomy, [p. 259](#)). For example, the city of Johannesburg managed to balance its budget (with a surplus) in 2020 by raising taxes and fees across all categories (property, electricity, sanitation and water etc.) by 5–15 per cent. The city of Arua, Uganda, was able to increase its revenue by 19 per cent in 2020 after updating its property tax database.

It remains to be seen if the drop in city revenues is going to have longer-lasting effects on city economies and their capacity to deliver services. City revenues are known to have a higher positive correlation with national GDP (UN-Habitat and others, 2020), and, as the following section discusses, GDP growth globally and in emerging market and developing countries is expected to slow in 2022.

Outlook

The situation as of this writing at the end of 2021 remains uncertain, even though growth has accelerated. According to the latest IMF forecasts (2021), the global economy is projected to grow 5.9 per cent in 2021 and 4.9 per cent in 2022,

and higher in emerging market and developing economies (6.4 and 5.1 per cent, respectively). Yet the total number of COVID-19 cases is still growing, as is the number of fatal cases, which showed a very low trend in the beginning of the pandemic.

As the virus continues to mutate and most of the least developed countries register low levels of vaccination at around just 5 per cent due to inadequate access to vaccines, it is possible that the next wave of the pandemic will rise to a level where the local healthcare system as well as other resources will be overburdened. Against this background, local governments would be expected to build up and maintain a certain level of indigenous healthcare and service delivery capacity while taking steps for local economic recovery.

This is clear evidence that the 'new normal' unfolding in front of us entails living with COVID-19 for some time to come. And this new normal implies maintaining a high level of preparedness and an excess capacity of the healthcare system to treat a large number of patients if necessary, while simultaneously maintaining basic service delivery and rebuilding local economies (hopefully better) in a manner that would minimize the risk of infection.

The other aspect of the new normal – or probably not so new – is an increased role of government, including local governments. A stream of authors, including Abhijit Banerjee and Esther Duflo (2020), Marianna Mazzucato and Rainer Kattel (2020) and, more recently, Joseph Stiglitz (2021), emphasize the criticality of a strong and able government enjoying a fair amount of legitimacy (regardless of the political system) for quick recovery. Mazzucato and others (2021) define public sector capacity as the set of skills, capabilities and resources for flexibly responding and adapting to changing environments through the dynamic capabilities nested in said capacities. The pandemic has shown that such agile stability, also referred to as 'resilience', matters greatly in the public sector.

**THE 'NEW NORMAL'
UNFOLDING IN
FRONT OF US
ENTAILS LIVING WITH
COVID-19 FOR SOME
TIME TO COME.**

Focusing on the four R's

Recent discussions (e.g. in Cities Alliance, 2021; OECD, 2021b; and UN-Habitat and UNCDF, 2021) about what can and should be done to enable the fiscal space of local governments to deliver an effective and robust response to COVID-19 in the short and longer term focus on four R's: **ringfence** the fiscal space, **reprioritize** budgets, **reinforce** budget and fiscal autonomy, and **rebuild** fiscal space better (see box 9.1).

Box 9.1 Four R's of local government finance for recovery

Ringfence revenues. Engage with the central government, development partners and other partners to minimize the drop in municipal revenues from own sources and intergovernmental fiscal transfers.

Reprioritize budgets. Reallocate budgets to maximize funds for activities that contribute to inclusive, green and resilient recovery.

Reinforce budget and fiscal autonomy. Engage with the central government and development partners to achieve a city's maximum discretion over its budget and ensure adequate fiscal autonomy.

Rebuild fiscal space better. Diversify and unlock sources of finance (public and private) and apply new financing approaches and techniques for inclusive, green and resilient recovery.

Ringfencing the local government fiscal space

Ringfencing refers to near-term activities aimed at (i) protecting the roles and responsibilities of local governments in COVID-19 response and recovery and (ii) safeguarding an adequate fiscal space for this. Building local government fiscal space should proceed in line with the principle of 'funding follows function'. This principle is yet to be implemented in many LDCs where most of local governments' functions are declarative, not properly resourced and – in reality – delivered by central government bodies.

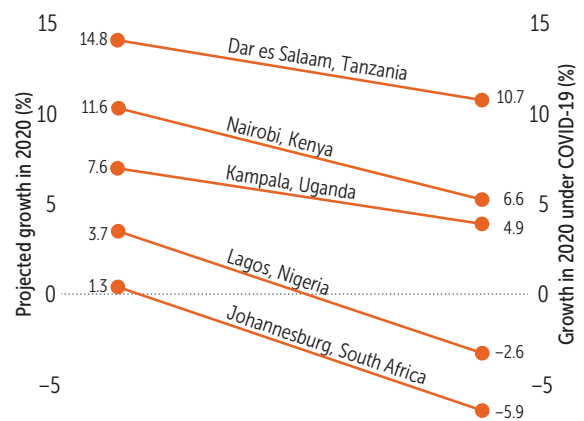
While the role of local governments is officially recognized and appreciated, in practice many central governments deny their independent role, seeing them instead as an extended arm of the central government acting on its instructions. Hence, mutual agreement between central and local governments, and a clear understanding of the deliverables expected from the latter, is critical and underlies the measures to safeguard an adequate resource envelope at the local level. After all, when the COVID-19 response is most often driven from the central level, local governments can deliver only as much as the central government allows them to.

This is particularly true for the recovery phase. During the preparation and response phases, local governments' responsibilities were relatively clear (albeit narrowly focused on carrying out central government's instructions) and even somewhat funded, as many central governments allocated special grants to enable local governments to perform their assigned functions (Dougherty and de Biase, 2021; UNCDF 2020b). There is less clarity during the recovery phase beyond continued delivery of basic services, for two key reasons:

- First, there is less clarity about the role of local governments and their contribution to COVID-19 recovery compared to their roles during pre-preparedness and response. Those tasks are relatively straightforward and concerned mostly health-related issues, such as case tracking, isolation, treatment and delivery of essential services.
- More fundamental is the general underdevelopment of the local government economic function, which entails three dimensions: (i) institutional (strong and able structures for economic governance), (ii) regulatory (enabling regulations to plan, finance and implement local economic development) and (iii) financial (financial mechanisms, instruments and adequate fiscal space). With the exception of larger cities (usually capitals), such as Dar es Salaam, Kampala, Dakar or Accra in Africa or Dhaka in South-East Asia, to take a few examples from the LDCs, the requisite conditions for delivering the economic function are weak or non-existent in most cities and local governments in the LDCs and developing countries. Lacking this strong economic function, there is a high risk of the central government stepping in and significantly curtailing the role of local governments in post-COVID-19 recovery and making it slower and less effective. Developing these prerequisites is a longer-term task, although COVID-19 offers an unprecedented opportunity to realize the ambition of an economically active local government.

In the immediate recovery phase, local governments should look to protect their economic functions based on mutually agreed realistic and achievable targets. Further, the own revenue space of local governments should ensure at least minimum financial resources for local recovery. The expected drop in own source revenues has hit urban governments (municipalities and town councils) particularly hard. For some, the own source revenue losses may amount to as much as half of their total fiscal space, with large cities registering significant growth drops or even moving into negative territory (UN-Habitat and others, 2020; see figure 9.4). Two dedicated

Figure 9.4 Projected growth and growth under COVID-19 conditions in selected African primary cities



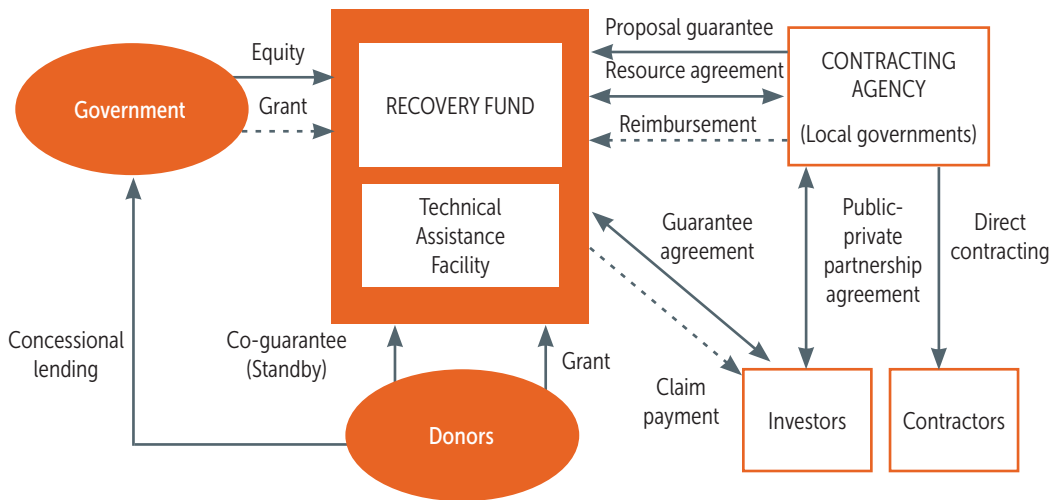
Source: UN-Habitat and others (2020).

mechanisms can be used to support an effective contribution of local governments to post-COVID-19 recovery.

- **Own source revenue compensation fund for local governments.** The central government could establish a fund to compensate local governments for the loss of own source revenues to keep these resources available for the purposes of response and recovery. The fund would play the same role as funding facilities currently established for private businesses and savings and credit cooperative organizations to inject liquidity to resume their operations. The fund would preserve local governments' discretionary fiscal space and enable local economic recovery. Funding should be in the form of discretionary grants, with releases subject to approved COVID-19 local response and recovery plans to ensure appropriate funds utilization.
- **Local government recovery fund.** This emergency fund is intended to provide short-term liquidity to local governments for local response and recovery. The sources, structure, financial instruments and management arrangements for such a fund may vary depending on its use in the context of mutually agreed-upon local government responsibilities. Obviously, when the central government experiences a downward trend in domestic revenues, capitalizing such a fund would be a challenging, but manageable, task. Assuming the central government has access to international or bilateral concessional loans or grants (from the World Bank Group, the International Development Association, IMF, or multilateral and bilateral partners such as the European Investment Bank), a share of these funds may be allocated to local governments subject to an approved COVID-19 local response and recovery plan. The type of funding (and to some extent the structure and management arrangements) will depend on the type of financial instruments used by the fund – for example, grants, recoverable grants (zero-interest loans) and guarantees to different types and sizes of businesses. Funding may be more discretionary or more conditional, earmarked for specific uses and specific financial instruments. The fund could be a revolving mechanism if it relies on recoverable funds extending beyond the recovery period or a one-time initiative if it relies only (or mostly) on grants. A revolving mechanism will be easier in local governments where some dedicated business or economic development mechanisms (such as local development corporations, local government loan boards, municipal banks) already exist. In its simplest form, the local government recovery fund could be a window in a recapitalized existing financial mechanism for local governments.

Figure 9.5 shows one possible model for a local government revolving recovery fund based on a combination of public-private partnership agreements and direct contracting to boost the local private sector. It is an arm's-length ringfenced funding facility co-financed by the central government, with the participation of local governments as contracting agencies and supported by donors through concessional lending, direct grants and guarantees.

Figure 9.5 Local government revolving recovery fund



Source: Based on Sood, Mays and Lindfield (2012).

Reprioritizing local government fiscal space

Reprioritization of spending priorities in local government fiscal space has played an important role in pandemic response, particularly in the early phases. No local government has been able to navigate the COVID-19 crisis without reprioritizing and reprogramming its budget.

Reprioritization has most affected capital investment programmes, although many urban governments – including Bishkek, Kyrgyzstan; Kampala, Uganda; and Lima, Peru – have also tightened their belts by cutting administrative expenses (e.g. travel, training, maintenance and some staff benefits) to carve out additional fiscal space from these savings. Local governments recognize that the COVID-19 crisis has offered them an opportunity to rethink public budgets – particularly administrative expenses – and improve the productive efficiency of public money. For one, the city of Subang Jaya, Indonesia, has reduced its administrative expenditure by 20 per cent (UNCDF, 2020c).

Some cities have taken a long-term view to ensure the availability of public budgets in anticipation of future expenses: for instance, Subang Jaya introduced a financial back-up plan, which includes a reserve equal to four months of expenses (UNCDF, 2020c). As local governments move through recovery, this same spirit, together with the approaches and practices identified during the COVID-19 pandemic, should be applied.

Reprioritizing public investments

Reprioritization is not simply a matter of moving funds between budget headings. It also involves more effective public investment management to increase the marginal efficiency of public capital. The economic and social impact of public investment critically depends on its efficiency. According to IMF (2015), comparing the value of public capital (input) and measures of infrastructure coverage and quality (output) across countries reveals average inefficiencies in public investment processes of around 30 per cent. The economic dividends from closing this efficiency gap are substantial: the most efficient public investors get twice the growth 'bang' for their public investment 'buck' than the least efficient.

MANY LOCAL GOVERNMENTS STILL HAVE A SILO PLANNING APPROACH WHEN SECTORS PREPARE THEIR INVESTMENT PLAN, WITH LITTLE ATTENTION TO OR CONSULTATION WITH OTHER SECTORS.

Improvements in public investment management could significantly enhance the efficiency and productivity of public investment. However, despite the existence of public investment appraisal manuals in many countries, their application by local governments to individual projects or to the portfolio of planned investments is quite infrequent. Net present value or economic rate of return analyses rarely guide local government decision-making about investment priorities.

Investment analysis is a critical condition for better and greener recovery, as local governments deal with new and existing constraints. Investment analysis and prioritization decisions should be made – not only for individual projects but also – for sector portfolios and the local government investment plan. Only in this way can public funds be allocated to maximize their overall impact.

Reprioritizing sources of finance

Since the start of COVID-19, many local governments have been exploring alternative sources of finance to complement or replace insufficient public funding. Some, such as Teresina, Brazil, were able to use their financial institutions to save public budgets for other interventions. To facilitate access to affordable finance

and maintain local demand, the publicly owned Teresina People's Bank issued R\$ 1 million (approximately \$183,000⁴) in microcredit finance in mid-2020. And the Swedish cooperative bank Kommuninvest, which serves as a pooled financing agency for Swedish cities and local governments, was able to raise SKr 5 billion (approximately \$534 million⁵) in a new green bond and \$1.25 billion in a new benchmark bond, dramatically improving the access of Swedish local governments to affordable finance.

Diversification of local government revenues is an important factor in a resilient local government fiscal space. Local governments need to reprioritize and redirect public and private financial flows and relevant instruments to match the economic and financial characteristics of specific investments.

Reinforcing budgetary and fiscal autonomy

As detailed in chapter 6, beginning on [p. 161](#), local governments in many countries lack budgetary and fiscal autonomy in law or in practice. Even where legal provisions or subordinate regulations are in place, they may be ignored or suspended by the central government. For decentralization to be effective, local governments must have sufficient autonomy to decide on how much to spend on a service, how to deliver it and, importantly, how to finance it (Bahl and Bird, 2018).

Budgetary autonomy refers to the competence of local governments to make budget decisions, including making budgetary adjustments to reflect changes in plans and policies throughout the fiscal year, moving funds between different headings etc. With insufficient budgetary autonomy, local governments may have to go through a tedious approval process to make adjustments in their budgets or spending decisions. For instance, some countries require parliamentary approval to allow local governments to use additional revenues they have generated; this significantly delays the effective response of local governments in emergency situations.

Fiscal autonomy refers to the competence of local governments to determine their sources of revenues (within the existing legal framework) and regulate taxes, charges and fees. This autonomy is significantly constrained in many countries: rates are often set by, or require the approval of, the central government; relevant regulations to enable the collection of certain types of revenues may not be in place; local governments may lack the expertise and funding to fulfil certain conditions to initiate revenue collection (e.g. to carry out a property evaluation survey for property tax); and so on. This situation undermines the capacity of local governments to react to changing economic circumstances by maximizing the tax sources that are most feasible at the moment – thus undermining

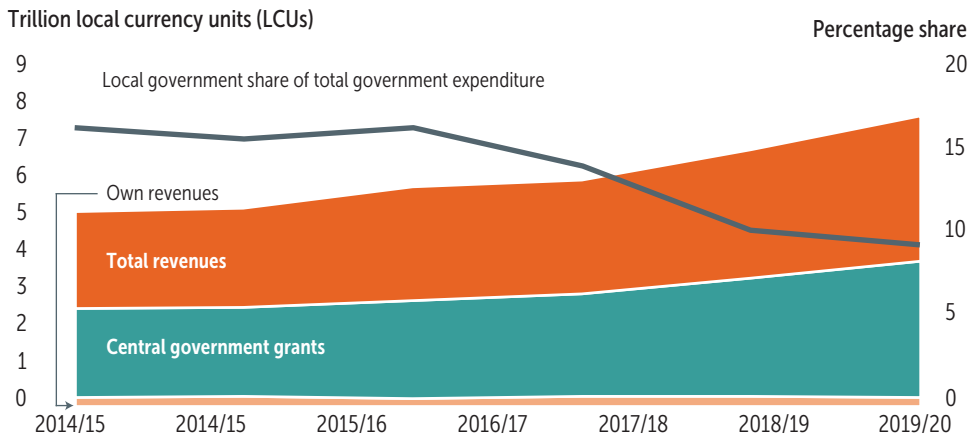
the flexibility of the local government fiscal space, which has proven to be a critical factor in funding an effective COVID-19 response at the local level.

In the immediate and short term, local governments, in partnership with relevant central government institutions, should make sure they fully utilize all existing budget and fiscal competences. Numerous examples illustrate when local governments are operating below their level of autonomy for reasons that include ignorance about their rights and opportunities, cumbersome approval procedures and political machinations.

Rebuilding the local government fiscal space better

The composition of local governments' fiscal space should be changed to make it more flexible and therefore more suitable for local government response and recovery. Four essential features characterize local government budgets in many African countries as well as in many developing countries around the world⁶.

- **Large share of recurrent finance versus capital finance.** The share of recurrent finance, primarily for wages and salaries, is larger than that for capital finance (development finance). The recurrent finance share varies for different countries and different types of local governments (and is generally lower for cities), but can at maximum account for over 90 per cent of the entire local government annual budget; this is the case in Uganda (UNCDF, 2020b).
- **Dominance of conditional (earmarked) finance over discretionary finance.** On average, the share of conditional funding is 70–90 per cent of the inter-governmental transfers from central (and/or provincial) governments to local governments (depending on the government structure). This share is approximately the same for all types of local governments, urban and rural.
- **High degree of reliance on central government transfers and a low proportion of own source revenues, despite a notable increase in the nominal amount of own source revenues in most cases.** In Uganda, Tanzania, Rwanda and Mali, intergovernmental transfers represent 96, 90, 89 and 75 per cent of subnational revenue, respectively. In Ethiopia, two thirds of local governments' revenues depend on grants (OECD and UCLG, 2019).
- **Low share of total public sector expenditure.** Given the dependence of local governments on fiscal transfers from higher levels of government, their share of total public sector expenditure generally remains low in developing countries (e.g. below 14 per cent in Uganda, as shown in figure 9.6, compared to about 40 per cent in Organisation for Economic Co-operation and Development countries).

Figure 9.6 Composition of local government revenues in Uganda

Source: Author calculations.

These four factors taken together significantly constrain local governments' fiscal space and their ability to respond to different crises. For one thing, many officially assigned functions of local government (even delivery of essential services such as solid waste management) often remain heavily underfunded. For another, considering the high share of recurrent and conditional funding, local governments cannot reallocate funding to address emerging needs in the context of a crisis, such as COVID-19, and must lobby higher levels of government for reallocations – resulting in delays and potentially increasing negative impacts.

The local government share of the general government budget is often a contentious issue, frequently seen as a zero-sum game and a loss of power by the central government (as discussed in chapter 6, beginning on [p. 161](#)). Changing the situation will take years of political advocacy and much political will (to use the Ugandan example again, it will take Ugandan local government another 10 years to reach a modest 25 per cent share of the total general government budget at the currently planned rate of increase).

The issue of local government revenues is equally (if not more) contentious. There are purely technical issues, such as identifying and sealing multiple leakages in local government revenue administration and achieving their full revenue potential. Multiple sources find that the current level of revenue collection in many local governments is barely 30–40 per cent of potential – and often much less, as shown in figure 9.7 (CRA, 2021). A larger and more contentious political challenge exists regarding revenue sharing between local and

Figure 9.7 Percentage of Kenya counties performing below their revenue potential



Source: Based on CRA (2021).

higher levels of government. This revenue-sharing issue requires political advocacy and legal and regulatory changes, necessarily taking time.

But there are actions that can be undertaken in the short term to transform existing local government budgets so as to increase the flexibility of fiscal space without raising additional finance.

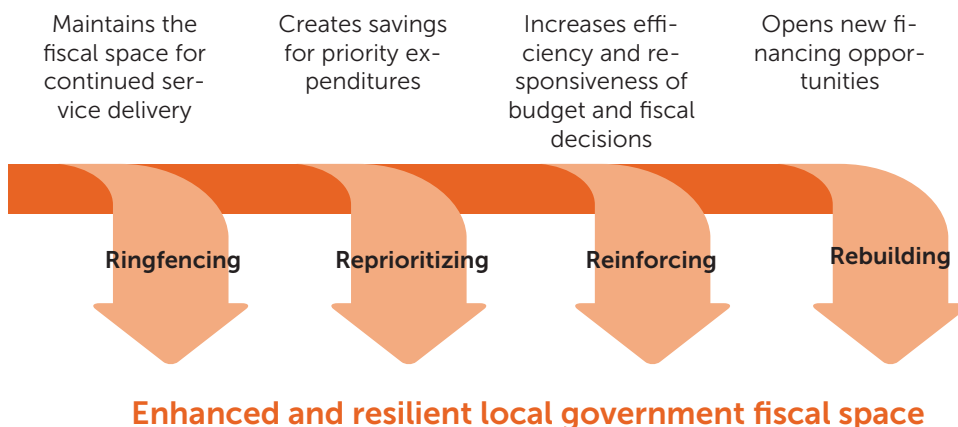
- **Increased discretionary fiscal space using flexible financial instruments.** Operational expenditure block grants are a specific type of intergovernmental fiscal transfer that can be a useful and effective vehicle for governments to implement their COVID-19 response strategies (UNCDF, 2020a). This grant combines the most effective elements of a discretionary capital grant and a discretionary recurrent grant; its transfer mechanism is similar to that of a capital grant. Resources are not drawn from the recurrent budget for human resources and basic operating expenditures, but are instead drawn from other funds and use the modality of the development (or capital budget) as appropriate. Once available to local governments, the operational expenditure block grants can be applied immediately to implement COVID-19 response protocols. In this respect, the grant differs from the regular development or capital budget. It has specific criteria and rules. In the medium term, the discretionary fiscal space of local governments should be increased (even if the total resource envelope remains the same) by decreasing the share of conditional/earmarked finance. This change should come with enhanced control and performance measurement – a direction in which many countries have already moved by introducing robust annual performance assessment systems for local governments. Operational expenditure block grant application in some UNCDF partner countries (Bangladesh, Mozambique and Somalia) in 2020 has demonstrated their effectiveness as a flexible financial instrument to enable local governments' immediate response.
- **Increased space for development/capital investments.** Local governments in many developing countries account for a minuscule share of total public sector investments – as little as 1 per cent in some least developed countries (OECD and UCLG, 2019). Of course, the share of local investments is many times more and, depending on the importance of the national projects during a particular investment cycle, may be as much as one half of

the total investment. The problem is that those investments are carried out by central-level ministries and agencies, not by the local governments concerned. Even when local governments are involved in the process of consultations about projects in their territory (which is the case in many countries), their role remains limited and the centre maintains the upper hand in all decisions about these investments. Provided there is political will, it is a simple matter to move funding for local projects under the management of local governments. This move will increase local government responsibility and scrutiny (including public control) over their operations, while improving the flexibility of investment decisions and facilitating reallocation decisions in case of emergencies.

Table 9.1 summarizes key activities in the four R's of local government finance for sustainable recovery; this is illustrated in figure 9.8.

Table 9.1 Operationalization of the 4R's

Dimension of local government finance	Time horizon	
	Immediate and short term	Medium and long term
Ringfence the local government fiscal space	<ul style="list-style-type: none"> ■ Set up and operationalize dedicated financial mechanisms: own source revenue compensation fund and local government recovery fund ■ Agree on specific arrangements with donors/partners on sharing aid/finance with local governments 	Clarify substantive responsibilities and financial resources for recovery; no unfunded functions
Reprioritize budgets	<ul style="list-style-type: none"> ■ Explore saving opportunities focusing on administrative expenses ■ Reallocate budgets to increase financing for COVID-19 response and recovery 	<ul style="list-style-type: none"> ■ Improve efficiency and effectiveness of financial decisions through application of financial and economic analysis frameworks for individual investments and portfolio of investments ■ Diversify sources, mechanisms and instruments for public investments
Reinforce budget and fiscal autonomy	Make sure all existing budget and fiscal opportunities are fully utilized	Introduce laws and regulations to expand local government budget and fiscal authority to new areas, simplify budget decisions and facilitate access to financial resources
Rebuild fiscal space better	<ul style="list-style-type: none"> ■ Introduce operational expenditure block grants ■ Introduce mechanisms and tools for direct financing of local governments for COVID-19 response and recovery 	<ul style="list-style-type: none"> ■ Enhance tax administration ■ Design, set up and operationalize new financial mechanisms and vehicles to unlock alternative financing for local governments ■ Transition towards a sustainable fiscal local government

Figure 9.8 The four R's pathway to resilient local fiscal space

Creating resilient local fiscal space

In the longer term, rebuilding local government fiscal space should focus on enhancing its resilience. The resilience of local government fiscal space refers to its capacity to absorb internal and external shocks and ensure a level of resources required for continued uninterrupted delivery of essential services, as well as an increase in certain goods and services (such as provision of additional quarantine facilities during epidemics); and to carry out previously unforeseen activities in response to such shocks (such as local economic recovery) (UNCDF, 2020c).

This resilience is determined by local governments having (i) the ability to mitigate a decrease in one type of revenues by quickly switching to other types, (ii) discretionary powers to reallocate funding to different uses within the existing envelope and (iii) being able to raise additional finance by tapping into debt markets and other alternative (non-traditional) finance mechanisms. UNCDF realized the importance of resilient local government space early on during the pandemic and issued a guidance note to local governments on COVID-19 emergency response (UNCDF, 2020a), outlining strategies for fiscal and monetary action in the short and medium terms.

Improved resilience of local government fiscal space builds on the approaches already discussed. In particular, greater flexibility in terms of grant nomenclature (especially in the share of discretionary funding), increase in own source revenues, and more flexible financial instruments are essential contribution to improved resilience. More substantive changes beyond immediate reallocation of resources within the existing envelope will take more time and effort, as noted above. Hence, improving the resilience of local government fiscal space involves medium- to long-term interventions that include policy

and regulatory changes. In this respect, four areas, discussed below, are of marked relevance.

Reserve/emergency accounts for local governments

A reserve or emergency account, replenished on an annual basis, should serve as a cushion in case of emergencies. This account should be subject to strict regulation to ensure its use for the declared purposes. As with the financial mechanisms previously discussed, there should be a clear link between such an account and local government medium- and long-term development plans including emergency and disaster risk preparedness and management plans. This consideration should be incorporated in local government planning guidelines to ensure that local governments appropriately plan and budget for disaster risks, including their financial and non-financial aspects.

Alternative financing mechanisms for local governments

Subnational pooled financing mechanisms – such as municipal banks, loan boards, municipal finance authorities and similar structures – may serve as a source of additional finance in difficult times (see box 9.1). Local diaspora finance vehicles offer an opportunity to tap into low-cost finance. However, establishing such mechanisms is a challenging task and will require the support of the central government and development partners (Gevorkyan, 2021). Local development corporations, municipal development funds and similar mechanisms with their own dedicated funding can also absorb and mitigate the shock.

UNCDF is working with a number of partner countries, including Tanzania and Uganda, to adjust their legal and regulatory frameworks to allow local governments access to debt finance and issue a municipal bond. Over the past few years, UNCDF has established a number of financing vehicles designed to facilitate local government access to alternative finance, such as the International Municipal Investment Fund, the Local Climate Adaptive Living Facility (LoCAL) and the Blue Peace Financing Initiative⁷.

Another solution is application of innovative financial instruments for financing local development projects that hedge against various financial and non-financial risks (such as the risks of foreign exchange depreciation, implementation delays and natural disasters). Various forms of partnership with the private sector is another example of alternative financing approaches.

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Box 9.2 Uganda: links between COVID-19 and the intergovernmental fiscal transfer system

Uganda's intergovernmental fiscal transfer system comprises conditional health grants as well as non-sectoral unconditional grants (with wage and non-wage components) and non-sectoral development grants. While complex, it has been a suitable vehicle to address the additional funding needs of COVID-19.

Transfers are the major source of finance for local governments in Uganda, accounting for more than 90 per cent of their overall funding. To be responsive to emergency needs, both conditional grants for key sectors and unconditional multisectoral transfers need to be increased in size as well as working modalities. The Government of Uganda also seeks to provide further flexibility to local governments so they can adjust these resources to the needs of local epidemic response. There is a need to strengthen capital as well as recurrent grants to cover payroll expenses, as well as operations and maintenance costs, which are often insufficiently addressed.

The intergovernmental fiscal transfer system can help support local government in implementing local response strategies. In Uganda, there are at least three existing financing channels that can be used and strengthened:

- **Unconditional grants.** These grants are focused mostly on recurrent spending and cover core salaries as well as recurrent costs such as travel, goods and services. The channel is available across all local government departments at the discretion of local leadership. COVID-19 emergency grants to local governments introduced by the central government in 2020 served as de facto recurrent operational expenditure block grants to finance a set of local response measures. In fiscal year 2020/21, the government approved a supplementary budget of US\$ 304.5 billion (approximately \$86 million, based on a 31 December 2021 exchange rate of US\$ 1 = \$0.00028) to combat the pandemic, with local governments and the Kampala City Council Authority receiving US\$ 66 billion (approximately \$16 million). Increasing the value of these transfers will enable co-financing with conditional grants.
- **Conditional grants for health, water and education.** Sectoral conditional grants have become a key vehicle for health/COVID-19 response, and the non-salary recurrent health grants to local governments have been somewhat increased from national fiscal resources as well as from additional resources received as part of international relief efforts (including the World Bank loan). These grants help in procuring medical staff and related equipment, transport and communication, and safeguards; they ensure flexibility in funding sector-specific needs.
- **Discretionary development equalization grants (DDEGs).** DDEGs are non-sectoral, discretionary capital grants made to local governments, and should be a core component of response and recovery phases. They enable new investments in facilities and infrastructure to support both improved service delivery and economic recovery and improvement. Their key advantages are that they support strengthening of the local cross-sectoral planning and budgeting process, can be used flexibly on emerging challenges, and provide for improved preparedness and investments in areas relevant to COVID-19 response. Also, DDEG allocations are performance-based, contributing to improved local government accountability, efficiency and performance. DDEG allocation has increased in the past two fiscal years (2019/20 and 2020/21) with the support of additional World Bank funding (discussed below) and European Union budget support of €32 million that started in 2020. However, the national budget allocation for DDEGs has yet to account for a sizeable share of local government revenues and thus become an effective local recovery tool.

(continued)

Box 9.2 Uganda: links between COVID-19 and the intergovernmental fiscal transfer system *(continued)*

The Government of Uganda is reforming its transfer system with the support of the World Bank, which has extended \$300 million in additional financing to the Uganda Intergovernmental Fiscal Transfers Program for Results (UgIFT) to boost local governments' service delivery in education, health, water and the environment as well as micro irrigation – all areas of particular importance in the context of COVID-19 response and recovery. This support is being used to review transfer size and allocation principles as well as eligible expenditures to ensure local governments have sufficient flexibility and room for innovation. These objectives are supported by strengthened monitoring and evaluation and accountability systems and credible performance assessment systems. UgIFT current and future financing will be aimed at the following:

- **Strengthening basic services.** In the health sector, primary health centre government operational funding increased by 50 per cent in 2020/21 in nominal terms, with over 3,000 facilities benefiting. Funding enabled higher coverage of outreach actions (vaccination, sensitization etc.) and helped operationalize 62 new health facilities in fiscal year 2020/21. The largest increases have gone to districts with the biggest populations and most needs relative to infant mortality, poverty and other factors. Revised guidelines require local governments to spend at least 30 per cent of these resources on health promotion, up from 18 per cent, which will help focus more resources on COVID-19 response. Education and water and sanitation services are being reinforced by new performance assessment systems and improved support by sector ministries for poor-performing local governments.
- **Supporting vulnerable groups and livelihoods.** Research conducted by ODI's Budget Strengthening Initiative and UNCDF raised the profile of challenges associated with the provision of public services to refugees, and has led to the inclusion of refugee population figures in formulas for central government allocation of financial resources to local governments. Refugee-hosting local governments are receiving a higher allocation as a result. UNCDF incorporated refugee populations in its district allocation formula for the Local Government Excellence Fund (part of the Development Initiative for Northern Uganda financed by the European Union) as early as 2018. Increases in school capitation grants have been coupled with more power for government schools to choose how to spend resources. This should have a particularly positive impact on poorer communities, including by allowing schools to invest in school feeding schemes or basic supplies such as soap when they reopen.
- **Strengthening fiduciary oversight.** The development of the Uganda Budget Information website and broader transparency initiatives have provided a means to closely monitor and engage with the Ministry of Finance, Planning and Economic Development on public spending commitments, including those for COVID-19. The ministry has published reports on COVID-19-related expenditures in fiscal year 2019/20 and fiscal year 2020/21 by vote and source of finance (domestic and external). ODI's Budget Strengthening Initiative support in developing and implementing local government performance improvement plans has provided a platform for engineers to oversee progress with infrastructure projects at a distance. These systems are critical at a time when many government officials have been required to work remotely. Finally, the recently developed performance assessment framework for local governments provides a strong focus on improved accountability, monitoring and efficiency, and enhances local government performance.

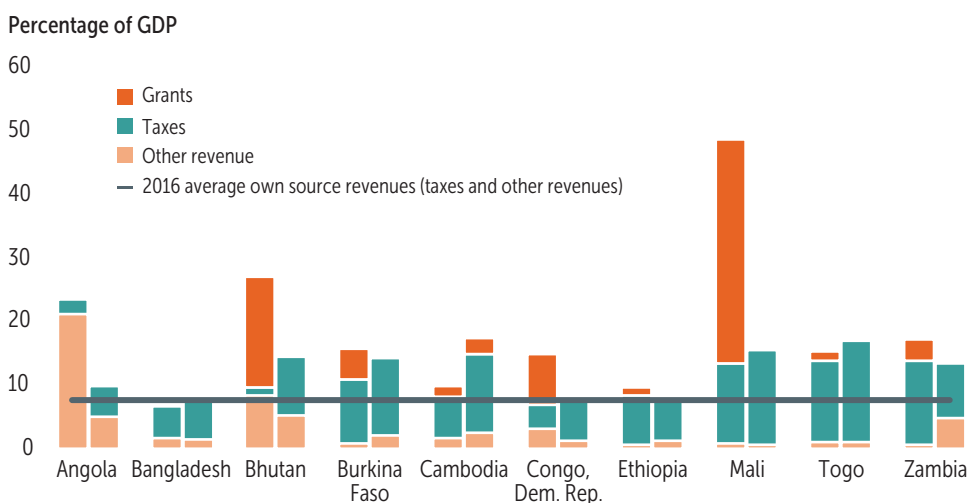
Source: Adapted from IDA (2020); Miller and others (2020); UNCDF (2020a, 2020b); Zhang (2020).

These partnerships may be based on both financial and non-financial contributions from the partners; if properly structured and implemented, they will decrease mutual risks while improving the resilience of the investment process. UNCDF has enabled a number of model public-private initiatives, such as the municipal solid waste management project in Mamou, Guinea (U4SSC, 2021).

Enhanced local revenue administration systems

Despite years of multiple efforts by multiple actors, local revenue collection in the least developed and developing countries stubbornly remains at a low level, and in some places has declined (OECD, AUC and ATAF, 2021), as shown in figure 9.9. Although discussing taxation at the time of COVID-19 may seem unpopular, a number of local governments did revise and even increased their taxes during this period to cope with the increased expenditure pressure. The present system of revenue administration at the local level suffers from numerous leakages, inefficiencies, multiple exemptions and poor enforcement. To enhance these systems will require a critical and informed review of the key components of local tax administration, including revenue sources, rates and collection methods. Recent tax administration diagnostic assessments in Kenya indicate low performance of local governments on all tax administration dimensions. Central governments should invest more in building efficient local tax administration while considering revenue-sharing schemes that would allow an expanded discretionary fiscal space for local governments as discussed above.

Figure 9.9 Subnational government revenues, 2006 and 2016



Source: Data from IMF Government Finance Statistics.

UNCDF has worked with local governments on improving their revenue administration and enhancing their revenues long before the pandemic. Revenue performance was integrated as an important allocation criterion in the design of UNCDF-supported local development funds starting from the 1990s. To encourage own source revenue mobilization, local development funds have typically included three main measures: local government co-funding obligations (5–10 per cent); minimum conditions and/or performance measures to boost local government revenue mobilization, e.g. indicators of increases in revenue mobilized and/or process indicators such as the development of a revenue enhancement strategy/plan; and capacity-building support to improve local government revenues (UNCDF, 2010). This approach contributed significantly to the revenue-generating capacity of many UNCDF partner countries, including Cambodia, Ghana, Nepal, Tanzania and Uganda. UNCDF continues this support through local development funds in Mozambique and Somalia. In Somalia, despite security challenges and the ongoing COVID-19 crisis, local governments have managed to increase their contribution to the local development fund over the past 10 years from the initial 5 per cent to 30 and 40 per cent in some districts.

LOCAL DEVELOPMENT FUNDS HAVE CONTRIBUTED SIGNIFICANTLY TO THE REVENUE-GENERATING CAPACITY OF MANY UNCDF PARTNER COUNTRIES.

UNCDF has developed and implemented a number of diagnostic tools designed to measure the economic and fiscal potential of local governments and identify improvement actions. These include the Local Authorities Financial and Institutional Management System (UNCDF, 2006) successfully applied in Benin, Guinea and Mali. Another tool, piloted in Somalia and Uganda, is Revenue Enhancement Action Planning (REAP), which is highlighted in box 6.1 of chapter 6 (see [p. 188](#)). This tool concentrates on analysis of revenue generation focusing on underutilized sources and helping local governments to develop specific action plans. During the pandemic, UNCDF partnered with IMF to apply the Tax Administration Diagnostic Tool in some Kenyan counties to help local governments improve their tax administration by addressing identified weaknesses and capitalizing on opportunities. In partnership with the United Nations Department of Economic and Social Affairs, UNCDF developed a methodology for infrastructure asset management (UN, 2021), collaborating with authorities in more than 40 districts, provinces and municipalities in Bangladesh, Nepal, Tanzania and Uganda to prepare and implement asset management action plans. Despite the challenges of COVID-19, local governments in Uganda have, with UNCDF support, increased the amount of legally registered land and properties by about 20 per cent, laying a foundation for increased revenue generation.

Enhanced digitization of services and public financial management

The COVID-19 crisis has clearly demonstrated the importance of digital systems and digital solutions for local government fiscal space. In and by itself, digitization does not increase the fiscal space, but it is a powerful enabler of more efficient public financial management systems on both the revenue and expenditure sides that eventually reflect on the flexibility and resilience of fiscal space.

On the revenue side:

- Local governments applying digital solutions for revenue collection, such as **electronic payment systems**, have seen a less precipitous drop in own source revenues (UN-Habitat and UNCDF, 2020). This is partly because of better control of and ease in making tax and non-tax payments; also, these solutions do not require physical contact, which is problematic under COVID-19 restrictions limiting freedom of movement and significantly reducing the number of civil servants physically present in an office. Online payment platforms, mobile phone payment systems etc. allow local governments to continue to provide certain services against a fee (such as issuance of permits and certificates), which also contributes positively to the local government fiscal space.
- **Digital reporting and communication systems** provide more possibilities to verify information and improve transparency as well as improve the exchange of relevant information between national and subnational tax administrations. For example, UNCDF has partnered with the World Bank and private fintech companies in Uganda to introduce digital platforms for local revenue collection and reporting directly linked to local government bank accounts to avoid cumbersome manual collection procedures. In some countries, local governments have introduced fully digitized document exchange platforms between different administrative departments and with the relevant central government bodies, significantly improving and accelerating document flow.
- Introduction of **integrated revenue administration systems** has proven to be a very effective tool for sealing tax leakages, as demonstrated by a number of local governments – some of which have managed to increase their tax collection by as much as 50 per cent during the pandemic.
- Integrated revenue administration systems come together with **e-registers of taxpayers**. These are of great value in enforcing property taxes, which are in many cases the mainstay of local taxation. Use of Google Maps by

local governments facilitates identification of informal (unregistered) real estate properties and the updating of property cadastres.

- The use of **meters and sensors linked to computer systems** enables implementation of user fees. Despite multiple COVID-19 exemptions for public utilities, many local governments advanced digitization of power and water provision to ensure adequate cost recovery.

On the expenditure side:

- **Digital geographic information systems (GIS)** aid in urban planning, the approval of construction permits and parking controls. Many local governments have equipped parking fee and road toll collectors with GIS devices allowing them to collect fees on the spot and remit them instantaneously to the relevant local government.
- **E-procurement** facilitates access of potential providers for goods and services (including small and medium-sized enterprises and female-led businesses) to local government procurement opportunities. It also improves transparency and accountability during different stages of the procurement process and reduces information and transaction costs for potential bidders.
- **Digital portals** are increasingly used by regional and local governments to facilitate residents' and tourists' access to relevant public services, such as online licensing, building permits, downloading of official documents, health and education services as well as culture and sport-related services.

Summary

The approaches and measures discussed above will lead to expanded, more resilient and sustainable fiscal space and the transformation of local governments into fiscal governments. A **fiscal government** is the projection of a fiscal state at the local level, implying a local government whose public revenue base is dominated by tax revenue and loans, and where the relationship between taxation and borrowing is balanced and thereby sustainable and characterized by interdependence (Bak, Jeppesen and Kjær, 2021).

As development partners, we should be concerned about the allocative efficiency of public funds where the marginal benefit from public goods and services exceeds the marginal cost of their production by the greatest amount. Local governments are well positioned to provide the best allocative efficiency, although the challenges, particularly in the developing world, remain

overwhelming. Our contribution to further strengthening the capacity of local governments to deliver maximum public benefit at minimum cost will help our partner governments improve the quality and quantity of services – and will improve the lives of the people in those countries. But it will also help us achieve better value for money for our development funding.

We should all be advocates of local government at this time. This is one of the lessons we have learned from COVID-19 and will, hopefully, be part of the new normal.

Notes

1. This study is part of a joint 2020 project by several United Nations agencies and subsidiary bodies to operationalize relevant provisions of the United Nations Framework for an immediate socioeconomic response to COVID-19. The project is implemented by the United Nations Economic Commission for Europe (UNECE), the United Nations Economic Commission for Africa (UNECA), the United Nations Economic and Social Commission for Western Asia (UNESCWA), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), with the participation of UN-Habitat and UNCDF. The joint project has a specific focus on economic and financial recovery in the urban context and has been implemented in 16 partner cities around the world: Tirana, Albania; Yaoundé, Cameroon; Guayaquil, Ecuador; Alexandria, Egypt; Suva, Fiji; Accra, Ghana; Pune, India; Kuwait, Kuwait; Bishkek, Kyrgyzstan; Beirut, Lebanon; Subang Jaya, Malaysia; Lima, Peru; Santo Domingo, Dominican Republic; Kharkiv, Ukraine; Hoi An, Viet Nam; and Harare, Zimbabwe. For more information, visit the [Building Urban Economic Resilience during and after COVID-19 website](#).
2. Based on a 31 December 2020 exchange rate of 1 South African rand = \$0.06818.
3. For more information on these initiatives, see the World Bank's [Debt Service Suspension Initiative web page](#), the International Development Association's [Responding to COVID-19 web page](#) and the IMF [COVID-19 Financial Assistance and Debt Service Relief web page](#).
4. Based on a 30 June 2020 exchange rate of 1 Brazilian real = \$0.182615.
5. Based on a 30 June 2020 exchange rate of 1 Swedish krona = \$0.106849.
6. The stylized facts discussed here are based on an analysis of subnational finance data from the OECD-UCLG [World Observatory on Subnational Government Finance and Investment Database](#) and the [IMF Government Finance Statistics database](#); also, OECD and UCLG (2019) provides a useful summary of the main features of decentralized governance in LDCs.
7. These mechanisms are discussed in more detail in chapter 11 ([p. 287](#)) and chapter 14 ([p. 359](#)).

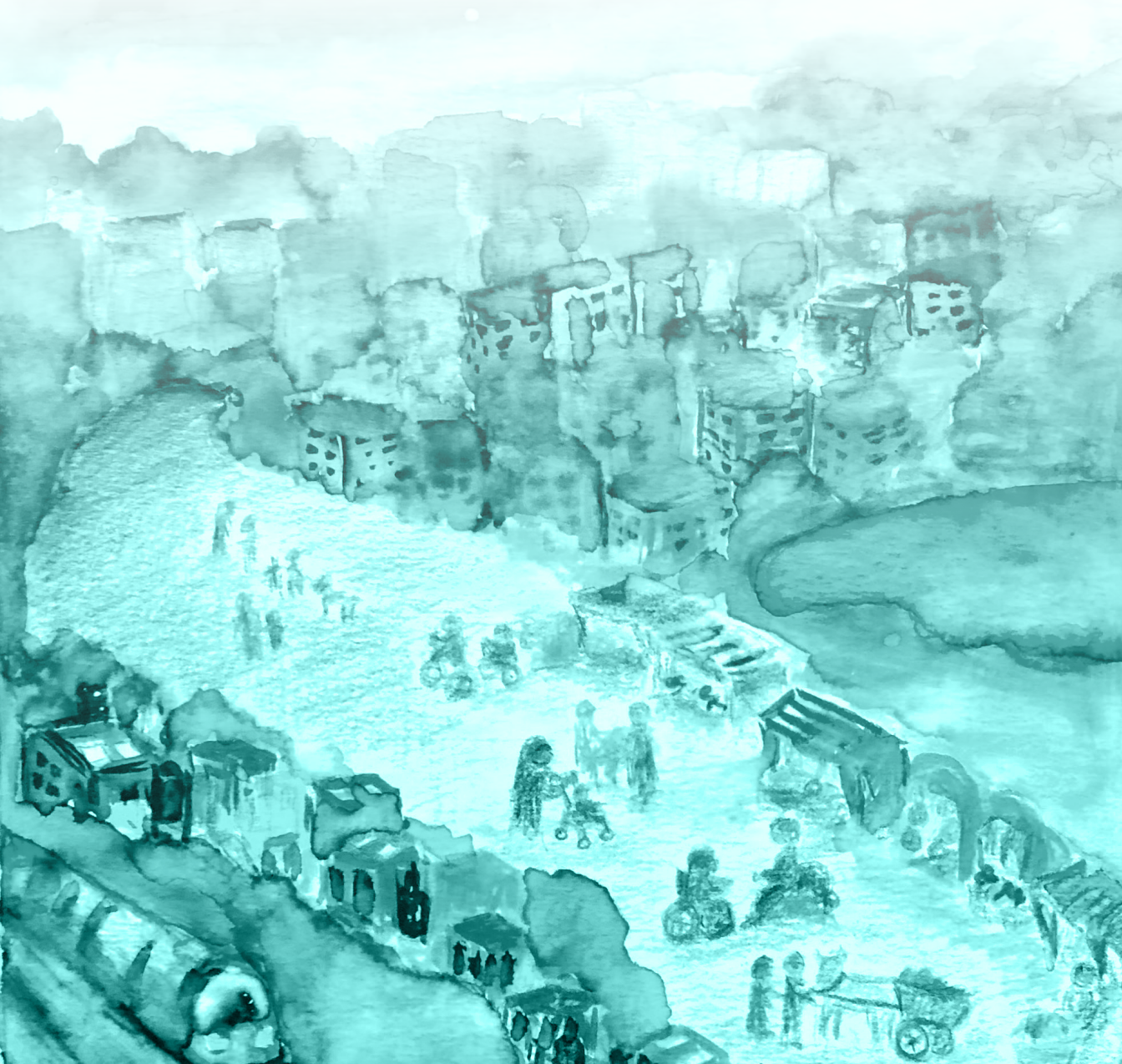
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PART II

Case studies





10

Bangladesh: From Fiscal Decentralization to Municipal Debt and Bond Financing

JESMUL HASAN AND SURESH BALAKRISHNAN

The rapid growth of Bangladesh's urban population – from 7.9 per cent in 1971 to 38.2 per cent in 2020, for an average annual growth rate of 3.29 per cent¹ – has been largely driven by rural migrants attracted by the expanding urban economy. The 328 municipalities and 12 city corporations which, as of this writing, constitute the country's urban space have struggled to find the resources they need to provide public services – such as public health, sanitation, water, civic infrastructure and social welfare – and ensure decent jobs and employment. By building on Bangladesh's long and rich experience with fiscal decentralization for rural local governments, enabling conditions for innovative financing can be systematically established – and municipal finance thereby transformed.

Fiscal decentralization and transfers

At the dawn of the 21st century, Bangladesh's system of local government had a proud history stretching back more than 100 years, but sadly remained with insufficient resources to address local development needs. Successive governments in the 20th century used a centralized approach to mobilization and application of development resources, meaning the local government system was rich in history, spirit and mandate, but weak in terms of capacity and resources.

In this context, the United Nations Capital Development Fund (UNCDF) in 2000 launched the first of a series of local governance funds in Bangladesh. These targeted the union parishads, the lowest tier of local government, and established a proof of concept for formula-based intergovernmental fiscal transfers. Specifically, the pilot demonstrated the capacity of union parishads to efficiently manage large volumes of resources, implement projects with participatory planning and prioritization, complete projects in a timely manner, and meet the requirements of public scrutiny and downward accountability. Subsequent stages of UNCDF's engagement expanded the grant framework beyond a funding formula based on population and size to include performance measures. Total resource transfers quadrupled, and the performance criteria attached to the grants proved to be effective incentives for local governments to improve

their performance in terms of governance, service delivery and public resource management. The framework has been mainstreamed and implemented nationwide since 2011, albeit with some differences across the various tiers of local government.

Even with the establishment of this successful model of formula-based budget allocations for municipalities, the huge capital requirements of urban infrastructure and associated large complement of staff necessitate a more complex model of financing – one that includes, at least in small measure, debt financing. Given the small size of local revenues, the majority of funding for capital investments is provided through fiscal transfers or grants from the central government. Borrowing is another means to cover capital expenditures at this level. However, the Bangladesh legal framework that circumscribes resource mobilization

by municipalities poses several challenges, particularly when it comes to non-grant finance; this is described in the next section.

**THE HUGE CAPITAL
REQUIREMENTS
OF URBAN
INFRASTRUCTURE
AND ASSOCIATED
LARGE COMPLEMENT
OF STAFF
NECESSITATE A MORE
COMPLEX MODEL OF
FINANCING THAT
INCLUDES DEBT
FINANCING.**

Legal framework and current status of municipal finance

Article 59 of the Bangladeshi Constitution empowers local governments to (i) perform functions related to the administration and work of public officers, (ii) maintain public order and (iii) prepare and implement plans relating to public services and economic development. Municipalities and city corporations in Bangladesh are governed, respectively, by the Local Government Municipality Act and the Local Government City Corporation Act, both enacted in 2009. These acts prescribe that local governments cannot levy any tax, rent, fees or

toll without the prior permission of the central government. As a result, they cannot independently raise funds, or repay the principal or pay interest on any debt issued.

The framework governing borrowing by local governments is the 1914 Local Authority Loan Act, enacted during the British colonial period. Under this act, a local authority is prohibited from borrowing money or otherwise creating a charge on its funds other than as prescribed by the act. Municipalities cannot go beyond the scope of the act to borrow money by issuing municipal debt without the concurrence of the national government. Under section 3 (1) of the act, if a local authority wishes to borrow more than Tk 25 million – roughly equivalent to \$290,000² – from a source other than the Government of Bangladesh, it must secure prior approval from the central government. The act further stipulates that a local authority may borrow through issuing bills or promissory notes up to a maximum tenure of 12 months. Under the act, local authorities do not have the ability to use their immovable properties as collateral to secure a loan nor can they attach their immovable properties as payment on loans.

There are four major sources of finance for municipalities in Bangladesh:

- **Own resource mobilization**, which primarily consists of earnings in the form of taxes, tolls and fees in accordance with the Local Government City Corporation Act and the Local Government Municipality Act
- **Intergovernmental fiscal transfers**, by which the central government provides grants to municipalities from the annual budget under the Annual Development Programme component
- **Subsidized loans** disbursed by the Bangladesh Municipal Development Fund, which channels loans assumed by the Government of Bangladesh from the World Bank for municipal infrastructure financing
- **Project-based financing from development partners and international financial institutions**, which constitutes the main financing for capital infrastructure and includes project aid and loans secured by the Government of Bangladesh and implemented by specialized technical agencies (e.g. the Department of Public Health Engineering for water supply; the Local Government Engineering Department for other infrastructure); these projects are included in municipal plans and budgets, but the resources are not managed by the municipalities

Financing for municipalities is highly dependent on grants from the central government. These grants are often insufficient in size, and their usage is controlled by terms and conditions which pose serious challenges in meeting infrastructure requirements in the context of rapid urbanization. Municipalities'

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THE PRIVATE SECTOR
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GOVERNMENTS,
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BORROWING.**

own source revenues are constrained and account for only a small share of total financing. Debt financing through the Bangladesh Municipal Development Fund is also inadequate. With limited fiscal devolution to municipalities in evidence, and deconcentrated technical departments playing a major role in municipal development, a large portion of the overall local government infrastructure budget is channelled through the Local Government Engineering Department – which limits municipal scope to actively engage with and consider the priorities and preferences of the urban population.

Bangladesh is a middle-income country that aspires to become an upper-middle-income country and graduate from its least developed country status in a few years. Given that economic progress, the inflow of grant assistance is expected to decrease and the inflow of commercial finance – both domestic and external – is expected to increase. Public sector sovereign borrowing alone may not be enough for an upper-middle-income country when the private sector can borrow from commercial and market sources. Hence, subnational borrowing will be essential. The Government of Bangladesh will have to decentralize many of its services to the private sector and subnational governments, which will justify subnational/municipal borrowing as well.

Next-generation municipal finance: from grant to debt finance

The Municipal Investment Finance project was conceived by UNCDF to develop a new channel to meet the growing financing requirements for municipal infrastructure in Bangladesh in a way that would relieve pressure on the national budget and treasury to deliver large volumes of grant finance. The project was premised on the eagerness expressed by the Government of Bangladesh to strengthen local governments as well as a promise for reform in capital markets. The strategic steps envisaged under the project started with developing a framework to expand the use of direct debt financing for municipal investments from domestic financial institutions, followed by an initiative to link capital markets with municipal finance through municipal bonds.

Several issues need to be considered regarding municipal debt financing from banks and non-bank financial institutions (NBFIs). Banks and NBFIs lend to both public and private sector projects. Because of its low rate of revenue collection, the central government borrows regularly from banks and NBFIs to

meet its recurrent expenditures. For its part, the private sector relies heavily on banks and NBFIs to borrow funds to run existing businesses and set up new businesses. For a variety of reasons, including political pressure and cronyism, banks and NBFIs are less interested in providing loans to municipal governments for municipal infrastructure. A key factor is a lack of municipal creditworthiness; the banking sector sees municipalities as a risk, and their credibility and reliability as a financially sound/empowered entity is lacking. Interest rates are another issue, and banks and NBFIs will seek guarantees for such lending. Municipalities may not have regular sufficient cash flow in the short term to repay bank loans.

To address this situation, the Government of Bangladesh has set up several specialized financial institutions for infrastructure financing with its own funds that can be used to lend to municipalities within that institution's legal-administrative framework. For example, the Infrastructure Development Company Ltd. (IDCOL) was set up to finance green energy projects, and the Bangladesh Infrastructure Finance Fund Ltd. (BIFFL) was established to finance multisector infrastructure.

International financial institutions are another source for indirect municipal borrowing. For example, the World Bank has loaned funds to the Government of Bangladesh backed by sovereign guarantee, which has then been on-lent to municipalities. Similar sources that need to be explored in this regard are international sources such as the Green Climate Fund (GCF). As one of the most climate change–vulnerable countries in the world, Bangladesh is eligible for GCF financing if the appropriate measures are undertaken to prepare national entities to comply with GCF standard eligibility criteria. It would be worthwhile to explore the mechanisms different companies, ministries and institutions use to access GCF funds, which can ultimately be channelled through municipalities to finance infrastructure projects aimed at mitigating and adapting to climate change impacts.

For the preparatory phase of the Municipal Investment Finance project, UNCDF identified 10 A-grade municipalities out of 326³; these were selected based on a set of criteria addressing market demand and debt-carrying capacity. Other criteria included in the assessment were related to the municipalities' financial situation, size, growth and revenue. Size of the municipality was considered important in terms of assessing potential revenue capacity and determining the nature of infrastructural needs. Financial performance gave an indication of capacity to repay debt without hindering the municipality's natural growth. Organizational aspects were considered in terms of assessing experience in implementing large-scale investments and capacity to implement necessary

AS ONE OF THE MOST CLIMATE CHANGE–VULNERABLE COUNTRIES IN THE WORLD, BANGLADESH IS ELIGIBLE FOR GREEN CLIMATE FUND FINANCING.

changes in urban local body management. Information items provided additional background that facilitated the selection process.

Capital investment plans for the 10 municipalities were developed to identify their needs for infrastructure financing. The total amount needed for infrastructure financing in the 10 municipalities was \$305 million as of 2017. In the absence of municipal credit ratings, a new credit rating methodology was developed to assess the creditworthiness of the 10 municipalities. Nine of the municipalities received investable grades in the assessment. As of this writing, pre-feasibility studies for three projects in two municipalities are ongoing for potential bond financing.

Borrowing from the capital market

Global capital markets are a heavily used source for financing municipal projects through municipal bonds, particularly in countries with functional local/subnational governments. Analysis indicates that capital markets could be a potential funding source for municipalities in Bangladesh (Government of the People's Republic of Bangladesh, 2016).

CAPITAL MARKETS COULD BE A POTENTIAL FUNDING SOURCE FOR MUNICIPALITIES IN BANGLADESH.

The Development Financing Assessment of the 7th Five Year Plan of the Government of Bangladesh recommends the development of a long-term domestic bond market by issuing longer-maturity government bonds and bills and thereby reducing dependence on public sector domestic borrowing from various sources (Government of the People's Republic of Bangladesh, 2016). Bangladesh's 7th Five Year Plan, in addressing municipal development, mentions local government in the context of rural development only, not urban. The chapter on urbanization notes that the 'long service life of infrastructure investments' justifies the use of borrowing as a mechanism for municipal financing in terms of 'shifting part of the burden to future generation[s] of users who will benefit from current investments as well as contemporary users' (Government of the People's Republic of Bangladesh, 2016, p. 482). It refers to subsidized lending to municipalities by the Bangladesh Municipal Development Fund, but is silent as to the potential of capital market borrowing by municipalities.

In the absence of a specific legal framework for municipalities to access capital markets in Bangladesh, debt securities could be issued under the provisions of Securities and Exchange Commission rules on private placement of debt securities (2012), public issue (2015) and/or asset-backed securities (2004). Specifically, there are two options for an authorized legal entity such as a

municipality or city corporation to exercise when issuing debt securities to collect funds: an initial public offering (IPO) or a special purpose vehicle.

Initial public offering

An IPO is the first time an issue of a security is made available for sale on the open market. Such issues are regulated by the Bangladesh Securities and Exchange Commission and entail strict financial reporting criteria on a regular basis to remain available for trade. Private placement offerings are securities released for sale only to accredited institutional investors such as investment banks, pensions or mutual funds. Some high-net-worth individuals may also purchase private placement shares through these options. Companies using private placements generally seek a smaller amount of capital from a limited number of investors. Depending on a lender's risk exposure, an issuance can be in the form of debt securities or asset-backed securities. In the latter case, securitization is made against the assets of the borrowing entities. Asset-backed securities are issued against specific projects/infrastructure and are generally managed by a subsidiary entity through a trust. Debt securities are issued by registered companies/entities and do not require the formation of a subsidiary.

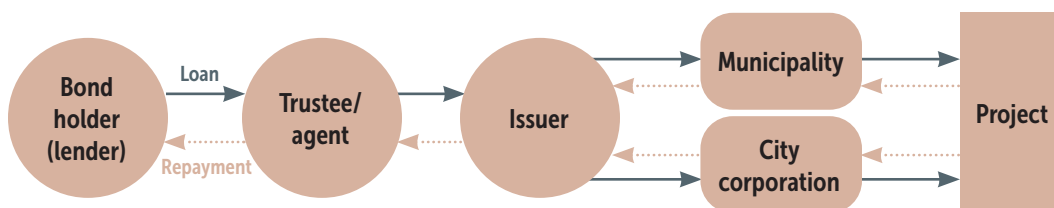
It is very unlikely at this point in time that any municipality or city corporation would be able to meet the requirements set under these rules to issue their own debt securities. Further, they are unlikely to receive permission from the government for such issuance, given municipalities' associated high-risk exposure. Investments in public issuance are based on reputation and other risk indicators that municipalities are presently unable to meet. Notably, they are generally unable to provide, or even correctly format, the financial information required by investors. Municipal accounting is currently performed using a single-entry method, and the assets and liabilities of municipalities do not tend to be properly managed.

Special purpose vehicle

The Bangladesh Securities and Exchange Commission, the Dhaka Stock Exchange and other relevant stakeholders suggest that issuing debt securities through private placement via a special purpose vehicle is the immediate option available for municipalities. For example, BIFFL has the legal mandate to borrow and on-lend. It could create a mutual fund comprised of a pool of funds collected from many investors to invest in municipalities. Banks and other financial institutions could invest through this facility – an action that would be difficult otherwise. Most likely, development partners seeking more self-sustaining financing options at the municipal level would also be potential investors

through private placement offerings. Figure 10.1 illustrates a simplified process of bond issuance and the indicative institutional arrangements.

Figure 10.1 Bond issuance process



To build BIFFL's sustainable capacity as an intermediary, assessments of its technical capacity and training needs, along with a capacity development strategy, should be undertaken. Since municipal bond issuance would initially be through private placement and investment would be done by high-net-worth institutional investors, prior assessment of risk would be appropriate.

Most municipalities generate limited revenue and low cash flow, elevating their default risk substantially. To minimize such risks, an intermediary must perform proper project feasibility assessments before sanctioning loans and conducting post-disbursement follow-ups. A partial risk guarantee may be useful in the initial stage to reduce an intermediary's default risk and build investor confidence. Private placement of interested development partners' funds or external private sector investors such as Meridiam can reduce the cost and effort of a partial risk guarantee.

**GOVERNMENT
PROVISION OF
TAX INCENTIVES
TO POPULARIZE
MUNICIPAL BONDS
MIGHT BE A
USEFUL OPTION IN
BANGLADESH, GIVEN
THE NASCENT STAGE
OF THE OVERALL
BOND MARKET.**

Global experience with municipal bonds suggests that government provision of tax incentives to popularize such bonds might be a useful option in Bangladesh where the overall bond market is in a nascent stage. Pricing of municipal bonds would be difficult in the absence of a recognized benchmark rate. However, issuing debt when overall market interest rates are low would set a good benchmark for the future.

To increase its efficiency, an intermediary needs expert services from individuals and organizations. The intermediary could recover the costs spent on such purposes by charging a nominal service fee to the municipalities; such fees could be exempted from tax obligations. The National Board of Revenue may be consulted to incentivize investors by giving exemptions to earnings from municipal bonds.

The conditions necessary to enable capital market investment in municipal infrastructure – and particularly to enable the issuance of municipal bonds – are related to the state of capital markets and market demand, the issuer (i.e. the municipality or other local entity), and the transactions in which they are involved. These conditions are subject to supply and demand and are common across all markets, although their specifics will vary (UNCDF, 2013).

In addition to the technical and policy aspects of subnational/municipal borrowing referenced above, there are political economy issues to be considered as well. Big players already exist in the market that are in the business of debt financing for major infrastructure such as bridges and commuter railways. Bond financing will face challenges from those players and consequently will require champions from within the government. Strong political support is essential in floating these new tools. The volume of national-level infrastructure debt financing is large and cheap. On the other hand, the need for subnational/municipal infrastructure debt financing has not been assessed. If a comparable volume of required resources cannot be established, it will be difficult to include subnational/municipal borrowing in the national policy agenda of decentralization.

There are some small pockets of support within the bureaucracy that are already aware of such needs and tools. A small-scale successful pilot could convince political and administrative actors to offer their support. Bangladesh has a long history of successful financing pilots; one on municipal bonds may help it discover a potential source of subnational/municipal development finance.

Notes

1. Source: Knoema data platform, World Data Atlas, [Bangladesh - Urban population as a share of total population](#).
2. Based on a 31 December 2021 exchange rate of 1 Bangladeshi taka = \$0.011668.
3. There are three categories of municipality in Bangladesh – A, B and C – determined by size, population and revenue earned. UNCDF targeted only A-grade municipalities because of their better revenue volume and loan performance with the public sector municipal lending agency.

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11

LoCAL: Financing Locally Led Climate Change Adaptation

SOPHIE DE CONINCK AND SARAH HARRIS

The impacts of climate change are most dramatically observed – and experienced – at the local level. Communities in least developed countries (LDCs) and other vulnerable developing countries are on the climate change frontline, yet finance for adaptation action is chronically underfunded. The United Nations Capital Development Fund (UNCDF) designed the Local Climate Adaptive Living Facility (LoCAL) to meet this need in 2010, beginning with a pilot in Bhutan and expanding across Asia before launching globally in 2014.

LoCAL channels finance to local government authorities in developing countries and LDCs for climate adaptation action accompanied with practical capacity-building and technical support. It is a standard, internationally recognized, country-based mechanism that builds climate change–resilient communities and local economies.

Through LoCAL, funding of over \$125 million has been mobilized for adaptation action to date, mostly in LDCs. LoCAL has engaged with some 322 local governments in 17 countries, with more countries currently designing their LoCAL actions. Over 12.5 million people have benefited from LoCAL to date. Further, LoCAL has the potential to reach 600 million people across Africa, Asia, the Caribbean and the Pacific once its activities are scaled up to the national level.

Participating countries own and steer the future direction of LoCAL through the LoCAL Board. While international donors provide the bulk of the funds,

approximately 25 per cent of committed resources come from the countries themselves – a reflection of country-level support for the LoCAL approach.

UNCDF is committed to growing LoCAL, with the objective of doubling the size of the facility every five years until 2030. As of January 2022, an additional 13 countries have expressed an interest in joining LoCAL and are being supported in their preliminary design phase, bringing the total number of LoCAL countries to 30.

Why LoCAL works

LoCAL works because it uses existing national systems to deliver finance for actions that meet local climate change adaptation needs. Local governments are a powerful ally in promoting climate change adaptation and building resilient communities, because they (i) understand local needs, (ii) have a mandate

to undertake small and medium-sized adaptation and infrastructure investments across climate-sensitive sectors and (iii) are well positioned to bring a variety of local actors together for action.

LoCAL is aligned with national climate change and decentralization strategies, supporting nationally determined contributions (NDCs) and national adaptation plans (NAPs), thus bringing the Paris Agreement and achievement of climate-related Sustainable Development Goals (SDGs) to the local and community levels.

At the international level, LoCAL aligns with the LDC 2050 Vision, which aims to steer all LDCs to climate-resilient development pathways by 2030 and to net zero emissions by 2050¹.

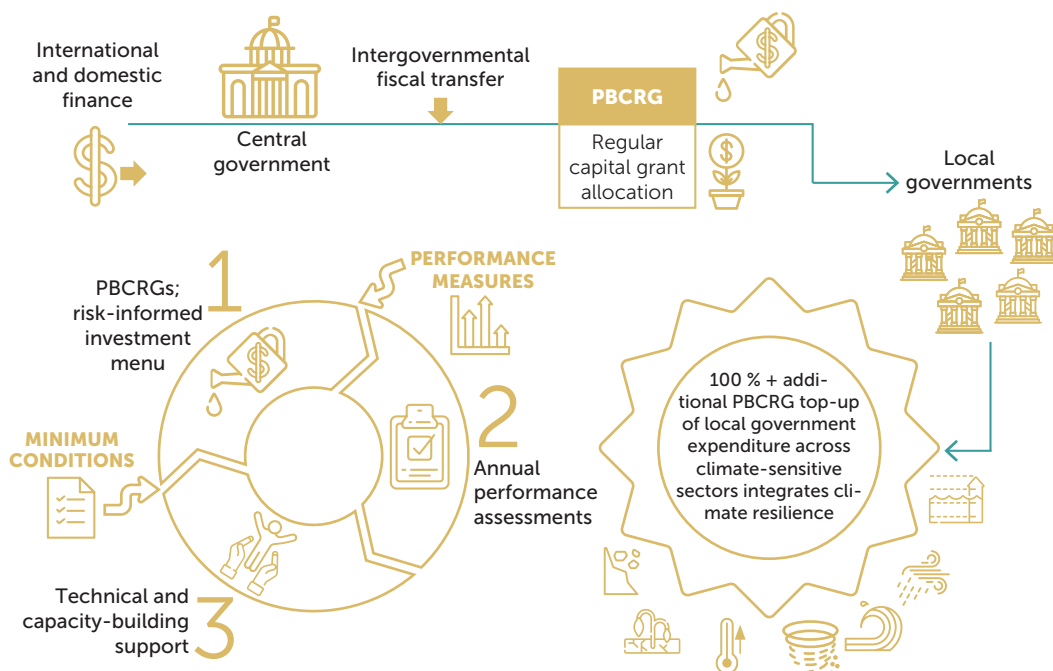
In answering the LDC 2050 Vision, a key LoCAL advantage is that it draws on national expertise and builds on systems and procedures that already exist within a country. The LoCAL approach is based on performance-based grants – a mechanism already used by UNCDF in many countries (UNCDF, 2010) – but targeted to climate change adaptation and performance. LoCAL's system of performance-based climate resilience grants (PBCRGs) uses existing intergovernmental fiscal transfer systems and combines funding for investments or services with capacity building and technical assistance. LoCAL PBCRGs include incentives for local

governments to improve performance through annual assessments linked with access to and size of the grants.

**LOCAL IS SYSTEMIC
AND SCALABLE,
USING GOVERNMENT
SYSTEMS RATHER
THAN PROJECT
OR PARALLEL
APPROACHES;
FLEXIBLE AND
SUSTAINABLE,
TAILORED TO
NATIONAL
CIRCUMSTANCES
AND LOCAL CLIMATE
RESPONSES; AND
STANDARDIZED IN
DESIGN, QUALITY
ASSURANCE,
MONITORING AND
REPORTING.**

This approach avoids parallel, project-specific operations and instead strengthens national systems to facilitate future scale-up and attract additional funding – thereby promoting harmonization, alignment and sustainability (see figure 11.1).

Figure 11.1 The LoCAL finance process



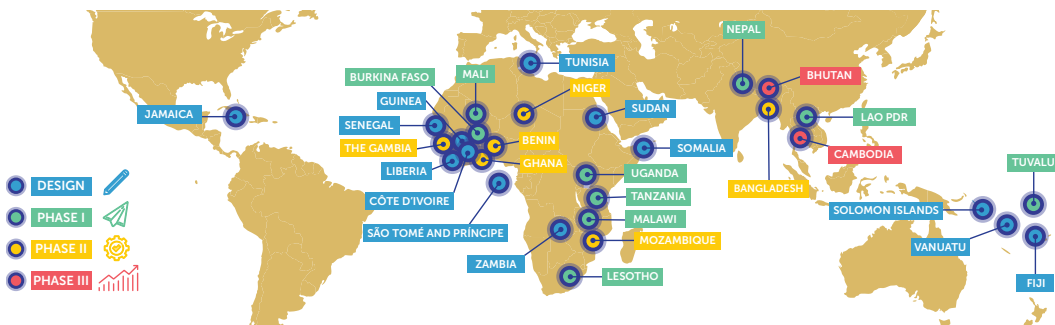
Implementing LoCAL

LoCAL uses a phased process of implementation, which typically comprises:

- **Design phase:** Assessment of the necessary conditions for deployment, definition of the PBCRG system to the country context and engagement of key stakeholders for Phase I
- **Phase I – piloting:** Initiating LoCAL in two to four local governments over one or two cycles of investments, collecting lessons and fine-tuning the mechanism
- **Phase II – consolidating:** Expanding and demonstrating LoCAL effectiveness at a larger scale, typically in 5–10 local governments or more
- **Phase III – scaling-up:** Gradual nation-wide roll-out of LoCAL as the national system for channelling domestic and international adaptation finance to the local level

Figure 11.2 shows the current status of LoCAL countries by phase.

Figure 11.2 LoCAL countries by phase



Designing actions that meet local needs

While LoCAL has essential core design features, it can be applied flexibly and adjusted to any country context.

A country initiative begins with a scoping analysis. This stocktaking exercise identifies the relevant political and institutional strategies and structures in place in a country. It reviews the entire system of local government service delivery, including functions, funding and capacity. It also examines and assesses the entry points and conditions for successful launch and implementation; this ensures the mechanism will benefit local governments and their communities.

The scoping analysis typically generates preliminary inputs and ideas for the design of the PBCRG system. Through in-country missions, expert information is gathered on climate change, decentralization (including fiscal decentralization and public financial management) and capacity building, specifically:

- Existing climate change information in terms of **climate risks, vulnerability and adaptation assessments**, as well as possible gaps in information, systems or guidance, especially at the local level and in candidate pilot authorities
- National **development strategies** and priorities, planning and budgeting **guidelines** and how they relate to climate change adaptation and local authorities
- **Decentralization strategies** (e.g. delegation in Mozambique and devolution in Bhutan) and status, and level of integration of climate change adaptation in decentralized authorities' public expenditure management systems
- **Climate-related policies and strategies**, particularly relating to adaptation, mainstreaming and local authorities (e.g. national climate change policy, NDCs, NAPs etc.)

- Existence and effectiveness of **intergovernmental fiscal transfer systems** and **performance-based grant systems** where applicable
- **Institutional set-up, roles and mandates** of central ministries (e.g. environment/ climate, finance, planning), line ministries (e.g. local government, agriculture, natural resource management, water and public works, health, education) and climate-related institutions in the context of decentralization, local development and climate change
- **Local government** legal framework, guidelines and manuals; monitoring and evaluation, audit and reporting systems
- Ongoing and planned climate change adaptation and decentralization **local governance initiatives** by governments and development partners
- **Technical and management capacities and needs** of local authorities and ministries responsible for climate change, finance, planning and local government (e.g. staffing and skills for planning and procurement functions)

Through this analysis, LoCAL is grounded in a thorough review of opportunities for local authority involvement in climate change adaptation and of the existing decentralization landscape. Implementation can thereby take into account functions assigned to local authorities, budgets and public financial management systems. This grounding allows the mechanism to be designed to strengthen local capacities for climate-resilient service delivery and investments and the resilience of communities themselves.

Assessing conditions for a successful launch

Using the data and information collected in the scoping analysis, the specific conditions and entry points for a successful launch are assessed. The key points covered in this assessment are summarized below and illustrated in figure 11.3.

- How is the country affected by climate change?
- What is the climate change governance landscape?
- What is the (fiscal) decentralization landscape?
- Is a functioning intergovernmental fiscal transfer system to the local level in place?
- What are the possible pilot areas?
- Is there strong commitment supported by champions within government?
- Are there possible technical partners?
- What is the scope for scaling up?
- What opportunities and risks are associated with different entry points?

Figure 11.3 Country entry points and conditions

Source: De Coninck (2018).

The next step consists of designing the PBCRG system and related guidance and support systems.

Performance-based climate resilience grants

The PBCRGs provide a financial allocation to cover the additional costs of making investments climate resilient and/or undertaking climate-specific investments, ensuring additionality. They complement regular allocations made by the central level to local governments through the inter-governmental fiscal transfer system. Their technical features include a set of minimum conditions, performance measures and a menu of eligible

investments. The PBCRG system is based on this set of minimum conditions for access to the grants; the performance measures provide sufficient safeguards for capacity to handle funds and promote strong incentives for performance improvements and targeting.

- **Minimum conditions** are the basic requirements with which local governments have to comply in order to access the grants. These conditions are formulated to ensure that a minimum absorptive capacity is in place to handle the funds. The entire set of minimum conditions needs to be met before local authorities can access their grants. In general, minimum conditions are concerned with good governance, public financial management and accountability; they typically cover 3–10 indicators. They act as on or off triggers and basic safeguards.
- **Performance measures** are indicators against which local governments are assessed on an annual basis. They are more qualitative than the minimum conditions, and cover core functional areas – e.g. quality of planning, integration of climate change adaptation, execution of adaptation measures, governance and accountability – in some detail. Local governments' overall performance against these measures is used to adjust the level of funds made available, subject to compliance with the minimum conditions.

The minimum conditions and performance measures can be broadly clustered into three sets of indicators:

- **Good governance and public financial management.** This set includes indicators related to planning, budgeting, procurement, transparency, accountability and reporting on physical and financial execution.
- **Climate related.** These indicators relate to the use of climate information such as data collection on climate change, climate risk assessments and vulnerability assessments; mainstreaming of adaptation in local planning, budgeting, procurement/contracting and execution; and technical compliance for climate proofing and effective use and targeting of fund absorption.
- **Interface between inclusive governance and climate adaptation.** This set is of particular importance for climate finance. These indicators include participation of vulnerable groups, gender equality, transparency, and environmental and social safeguards. The aim is to ensure that adaptation capacities and community resilience are strengthened through the participatory local planning process as well as the actual adaptation measures.

Good governance and public financial management indicators tend to be highly relevant in defining the minimum conditions, while climate-related indicators feature more prominently in the set of performance measures. As an example, minimum conditions are essential in ensuring that the mechanism builds robust transfer systems for climate finance and strengthens the accountability of local governments. Performance measures tend to focus more on the participation of communities, including vulnerable groups and women, in decision-making and monitoring; and the quality of adaptation interventions in terms of relevance for climate change and their effective implementation.

Size of grants and allocation formula

Size

PBCRGs need to be large enough to provide an incentive, cover the additional costs of adaptation and/or undertake climate-specific investments, and have an impact in terms of investment and service delivery in areas key to enhanced climate resilience. On the other hand, they must be small enough to match the absorptive capacities of local governments and be fiscally sustainable and scalable. Funding availability also influences the size of grants, especially during the pilot phase.

Ideally, the PBCRG should provide sufficient funding for a 10–20 per cent average top-up of current discretionary funding available for local development investments. Examples of the size of the top-up for existing capital grants are 8.5 per cent of un-earmarked Commune Development Fund (Fonds d'Appui au Développement des Communes – FADeC) in Benin, 10 per cent in Tuvalu, and 15–20 per cent in Mozambique and Bhutan for Phases I and II, respectively. In countries where regular capital grant allocations are very limited or non-existent, PBCRGs are calculated as stand-alone grants with similar principles in mind.

Horizontal allocation

Another question to be addressed is how funds should be allocated across the enrolled local governments – i.e. horizontal allocation. The criteria should not distort existing resource allocations and should provide equal incentives (in percentages) to all local governments involved – small or large, poor or better off. Hence, the design will always assess whether the current formula for development grants can be applied. As data are not readily available for fac-

**'LOCAL WORKS
BECAUSE IT GETS
TO THE PEOPLE,
AND THE PEOPLE
THEMSELVES
PARTICIPATE'.
– LAMIN DIBBA,
MINISTER OF THE
ENVIRONMENT,
CLIMATE CHANGE
AND NATURAL
RESOURCES, THE
GAMBIA**

toring in risk or vulnerability and expenditure needs, simple factors are often applied such as population, land size, poverty, equal share and performance. Criteria should be based on objective, simple, transparent, reliable and official data sources.

Most LoCAL countries use the basic allocation formula available for development grants and weight this with the performance element. Performance represents a percentage, which varies from 14 per cent in Benin, to 50 per cent in Mozambique and Tuvalu, and 70 per cent in Bhutan (table 11.1). The formula must be transparent and well understood.

Because local authorities need time to respond to the performance component of the formula, a number of countries have introduced a transition period during which only the basic formula is applied in the first year or two, with performance measures introduced in the second or third year.

During this transition period, participation in the mechanism remains conditioned upon compliance with the minimum conditions. From Year 2 or 3 onwards, the allocation is adjusted against the performance of the local governments involved – providing an incentive for improvement – together with other factors, such as awareness raising, publicity regarding results, competitiveness of local authorities and support for capacity building.

Table 11.1 Sample country applications of allocation criteria and performance measures

Country	Basic allocation criterion	Performance measure
Benin	86 % calculated based on population (29 %); poverty (29 %); area (13 %); and equal share (15 %) (aligned with the Commune Development Fund formula)	14 % based on a weight of 30 % for good governance indicators and 70 % for climate-related indicators
Bhutan (Phase I)	30 % calculated based on an equal share (7 %) with the remaining divided on: population (35 %); poverty level (45 %); cost index (10 %); area (10 %)	70 % based on a weight of 50 % for good governance indicators and 50 % for climate-related indicators
Mozambique	50 % calculated based on population (60 %); area (20 %) and equal share (20 %)	50 % based on a weight of 50 % for good governance indicators and 50 % for climate-related indicators

The mechanism consequently needs to remain limited and simple, particularly in Phases I and II, and slowly build capacity at the local level while engaging with donors and governments to share experiences and create robust fiscal transfer systems.

Mainstreaming

LoCAL does not have the mandate or resources to take the lead in promoting broad decentralization reforms. However, by opening a dialogue between donors, central government and local levels on a specific issue (i.e. climate change adaptation) and by testing systems and identifying challenges, LoCAL acts as a catalyst for progress in decentralization. In Bhutan, Cambodia, The Gambia, Mali, Mozambique and Tuvalu and more, it was the first initiative to introduce performance-based grants; Tuvalu is considering expanding to other funding streams. In other countries, LoCAL builds on and supports refinements of existing performance-based grant systems.

LoCAL is also mainstreaming climate change adaptation into subnational transfer systems through progressive institutionalization of the mechanism in member countries. In Bangladesh, LoCAL experience is serving as a standard to advance the country's commitment to decentralized climate finance. There, discussions are ongoing to include climate vulnerability considerations into the intergovernmental transfer allocation formula for local governments. Following LoCAL actions in Ghana, a Climate Change Desk was established at the Ministry of Local Government and Rural Development to further support the mainstreaming of climate change adaptation in district assemblies' mandates. LoCAL experience also led to the inclusion of climate-related indicators in the country's performance-based grant system of the decentralization sector as well as

the inclusion of climate change considerations in its latest National Decentralization Policy and National Decentralization Strategy (2020–2024).

Guiding the process: menu of eligible investments

The menu of eligible adaptation investments or measures identifies broad areas of adaptation actions within the local governments' remit that can promote climate resilience. The menu includes positive items that are meant to inform the integration of adaptation in local development and investment planning. It also provides an overview of adaptation measures that often go beyond existing local government investments, and can guide local governments in expanding the range of adaptation opportunities (e.g. additional measures to strengthen infrastructure resilience). The menu is aligned with the mandates of local governments and the NDCs and NAPs as they are developed.

Menu categories largely depend on the (anticipated) climate change impacts identified and local governments' mandates in a given country. The investment section of the menu can be organized in line with local development priorities such as agriculture, education and health, water and sanitation, transport and storage and forestry (see table 11.2).

The menu provides local governments with sufficient flexibility to address local issues of relevance for climate change adaptation. However, the climate information, the process that leads to the decision to implement a specific adaptation measure and how it is implemented are more important than the individual measures themselves. The rationale for the individual adaptation measures financed is thus essential. For example, in a water-scarce area, boreholes can be included on the menu. However, if the local government decides to dig a new borehole just because the existing ones have been poorly maintained, this should be considered business as usual, not adaptation to climate change. Similarly, if the location of the borehole is not informed by the level of groundwater in light of climate change and the assessment of this, this can lead to maladaptation.

The menu and related guidelines should be viewed as a safeguard that avoids investments that are clearly not relevant for adaptation and thus ensures that the PBCRGs target climate change–relevant issues. This is critical, as the funding for the grants is conditional on climate change adaptation relevance. Focusing on measures that are on the menu is thus a necessary but not sufficient condition. The use of local climate information in terms of climate risks and vulnerabilities (also promoted through performance measures) remains essential to ensure investments are indeed contributing to increasing climate change resilience. Over time, with increasing capacity for assessments, the investment menu can evolve to capture broader and more complex types of interventions.

Table 11.2 Bangladesh menu of eligible investments

Climate Change Strategy and Action Plan activity		Examples of eligible activity
1	Food security, social protection and health	
1.1	Community-level adaptation	Support to food security and livelihoods of climate vulnerable groups
1.2	Climate resilient cropping systems	Design, construction or rehabilitation of small scale irrigation systems [in a climate-proofed manner] Introduction of climate-resilient crops and farming methods
1.3	Disease surveillance systems	Awareness raising, health education and community disease surveillance in climate-vulnerable communities
1.4	Drinking water and sanitation programmes	Construction or repair of drinking water systems in climate-vulnerable communities Construction or repair of sewage systems in climate-vulnerable communities
2	Comprehensive disaster management	
2.1	Strengthen capacity to manage natural disasters	Strengthen capacity of <i>upazila</i> parishad and technical departments to respond to natural disasters
2.2	Strengthen community-based programmes	Support to community programmes for disaster preparedness
2.3	Strengthen cyclone, storm surge and flood early warning systems	Community education and awareness-raising activities for early warning systems
3	Infrastructure	
	Repair and rehabilitate existing infrastructure [at risk from climate change]	Repair and rehabilitation of road drainage structures on inter-Union roads (culverts and small bridges) (NB: road earthworks are NOT eligible) Repair and rehabilitation of flood control structures Repair and rehabilitation of drainage structures
	Plan, design and construct urgently needed new infrastructure [to address climate change]	Design and construction of road drainage structures (culverts and small bridges) on inter-union roads (NB: road earthworks are NOT eligible) Design and construction of flood control structures Design and construction of drainage structures
4	Research and knowledge management	
5	[Measures with co-benefits for adaptation and] mitigation/low carbon development	
5.2	Expand social forestry programme	Community organization for management of social forestry Tree planting for social forestry
5.3	Expand the greenbelt coastal afforestation programme	Community organization to manage, protect and conserve mangroves Mangrove planting
6	Capacity building and institutional strengthening	
6.2	Mainstream climate change in development planning (local government)	Preparation of the Upazila Climate Resilience Strategy and Action Plan
6.3	Build capacity to take forward climate change adaptation	Capacity development activities related to climate change adaptation

Source: De Coninck (2018).

Capacity building and institutional strengthening

LoCAL combines PBCRGs with technical and capacity-building support. The design and implementation stages provide recommendations to review and strengthen local governments and their operations throughout the process. These recommendations address climate risks and vulnerability and adaptation assessments; participatory and gender-sensitive approaches; adaptation programming and integration in local development plans, budgets and investments plans; public financial management of climate finance and procurement; costing, preparation and implementation of adaptation measures; and performance assessments, monitoring and reporting.

Annual performance assessments support the LoCAL process by identifying capacity needs and promoting incentives for performance improvements. In the event that a local government does not meet the minimum conditions for the following year, it will not receive the grants – but will receive support in identifying and implementing corrective actions and targeted capacity building.

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TO WORK WITH
LOCAL GOVERNMENT
AUTHORITIES AND
REACH THE INTENDED
BENEFICIARIES’.
– LANDING B
SANNEH, CHAIRMAN,
MANSAKONKO AREA
COUNCIL, THE
GAMBIA**

More broadly, local governments are encouraged to review their performance assessment and identify areas with potential for improvement. For example, in Cambodia, follow-up to the performance assessments helped local governments look for ‘low-hanging fruit’ – areas where their score was low but could easily be improved. In Tuvalu, local governments were supported in beginning to improve on the performance measures after the original baseline was tested and conducted, well in advance of the first performance assessment. In Benin, Cambodia, Ghana, Mali and Niger, local governments undertake self-assessments several weeks before the annual performance assessments to ensure they address any pending issues.

National and local governments and development partners can target capacity-building support towards weaker areas of local government performance as identified in the annual performance assessments. Support can include technical training, institutional strengthening, vulnerability-based local planning, or local procurement, among others.

At the national level, LoCAL supports the strengthening of public financial management systems for climate change adaptation over the long run through the development or revision of guidelines and manuals; integration of climate change in tendering, procurement and delivery processes

and reporting practices; the creation of budget codes; and strengthening of monitoring and evaluation systems.

Institutional set-up

Ideally, LoCAL is anchored in ministries dealing with climate change or the environment, local government, finance or planning; some of which typically serve as a country's national designated authority to the Green Climate Fund (GCF). The institutional set-up for LoCAL includes agreement as to lead ministries and definition of the roles and responsibilities of different government counterparts with respect to the various elements of the PBCRG system and capacity building – e.g. flow of funds, financial oversight and transfers; coordination and oversight of local authorities in terms of adaptation planning, investment execution, monitoring, reporting, financial accountability and audits; and the provision of technical support to local authorities.

Appropriate host ministries are selected, with various core ministries having important roles (such as the ministry of finance to handle funding flows and releases) and line ministries being responsible for climate change or local-level planning (e.g. Niger's Ministry of Environment and Bhutan's Gross National Happiness Commission). These bodies provide policy and strategic guidance and technical support to the initiative. A government institution often takes the lead for coordination of day-to-day LoCAL operations including monitoring and capacity building, and agreements with line ministries on specific activities and tasks.

Generally, a steering and/or technical committee is established early on at the central level to provide both strategic direction and oversight to design and implementation. The committee usually includes key implementing departments such as those responsible for climate change, finance, planning and local government. The committee should also include representatives from local governments themselves, as well as from civil society. Whenever possible, LoCAL makes use of existing committees by expanding on their mandates and membership.

The institutional set-up can – and likely should and will – evolve from one phase to the next in response to evolving national circumstances. The configuration, built on national systems, is tailored to country conditions and needs, and documented in a memorandum of understanding with the lead government institutions. This memorandum is a cornerstone in the design and delineates

THE INSTITUTIONAL SET-UP, BUILT ON NATIONAL SYSTEMS, IS TAILORED TO COUNTRY CONDITIONS AND NEEDS AND CAN EVOLVE IN RESPONSE TO CHANGING NATIONAL CIRCUMSTANCES,

and regulates the flow of funds from UNCDF and other partners, if applicable, to the central government and from the central government to the local governments. In all cases, representatives from countries joining LoCAL sit on its governing board.

Flow of funds

As part of the system design in each country, LoCAL clearly defines how funds will flow from UNCDF or other partners to the national government and from the national government to local governments. The aim is to use the government treasury system and ensure a high level of mainstreaming and alignment with existing public financial management procedures. LoCAL assesses the feasibility of such alignment, considers various options, and puts risk and mitigation strategies in place as necessary.

Generally speaking, grants are transferred directly to the treasury and follow the existing modalities of the intergovernmental fiscal transfer system and existing performance-based grant systems, where applicable. When this is not possible, funds are routed through the relevant ministry to top up current development grant schemes. In all cases, traceability and additionality of funding is ensured.

The number of tranches (annually, bi-annually or quarterly) and the timing of their release are set to align with the relevant intergovernmental fiscal transfer system or performance-based grant system if available. In countries where effective and regular fund transfers cannot be guaranteed, LoCAL may release the PBCRG in a single tranche as early as possible in the fiscal year – or, for subsequent years, immediately after the performance assessment of the earlier cycle of investments – so as not to delay flows to local governments, while gradually adjusting to the country cycle. For example, in Mali and Niger, funding for the first two years was channelled directly from the lead ministry to the local governments to align with national annual budgeting and planning; it was subsequently aligned with the respective intergovernmental fiscal transfer system or performance-based grant system.

In all cases, funding use should be monitored to ensure it is applied within eligible climate change adaptation activities. Arrangements vary, with each country's memorandum of understanding delineating the responsibilities and tasks of each party in fund flow arrangements, including requirements and conditions prior to release; timing of the release; reporting requirements; and accounting, accountability and auditing conditions.

LoCAL is designed to adapt to individual national circumstances, regardless of whether the respective fiscal transfer mechanisms are well-established and

functional as in Bhutan; challenged by political instability as in Mali; otherwise constrained as in Bangladesh, Cambodia and Lesotho; or in the process of being established as in The Gambia. In many countries where the mechanism operates, the ability to transfer funds effectively and efficiently to local governments is significantly constrained, and LoCAL can support paving the way for this.

LoCAL is sufficiently flexible to adapt to increasing decentralization, adjusting fund flows, minimum conditions and performance measures to ensure integration into evolving country systems. Conversely, the experience feeds into this evolution. For example, changes in fiscal transfer mechanisms are anticipated in Mali, Niger and Tuvalu as a result of a LoCAL reflection and learning process.

Using and strengthening country systems

Using and strengthening country systems is at the core of the LoCAL approach. In Bhutan, the original pilot country where the mechanism has been operating the longest, LoCAL relies entirely on the country system. Similarly, in Mozambique, the existing transfer system is applied, but with strengthening of monitoring and evaluation systems and dedicated funding codes in the public financial management system. LoCAL supports strengthening of Ghana's intergovernmental fiscal transfer system through improved guidelines and procedures, as well as through the introduction of a strong element of performance-based grant allocations and annual performance assessments of the District Assembly Common Fund Responsiveness Factor Grant.

In all countries, local government financial management procedures are applied (and augmented as needed, for example by strengthening reporting systems) along with the investment menu (which is usually large and matched to the devolved competencies of the targeted local government level, thus not creating any limitations). In most cases, funds are released to existing local government accounts. Audits are under the remit of the national audit institution – although, in a number of cases, such audits are not undertaken in a regular or timely manner due to limited capacities or financial resources. This situation pertains in The Gambia, Lesotho, Mali and Niger, where LoCAL provides an opportunity to support relevant institutions in fulfilling their mandates and/or involve them in the annual performance assessments.

'LOCAL BRINGS CLIMATE FINANCE TO THE LOCAL GOVERNMENT LEVEL SO COMMUNITIES CAN DRIVE THE CLIMATE ADAPTATION THEY NEED TO MAKE THEIR VILLAGE, DISTRICT OR PROVINCE RESILIENT'. – IVETE MAIBAZE, MINISTER OF LAND AND ENVIRONMENT, MOZAMBIQUE

Linking planning and budgeting

Effective and timely transfers of resources based on predictable allocations allow for effective planning. However, some countries may experience fragmented sources of funding, unclear or delayed budget allocations, and a history of late or lower-than-budgeted releases – which do not support meaningful planning at the local level. This lack in turn affects the ability of local administrators to engage either with communities or politically. With fewer activities ultimately implemented in this environment, citizen motivation to participate in planning processes is likely to diminish over time. This situation can make LoCAL implementation difficult, as local governments cannot adequately plan the base budget to be topped up, and committed budgets – and thus planned activities – may well be cancelled.

While LoCAL seeks to integrate its PBCRGs into fiscal transfers or performance-based grants from central to local governments, the lack or deficiency of existing mechanisms is not a deterrent. In fact, it is anticipated in targeting LDCs that such fiscal transfer mechanisms will face challenges. It is necessary, however, to ensure that LoCAL supports the further development of such mechanisms as well as the accompanying capacity to integrate climate change and PBCRGs into country systems.

Tracking adaptation funding

PBCRG funds transferred to local governments must be tracked to / linked with clearly identified eligible expenditures, i.e. activities that contribute to improved climate resilience.

In countries where the budget classification permits tracking of fund utilization at the local level and by themes, the chart of accounts was adjusted to report on adaptation activities at the local level (e.g. through the financing item code in Bhutan or Tanzania). In Mozambique, LoCAL reached agreement with the Ministry of Economy and Finance to establish special source of funding coding for PBCRG funds within the State Financial Administration System (e-SISTAFE).

This solution may not be easily achieved or possible in some countries; this was the case in Benin, Ghana, Mali, Niger and Tanzania. Special reporting systems and formats may have to be established in the short term, aligned to the extent possible with the existing system. This approach, taken in Bangladesh, The Gambia and Tuvalu, relies on identifying LoCAL funding as receipts and reporting on the adaptation activities funded by the local governments' budgets. Clear banking arrangements need to be determined. In Tuvalu, funds flow through the Treasury's general development account at the central level, but

to a specific bank account at the local government level to ensure that funds can be reported. In any case, it is receipt of the funds reported by the targeted local governments that allows funds utilization to be tracked at the local government level. Cambodia maintains additional records to track the use of LoCAL funds, and Tuvalu has established a system to review the source of funding in an improved reporting framework.

Tracking adaptation can also be achieved when a country shifts to a programme-based budget with performance information and reporting. As most countries have now embarked upon such reforms, it is increasingly possible to assess expenditure towards adaptation using a country's programmatic classifications.

These issues highlight the importance of annual performance assessments to enable determination and examination of the extent to which climate change adaptation is integrated into local plans and budgets, the extent and quality of reporting and accountability, and responsiveness to identified climate change impacts and vulnerable groups.

PBCRGs in addressing urban and rural linkages

Cities are faced with both challenges and opportunities due to the speed of their growth and the size of their populations, with cities in many developing countries and LDCs accounting for between a third and a half of the total population. Large urban populations provide something of a conundrum when it comes to addressing climate change. On the one hand, cities in developing countries are fast-growing carbon dioxide-equivalent emitters and have somewhat limited adaptive capacity to cope with climate change; on the other, they offer opportunities for improved living standards, green economy (e.g. in construction, sustainable transport, waste management, jobs), innovation – and ultimately achievement of the SDGs. Sustainable cities depend on their links to rural and peri-urban areas where food production and transformation take place, as well as artisanal and industrial production. This connection is critical to achieving the SDGs throughout a country and to ensuring the sustainability of cities.

PBCRGs offer an opportunity to address localization of SDG 11 (sustainable cities and communities) and SDG 13 (climate action) and other climate-related SDGs in both rural and urban areas while strengthening government systems – particularly inter-governmental fiscal transfers, local planning and budgeting, and local public

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financial management. This creates the enabling conditions for improving the effective mobilization of other sources of finance, own revenue-generated resources and private finance for local investments, all aligned with local priorities. Although LoCAL's initial focus was on rural local governments, urban areas are increasingly applying the PBCRG system.

Lessons learned and way forward

Since its inception a decade ago, LoCAL has generated a wealth of lessons on how intergovernmental fiscal transfers can enable community-led adaptation in countries that are among the world's most vulnerable to climate change. Use of performance-based grant allocations with clearly formulated and transparent criteria for allocation, have raised awareness, improved targeting and streamlined efficiency in local government operations and spending. Lessons learned are grouped in two areas – the importance of insightful design and the relevance of locally led adaptation.

Insightful design creates a virtuous learning circle

The design phase is crucial to ensuring the sustainability of the LoCAL phased approach, providing an important opportunity to plan at the outset for phase transitions, particularly to ensure that predictable funding is secured to allow the mechanism to move smoothly and uninterruptedly from pilot to consolidation to national roll-out. Continued support ensures that the design can be adjusted based on lessons learned and changing needs.

- **Performance measures should target the objective(s) of the grant system.** Performance measures should be cross-sectoral and measurable on an annual basis (as performance affects yearly grant allocations) and provide clear signals for areas for improvement with a focus on climate change adaptation. They should be realistic but challenging and need to be updated periodically to improve performance. Balanced performance assessments provide local governments with actionable information for further capacity development and learning. Ideally, assessments are neutral and objective, with an external verification process.
- **Typically, five to seven minimum conditions are more effective for measuring performance than a long list of criteria.** A streamlined list of conditions is less likely to overload participating authorities, while establishing a clear incentive mechanism for performance reward, maintaining system robustness and ensuring sustainability.

- **A comprehensive, user-friendly manual that lays out the minimum conditions and performance measures can increase acceptance and credibility of the LoCAL approach.**

The manual should also provide guidance to ensure a system of prior training or awareness raising of both the performance assessment teams and the local governments to be assessed, as well as steps to disseminate results.

- **Grant size must take into account issues of fiscal sustainability and scalability, as well as the absorption capacity of local governments.** These factors in turn depend on local government capacities as well as national allocation mechanisms.

Science-based evidence of climate change risks at the local level is a key enabler of effective subnational adaptation. As science-based climate data are lacking in many cases, especially at the local level, supporting risk-informed planning and access to climate information remains a challenge. The LoCAL approach is systematically integrating the design and development of tailor-made, country-based methodologies and systems to support the collection and analysis of climate data for local-level decision-making.

- **Climate risk and vulnerability assessments should incorporate local-level indicators.**

Such indicators help ensure climate risk-informed planning and budgeting at the local level. Localization of climate risks provides a useful starting point for local decision makers, as climate hazard, exposure and vulnerability hotspots are mapped at the commune level. Climate risk assessments are currently ongoing in Mali, Niger, São Tomé and Príncipe and Uganda.

- **A tailored local information system for adaptation advances awareness².** Such a system constitutes a useful resource to advance awareness and understanding of climate trends and to properly factor climate and environmental risks into participative decision-making processes. Such resources may also help central governments account for subnational climate risks and impacts and feed national climate agendas (including NDCs and NAPs) with evidence from local realities. Ghana and The Gambia are developing such systems.

By being fully aligned with national fiscal transfer mechanisms, the PBCRG system can help strengthen existing systems. LoCAL funds follow normal public expenditure and disbursement cycles, thereby building confidence in the system and strengthening national capacity. In the long term, this will improve and broaden confidence in the system, thus helping local governments obtain access to global adaptation finance via national allocation mechanisms, as national implementing entities are accredited by global climate finance institutions such as the GCF and the Adaptation Fund (see box 11.1).

Box 11.1 Direct access to international climate funds

Direct access to international climate funds provides an opportunity for countries, especially LDCs, to fund ambitious national and subnational adaptation priorities. LoCAL supports national partners in unlocking resources that will contribute to scaling-up, ensuring results are maintained; this includes supporting direct access to vertical funds such as the GCF and the Adaptation Fund. Specifically, LoCAL is supporting accredited entities across 14 countries in Africa, Asia and the Pacific to access GCF funding for a pipeline of over \$175 million. Candidate countries are exploring how to leverage the GCF Readiness Programme to deploy LoCAL Phase I and prepare the ground in view of a subsequent LoCAL roll-out through GCF direct access or other funding sources including domestic resources.

Sustainable adaptation is locally led

Changing people's attitudes, behaviours and practices is complex but an essential investment in long-term adaptation success. It is particularly complex when dealing with climate change, given the unpredictability of climate, the lack of data, and the uncertainty of success with new technologies and practices. Infrastructure projects such as retrofitting a bridge or elevating a road are generally more appealing to subnational governments and local communities than 'soft' adaptation measures such as awareness raising or vocational training. For this reason, infrastructure investments tend to comprise the majority of adaptation measures selected in LoCAL countries, while soft adaptation accounts for a minority of interventions. Yet such measures are crucial in ensuring that climate change considerations are adequately mainstreamed through local planning processes. In Niger, for instance, training communities in early warning and resilience helped boost the local population's knowledge and understanding of climate change adaptation.

- **Measuring success and impact is key.** A standard adaptation measurement methodology that serves as a bottom line provides an effective way of capturing impact on climate change adaptation and tackling the challenges involved in differentiating between development and climate interventions. With this in mind, LoCAL, in collaboration with the World Resources Institute, developed the Assessing Climate Change Adaptation Framework (ACCAF), a monitoring and evaluation framework to ensure the adaptation additionality of the LoCAL mechanism and investments that follow. LoCAL mainstreaming efforts and funded interventions are also to be informed by a localized climate risk assessment that integrates both climate data and local knowledge. Implementation should further be informed by feasibility studies and technical designs that take climate

change into account and be linked to the planning and budgeting process. Last, investment menus help make climate change explicit and include provisions that the measures are eligible provided their selection is informed by the climate risk assessment.

- **The participation of local communities and vulnerable groups is integral to successfully planning and implementing adaptation at the local level.** To this end, Cambodia has used participatory climate risk assessment as part of its local development planning process and as a basis for responding to local adaptation needs. Similarly, increasing local governments' capacity in public financial management is essential to ensuring they can meet the minimum conditions of the performance-based grant mechanism. In Tuvalu, after a series of interventions on capacity building, the *kaupules* were able to meet the PBCRG minimum conditions, allowing them to access LoCAL grants despite a relatively low capacity level (few staff, logistical challenges etc.).
- **Local delivery systems can be extremely effective.** When combined with appropriate support and technical assistance, local delivery systems can provide more appropriate and cost-effective solutions than those managed centrally. There are incentives for local governments and contracting agents to get the best value from local contractors. However, durable, robust and transparent systems must be in place if these advantages are to be realized. LoCAL builds on experience in designing these systems for scale-up across a range of countries, notably Bangladesh, Cambodia and Mozambique.
- **A concept as innovative and ambitious as the PBCRG system needs long-term policy support.** As demonstrated in Bhutan and Cambodia, both policy support and long-term lesson learning are needed so that the new mechanism is institutionalized and policymaking is informed by field experience. Strong national and local government commitment to communicating results to the climate change community increases the chances of a given country's ability to scale up its initiative. Knowledge sharing and South-South exchange, as promoted through the LoCAL Board and its members, are crucial in highlighting the results and impact of the LoCAL mechanism and can help national institutions access a wider pool of climate financing in the long term through demonstrated success. Further, implementation efficiency is improved by pointing out what does and does not work in specific circumstances.
- **Effective involvement of communities in LoCAL can create short-term job opportunities.** Jobs were created in Niger to rehabilitate ecosystems through cash-for-work schemes that prioritized investments in youth, women and

other vulnerable groups. Combined with skills development support and access to finance, LoCAL can be a vehicle to stimulate green local economies and job creation, as is being done in The Gambia across soon-to-be 32 wards through cash-for-work interventions managed by local governments. Participants are acquiring skills while becoming increasingly involved in intra-household and community decision-making processes. The same model is applied by LoCAL in Ghana.

- **To increase country ownership and government support, LoCAL needs strong political anchorage.** This includes enhanced coordination at the national level between the Adaptation Fund and the GCF national designated authorities, national focal points for the United Nations Framework Convention on Climate Change, the ministry of finance and planning, and ministries/agencies dealing with local governments and climate change issues. Anchoring LoCAL in this way ensures its institutionalization, and thus its sustainability.
- **As demand from countries to deploy and scale up LoCAL soars, the mechanism is set to become an internationally recognized standard for subnational adaptation finance.** As more countries become interested in using and scaling up the LoCAL mechanism, it is important to ensure its consistency and integrity. A standardized yet tailored approach supports capacity building and learning across local governments and countries. To this end, LoCAL is in the process of being certified as an ISO standard. ISO certification will also promote awareness of and traction for the LoCAL mechanism.
- **There remains a need for quality control across countries and implementing parties, making the progress made to date in the development of LoCAL into an ISO standard ever more important.** Efforts need to be maintained to ensure adherence to LoCAL standards throughout its phases – supported by, among other things, trainings developed in partnership with the United Nations Training and Research Institute. Support is also needed for fast-track access to climate finance at the domestic, regional and international levels.
- **Delivering on the Paris Agreement in LDCs requires country-owned and scalable financing mechanisms, such as LoCAL.** The global pandemic and its repercussions mean that increased efforts and enhanced ambition will be needed to support developing countries and LDCs achieve their climate targets and accelerate sustainable development – especially at the local level, where climate action is most needed. LoCAL continues to work towards increased recognition and institutionalization in several forums, highlighting its potential role as an innovative delivery mechanism to strengthen the climate finance architecture and ensure support reaches the local level.

- **To accelerate locally led adaptation through LoCAL, efforts are underway to boost the facility's funding capacity and access predictable and long-term sources of finance.** In 2021, funds delivery through the LoCAL facility increased by over 60 per cent year-on-year with a commitment to further growth in 2022 to respond to increasing demand from LDCs and developing countries. Access to regular and predictable finance is essential to the smooth running of the LoCAL mechanism as countries move through the various phases. With assured funds, communities are able to plan and realize actions that have large-scale impact at the local level. To this end, partnerships and options to fast-track the LoCAL mechanism vis-à-vis vertical funds such as the GCF and bilateral donors are being pursued.

Notes

1. This alignment is formalized in the 2021 LoCAL Board Decisions (available at the [UNCDF 8th LoCAL Board Meeting Decisions 2021 web page](#)), which note, in part, that the Board: 'requests all partners to make use of LoCAL to fast-track the implementation of the LDC 2050 Vision by scaling up existing LoCAL country-based mechanisms and activating the newly designed mechanisms'. An overview of the LDC 2050 Vision can be found in LIFE-AR (2019).
2. Local information systems for adaptation are built on in-depth diagnostics of local capacities, successful experience and local knowledge, identification and collection of data from available databases, down-scaled climate models, and a set of indicators of climate and non-climate drivers of risks and vulnerabilities at the local level. Once finalized, these systems allow local governments to set a climate risk and vulnerability benchmark and regularly update data to ensure a risk-informed local planning process.

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12

The Liveable City: Green Space

DMITRY POZHIDAEV

Urbanization has the potential for powerful transformative effect as an engine for growth and development, but in itself is an insufficient condition for development. Many countries that are more than 50 per cent urbanized still have low income levels. Urbanization per se does not bring economic growth, and rapid urbanization does not necessarily correlate with rapid economic growth (AfDB, 2016). An important indicator – and indeed a necessary condition – of sustainable urban growth is environmental quality, including access to green and public spaces. Such spaces are an essential dimension of a liveable city, together with characteristics like climate, infrastructure, safety and stability, and access to health and education (Kashef, 2016). Sustainable Development Goal 11 – to make cities inclusive, safe, resilient and sustainable – incorporates ensuring universal access to safe, inclusive and accessible green and public spaces in urban areas, particularly for women and children, older people and persons with disabilities. The recent COVID-19 experiences have brought to the fore the importance of continued access to open and green spaces in maintaining the social fabric and conducting a variety of activities and interactions under stressful conditions (UN-Habitat and others, 2020).

This chapter analyses the challenge of accessible green space in Ugandan cities in the context of public space management, focusing on secondary cities. It is based on field research in two municipalities, Gulu and Mbale, conducted by the United Nations Capital Development Fund (UNCDF) and Makerere University in 2017–2018 with financial support from the Cities Alliance Joint Work Programme on Equitable Economic Growth in Cities (Mukwaya and others, 2018).

Urbanization trends and quality of growth

The quality of urban growth and development is a major concern in Uganda. The year 2019 was marked by the decision of the Ugandan Government to create 15 cities by upgrading some municipalities to this status. This is the first-ever creation of cities in Uganda's independent history. The process is being implemented in phases with seven cities (Arua, Gulu, Jinja, Mbale, Masaka, Fort Portal and Mbarara) becoming effective on 1 July 2020, another three (Hoima, Soroti and Lira) on 1 July 2021 and four more (Entebbe, Nakasongola, Moroto and Kabale) officially launched at a later date. This development is grounded in the government's long-term development blueprint, Vision 2040, which envisages the establishment of four regional cities (Gulu, Mbale, Mbarara and Arua) and five strategic cities (Hoima – oil, Nakasongola – industrial, Fort Portal – tourism, Moroto – mining and Jinja – industrial) as part of the urban corridor development.

The decision is also concrete recognition of the opportunities and challenges of Uganda's progressive urbanization. It thus highlights the urgent need for effective urban management, particularly at the level of secondary cities (all of the newly created cities have a population below 250,000) to leverage those opportunities and deal with the challenges.

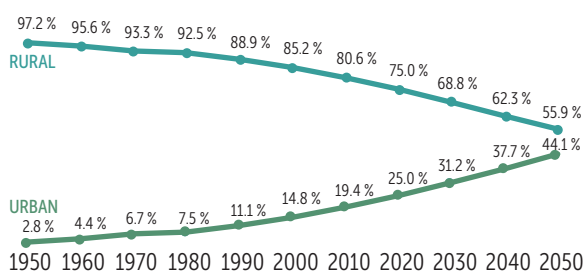
Uganda has been urbanizing at a rapid rate of about 6 per cent annually starting from the 1990s. At that point, only 11 per cent of Ugandans lived in

urban areas; by 2020, the urban population was estimated at 25 per cent. And by 2050, almost half of Uganda's population will be living in cities and towns (see figure 12.1).

Uganda's urban landscape includes a variety of urban centres whose population is distributed in a bimodal fashion. About one third is concentrated in the Kampala metropolitan area, and 37 per cent live in towns with populations of fewer than 50,000 residents. Although Uganda complies with the general pattern of

its regional peers of having a primary city (usually the capital) dominating the landscape, Kampala proper is relatively small. Only about 1.4 million people, or 3.3 per cent of the country's total population, reside in Kampala; by comparison, Nairobi accounts for 9.2 per cent of Kenya's population.

Figure 12.1 Urban and rural populations in Uganda, 1950–2050



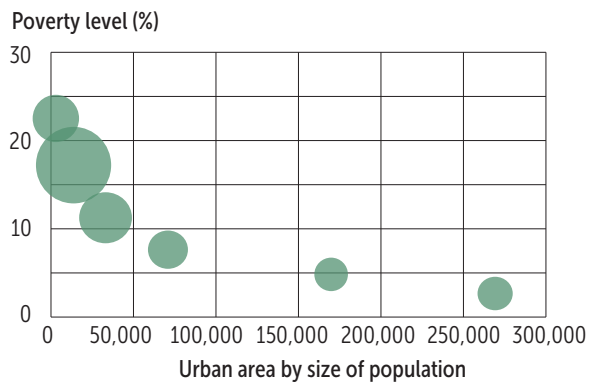
Source: Author's calculations using data from [United Nations Department of Economic and Social Affairs World Urbanization Prospects 2018](#).

This outcome is the result of urbanization trends playing out over the past 40 years. Starting from the mid-1970s and particularly after the mid-1980s, as political and economic stabilization set in after the tumultuous years of dictatorship and civil war in the 1970s, secondary cities with populations below 100,000 have been growing faster than the capital metropolitan area and ahead of the total urbanization rate. The growth of secondary cities accelerated between 1980 and 2000 to almost 10 per cent, slowing during the following decade to about 7 per cent. Although it has decelerated to 6.4 per cent during the current decade, it still remains above the total urban growth and the growth in the Kampala metropolitan areas, which has remained pretty stable since 1990.

However, the fruits of this growth are not evenly distributed, as demonstrated by poverty incidence. Figure 12.2 shows poverty distribution in urban areas by size of population in six categories ranging from cities with more than 250,000 inhabitants to towns with less than 10,000. What is remarkable about Uganda's urban areas is not only their variation in size but also their poverty distribution. Not only are secondary cities in general poorer than larger cities, but poverty is concentrated in towns with fewer than 50,000 residents, with most of the poor living in towns hosting from 10,000 to 25,000 residents.

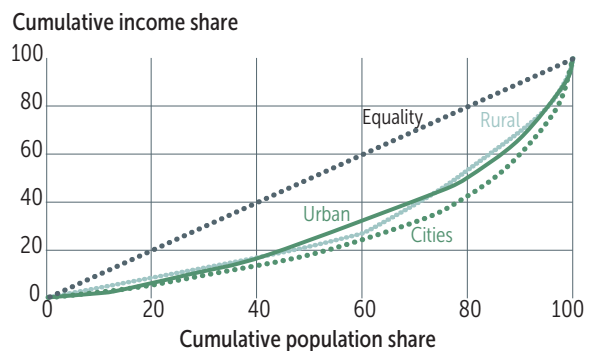
In addition to inequality between urban settlements of different size, income inequality within urban areas of the same size is a distinct feature of Uganda's urban development. Income inequality in urban areas has been on the rise between fiscal year 2012/13 and fiscal year 2016/17, largely driving total national inequality (Gini coefficient of 0.42 compared to 0.38 in rural areas) (UBOS, 2018). Decomposition of this inequality through a series of Lorenz curves that correspond to income distribution in three zones (rural, urban and cities) returns interesting results (see figure 12.3). Specifically,

Figure 12.2 Poverty distribution in urban areas



Source: Author's calculations based on data from the [Uganda Bureau of Statistics website](#). Size of bubbles represents poverty share.

Figure 12.3 Decomposition of inequality



Source: Author's calculations based on [Uganda Bureau of Statistics online database](#).

city inequality is higher compared with inequality in urban (i.e. towns and secondary cities) and rural areas. Urban areas are not much different from rural areas in total inequality (expressed by the Gini coefficient) but differ from rural areas in creating more inequality for low-income groups and high earners (above the seventh decile), while returning less inequality for groups in the middle of the income distribution (approximately between the fourth and seventh deciles).

Value of urban green spaces

Urbanization is known to produce a strain on the environment while simultaneously increasing the vulnerability of urban populations to climate change. This is because (i) extreme weather events can be especially disruptive to complex urban systems, (ii) climate change is expected to disproportionately affect cities and (iii) so much of the world's urban population lives in areas vulnerable to climate change by virtue of their geographic location (Corfee-Morlot and others, 2009).

In this respect, adequate accessible green space and public space in general are gaining added importance for urban liveability. The protection, provision and maintenance of public lands and spaces are core activities delivered by municipalities throughout the world. Though these may be perceived differently from other public services (such as firefighting, water supply or waste management),

they are critical for the production and reproduction of cities' social and economic life and for their orderly development.

**COVID-19
HAS VIVIDLY
DEMONSTRATED THE
CRITICALITY OF
PUBLIC SPACES FOR
MAINTAINING THE
SOCIAL FABRIC.**

UN-Habitat (2015) and the Bellagio Accord for Public Spaces in African Cities (HealthBridge Foundation of Canada, 2016) consider public spaces 'a vital ingredient of successful cities', the places in the city that build a sense of community, culture, social capital and community revitalization. COVID-19 has vividly demonstrated the criticality of public spaces for maintaining the social fabric and continued social activities, commercial and non-commercial, under the stringent conditions of physical distancing and restrictions on movement.

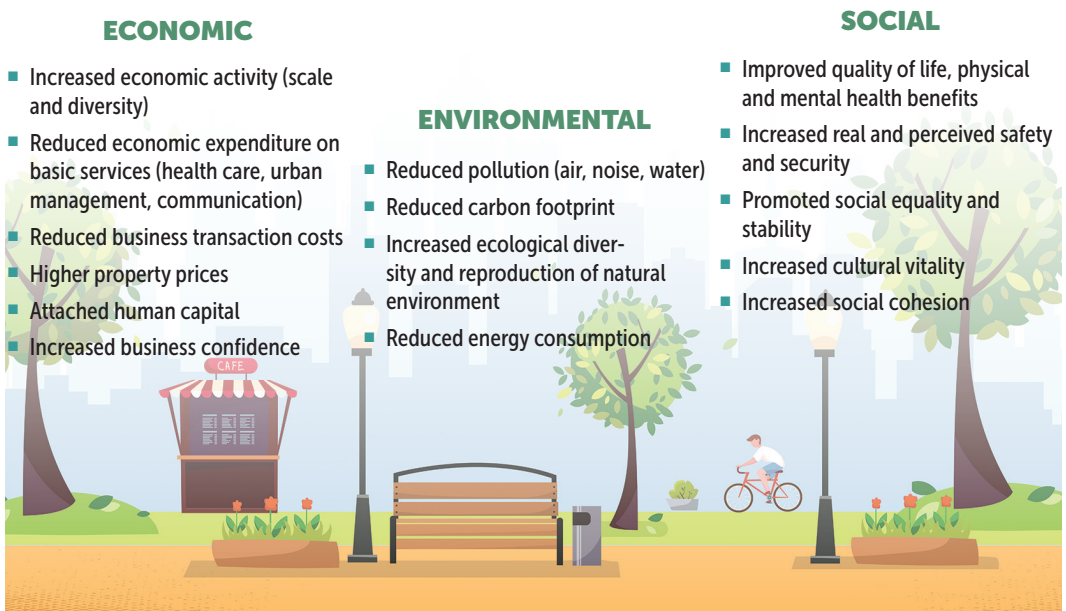
However, in many cities – especially in African countries – public spaces are not seen as a basic public service; consequently, these areas are often chaotic, poorly planned and maintained, if they exist at all (HealthBridge Foundation of Canada, 2016). The share of public space for parks and roads in Africa's urban land is about 15–20 per cent, which is half the world's average of 30–40 per cent. According to UN-Habitat (2013), the generally accepted minimum standard for public space in urban areas is 45 per cent, broken down into 30 per cent for streets and sidewalks and 15 per cent for green spaces. This standard aims to achieve a minimum density of 150 inhabitants per hectare.

A key feature of successful public spaces is their capacity to provide multiple benefits to urban communities (Dunnet, Swanwick and Wooley, 2002); these benefits are illustrated in figure 12.4.

Urban forests and green belts play an important role in mitigating the negative consequences of climate change. They present a nature-based solution for temperature, air and flood regulation and a cost-effective and sustainable contribution to soil and water conservation. Urban trees and forests make for an attractive green townscape and communicate the image of positive, nature-oriented cities and towns. They indirectly promote tourism and enhance economic development. They provide the water catchment and hence recharge water sources that supply water for livelihood and economic activities in nearby towns and cities. They also provide health benefits, as parks and green areas offer the opportunity for healthy physical and recreational activities, thus helping the urban population to relax. Additionally, urban forests provide forest products such as honey, mushrooms, herbs, timber and fuelwood for urban communities. Forests in cities and urban areas are easily accessible for supporting education and research activities.

Poorly planned and implemented development of Ugandan cities and municipalities has resulted in the proliferation of informal housing and sprawling slums, increasing congestion, and deteriorating physical and social environment

Figure 12.4 Values of public spaces



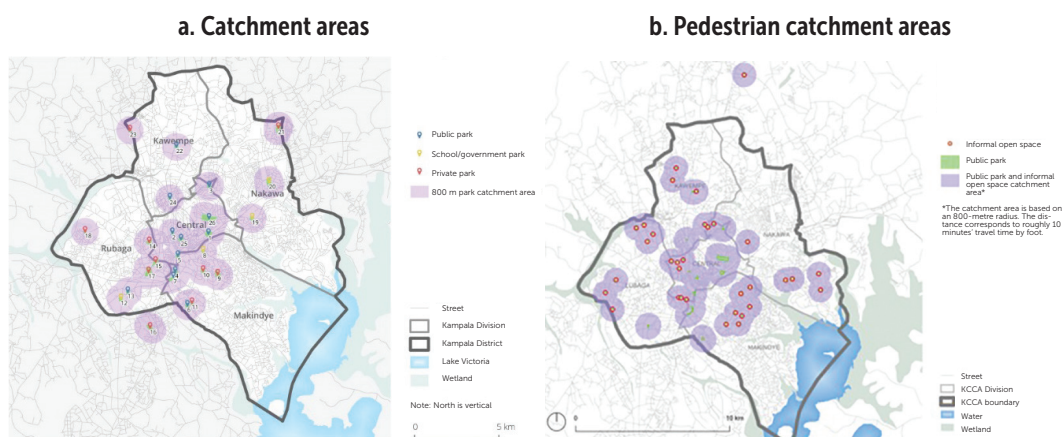
Source: Adapted from Kim (2015).

(World Bank, 2015). Many cities, including Kampala, have expanded beyond their original spatial plans but without a corresponding increase in public utilities, services, housing or green spaces. The challenge is particularly acute for secondary cities where physical plans have not been updated for decades or did not exist in the first place. And the intention to incorporate neighbouring rural subcounties that have no physical plans in certain newly established cities – such as Gulu, where this measure will double its population overnight – further exacerbates the problem (Mukwaya and others, 2018).

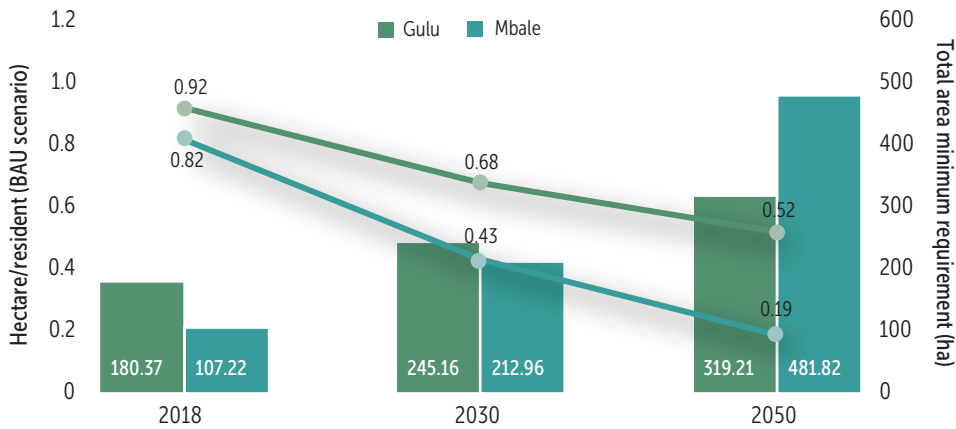
Uganda's urbanization has been accompanied with continuous encroachment on green spaces and wetlands and the conversion of agricultural land into built-up areas. It is a distressing reality of many cities across the country that their public spaces and land are shrinking and disappearing altogether. The rapid urbanization rate puts great pressure on Uganda's urban forests and green belts. Most of the central forest reserves in urban areas – such as Kitubulu in Entebbe Municipality, Kajjansi in Kajjansi Municipality, Namanve in Kiira and Mukono Municipality and Mbarara in Mbarara Municipality, among others – have been destroyed and degraded through encroachment and other illegal activities. Green spaces and public parks are becoming few and far apart; figure 12.5 demonstrates this in Kampala.

Research on two secondary cities, Gulu and Mbale (Mukwaya and others, 2018), has recorded a precipitous loss of public land, green areas, forests and wetlands within and on the periphery of these cities. Figure 12.6 shows the growing requirement for public spaces in the two cities under the population pressure until 2050 as well as the diminishing public space available under the

Figure 12.5 Catchment areas surrounding parks in Kampala District and pedestrian catchment areas of official public parks and informal open spaces



Source: Mukwaya and others (2018).

Figure 12.6 Public land situation forecast for Gulu and Mbale, 2018–2050

Source: Mukwaya and others (2018).

Note: BAU = business as usual. The recommended minimum public space requirement is 1.2 hectares/resident.

business as usual scenario against the minimum recommended public space of 1.2 hectares per resident. If no decisive action is taken, the cities will be at only 50 per cent of the recommended minimum by 2030.

One egregious example of the loss of green space occurring under the watch of local politicians is the Uhuru Park in Mbale, half of which has been lost to new real estate development. Photo 12.1 shows its current state – or what is left of it.

Photo 12.1 Part of the former Uhuru Park (Independence Square), Mbale Municipality

Credit: UNCDF/Makerere University.

Urban sprawl and the continuous loss of public land and green areas cause the degradation of green spaces and ecosystem services. Most of the central forest reserves and public spaces in urban areas have been destroyed and degraded through encroachment and other illegal activities (Zake, 2018). Rampant encroachment on fragile ecosystems results in persistent flooding in urban areas and heat islands. Irresponsible dumping of waste including plastics causes water stagnation, which in turn serves as a breeding site for mosquitoes, leading to increased incidences of malaria (NEMA, 2017). Most secondary towns lack lagoons for managing human waste, and cases of waterborne diseases such as cholera and diarrhoea have been on the increase (Kiggundu, 2014).

Unfortunately, institutions with a mandate for sustainable forest management – such as the Ministry of Water and Environment, the Forest Sector Support Department, the National Forest Authority, urban authorities and local governments – rarely provide regular reports on the status of urban forests and green belts to the Parliament and the public as part of their reporting and accountability requirements.

Uganda and its cities are on the receiving end of climate change, with a minor contribution to greenhouse emissions. However, the negative environmental effects of Uganda's urbanization reinforce the impact of climate change, making urban areas more vulnerable to weather extremes and degrading natural and economic ecosystems in peri-urban areas.

Green and public spaces and gender

Access to public spaces varies greatly by gender. In the two municipalities researched (as well as in many urban areas elsewhere), public spaces were designed based on the traditional conception of the family and a traditional division of labour between women and men: men as workers in the public space and women as caretakers and maintainers of the home and household in the domestic and private space). Extremely vulnerable individuals – women, children, former abductees, the sick, disabled and certain sectors of youth – do not always enjoy full and equal access to public spaces and suffer as public space shrinks.

The research found that most public spaces were patronized by men, while women cited their own use of existing public spaces as a cause of great anxiety. Women were hesitant about visiting and using the public spaces that existed in both municipalities. The spaces were perceived as unfriendly, unsafe and insecure to visit and use, whether in groups or as individuals. Most public spaces in these municipalities do lack safety and clean sanitary facilities, good lighting, safe walkways and related facilities, creating disincentives for many potential

women users. Surveys of all the public spaces in the two municipalities found only one had put infrastructure in place specifically for women: a cricket grounds accommodating netball, a women's team sport.

Focus group discussions in the two municipalities revealed women's concern for security as the primary cause of dissatisfaction with urban public spaces.

Women experience spaces with a larger number of users where the sexes mix as safer and more secure than more secluded public spaces, such as parks (see table 12.1).

Dissatisfaction in general runs quite high. Women and men do not differ much in their dissatisfaction with public spaces such as streets, markets, playgrounds, and parking lots. But a difference is clearly observ-

able in higher levels of women's dissatisfaction (as much as 80 per cent) with places such as a stadium (a predominantly young men's domain), and municipal gardens and recreational parks, because of their seclusion and therefore higher insecurity as well as a lack of relevant facilities for women and children.

The gendered patterns of public space use were clearly observable in the focus groups (see figure 12.7). Men make up the majority of regular users of public spaces daily and weekly (around 60 per cent on average). Their dominance is particularly visible in the use of sports and recreation facilities such as playgrounds, recreational parks and municipal gardens, where women constitute 30–40 per cent of daily users and 20–30 per cent of weekly users. Had these results been drawn from a representative random sample, the gender difference would have been significant at a 5 per cent level.

Safety concerns and the lack of appropriate facilities restrict the type of public spaces women use. But another significant, and often over-

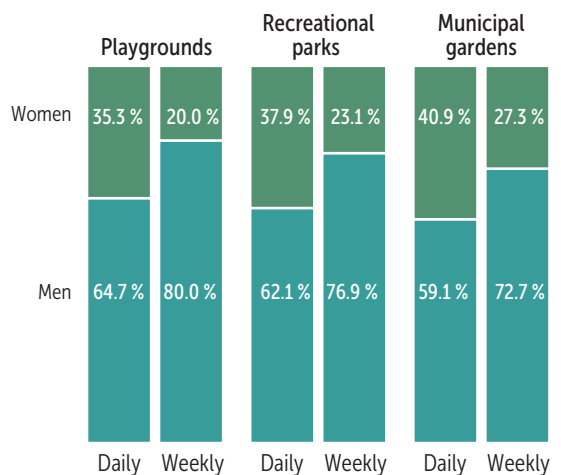
looked, factor is distance. Women are generally less mobile than men. Their ability to move in communities in cities is regulated; there is a long history of

Table 12.1 Level of dissatisfaction with urban public spaces (%)

Public space	Men	Women
Playgrounds	50.0	44.4
Stadiums	60.0	72.7
Municipal gardens	50.0	80.0
Recreational parks	62.5	80.0

Source: Mukwaya and others (2018).

Figure 12.7 Public space utilization by gender



controlling and regulating female physical mobility in Uganda. Historically, concerns that women who moved out of the home will engage in ‘immoral activities’ or not take care of family duties have restricted their movement (Kin-yanjui, 2014). Also, women have less access to transportation than men. They rarely own a vehicle or any other transport – in fact, Ugandan women are five times less likely to own a bicycle than men (UBOS, 2013). Public transportation is virtually non-existent; and other means of transportation, such as taxis or boda boda, may be prohibitively expensive because of women’s lower disposable income. Hence, as the distance increases (and green spaces, for example, move further from the city), public spaces become less accessible to women.

Key challenges and solutions

Based on this and other studies, UNCDF has identified four urban governance dimensions that affect the availability of accessible and safe green and public spaces (see table 12.2). UNCDF has focused on the challenge of accessible green and public spaces in urban areas from the perspective of **public financial management**, focusing on asset management and revenue administration. This entry point has allowed us to introduce improvements across all four dimensions of urban governance. Indeed, a key challenge is that neither local councils themselves nor the public at large have adequate information about public land and spaces. Even when such information is available, the use of public land is often unsatisfactory and below its economic potential, which destroys its value and negatively affects municipal revenues. On the other hand, the most often cited reason for local governments not being able to properly maintain and use green and public spaces is lack of finance. This vicious circle must be broken to ensure universal access to safe, inclusive and accessible green and public spaces in urban areas.

Green and public spaces as municipal assets

Ugandan local governments (excluding the major urban centres) own an astronomical amount — over \$0.5 billion — of assets, most of it in land (UNCDF, 2018). But when UNCDF started its programme of asset management and revenue enhancement with 20 local Ugandan governments in collaboration with the United Nations Department of Economic and Social Affairs (UN DESA), the Ministry of Local Government, the Local Government Finance Commission and other partners, it made the startling discovery that most local government land, including wetlands and forests where they exist, was not registered. Only Moroto Municipality had all its land registered. It was followed distantly by Adjumani and Mbale Municipalities (each with 38 per cent of their land

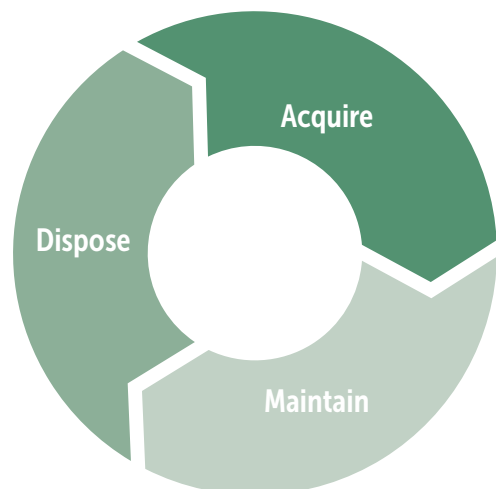
Table 12.2 Key urban governance dimensions affecting availability of green and public spaces

Governance dimension	Outcome
Participatory democracy in planning, budgeting and management of development	<ul style="list-style-type: none"> Active public participation in designing municipal policies on public land use and specific green and public space development and renovation projects Community mechanisms for managing and maintaining green and public spaces Public advocacy coalitions and platforms to protect public spaces and lands
Coordinated project management and budgeting for the delivery of basic infrastructure and services to communities	<ul style="list-style-type: none"> Effective mechanisms for horizontal and vertical coordination of public land issues between relevant national and local government agencies and with non-government stakeholders Adequate and sustainable funding available for development and maintenance of green and public spaces and lands Effective application of land-based financing and other approaches based on land value capture
Urban management capacity	Effective and efficient management of green and public spaces and lands based on comprehensive and regularly updated asset registers and valuation techniques
Transparency and efficiencies in the operations of markets	Continuous engagement with local and national land and real estate markets to regulate and leverage their participation in the development, maintenance and management of green and public spaces and lands

Source: Mukwaya and others (2018).

registered), Gulu District (21 per cent) and Kole District (11 per cent); the rest had less than 5 per cent. Five local governments reported having no titles at all, and six have no land asset registers. This situation makes it difficult to ascertain land location and size, and makes public land open to abuse as most of it is fenced by private developers. It exposes the land to encroachment and disputes with neighbouring communities, and the local government cannot receive revenues from land that is not titled.

UNCDF profiled asset management in the partner local governments, using the asset management cycle approach as its organizing framework (see figure 12.8). The asset management baseline survey/profiling in the 20 local governments was intended to establish the assets that exist, the asset management processes and

Figure 12.8 Asset management cycle

procedures in place, and asset management—associated challenges to aid future planning and interventions. Specifically, the objectives of the asset management profiling were to (i) ascertain current asset management practices in the participating local governments, (ii) establish the opportunities and challenges faced by the local governments in their asset management processes and (iii) find conclusive evidence for training themes and designs.

The asset management profiles helped local governments identify gaps and weaknesses in their asset management systems and practices across all asset classes including green and public spaces. This enabled them to develop asset management action plans covering five areas (UNCDF, 2020):

- A local government asset management **framework**, i.e. the overall vision for the management of local government assets, including objectives, targets and links to a broader local government vision and development plan, if it exists
- An assessment of **stakeholders** involved in managing the assets as well as a review of their specific functions and setting a performance goal for one or more priority assets in line with the local government asset management framework and national policies and regulations governing the management of the selected assets
- A review of the types of **methods and technologies** used in managing the assets (asset inventory database, asset management software, valuation techniques, life cycle management, strategic portfolio reviews, integration of asset management needs in annual budgets, reporting and auditing of assets)
- A **performance assessment** of these asset management practices against stated objectives and clear identification of gaps and areas for improvement
- Formulation of **concrete actions** by all relevant stakeholders that address the identified gaps and link proposed actions to improve asset management to the current and medium-term municipal budgets

Following approval of the asset management action plans by local councils, all participating districts and municipalities formed asset management committees to champion the asset management change process. These committees oversee a number of activities, including updating, completing, cleaning and digitizing asset registers and implementation of the land titling process (initiated in 19 local governments). Importantly, measures to institutionalize asset management at the local level have been negotiated with the National Planning Authority, which has agreed to integrate asset management into the local government planning framework.

Financing municipal green and public spaces

As the partner local governments have embarked on implementation of their asset management action plans and upgrading of their asset management systems, the challenge of extracting the economic value of green and public spaces and securing an adequate fiscal space for designing, maintaining and managing such spaces is being addressed through a local revenue mobilization initiative implemented in the same partner local governments. This responsibility rests legally with districts and municipalities and is not shouldered by the central government. Hence, the ability of local governments to provide continued universal access to green and public spaces depends on their fiscal space, which is determined by their own source revenue collection.

Municipalities and town councils derive between 15 and 20 per cent of their budget from own source revenues – a rather low threshold, significantly below not only their potential but also their annual planned targets. For example, in fiscal year 2015/16, Gulu Municipality collected 26 per cent of its planned amount in property-related duties and fees, whereas Mbale Municipality collected only 18 per cent. Although local governments have been under financial pressure due to increased public services demand and decreased subsidies from the central government, local government still treats public assets as public goods and not as income-generating resources despite their potential to generate revenue. The analysis of public space management and revenue administration performed by UNCDF in collaboration with the Local Government Finance Commission in target municipalities demonstrates the huge untapped potential of green and public spaces to not only generate revenues for their maintenance but also contribute to an expanded fiscal space at the local level.

Local revenue enhancement plans developed by the participating local governments offer new local revenue forecasts; although these are lower than older ones (which have almost never been achieved anyway), they are more realistic. The objective is to increase the share of own source revenues in all local governments to more than 10 per cent. At least four participating local governments are expected to achieve the target in the short to medium term. All local governments have digitized their local revenue registers and databases, featuring at least five primary revenue sources (trading licenses, market dues, property rates, local service tax, land fees). A total of 356 local government staff have been trained in data collection techniques and the

MUNICIPALITIES AND TOWN COUNCILS DERIVE SOME 15–20 PER CENT OF THEIR BUDGET FROM OWN SOURCE REVENUES – WHICH IS SIGNIFICANTLY BELOW BOTH THEIR POTENTIAL AND ANNUAL PLANNED TARGETS.

operation of local revenue database management systems. Approximately 4,147 taxpayers in four districts (Adjumani, Yumbe, Amuria and Zombo) have been registered on a web-based platform ready for e-payment.

Digital solutions play an important role in effective and robust local revenue management systems by improving transparency, increasing collection efficiency, and reducing transaction costs for taxpayers and local governments. UNCDF piloted the digitization of collection and management of local revenue in two districts, Amolatar and Kole, in partnership with a local fintech company,

Pegasus Technologies. The digital system allows taxpayers to use web-based and simple code-based techniques on their mobile phones to effortlessly transact with local authorities to remit taxes, user fees and other charges. Simultaneous digitization of asset management and tax payments, combined with improved asset management of public spaces through all stages of the asset management cycle, promises better use and enhanced financial sustainability of open and green spaces.

**SIMULTANEOUS
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Implementation of the local revenue enhancement plans is supported by a UNCDF matching grant designed to top up local governments' own financing. Land-based revenues are considered an important source of own revenues and feature prominently in the local revenue enhancement plans (see table 12.3). Improved management of land assets in conjunction with land titling and enhanced revenue administration systems enabled Gulu District to generate US\$ 540 million (roughly \$150,000) from land leases and exploitation of a stone quarry in 2019⁴. Amuria District generated US\$ 20 million (approximately \$5,500) from land lease agreements and is expecting this revenue stream to continue in the coming years.

The quest for innovative approaches to financing and managing green and public spaces plays an important role in the efforts of local governments to improve the maintenance and management of their green and public spaces. UNCDF is helping local governments identify good practices and develop workable and practical models for municipalities. One such approach is based on partnerships with non-profit agencies and private charities. In many municipalities, non-governmental organizations and charitable agencies are intimately involved in designing, building, managing, restoring and maintaining natural and cultural resources in their respective communities. In this regard, several cases, which vary in composition and scope, stand out as prominent examples of the role of non-profit agencies in the Gulu and Mbale Municipalities:

Table 12.3 Value proposition of digitizing tax collection

Stakeholder	Benefit	Details
Local governments	Accountability, transparency and security of tax collections	<ul style="list-style-type: none"> ■ Transparent collection process with automated rules ■ Limited manual intervention, reduced risk of errors ■ Database-driven collection, visibility on payment delays
	Enhanced forecasting and planning of local investments	<ul style="list-style-type: none"> ■ Timely collection of local taxes, reminders can be set ■ Predictability of tax resources based on historical data
	Cost reduction of tax collections	<ul style="list-style-type: none"> ■ No (or limited) transaction fees for local governments ■ Staff focused on tax recovery rather than regular collection
Contributors	Convenience	<ul style="list-style-type: none"> ■ Taxes can be paid from own mobile device or at a digital financial services agent ■ Service available 24/7, from anywhere across the country
	Transparency	<ul style="list-style-type: none"> ■ Tax calculation rules can be embedded in the digital service ■ Tax payment is made instantly to local government's account ■ Proof of payment is received via text message on own mobile phone

- Rotary International has entered into a working partnership with the Mbale Municipal Council to manage Mbale Green, one of the better-maintained open spaces in the municipality.
- World Embrace is engaged in innovative planning on part of the Gulu Municipality's 9.4-hectare tract of wetland. The agency has also partnered with the Gulu Municipal Council to renovate the Gulu basketball court and the Pece War Memorial Stadium's facilities.
- Mbale Municipality hosts a number of recreation clubs and local sports leagues that focus on recreational activities including football, rugby, netball, golf and athletics. These activities demand well-designed, secure and maintained green and public spaces. Several business agencies, such as those engaged in soft drink manufacture and telecommunications, have coalesced around what has come to be referred to as the Eastern Corporate Club, financing maintenance and management of green and public spaces.

In the context of COVID-19, Ugandan municipalities (including Gulu and Mbale) worked with market vendor associations for proper functioning of open space markets by ensuring regular disinfection and handwashing by vendors and customers, maintaining social distance, wearing masks, and preventing crowding and other unhealthy behaviour. With the support of the respective

municipalities (which provided disinfectants, sanitizers, masks and handwashing stations), private partners managing open and green spaces adopted similar practices to ensure continued and safe public access to properties under their management if allowed under the lockdown measures.

Way forward

The work in Uganda suggests several effective approaches to protection and development of green and public spaces. These approaches are combined into an ecosystem consisting of three elements: (i) effective political leadership, (ii) effective management systems and (iii) broad-based local partnerships.

The starting point is **effective political leadership**. The political leaders in municipalities, including the municipal mayors, should take a deliberate stand to champion, through formal and established institutional channels, the protection and development of municipal green and public spaces. This should become a recurrent theme in their interactions with citizens during meetings, discussions, ceremonies and other public events. Political leaders should make better use of traditional values, particularly the sense of community life and respect for common properties, including through approaches such as *Obuntubulamu*², to promote a sense of ownership and honour for well-kept and properly used public space and land, especially among young people.

Municipal councils should regularly, at least once a quarter, discuss issues of public space and land use at their meetings. The councils should hold regular public meetings and consultations to sensitize the public about the importance of effective public land management, expose cases of land misuse and illegal occupation, and mobilize public opinion and direct action.

Municipal councils should become in practice the guardians of an inclusive and participatory city planning process involving all groups affected by planning decisions – particularly women – to ensure broad-based support for land use decisions and socialize protection and use of green and public spaces. They should encourage public participation in planning decisions among their voters and make sure that local government officials create conditions for such processes and duly reflect the results in their final plans.

Effective political leadership is critical for an **effective management system** of green and public spaces. Elements of this system, as discussed in this chapter, include adequate fiscal space for development and maintenance of green and public spaces, reliable and complete data and information, and modern tools and approaches. Land titling, updating municipal property registers, application of adequate valuation techniques and the use of effective collection methods for land-based revenues (including those derived from municipal properties) must

become priority tasks for municipalities. Adequate budgetary appropriations and funding allocations should be made for the development and maintenance of green and public spaces. If municipalities do not prioritize and provide funds to the different departments under whose mandate green and public spaces fall, they will continue to lose public land. Wide application of digital solutions for asset and financial management (particularly revenue management) is critical for the effective use, management and development of public properties including green and open spaces. The recent COVID-19 experiences have made it clear that local governments with a higher share of digital solutions have seen a smaller drop in own source revenues and better business continuity (see chapter 9, beginning on [p. 247](#)).

Municipalities should be on the lookout for creative and innovative ways of financing the management of public spaces and land. This can be done by encouraging partnerships with the private sector, such as with World Embrace and Rotary International in Gulu and Mbale Municipalities, respectively, to invest in public spaces and share returns on investment with the municipalities. Similarly, municipalities should develop arrangements for engaging non-profit organizations in the development and maintenance of green and public spaces and reach out to them proactively. Experiences with COVID-19 have emphasized the important role of community-based and non-governmental organizations in retrofitting public spaces and keeping their operation compliant with COVID-19 health requirements.

Municipal authorities should carefully design and protect public space in view of the specific safety and security needs of women and girls. Required features include public restrooms, adequate signage, shade structures, sitting facilities, well-maintained paths, street lighting and road furniture. Planning for mixed land uses is also recommended so as to attract users throughout the day, particularly in more secluded public spaces such as parks to improve women's safety. Municipal authorities should institute safety reviews or evaluations that incorporate checklists of mandatory criteria to be performed regularly on all public spaces, as well as periodic surveys of residents' safety concerns with an emphasis on results from women.

Broad-based local partnerships form the foundation of resilient green cities. Civil society organizations should integrate issues of use, maintenance and protection of green and public spaces in their programmes and activities. The distressing trend of continued loss and deterioration of public properties underlines the need for active and meaningful engagement by all kinds of civil society

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organizations: faith-based because of cultural and religious aspects, sports clubs and associations because of the need for exercise and physical development, environmentalists because of ecological concerns, and so on. Civil society organizations should raise their concerns through all manner of communication, in meetings, and via social and other media. They should apply pressure on local politicians and municipal administrations to tighten control over public assets and regularly account for their use to the public.

Professional groups, local community and neighbourhood groups, vendor associations, and other groups with non-economic and economic interests in public space and land should proactively seek opportunities to engage with municipal administrations over management initiatives on a not-for-profit basis to design, maintain and develop public spaces for particular uses. Such management arrangements may concern parklets or other green areas on the own or in combination with a variety of other types of public space that can have a larger impact on neighbourhoods and cities.

Lastly, private businesses should consider their engagement in the design, development and maintenance of green and public spaces from two per-

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spectives: in terms of corporate social responsibility and as value-adding activities that improve their bottom line by expanding their customer base or inspiring brand loyalty. Like non-profits, private businesses need to integrate public space and land into their business models and seek opportunities to proactively engage with municipal administrations as well as with local communities.

The experiences in Uganda as well as examples from other parts of the world demonstrate a variety of practical solutions and actions to improve urban liveability through universal and safe access to green and public spaces. Urbanization can coexist with urban forests, green belts and green areas and thereby deliver multiple benefits as Uganda advances to middle-income country status following a green growth path. There is in fact no alternative because environmentally unsustainable urban development ultimately undermines all growth attempts. Green and sustainable development in urban areas requires political will and commitment on the part of local governments as well as technical and financial support from development partners, but with effort and dedication can be achieved in a relatively short time.

Notes

1. Based on a 31 December 2019 exchange rate of 1 Ugandan shilling = \$0.00027.
2. The overall meaning of *ubuntu* as humaneness is found in various East and Southern African countries; each language has its own specific version and meaning of the concept. In Uganda and northern Tanzania, *Obuntu* (*bulamu*) refers to the human characteristics of generosity, consideration and humaneness towards others in the community. It is a system of shared values that promote well-being, togetherness, unity and considerate use of common resources. More information about this UN-supported initiative can be found at [United Nations Ubuntu website](#).

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13

Enhancing Public-Private Partnerships for Local Development Financing in the ASEAN

PAUL A. MARTIN

This chapter sets out and discusses the role of public-private partnerships (PPPs) as a legitimate local development financing instrument. Through the lens of Southeast Asia, it compares the practices of and barriers to national and subnational PPPs across the member states of the Association of Southeast Asian Nations (ASEAN).

Extensive PPP literature related to ASEAN has been developed by international financing institutions, multilateral development banks and academia, but limited research exists on the essential prerequisites to promote PPPs as a subnational financing instrument for connectivity or urban services. This chapter looks at examples of successful subnational PPP applications in ASEAN to develop and test enabling solutions and makes the argument that such applications need to be accelerated to usher in new investment streams and partnerships for local governments to meet national Sustainable Development Goal commitments. For it is through local governments that these national commitments will be met.

Given the broad mix of economies that are found within ASEAN – from least developed countries (LDCs), to middle-income countries and a developed city state – PPPs in ASEAN have gained popularity over the last 20 years, and are now one of the leading financial instruments used to close the ASEAN infrastructure gap (see box 13.1). The reach of the PPP modality as a subnational public finance and budget instrument is limited, as the ASEAN member

Box 13.1 Closing the infrastructure gap via PPPs

Developing Asia will need to invest \$26 trillion between 2016 and 2030 – or \$1.7 trillion per year – if the region is to maintain its growth momentum, eradicate poverty and respond to climate change (ADB, 2017). While the need to build up infrastructure is widely recognized in the region, tight fiscal conditions and limited public sector capacity prevent most countries in developing Asia from making significant headway in narrowing their infrastructure gaps. A long-sought-after solution has been to get the private sector to help fill the infrastructure gap. The private sector clearly has much to offer in many areas of infrastructure delivery, including improving operational efficiency, granting incentivized finance, promoting project innovation, and providing technical and managerial skills. An effective way for the private sector to maximize its comparative advantages is to recalibrate its relationship with the public sector to share roles and responsibilities in providing public goods and services more efficiently. To this end, the PPP approach could transform how both sectors collaborate to deliver infrastructure services (ABD, 2017).

states often see PPPs as solutions to finance multimillion-dollar national projects. However, PPPs are starting to be viewed as a viable financing tool at the local level as well; this is the case in Indonesia and the Philippines, where PPP units are being decentralized. These subnational PPP models tentatively follow the Chinese model, wherein subnational PPPs are used to finance urban services and connectivity development projects.

Differing PPP modalities, types and project sizes are found across the region at the subnational government level, with multiple PPPs in use in Indonesia, the Philippines and Thailand, among others.

Subnational governments in the region are considered to have less technical capacity and competency, which has been cited as a barrier for PPPs. These deficiencies include but

are not limited to financing, due diligence and management; making local governments best suited to adopt less complex PPPs. And in some ASEAN countries, local governments are applying simple PPPs to contract out services. In Cambodia, for example, municipal governments operate and manage waste collection and waste management contracts, as well as contracts for non-potable water supply systems. The monetary value of such contracts is very low, however, and these arrangements do not offer municipalities an alternative financing solution for local revenue generation for infrastructure needs such as city water systems including sewage.

The bottom line is that PPPs are not a new phenomenon in the region, and local governments have had experience with them from very basic modalities (outsourcing as in Cambodia) to build-operate-transfer (BOT) contracts for infrastructure (as in the Philippines).

What is a PPP?

PPPs are 'formal arrangements between public and private counterparties to share risks and rewards in the delivery of e.g. public services and infrastructure'¹. The PPP model has many variants, ranging from simple contractual arrangements to complex project development and ownership arrangements. In the context of this chapter, a PPP is considered a public investment and procurement method for providing public infrastructure and/or public services. Various governments within ASEAN use slightly different definitions.

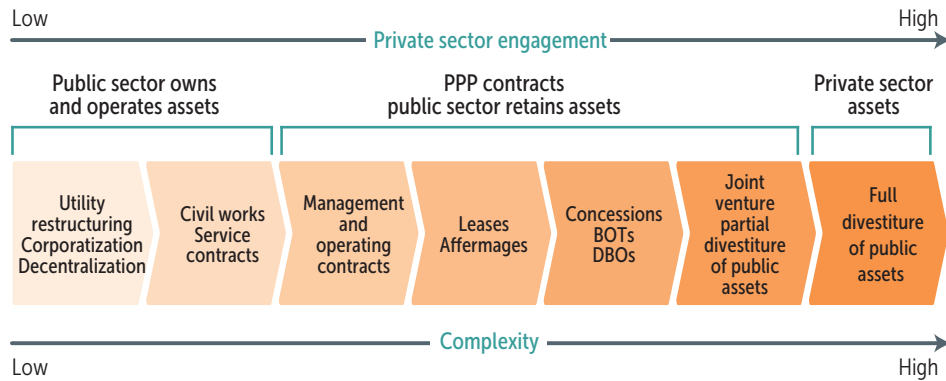
- **Cambodia.** Under its PPP Law of 2020, Cambodia considers a PPP to be an investment agreement between the state and one or more private partners to restore, build, repair, maintain and/or manage the operation of public infrastructure or provide public services within a certain period of time. The private party makes the investment, bears the risks and receives benefits in accordance with the provisions stipulated in the specific PPP contract.
- **Philippines.** Under the auspices of its BOT Law of 2012, as amended and in line with its implementing rules and regulations, and its Public Service Law, the Philippines defines PPPs as infrastructure or development projects normally financed and operated by the public sector, and implemented in part or whole by the private sector. Such projects include power plants, highways, ports, airports and other infrastructure and development projects as may be authorized under the BOT act by the appropriate government agency or local government unit.

As shown in figure 13.1, PPP modalities range from low private sector engagement and complexity to high complexity and ownership. Generally, the PPPs that are undertaken in ASEAN are either management and operating contracts, concessions, BOTs or design-build-operate (DBO) contracts.

The simplest and most common PPPs deployed at the subnational level are fixed-fee, short-term maintenance and operation contracts offered by governments for an agreed-upon set of private activities. Remuneration of the services provided does not depend on the contractor's collection of fees or tariffs and does not entail assuming risks for the asset condition, unless a performance-based contract is used. In such cases, performance standards must be attained, which may require repairs, replacement and refurbishment.

Concessions and BOTs make up the majority of PPP contracts in ASEAN. Such models are favoured in China, and have in fact been the backbone of its infrastructure development programme. These types of agreements are output focused and often require the private sector to cover significant design

Figure 13.1 Standard PPP models



Source: [World Bank Public-Private Partnership Legal Resource Center website.](#)

and construction costs and activities in addition to long-term operations and maintenance. The BOT model differs from the DBO in that the former is used to develop discrete stand-alone assets, such as a road, bridge, power plant or water treatment facility. Generally, the project developer finances the construction and receives revenues generated through fees that are charged to the utility or government.

In a DBO, the public sector provides all construction finance and owns the new asset. The role of the private sector is to deliver the design, develop and construct the asset, and operate and maintain the asset to strict performance criteria. DBO contracts are less complicated, as they do not carry a financial component to be delivered by the contractor.

The Development of PPPs in ASEAN

Today, PPPs provide a recognized and widely applied policy tool and financing instrument for governments to leverage public finance and assets to attract private sector engagement in projects, sharing development costs, risks and profits. PPPs have been used throughout history, notably in the 1800s, when a high proportion of America's infrastructure development was realized through a form of PPPs. The Philadelphia and Lancaster Turnpike, America's first long road built under a time-bound performance contract to local government specifications, provides a suitable example of what may be considered as a PPP (Landis and others, 1918).

In the modern era, PPPs became popular under the new public management system introduced in the United Kingdom in the late 1970s and refined

in the 1980s. The outsourcing of public services and the use of PPPs became a policy preference, as government sought to reduce public sector spending and increase public investment efficiencies. A forebear of the modern PPP is the Private Finance Initiative introduced in the United Kingdom in 1992 (Corner, 2006). The initiative was the first programme to systematically seek out and facilitate PPPs for services, infrastructure and investments, coining the phrase ‘value for money’ in the context of public capital investments.

As infrastructure gaps widen, ASEAN countries are today seeking new options and financial instruments to procure greenfield infrastructure or upgrade brownfield infrastructure. It is estimated that annual investments of \$1.7 trillion in electricity, transport, and water and sanitation – including finance for climate mitigation and adaptation – are needed to mitigate the infrastructure deficits in the region (ABD and KDI, 2019). As noted in box 13.1, these investments will be needed across developing Asia in 2016–2030 to maintain the region’s growth momentum, eradicate poverty – the region’s main unfinished development agenda – and take effective action against climate change. It is estimated, however, that only 40 per cent of these financial requirements will be able to be met by the public sector (ABD and KDI, 2019).

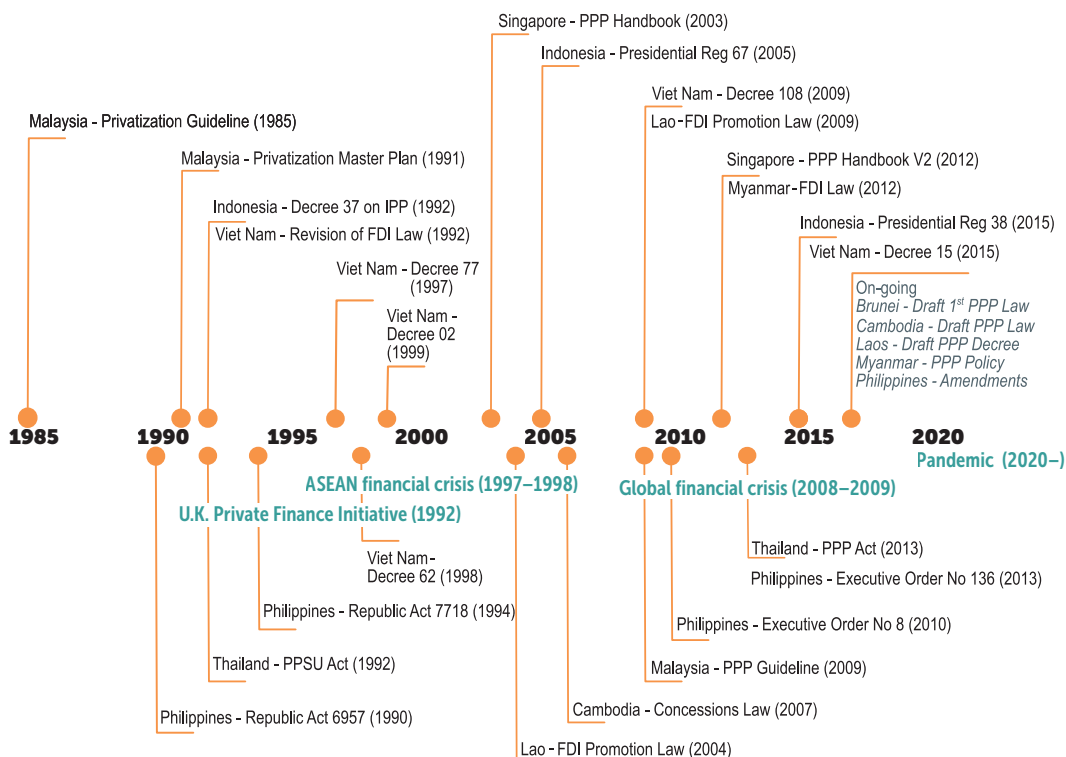
Over the past three decades, there has been increased impetus among governments in the region to develop their policy, legal and institutional frameworks to facilitate PPPs (see figure 13.2). The first phase of this development, which lasted from the mid-1980s to the mid-1990s, was provoked by the privatization movement that prevailed globally.

The use of PPPs in ASEAN was first popularized in the early 1980s, before the ASEAN financial crisis of 1987–1988, with several countries developing and enacting their policy space, legal frameworks and institutional architecture – notably, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. Greater use of PPPs also extended private sector engagement in large connectivity projects in the 1990s as a standardized approach to infrastructure financing was promulgated.

ESTIMATED ANNUAL INVESTMENTS OF \$1.7 TRILLION ARE NEEDED IN ELECTRICITY, TRANSPORT, AND WATER AND SANITATION – INCLUDING FOR CLIMATE MITIGATION AND ADAPTATION – TO ADDRESS ASEAN INFRASTRUCTURE DEFICITS.

Regulatory and policy base

The development of coherent policy and legal frameworks for PPPs can be divided into three distinct phases linked to global trends and financial events. As noted, the initial phase (from the mid-1980s to the mid-1990s) was driven by

Figure 13.2 ASEAN PPP legal and regulatory development

Source: ERIA (2015).

privatization policies, including de-nationalization in the United Kingdom. The second phase of PPP growth in the region followed the ASEAN financial crisis of 1997–1998; and the third and current phase follows the global financial crisis of 2008–2009, which shaped and harmonized the regional PPP environment to support rapid economic growth fuelled by intra-ASEAN investment and trade.

Today, a new impetus is emerging as PPP solutions, buoyed by regional infrastructure success stories, are driving lagging economies to provide and develop harmonized PPP environments to attract public sector investments from within the region and through South-South partnerships as an alternative to diminishing official development assistance (ODA) inflows and the conditionalities that are often attached to concessional finance. The utilization of PPPs in ASEAN and the associated levels of finance (see figure 13.3) match the trajectory of the development of the underlying policy, legal and regulatory frameworks (see figure 13.2).

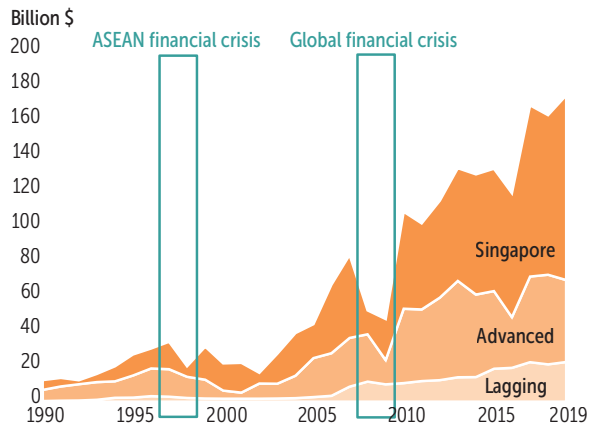
As figure 13.3 shows, foreign direct investment (FDI) inflows to ASEAN were affected by the two financial crises, but limited to Singapore and the advanced

economies. The lagging economies were subject to the crisis, but the levels of investment were limited. Overall, growth in the region has increased approximately 18-fold, from \$10 billion to \$180 billion (2019). Growth from 2002 can be related to the update of existing laws within the Philippines and Singapore. From 2002 onwards, investments in the lagging economies of Cambodia and Lao PDR matched a similar pattern of legislative updates and development of PPP architecture through the introduction of investment laws.

ASEAN member states view PPPs as an important policy and financing instrument to help address the known infrastructure gaps in the region that are beyond the reach of public finance. In this context, all member states have refined or are refining their sovereign PPP architectures (legislation, regulation and institutional arrangements) to promote their PPP frameworks as primary investment destinations. However, even in the region's lagging economies, PPPs have been used to develop large-scale infrastructure, usually transboundary energy or transport projects. Such PPPs were implemented in advance of the legislative and regulatory base and potential competencies of the responsible government entity, but have been made possible through neighbouring countries' financial and technical support.

Overall, use of PPPs and the maturity of PPP systems is fragmented across ASEAN member states. A known barrier related to PPPs and their localization relates to the clarity of the legislative and regulatory base. Such barriers not only impede PPPs at the operational level but reduce investor confidence and appetite to engage in PPPs. The PPP ecosystem in some ASEAN countries is characterized by a myriad of overlapping, at times contradictory and ambiguous, laws and regulations and poorly defined policy. However, as the positive impact of PPPs has driven the development of ASEAN cities into the 21st century, with the emergence of city multimodal mass transit systems and larger-scale national infrastructure, member states have embarked on a path to harmonize PPP frameworks and laws towards regulatory excellence. In this regard, the United Nations Capital Development Fund (UNCDF) is providing technical support to the region's LDCs to mitigate fragmentation and promote

Figure 13.3 FDI inflows to ASEAN, 1990–2019 (BoP, current \$)



Source: ASEANstats website.

Note: BoP = balance of payments.

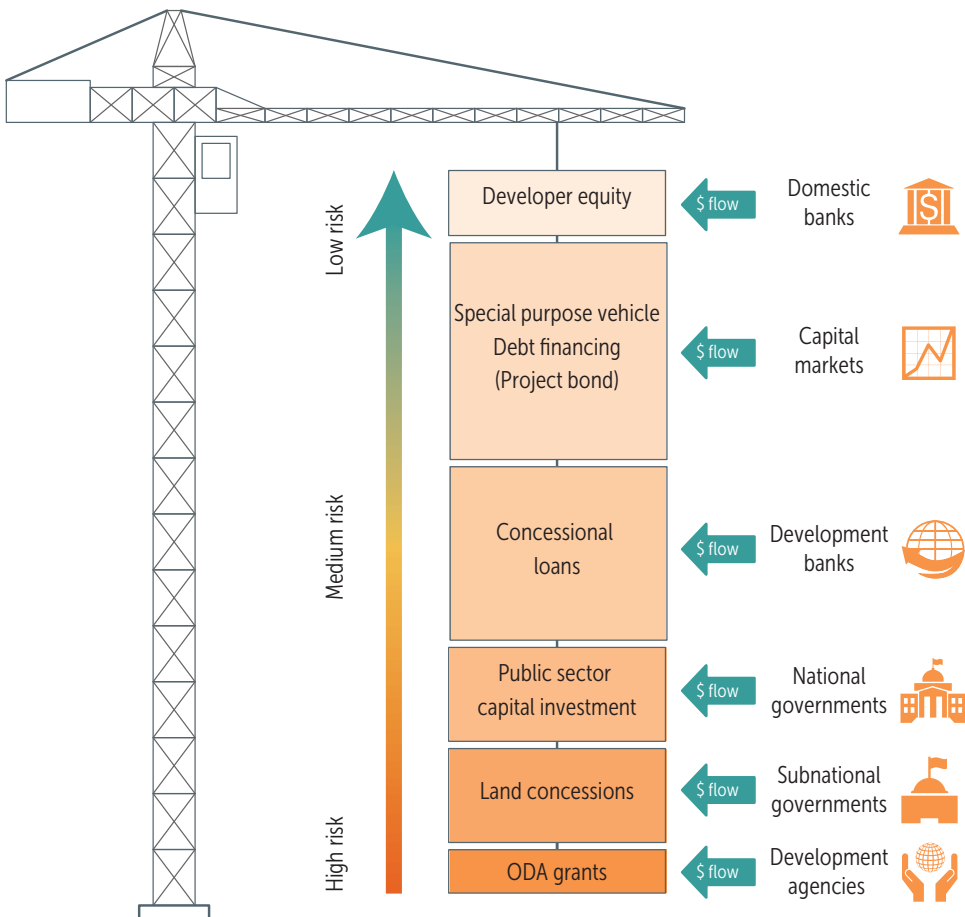
a context of legislative excellence and harmonization across ASEAN. In so doing, it expects that more PPPs will be realized, following similar harmonized models in Europe.

Typical PPP structures in ASEAN

Typically, and to reduce costs, many ASEAN countries are financing PPPs with blended finance, which provides a mix of public sector budget combined with ODA-sourced finance and, in some cases, government-issued revenue bonds. Such blended finance has the ability to reduce the cost of capital while simultaneously improving the bankability of PPP projects for private lenders and developers (see figure 13.4).

Through the lens of a would-be developer or private sector investor (including domestic banks), blended financing generally provides the initial capital to

Figure 13.4 Typical ASEAN PPP finance structuring model



essentially de-risk and prepare the PPP, in the form of an ODA grant, any necessary land concessions from the government and a commitment for public sector capital input to the project. Concessional loans are commonly secured on the basis of initial preparation and commitments, acting in part as a de-risking instrument. With all de-risking elements in place (up to 50 per cent of the value of the PPP), the funding gap is usually closed through special purpose vehicle (SPV) financing: this may be a bond issue, a commercial loan or a combination of both; and developer equity. Investors normally seek to minimize equity requirements; in some cases, failures to launch a PPP has revolved around this issue. The model shown in figure 13.4 and described here illustrates financing structure features that often underpin larger PPPs – for example, the hydro-power infrastructure and rail projects being developed by the Government of Lao PDR, applying BOT PPP modalities.

In ASEAN countries, especially lagging economies, ODA programmes and multilateral development agencies commonly play an important role in supporting PPPs, in terms of developing and launching them and attracting investors and project developers. The UNCDF International Municipal Investment Fund technical assistance facility is one such example. It funds specialist advisors; provides (at a small scale) de-risking capital in the form of grants, concessional loans or guarantees; and offers transaction advisory and deal closure services.

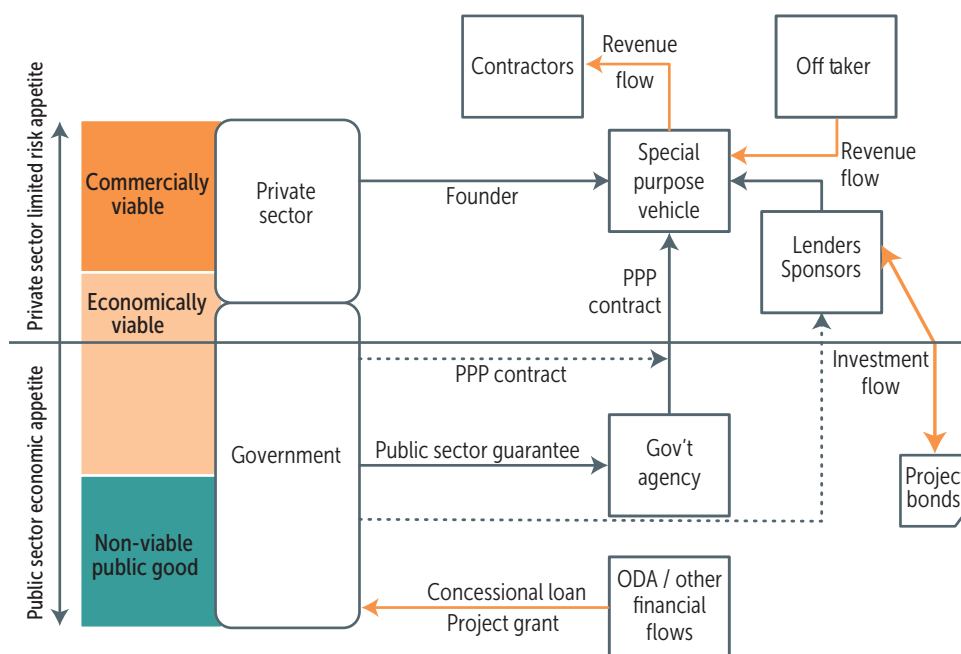
The ASEAN challenge: minimizing PPP bottlenecks

After decades of implementation, many bottlenecks continue to restrict the wider use of PPPs in the region, and especially within the lagging economies (Emirullah and Azam, 2014). Through its work in the region, UNCDF has examined and is systematically addressing these bottlenecks.

As illustrated in figure 13.5, a narrow margin exists for the application of PPPs in the context of economical and commercial viability. In this context, risk-averse investors are reluctant to enter the PPP area, as many identified PPP critical risks remain to be addressed. This section looks at the core risks associated with ASEAN PPPs.

Harmonized legal frameworks

A pervasive feature of PPP risk relates to the variation in legal frameworks across the region. The lack of harmonized laws and regulations restricts intra-regional investments and intra-ASEAN financing of PPPs. This lack is particularly relevant in the context of arbitration, permits and approval times, as these issues generally involve multiple government agencies.

Figure 13.5 Typical PPP structure in emerging ASEAN economies

Source: ERIA (2015).

Revenue streams

ASEAN PPP projects are commonly found to be dependent on revenue streams, especially BOT and DBO PPPs, which are currently the most popular modalities in the region. Revenue streams provide the capital that allows project companies (special purpose vehicles) to service project debt and achieve expected returns on investments, which underscores the importance of mitigating revenue risks.

Revenue risks vary across the PPP landscape for a variety of factors; the type of project sets the basic risk structure, as discussed below.

- User-pay projects, which include toll roads and bridges and urban transport (metros)
- Off-take projects, which include energy and resource projects

User-pay projects

User-pay projects implemented under BOT arrangements have been found to be difficult to procure in the region as demand and price risks prevail. Pricing often involves tariff setting and regular adjustments to accommodate changes

in cost of living and inflation; this often requires greater involvement with regulators.

In terms of bankability, user-pay projects often need public sector subsidies as lenders will not bear 100 per cent of the demand and price risks. In ASEAN, subsidies are often provided by the public sector to fully ensure (i) the availability and continual connectivity of basic services, (ii) the provision of minimum revenue guarantees from the government to the contractor and (iii) viability gap funding.

User-pay PPPs in ASEAN are generally not financially feasible based on commercial revenues alone (i.e. revenues net of operation and maintenance costs are not sufficient to amortize project loans). Rail and metro projects are examples of PPPs that are not commercially feasible (Imperial College, 2017), but they are feasible in an economic sense as there may be significant externalities (climate mitigation) and strong socioeconomic benefits (connecting people and delivering services) that justify the acquisition of the PPP.

Various options can be applied to mitigate revenue risks. These include (i) government co-financing or soft loans to close the feasibility gap; (ii) complementing revenues through public sector budget conditional transfers based on performance and quality of service (availability payments) and increased volume of end users (shadow tolls/tickets).

Off-take projects

PPPs for energy and resource projects often involve long-term off-take agreements that are used to secure and fix future revenue streams to enhance the predictability of financial modelling. The current crop of ASEAN off-take-based revenue models transfers the demand fluctuation risk from the lender/co-financier to the utility (off-taker). The utility company is generally a state-owned enterprise that offers a tariff-based service to its customers and commits to the purchase price of a product (from the PPP) with nominal increases (commonly linked to the Consumer Price Index).

In terms of bankability, lenders focus on the ability of the off-taker to meet its obligations (tariff payments) in a predictable and timely manner. Lenders thus focus on the creditworthiness of the off-taker, thereby isolating the off-take credit risk from the demand risk. Because the off-takers in many ASEAN member states are public sector utility companies, the risk is further shared as the associated governments are the de facto owners of the state-owned enterprises and provide a secured last line of credit.

**MITIGATION OF
REVENUE RISK
VIA THE OFF-TAKE
CONTRACT HAS
ENCOURAGED
THE ENTRY OF
INTERNATIONAL
LENDERS INTO ASEAN
MEMBER STATE
MARKETS.**

Mitigation of revenue risk via the off-take contract has encouraged the entry of international lenders into ASEAN member state markets – notably, in independent power producer projects as in the early PPPs in Cambodia (oil-fired generating plants) and Lao PDR (hydropower).

Currency mismatching

Currency mismatching risks are a direct result of the differences in currency values or their composition in terms of revenue and amortization. Many PPP projects are financed through loans provided in US dollars or euros; in some cases, Chinese yuan or Singapore dollars are used, which is problematic, as ASEAN revenues are commonly collected in local currencies. Currency risks are often eliminated through natural hedge (long-term) financing. In ASEAN countries where the financial markets are considered to be developed, finance can be raised in local currency through various financial instruments, including initial public offerings (IPOs), as with the 2013 Thailand Sky Train; and infrastructure bonds. Where national financial sectors remain underdeveloped or limited capital is available in domestic markets, adjustments to mitigate currency risks are usually included in associated contracts. Currency mismatching was one of the major issues with PPP projects during the ASEAN financial crisis (ADBI, 2017).

Political risks

Political risk are best defined as a range of insecurities that emerge within all countries; these include exchange risks, political stability, expropriation through nationalization of assets and breach of contract. The latter represents the most considerable risk associated with PPPs in the region, especially within the lagging economies which have weak or ambiguous laws covering investment and contract dispute resolution.

Some countries in the region have taken notable steps to reduce political risks. Notably, Indonesia has created a government infrastructure fund that guarantees the financial obligations of the PPP contracting agency. Viet Nam has established investor step-in rights and a government guarantee to minimize currency exchange risk. And the Philippines has institutionalized a contingent liability fund to ensure government commitments to PPPs and their completion.

Land acquisition and land use risks

Land use through concessions and land procurement pose ongoing obstacles for infrastructure PPPs within the region. These issues are amplified where land tenure and land use laws and regulation are fragmented and overlapping, land

records are poorly maintained, land compensation is not universally legalized, and indigenous (traditional) ownership and rights are invoked. These features translate into extensive time delays and cost overruns for many road and power projects and, in some cases, mobile communication infrastructure. A common result of land issues is price hiking of land above normative values. Although land price hiking is highly prevalent in urban centres, rural land price hikes are also encountered in PPP projects. For example, in Cambodia, the cost of land near a provincial landfill site has more than quadrupled as tipping extensions are being sought by a contractor within the framework of an operational PPP.

Dovetailing risks and legal frameworks

In the ASEAN context, the various risk factors discussed above can be addressed through a common denominator: harmonized legal frameworks that set and establish basic standards for PPPs. To encourage increased use of PPPs within ASEAN member states, a practical and sequenced process of updating and harmonizing the PPP legislative base is being implemented. Basic laws governing PPPs and associated contracts and dispute settlements are gradually being introduced in all ASEAN member states in parallel with capacity development programmes and intra-ASEAN networking among governments, developers and financiers at national and subnational levels. Great strides have already been made, with some countries, like the Philippines, having advanced PPP architectures and systems; the Philippines is in fact one of the most advanced countries in the region in terms of PPP use (ERIA, 2015). Some countries still lag in terms of PPP architecture and owned competencies. UNCDF is working with these countries to expedite the development of a PPP architecture, applying a systematic approach that develops harmonized legislative and regulatory foundations, builds government and private sector capacities for partnerships, and tests PPP project origination and development by demonstrating PPP investments with a focus towards sub-national levels of government and service delivery.

**IN THE ASEAN
CONTEXT, THE
VARIOUS RISK
FACTORS CAN
BE ADDRESSED
THROUGH A COMMON
DENOMINATOR:
HARMONIZED LEGAL
FRAMEWORKS THAT
SET AND ESTABLISH
BASIC STANDARDS
FOR PPPS.**

UNCDF policy and legislative support for PPPs in Cambodia

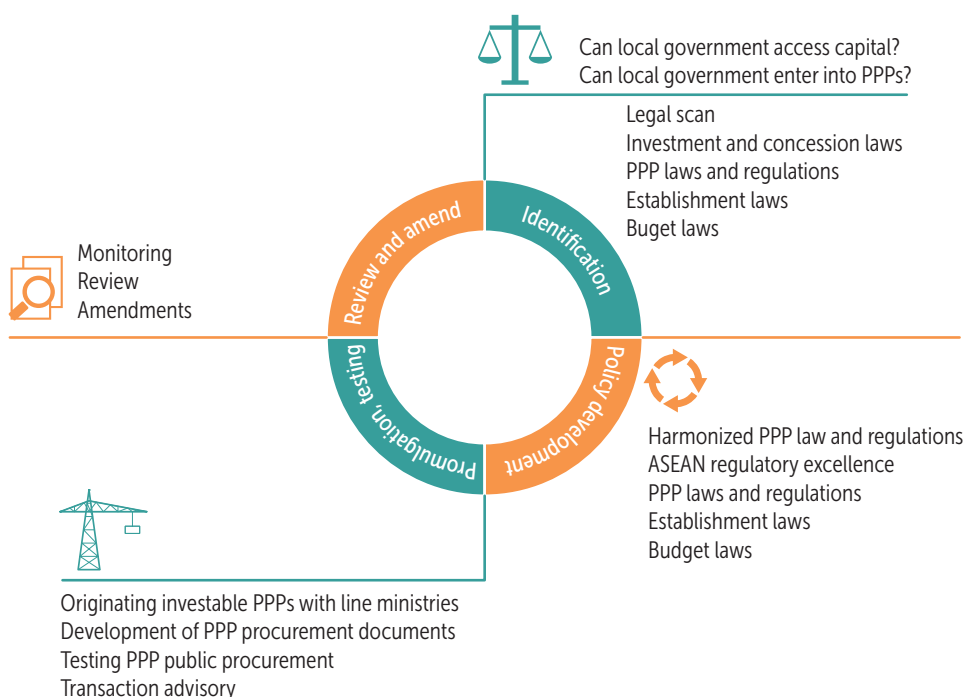
UNCDF has been supporting legislative and policy development in the region over the last three decades. Such work has included advising on

decentralization policy, developing subnational public finance systems, establishing intergovernmental conditional and discretionary grants (financial flows), and introducing thematic performance-based grants and own source revenues and taxation.

With most LDCs now embarked on a positive development path towards near-term graduation, the emphasis of decentralization is moving from a good governance–focused approach to include financing for development – especially as traditional sources of development finance are declining as a result of graduation and, more recently, due to global shocks and the realization that infrastructure gaps cannot be met by public sector budgets and ODA.

UNCDF has adopted a new public management approach to legislative and policy development support and associated capacity- and institutional-building efforts. This local development finance regulatory harmonization system comprises a cyclic process involving identification of legislation and regulations, public policy development, promulgation and testing, and review and revision (figure 13.6). Using this approach, UNCDF has supported development of an emerging PPP legal and regulatory architecture in Cambodia and has tested critical components of the system leading up to:

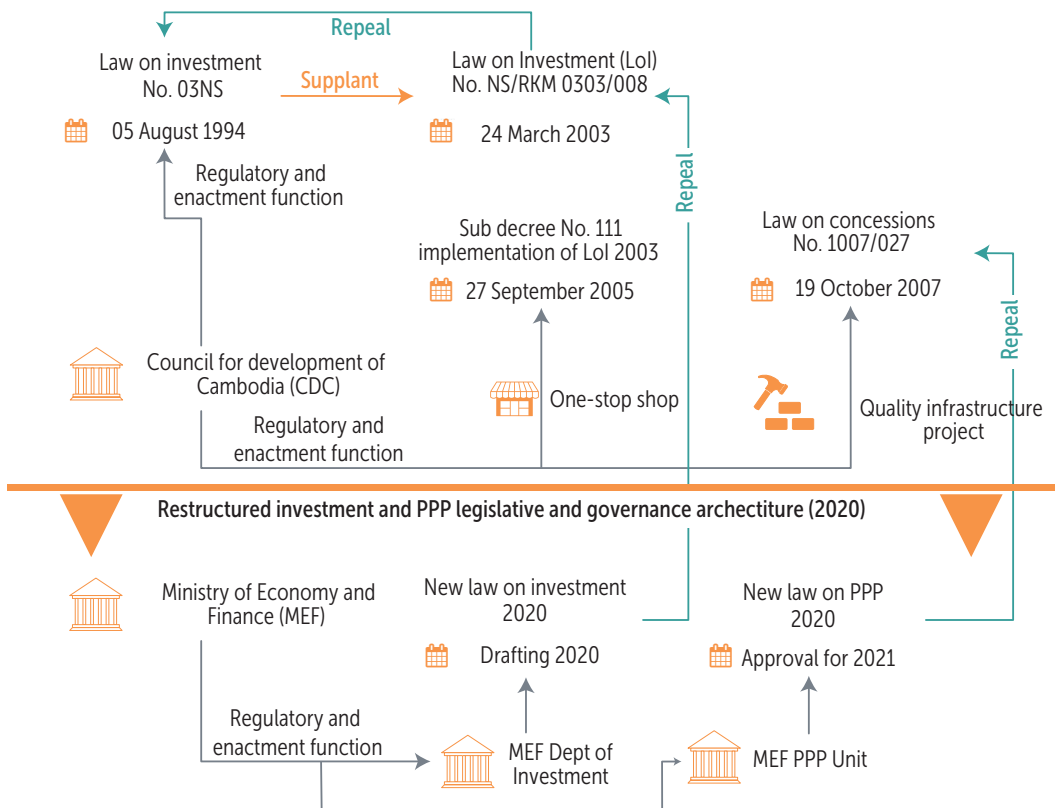
Figure 13.6 UNCDF approach to policy and legislative excellence for PPPs



- Introduction of a new PPP law
- Repeal of existing, overlapping laws whose administrative requirements slow PPPs
- Streamlining ministry and municipal origination of a subnational PPP for a waste-to-energy facility project
- Introduction and generation of a standard set of pre-financing and technical procurement documents verifying financial and technical feasibility and developing performance data for the PPP
- Generation of a project information manual (the key tender document)

Applying the integrated approach shown in figure 13.6 implemented a systematic development process with Cambodia's PPP Unit to support the transition towards a new investment architecture (figure 13.7). Based on an initial scan of Cambodia's investment laws, UNCDF was able to promote and include provisions within the new PPP law that will enable the introduction of subnational PPPs. In addition, UNCDF has been supporting the PPP Unit in developing the broader

Figure 13.7 New investment architecture, Cambodia



investment architecture and formulating a country-level PPP investment pipeline (project bank). UNCDF has provided advisory and technical support to the unit during the public consultation process for the new law and has provided technical and financial support in developing the investment pipeline. It has also tested the new law in the context of subnational municipal investments, focusing on waste management. In this context, UNCDF helped develop a standardized project information memorandum for use by the PPP Unit in procurement solicitations; it also helped improve the technical competencies of the unit in the origination of bankable PPPs and pipeline development. UNCDF also introduced standard tools including (i) financial modelling, (ii) establishment of PPP performance criteria, (iii) a technical feasibility (pre-financing) study framework and (iv) a template and quality checklist for a BOT PPP project information memorandum to solicit private sector bids through the national procurement system. Most of these actions were implemented during the course of a model subnational PPP opportunity; this is described in the case study at the end of this chapter (see [p. 353](#)).

PPP use in Cambodia





The Government of Cambodia has been engaged in a variety of concession-based PPPs since the 1980s, outsourcing the management and maintenance of services (water and waste management) road infrastructure, tourism sites and industrial parks. However, the quantity and quality of its PPPs have been modest and, in the main, can be considered as applying a PPP modality to existing structures or services as opposed to developing new ones. Improvements in service provision are not easily discernible, as existing infrastructure is often only maintained and not upgraded.

Cambodia has also embarked on numerous energy and airport PPPs that have been developed through blending ODA grants with soft concession loans. Table 13.1 shows that a significant amount of large-scale PPPs have been undertaken by the government up to 2018; this list does not include Belt and Road Initiative investments and PPPs associated with existing roads and tourism complexes.

PPPs have thus been applied to only very narrow investment segments of the economy and have focused on large-scale national investments; this illustrates:

- The reliance of the government on concessional finance to support PPPs
- The private sector's risk aversion towards engaging in PPPs unless risk is mitigated by third-party actors – here, international financing institutions
- Cambodia's limited accommodation of PPPs compared to other ASEAN member states

Table 13.1 PPPs implemented in Cambodia

			
194 MW Sinohydro Kamchay hydroelectric plant	Road #4 Sihanoukville to Koh Kong	Phnom Penh International Airport	Phnom Penh
338 MW Lower Stung Russey Chrum hydroelectric plant		Siem Reap International Airport	Siem Reap
246 MW Stung Tatay hydroelectric power plant		Sihanoukville International Airport	Battambang
400 MW Lower Sesan 2 hydroelectric power plant			
135 MW Sihanoukville coal-fired power plant			
240 MW Sihanoukville coal-fired power plant			
100 MW Sihanoukville coal-fired power plant			
CPTL 221 km of 115 kV transmission lines			

- Limited investor confidence as a result of the business environment and the fragmented legislative and regulatory base
- Limited capacity within government to engage in a broad selection of PPPs at the national and subnational levels

Optimizing the legislative base and streamlining procedures

UNCDF signed a memorandum of understanding with the Cambodian Ministry of Finance's PPP Unit in 2019 to provide policy, technical and financial advisory support. This work included providing technical support to develop a new legislative and regulatory base for PPPs and public and private sector consultations.

At the time, the PPP sphere was regulated through various laws and decrees that were fragmented in origin and regulatory ownership, which injected ambiguity into the legal system for would-be investors. Many of the then-known issues of fragmentation had been addressed through the 2005 subdecree that amended the Law on Concessions, establishing a national one-stop service for investors through the Council for the Development of Cambodia (CDC). Although certain PPPs were implemented through the council, infrastructure investments were impeded due to the length of time needed to approve quality infrastructure projects (QIPs) – an average of over 12 months. The costs associated with

the QIP process, including conducting financial, engineering and environmental studies, made PPP origination too expensive for would-be developers.

Cambodia's initial legal framework for direct investment and concessions supported unsolicited PPPs – project proposals that were originated by external actors and international financing institutions, but required concessions or were concessional in nature with a dedicated and guaranteed income stream. This feature again reflects the narrow segment for which PPP modalities have been used in Cambodia. The concession-based system and centralized approach to PPPs, which was managed under the auspices of the CDC, encouraged minimizing line ministry involvement in PPP project origination and led to the generation of large-scale strategic PPPs and limited whole of government capacity development. Subnational entities have yet to implement PPPs.

The emergence of a new draft PPP law and the organization of a new PPP Unit within the Ministry of Finance were major steps towards attracting PPP investors in Cambodia as a policy response to LDC graduation. The re-engineered PPP

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architecture has facilitated the development of a robust and attractive PPP environment whereby (i) origination for PPPs is carried out by responsible mandated government entities, (ii) the PPP Unit has established and is maintaining a national project bank of approved PPPs that provides opportunities to would-be investors, (iii) the public procurement system is used to solicit the private sector to engage competitively and transparently for PPP contracts and (v) incentives (from a project transaction advisory fund) are provided to investors to reduce the cost of pre-finalizing works.

PPP legislative and regulatory scan of current investment laws

UNCDF conducted a scan of the legislative and regulatory base across the lagging economies of Cambodia and Lao PDR using regional law firms to ascertain bottlenecks that block subnational government entities from engaging in PPPs and in regional capital markets through the issue of debt financing instruments. The scan consisted of the following:

- Stock take of laws and regulations governing investments and investment projects
- Administrative laws and regulations
- Gap analysis (ASEAN member state comparative assessments)
- Technical and legal advisory (policy, legislation and regulation)
- Implementation assistance

Cambodia's myriad of investment laws

The initial scans of the investment legislation highlighted the process and approval issues that restrict the use of PPPs, especially at the subnational level. In essence, all approvals for PPPs under the current laws require central government processes and approvals.

The Law on Concessions is the law applicable to PPP-type projects, providing the legal framework to encourage privately financed infrastructure projects through concessions that may, or may not, include land and access to other government assets and amenities. At the core of the concession agreement is the land use permit, which provides a single land use category and an associated term (time-bound agreement) for the concession. All concession contracts are transferable to other parties, allowing greenfield investment and the sale of contracts to a third party. The framework of concession contracts allows projects to be developed under various PPP modalities, including BOTs, build-transfer-operate contracts, modernize-operate-transfer contracts, and lease or management contracts.

Cambodia's PPP policy (2016–2020) established that PPPs be solely based on a specific revenue model whereby all risks are assumed by the investor. This policy limits PPPs to either a BOT or DBO model. It also places the risk on the developer, which is imperative for risk sharing. Often, private sector investors require reduced risks to enter into PPPs. Features of the Cambodian model require that PPPs and associated contracts:

- Focus on output specifications instead of input specifications, leading to possible innovative designs and solutions
- Can cover multiple activities in a single contract, including design, building, financing and operation/maintenance; this can lead to reduced life cycle costs
- Reduce cost and time overruns
- Allow that risks can be shared and allocated to the party best able to manage them

The restrictive features of concession contracts relate to the term of concession and jurisdiction of the governing law in case of dispute. Typically, concessions are limited to 30 years from signature of contract; in some cases – especially for bridges, dry ports, roads and other larger-scale infrastructure – this is far too limited. Provisions do allow extension of concessions beyond the 30-year term dependent on government approvals and only if the nature of the project requires such extensions. The possibility to secure extensions to concessions and permits implies that additional costs will be incurred, thereby

increasing risk to developers and financiers. An additional, yet highly critical, limitation is that all concession agreements must be governed and arbitrated through Cambodian law and legal systems; there is no provision to support external international arbitration.

There are a few bottlenecks within the Law on Concessions with respect to foreign investment and where investment incentives are sought. The first step requires that a QIP application be made to the CDC. The QIP proposal is lengthy and process is time-consuming, with the average QIP application taking approximately one year to be approved. This significantly increases initial outlay costs for project developers, and illustrates why Cambodia is not a destination of choice for would-be regional investors.

The QIP approval timeline varies depending on the project and the interest of the government in approving it. The main steps entailed in the QIP application process follow:

- The application is made under the company/project name; usually a new company (an SPV) is formed to undertake the project.
- The completed QIP application is submitted to the CDC for review.
- The QIP is approved by the CDC.
- The applicant applies for (and obtains) any relevant business operating licenses from the relevant line ministry.
- The PPP SPV is registered with the Ministry of Commerce and the General Department of Taxation within the Ministry of Economy and Finance.

The main bottleneck that occurs with respect to PPP projects is likely the result of the current ad hoc system of approval, which in turn is due to limited and unclear implementation of the Law on Concessions.

Transitioning the investment architecture in Cambodia

As noted, investments in Cambodia are under the auspices of the CDC, a government entity attached to the Prime Minister's Office. Although the CDC attempted to develop a one-stop shop for would-be investors, this did not result in an efficient system. The concept of a one-stop shop is to provide a centralized point for the application and approval of investment projects. Unfortunately, due to overlapping laws and directives, project developers had to register their businesses and seek permits and approvals from a wide range of ministries and government agencies in addition to the CDC.

Development partners, including UNCDF, have supported the development of a new legislative base and investment architecture to address issues such as time of approvals, differentiation between FDI and PPPs, and the requirement

for permits to be attained from multiple line ministries and central government agencies.

As shown in figure 13.7, the new investment architecture enables a definitive split between FDI and PPPs, with both inward investment streams managed by different departments of the Ministry of Finance. These departments, coordinated under a single management structure, provide the necessary technical capacity, competence and approval powers to support, manage and regulate both investment streams as specialized agencies. Two new laws are being introduced that remove the overlap of functions, streamline processes to legally underpin the new architecture, and remove ambiguity by repealing earlier legislation (i.e. the Law on Investments and the Law on Concessions).

Subnational PPPs legislation scan findings

The legal framework for PPPs in Cambodia is not well developed, especially when compared against its ASEAN peers. PPP projects are approved on an ad hoc basis by the relevant line ministry. Under the Law on Concessions, which remains in effect as of this writing, the approval process for PPPs is centralized under the Office of Private Sector Development Coordination, Department of Investment, General Department of Budget, Ministry of Economy and Finance.

There is no legislation or article within the Law on Concessions nor regulations or fiscal transfers at the provincial or municipal level in Cambodia that specifically address PPPs, although the general provisions of the Law on Investment and Subdecree 111 may apply to PPPs.

While the Law on Concessions sets forth the principle for authorized entities (including local government entities) to undertake PPPs, an implementing subdecree remains to be issued; therefore, local government entities do not yet have clear guidance as to how to undertake PPPs on their own or how they can be authorized to apply for financing. Without a solid legislative base, subnationally originated, developed and managed PPPs are not being used in Cambodia.

However, there is no known law that expressly prohibits a local government body from forming or being a shareholder in an SPV (see box 13.2). In principle and subject to the provisions to be set forth in the implementing subdecree, the Law on Concessions permits the concept of local governments undertaking infrastructure projects, or entering into concession contracts for infrastructure projects, within their respective spheres of competence. They have the power to enter into ancillary or related agreements, including for the purpose of facilitating any related financing.

**THE LEGAL
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Box 13.2 Local government participation in a special purpose vehicle

At present, a local government body (municipal or provincial-level government) would not ordinarily be party (a shareholder) to an SPV participating in a PPP for infrastructure projects unless directly authorized and supported by the Government of Cambodia.

Although the subdecree implementing the Law on Concessions has yet to be issued, it is most likely that the SPV, as an entity, would apply to either the CDC if the project seeks QIP status or the Ministry of Commerce if the project's investment capital will be less than \$1 million. It can be assumed that a local government will need to be granted permission from one of the above entities and the Ministry of Economy and Finance before receiving approval from the Ministry of Interior, which oversees local administration. As the law stands, the following process is applicable to the establishment and organization of an SPV entity; as approved shareholders, local governments would need to adhere to it.

- **Registration of the SPV.** First, register with the Ministry of Commerce and obtain an approved memorandum, articles of incorporation and certificate of incorporation. Next, register with the General Department of Taxation to obtain value added tax and patent certificates. Conversely, use the CDC one-stop shop.
- **Restrictions on SPV investments into multiple projects.** If the necessary authorization from the central government can be obtained, there are no legal restrictions with respect to an SPV entity engaging in multiple projects with private investors to build infrastructure. However, investors may wish to separate liability among projects by establishing a new entity for each.
- **Share distribution.** As long as the SPV entity does not own title to land in Cambodia, the equity distribution can be up to 100 per cent privately foreign owned. There is no equity distribution percentage provided by law for SPVs owning or operating infrastructure (separate from land ownership) in Cambodia.
- **SPV responsibilities.** Besides its negotiated contractual responsibilities, the SPV is obligated to make monthly and annual tax filings, and update its registered memorandum and articles of association to reflect current capital, management team and shareholders/shareholding.
- **SPV liquidation/closure.** An SPV can liquidate according to the procedure outlined in the Law on Commercial Enterprises (Articles 251–258). The basic steps for liquidation and closure are (i) undergo a tax audit with the General Department of Taxation, (ii) undergo company closure with the Ministry of Commerce and (iii) file with the Ministry of Labour for termination of employees upon winding up.

The new PPP law that is expected to be approved in 2021 addresses the shortcomings associated with the Law on Concessions and introduces new practices and procedures that harmonize the legislative base and allow for a more streamlined process that is managed directly and solely by the PPP Unit.

Testing the new PPP law: Cambodia's waste-to-energy project

UNCDF has been working with the PPP Unit to pilot test the new PPP law that is under final approval status and intended for promulgation in 2022. The piloting of the Poi Pet waste-to-energy project development was designed to (i) improve the line ministry's capacity in terms of PPP origination, (ii) test the processes of the PPP Unit in formulating PPP procurement documents and (iii) apply PPP modalities to a subnational project.

The genesis of the project and the choice of PPP modality were linked to national government policy aims. The prime minister and the cabinet recognized the urgent need to address urban waste management in response to a growing urban population and expanding tourism sector. While waste management functions and responsibilities have been devolved to local governments, substantial investment is needed in the means with which to deal with waste – i.e. processing or dumping. The need for investment in sustainable waste management is particularly acute in growing cities such as Phnom Penh (the capital), Siem Reap, Poi Pet and Sihanoukville.

Preliminary work related to a waste-to-energy PPP was undertaken by the Ministry of Interior's National Committee for Subnational Democratic Development. The work entailed a review of four potential locations for the facility against specific criteria: geographical location, existing waste management contracts with private sector companies, proximity to economic zones and road network quality. The review concluded that Siem Reap and Poi Pet were the most advantageous municipalities to engage with in developing a waste-to-energy PPP that will, at scale, be able to process waste rather than consigning it to a landfill. Siem Reap was chosen based on its status as a global tourism destination, attracting over 4 million visitors a year. Poi Pet is the fastest-growing city in Cambodia, located on the Cambodia-Thailand border and the main junction between Cambodia and the high-speed North-South Corridor Railway being developed in the region under the auspices of the Belt and Road Initiative.

Extensive planning dialogues with the two municipalities revealed issues related to land availability, waste content and quality, and waste supply.

Poi Pet offered land but could not address the issues of waste content, quality and supply; Siem Reap, due to tourism related to Angkor Wat, could address the latter but did not have available and affordable land. The final solution was to establish a suitably sized waste-to-energy plant and pre-sorting facility to serve the waste management needs of three provinces, rather than just the initial two. The economy of scale improves plant efficiency in terms of waste management and energy production, thereby making it more attractive as a PPP and for private sector engagement.

Together with the municipalities, the National Committee for Subnational Democratic Development Secretariat and the PPP Unit, UNCDF conducted two levels of pre-financing feasibility studies. These resulted in the development of a financial model, generation of technical solutions and project performance criteria, and a consolidated project information memorandum, enabling the PPP Unit to launch a public procurement. This exercise introduced good practice technical standards within the PPP Unit covering standard operating procedures for public tendering of PPP projects to solicit engagement with the private sector and investors.

UNCDF expects to provide low-cost financing solutions for a centralized waste-to-energy facility in the provinces of Banteay Meanchey, Siem Reap and Battambang in north-west Cambodia. The facility will (i) reduce waste volumes

that have to be landfilled, (ii) reduce related greenhouse gas emissions, (iii) contribute to the country's electricity production and (iv) contribute to the workforce in the region.

Figure 13.8 Location of waste-to-energy facility



Source: Breukelman (2020).

and Battambang will be directed to the waste-to-energy via two waste transfer stations. Both will be located near the urban concentrations of the cities of Siem Reap and Battambang. Transport to the waste-to-energy facility will follow Highways 5 and 6 to Poi Pet.

The project site is located west of Poi Pet. Accessibility from Highway 5 is good with the exception of the last part which would need investments in paved roads for 5 km and powerlines for 5 km. The site measures 20 hectares and provides ample space for siting the facility.

The project will consist of two transfer facilities and a central treatment facility comprising a reception station, pre-treatment, a furnace, boiler and turbine/generator and post-treatment of residues. Organics, separated

in the pre-treatment, will be transported for bio-stabilization to the landfill. Overall capacity will be 215,000 tons of waste per year, of which 6,000 tons eventually will be landfilled. The project will produce an annual output of 85,000 megawatt-hours of electricity, 4,000 tons of recyclable metals, 30,000 tons of reusable slags and 20,000 tons of landfill coverage material.

Land use is estimated at 30,000 square metres for the facility, 10,000 square metres for the transfer stations and 10,000 square metres for the stabilization facility. Operations will employ a workforce of 100 employees and an additional 250,000 in case stabilization is performed manually.

Implementing the project will lead to a reduction of landfill use of 97 per cent. As compared to open dumping, a reduction of carbon dioxide emissions of 45 per cent can be expected. Compared to sanitary landfilling, carbon dioxide emissions are reduced by 20 per cent.

The project plan shows a five-year period for preparation and construction. The project's financial feasibility will be achieved through a gate fee of more than \$10 per ton of waste in combination with a feed-in tariff above \$0.10 per kilowatt-hour.

Concluding remarks

PPPs in ASEAN countries are on track to become a primary policy vehicle of choice for financing and implementing a new batch of catalytic investments at the subnational level to support urban, green and productive transitions.

Although national governments in the region remain somewhat wary of decentralization, the new challenges being faced by countries in Asia stemming from the far-reaching impacts of the pandemic will necessitate policy changes in the spheres of decentralization and subnational financing.

The take-up of national PPPs to fund large projects in the region – especially in the Philippines and to a lesser extent in Indonesia – demonstrates that the appetite for PPPs exists and that many investors and private sector companies are seeking new opportunities.

Private sector capital will have a huge influence on pandemic recovery and on the ability of governments in the region to successfully implement their recovery strategies and policies to transform and diversify economic structures. As discussed in this chapter, PPPs provide an ideal conduit to attract greater investment flows from the private sector and to unlock domestic capital. Utilizing PPPs that are implemented through SPV arrangements will drive local capital markets through the

PPPS PROVIDE AN IDEAL CONDUIT TO ATTRACT GREATER INVESTMENT FLOWS FROM THE PRIVATE SECTOR AND TO UNLOCK DOMESTIC CAPITAL.

issuance of local currency bonds, and IPOs will encourage the conversion of savings to development finance liquidity.

As a global hub for subnational finance, UNCDF has continued to work in frontier PPP markets to support governments to develop competitive, transparent architectures and systems to foster the development of PPPs at the subnational level, thereby increasing financial flows for local development. We view subnational finance as true development finance, as incremental changes

**LOCALIZED
PPPS BRING
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AND FINANCIAL
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AND FINANCE FLOWS
WHILE FUELLING
SUBNATIONAL
TERRITORIAL
ECONOMIES.**

in economic structures made in local territories will steer and drive national structural transformations as key components of COVID-19 recovery and deliver on the commitments to LDCs of the Doha Programme of Action and the Addis Ababa Action Agenda.

Localized PPPs, as demonstrated by UNCDF's current work in Cambodia, bring implementation systems, processes and financial solutions together to enable private sector engagement and enhance private sector finance flows while simultaneously fuelling the engines of transformation – the subnational territorial economies. The modality of subnational PPPs that is being tested globally by UNCDF harnesses know-how and local and domestic finance solutions and options as identified throughout this book. When used effectively, local government PPPs can stimulate a catalytic change within LDCs in terms of the localization of development finance as a new blending conduit for ODA and private sector investment.

After decades of continuous investment at the national level towards meeting development financing challenges that have struggled to foster sustainable transformative and equitable growth (Daly, 1997), a new opportunity arises in the post-COVID 'new normal' to change the trajectory of development finance towards localized solutions that, when agglomerated, can lead to the structural change and beyond GDP (gross domestic product) growth that has thus far eluded many LDCs.

Note

1. Source: United Nations Conference on Trade and Development Investment Policy Hub, [What Are PPPs? web page](#).

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14

Blue Peace: Invest in Peace through Water¹

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Achieving the ambitious goals set by the 2030 Agenda for Sustainable Development and the Paris Agreement will require new forms of partnerships and increased investments. Growing populations, rapid urbanization and the rising increase in consumption by an expanding middle class imply a systematic reorganization of production and access to livelihood assets and public goods such as food, energy, drinking water and natural capital. In general, what we are witnessing is a shift in the production, delivery and acquisition of public goods or livelihood assets from the public to the private (or quasi-private) sector and citizens; no corresponding shift is observed in the financing of these towards the formal financial sector. The result is that the investment gap cannot be absorbed in regions where access to public finance, concessional loans and capital markets is limited because of an insufficiently robust economy, fiscal flow and financial rating. Sustainable growth and social inclusion are therefore impeded.

Often, the effort to access grants and concessional loans hits a wall of fragmented conditionalities and cumbersome procedures facing both the demand side (governments) and the supply side (development institutions). The result is a huge delay in implementing needed investments. Quicker and easier access to capital from new investors in these days can be associated with trade-offs, often leading to a loss of sovereign access to the very same livelihood assets in which a region or a country has been investing.

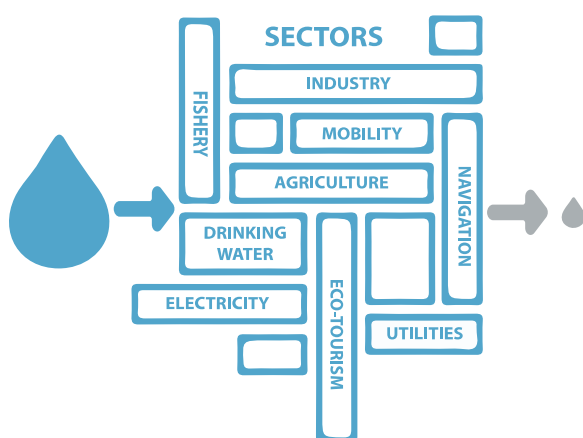
Why is all this happening? The answer lies partly in the way public investment plans are defined and how the responses of financial institutions are organized.

Both are predisposed to sectoral and administrative approaches, thereby missing the necessary common strategic orientation and systemic reality of an evolving society. Further, the financial system focuses on a single project in terms of its financial sustainability based on risk assumptions and analysis that are not necessarily in line with reality.

The other part of the answer has to deal with accountability. A sectoral approach implies that there is no need to enter into a negotiation around conflicting interests among sectors. This may lead to defining projects that are oversized and that will face opposition from other sectors when implemented.

The same is true of a national plan that does not consider the reality imposed by

Figure 14.1 Water management in silos



neighbouring countries. And the pattern holds when we consider financial institutions. Each is organized in a silo based on sectoral expertise and makes the rules for accessing funds accordingly (see figure 14.1).

The challenge is to overcome what must be considered an administrative failure. This implies a clear need to develop new ways of financing and managing assets so they are financially, economically, ecologically and socially sustainable as well as impact oriented, thanks to reinvig-

orated accountability lines. We need to move away from sectoral and national to systemic and transboundary thinking, opening the way for political will to incentivize transboundary cooperation and multisectoral investments and leading to better access to capital markets.

A clear case can be made when we consider water and its uses. From an administrative perspective, water is often considered a sector. From a human perspective, water is everything. From a financial sector perspective, water is a huge headache.

Water as entry point

Surely everyone has seen a picture of a boat stranded in the middle of a desert. Many would think that once there must have been a lake or a sea, but probably very few would ask themselves why it disappeared. And even fewer would wonder about the quality of the sand forming the desert. Yet the reason for such an incredible loss is quite simple: the inflow did not match the outflow of water

over time. And to discover whether this is a human-made or natural disaster, it would be sufficient to analyse a sample of the sand. If it is highly polluted, one can discard the latter hypothesis.

Although such a dramatic scenario might be quite rare, every society with a growing population dynamic has been or will be confronted with the issue of water scarcity and/or water pollution as a major threat to the health of its population, livelihood assets and economy. If the same water sources must be shared among different groups, municipalities or countries, the increase in tensions among diverging interests for its use might even lead to open conflict. It is therefore not surprising that in recent years, water-related crises have been identified among the top long-term threats to our planet (WEF, 2019).

Empirical evidence shows that an administrative approach considering water as an infinite item with no economic, social, environmental or spiritual value leads to a tendency to manage access to water uses from a sector-to-sector perspective without any consideration of long-term water availability both in terms of quantity and in quality – de facto leading the way towards the above-mentioned scenarios, for the simple reason that this approach denies any hydrographic reality. For instance, in the case of a transboundary river basin, colliding sovereign national interests of upstream and downstream countries applied to sectoral investments without negotiated agreements among all riparian countries will likely lead to disaster. In social behavioural terms, it is akin to forgetting that one's freedom ends where another's starts.

Moreover, the sectoral approach leads almost inevitably to oversized infrastructure because investment plans are not analysed, negotiated or reviewed in terms of different perspectives and interests². But such an approach is crucial in order to reach a compromise that includes state-of-the-art knowledge as to how best to invest for sustainable use of water. That said, since the adoption of the Sustainable Development Goals in 2015 there has been growing recognition at the highest political levels that a systemic approach to financing with water as an entry point can be part of the solution, with de-risking effects on tensions and possible conflicts. Water is the optimal entry point in the nexus between sustainable development and peaceful societies.

**EVERY SOCIETY
WITH A GROWING
POPULATION HAS
BEEN OR WILL BE
CONFRONTED WITH
WATER SCARCITY
AND/OR WATER
POLLUTION.**

The Blue Peace movement

Blue Peace is a growing global movement aimed at developing a culture of peace and fostering the preservation of precious resources of fresh water while

achieving the equitable and sustainable use of water across boundaries, sectors and generations. The Blue Peace movement is about the creation of a new development and political spaces for progressives who believe in an open and mobile society. Its vision is to move towards sustainable, integrated, cross-sectoral and transboundary management of water for people and planet, leading to prosperity and peace³. It does so by using water as an entry point for transboundary and cross-sectoral cooperation as well as impact investing. The Blue Peace movement takes a cooperative approach – which is more relevant than ever at a time

**BLUE PEACE IS A
CALL TO INVEST
IN OUR FUTURE
THROUGH WHAT
MAKES LIFE SO
UNPREDICTABLE AND
PRECIOUS: WATER.**

when population growth, rapid urbanization and industrial expansion are putting increasingly more pressure on water supplies. This pressure is mounting ever faster with less than 2 per cent of waste water in the world recycled, while ecosystems are disrupted by climate change.

A Matter of Survival (GHLPWP, 2017), a report by the Global High-Level Panel on Water and Peace, has been a cornerstone of the Blue Peace movement in promoting water as an instrument for peace. The report includes a key recommendation on innovative financing for transboundary water

cooperation, which requires the development of new sustainable financing mechanisms specifically aimed at promoting water as an instrument for peace. Think tanks such as the Geneva Water Hub, the Strategic Foresight Group and the Earth Security Partnership – along with a new generation of experts who are part of the World Youth Parliament for Water – are instrumental in shaping the Blue Peace movement. In addition, a Blue Peace Index by the *Economist's* Intelligence Unit has been developed⁴. And countries including Costa Rica, Jordan, Morocco, the Netherlands, Senegal and Switzerland, as well as several municipalities around the world, are actively shaping this new agenda.

The Blue Peace master plans

To overcome the challenges resulting from a sectoral and national approach to water, the Blue Peace approach suggests using 'master plans' for the management of water. A master plan is a multisectoral and transboundary joint investment plan. It includes infrastructure investments, data, monitoring, marketing and other soft investments required for service provision such as electricity and drinking water. A master plan is based on shared ownership, pre-negotiated and approved by authorities from all concerned countries through an iterative process across technical and political levels, thus creating enhanced accountability among the parties involved. This enhanced accountability is of a double nature:

- **Horizontal accountability** through the transboundary nature of the master plan having involved more than one country or municipality
- **Vertical accountability** through the development of a multisectoral investment plan, which does not treat water as a sector but rather as an entry point, to include multiple sectors in the investment plan

Both aspects – the transboundary and the multisectoral – are crucial in that they incentivize cooperation and political agreements with water as an entry point among riparian countries (transboundary) and sectors (multisectoral), leading to a reduction in the risk for social, political or economic conflicts and therefore leading to more stable and peaceful societies.

The financing mechanism proposed in this chapter (see specifics beginning on [p. 366](#)) has two financing channels to be considered as the equivalent of holdings (see box 14.1): **transbound-**

ary water organizations on the supply side (river basin organizations or any other transboundary organization between countries sharing the same river, lake or aquifer) for the sustainable production of livelihood assets and public goods and **municipalities** on the demand side, which are in charge of ensuring access to assets and goods. To reach a circular economy in water management, we need

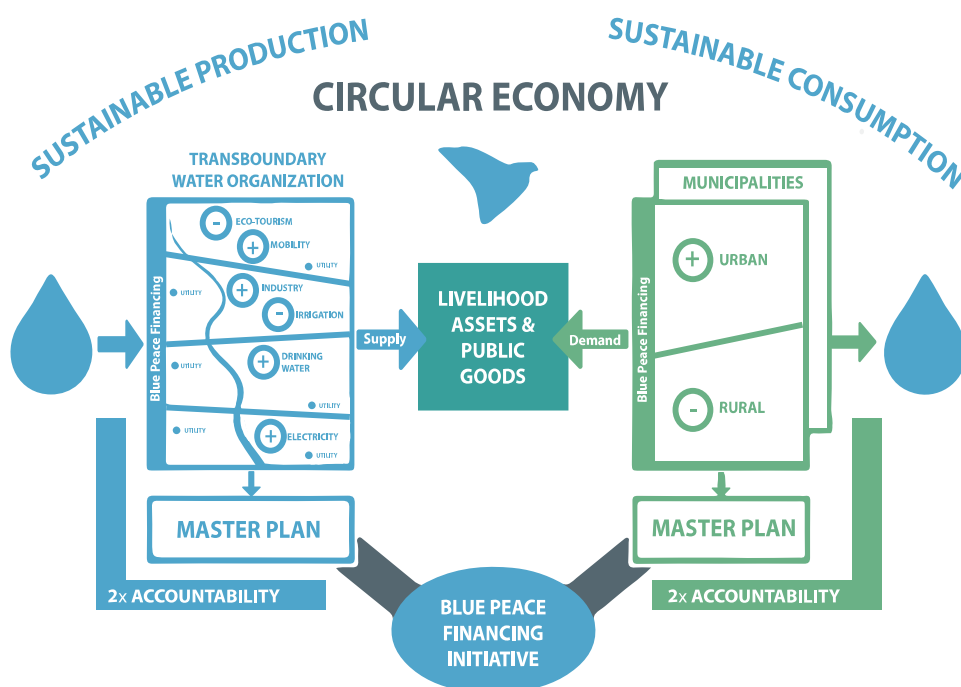
master plans on both sides (see figure 14.2). The investments, including access to related funds, will be managed by Blue Peace holdings, based on delegated authority defined and agreed upon by governments. This implies that the negotiation, development and implementation of the master plans fall under the holding's responsibility, while approved by governments. This allows the holding to manage and supervise the sectoral utilities as companies⁵. More specifically, the two kinds of Blue Peace holdings are as follows:

Box 14.1 Blue Peace holdings

Blue Peace holdings can be either transboundary water organizations or twinned municipalities managing and supervising their utilities, which sustainably produce and provide livelihood assets and public goods. In some cases, it might be necessary to create special purpose vehicles for a transboundary water organization or twin municipalities to enable them to act as holdings.

- **Transboundary water organizations (supply side: sustainable production).** The transboundary nature of this kind of Blue Peace holding is given by having the riparian countries as member states of the transboundary water organization. Different livelihood assets are produced by different utilities in the member states using the river, lake or aquifer water for the sustainable production of these assets. The transboundary water organization manages the water and develops the negotiated master plan based on the different needs and interests of the member states and their

Figure 14.2 The Blue Peace production cycle



constituencies and therefore includes different utilities from each country (transboundary) and from different sectors (multisectoral). The proposed model includes cross-subsidization of the different projects according to a defined political will: the returns plus fiscal revenues and any other sources of income match total expenditures, including financing costs. For example, irrigation water for small farmers is often subsidized by the state, while the production of electricity through hydropower is expected to generate profit.

- **Municipalities (demand side: sustainable consumption).** The master plan of the municipalities would be based on organizing and developing their own structures to ensure sustainable and affordable access to assets and public goods by citizens and therefore would include different sectors (multi-sectoral). To act as a holding, the municipality must have a certain degree of delegated authority from the central government in terms of accessing the finance needed through borrowing, grants and/or fiscal revenues. The transboundary nature of accountability in this case is ensured through a twinning mechanism⁶. The twinning would help municipalities having difficulties in accessing capital markets to reach out to affordable loans through support that reduces financial risks while ensuring additional

political backing. Municipalities with better access to finance would support their twins in their fundraising with the help provided by a trust (as described on [p. 369](#)). Moreover, twins would receive support in setting up their own exchanges of knowledge based on expertise aiming at managing their water resources in an environmentally sustainable manner while simultaneously improving social inclusion for their citizens.

Currently, these two entities access finance through the credit of nation states, competing with other social service needs for resources. When water infrastructure is financed based on the credit of the nation state instead of the strength of its cash flows, the accountability for the repayment becomes blurred. With its suggestion of master plans, the Blue Peace approach changes this paradigm by introducing multiple de-risking elements not taken into account by the current financial system, such as the following:

- The master plan is negotiated and approved at both political and technical levels and is based on political **commitment and joint agreement** among the different stakeholders (transboundary and among sectors). This is the key accountability line of the master plan, reducing the risk for conflicting situations and providing a built-in mechanism to resolve disputes. Their joint commitment on the master plan allows Blue Peace holdings to manage water more closely aligned to the needs of the end beneficiary, leading to more efficiency and sustainability and reducing the risk for social unrest.
- To make the master plan work, Blue Peace holdings need to have **delegated authority**, which allows them to have direct access to funds and to manage them based on the needs of the different stakeholders. Because of this delegated authority and the blended finance approach of the master plan, the holdings will have more flexibility in funds allocation and use.
- The transboundary aspect of the master plan brings in a **horizontal accountability** line through shared ownership of livelihood assets and public goods and common guarantee by governments. It is therefore a de-risking factor in itself and facilitates an enabling environment for other projects to invest in the region, allowing economic growth and sustainable development.
- The multisectoral aspect of the master plan brings in a **vertical accountability** line by considering the interests and needs of all concerned sectors. Multisectoral investments are inherently less risky because of the diversified risk among the different sectors. Furthermore, where the interests

of water, energy and food are balanced, it is possible to achieve higher returns on investments. The multisectoral aspect is therefore critical to maximizing benefits for all stakeholders and provides an improved risk return profile.

- The master plan will include a **negotiated formula** on how to use water for the different livelihood assets and public goods and how to share their costs and return on investment, including cross-subsidization where necessary. This implies shared ownership and common guarantees, which are important de-risking elements in themselves. With a negotiated formula, the master plan avoids oversized infrastructure and is more efficient financially and technically.
- The master plan is based on **blended finance** arrangements, where the public sector provides the risk insurance and assumes an important part of the risk mitigation to allow private investors to step in at lower risk. This improves the risk return profile of investments, providing more security for private investors.
- By having master plans on both the supply and demand sides, the Blue Peace approach leads to a **circular economy** in the management of water, mitigating the risks we face in the upcoming global water crisis. The assumption is that the master plans are truly concerted and negotiated among different perspectives.

To make these master plans work, we need to structure a new way of financing that blends both public money for de-risking and private capital for development. Through this approach of blended capital, we will unlock large quantities of financing, which brings about meaningful systemic change on the way transboundary ecological resources are financed and managed.

A new way of financing: the Blue Peace approach

The way financing currently approaches water investments is through the existing sovereign-based, country-specific landscape: central government borrowing and projects are undertaken at a sectoral level through the ministry of water, a state-owned utility company or a single municipality. Financing water infrastructure in this way is inefficient and cumbersome – and, in many cases, results in an excessive burden of debt for countries. For example, a hydroelectric dam is independently financed from the irrigation scheme or drinking water for the city, and all three source water from the same river. Further, segmentation of water investment through national boundaries and the sectoral

approach limits the ecological recycling of used water, leading to the management of water as an infinite resource.

This manner of managing and financing water infrastructure and other water-related projects creates an opaque risk-taking approach, by which investors are secured by a sovereign credit instead of the cash flows coming from the water investments. For example, financing of projects in a river basin shared by four countries is handled through four ministries of finance. Water investments require large sums of capital, and banks tend to form syndicates to share risks. Thus, the financing of two projects in the four-country river basin by a six-bank syndicate results in 48 contracts to be negotiated: six banks will issue two contracts each to four countries' ministries of finance. The process of coordinating the finance becomes a complex maze of conditionalities and negotiations. The upshot is that it takes years to implement projects, during which time the cost of project implementation increases and environmental degradation escalates, leaving people's living standards frozen in underdevelopment.

This chapter advocates for change in the way financing is approached for water investments in transboundary and municipal settings. The goal is to have a commercial methodology that is replicable and scalable – one that does not replace existing financial agreements and public resources but instead creates new ways to access financial capital, leading to a sustainable and circular economy.

**THE GOAL IS TO
HAVE A COMMERCIAL
METHODOLOGY THAT
IS REPLICABLE AND
SCALABLE.**

The Blue Peace Financing Initiative implies that investments are made as a result of negotiated political agreements among diverse interests which define how to share common water resources. The master plans described above should be viewed by investors as part of a de-risking mechanism funded through public finances. The link between the supply of financial resources to water investments and political agreement depends fully on the evolution of risk perception by investors. The Blue Peace Financing Initiative will encourage investors to understand the benefits of investing in water-related assets and goods as an asset class that cuts across multiple sectors and is anchored in a joint political agreement (see box 14.2). This in turn can incentivize the creation of institutional mechanisms managing the integrated master plan. Investors will be taking on a financial risk that has been politically demystified, inclusively planned and efficiently implemented.

Creating a new financing instrument: the Blue Peace bond

The objective of the Blue Peace financial initiative is to develop an innovative financial instrument that invests in water-related livelihood assets and public

Box 14.2 Water as an asset class

From an economic perspective, water having the essentials of a public good and its governance in most jurisdictions being under the right of use are the main reasons why Blue Peace assigns value to a well-negotiated political agreement between riparian communities on a shared water resource. The philosophical question of whether water has an intrinsic value is beyond the scope of this chapter, nor is the discussion of water pricing intended to reflect the tradability of water as a commodity. The Blue Peace initiative aims to support countries in financing water-related livelihood assets and public goods, both on the supply side from the water resource and on the demand side for the users of water. The incentives Blue Peace is advocating – financial instruments to be raised to fund water-related assets and goods – are based purely in economic terms on the value of water-related projects and assets, not on the value of water as such. Therefore, the asset class of the financial instruments Blue Peace will support should be categorized as water-related bonds from the buy side of the financial sector.

goods directly through Blue Peace holdings. The investment instrument will blend both public and private investments into a single de-risking instrument, and the public funds will be used to attract private funds to achieve total financing. The new financial instrument will be called a Blue Peace bond. Because the majority of these bonds will be issued by either a municipality or a transboundary water organization acting as Blue Peace holdings, they will be backed by the cash flows of the underlying projects. When a transboundary water organization issues a Blue Peace bond, it will overcome the challenge of coordinating many banks through multiple sovereign borrowing exercises – thus smoothing the process of raising financing for project implementation and accelerating development on the ground.

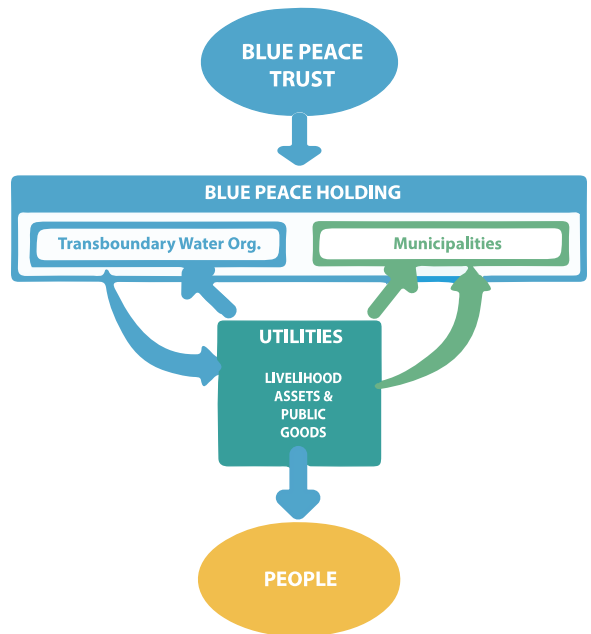
These bonds will be catalytic in matching project cash flows to bond repayment, a process that will increase accountability in water resource management. The bonds will assume different structures based on the revenue expectations of a specific master plan and will thus be flexible to fully match the cash flows generated by the projects. The Blue Peace Trust (discussed in the following section) will support the issuer on two fronts: credit enhancement and the issuing process. Financial advisory firms will be hired to support the issuer in structuring the bond, pricing, issuance timing and distribution of the bond to investors. Blue Peace bonds will have transparency built in for the life of the bond; the issuer will have to give relevant information to investors.

BUYING A BLUE PEACE BOND MEANS INVESTING IN FUTURE PEACE.

The structure of the Blue Peace bonds will fuse the bond and the credit enhancement mechanism. The credit enhancement will be subsidized by

public funds to increase the marketability of the bonds to private investors and to unlock 'structured' financing to match future cash flows to be produced by the sustainable water infrastructure and projects. Blue Peace bonds will be marketed to local investors from where the issuer resides – for example, local pension funds, insurance companies, corporations, banks and individual savers. The bonds will also be available to the international investor community. The idea is to try as much as possible to match the financing demands of water infrastructure and other water projects to a more impact-based financial supply, therefore opening up new markets. To create such change, Blue Peace is creating a trust (see figure 14.3) that will manage the innovation and support the initiatives of Blue Peace holdings.

Figure 14.3 The Blue Peace Trust



The Blue Peace Trust

The Blue Peace Trust will work to institutionalize investing in multisectoral transboundary investment plans through two different Blue Peace holdings, transboundary water organizations and municipalities in different countries. The Blue Peace Trust will tackle the following major activities:

- Support municipalities and transboundary water organizations through **funding support** in structuring and issuing Blue Peace bonds; at the same time, provide support in de-risking bonds and thereby attracting global private capital from institutional investors.
- Provide **technical support** to transboundary water organizations and municipalities for them to build capacity and, in the future, be able to negotiate and design investment plans and raise financial resources at a global level on their own.
- Support **political mechanisms** that create and strengthen transboundary resource management organizations.

- **Advocate** for how to invest sustainably in global ecological resources, especially water.
- Conduct **water diplomacy** with higher-level political support to create a new methodology that allows financial markets to invest in ecological assets.
- Provide a **branding mechanism** through a Blue Peace Standard and an impact framework, communicating to investors that this is impact investing.
- Promoting the **Blue Peace Index** developed by the *Economist's* Intelligence Unit as a public information-sharing and awareness-raising mechanism.

The Blue Peace Trust provides three main advantages compared to traditional financing:

- **Impact.** The trust creates a meaningful impact in helping to achieve the Sustainable Development Goals (SDGs) and the Paris Agreement.
- **Capacity.** It will support capacity building within transboundary water organizations and municipalities. One of the main challenges these entities face is that current investors do not provide a proper capacity-building mechanism that would allow developing countries to become economically more independent and sustainable.
- **Acceleration.** The Blue Peace financing mechanism will open up a convenient channel for multi-project investment programmes through the master plans and hence accelerate the pace of development.

Development of a new marketplace

The financing instruments described in this chapter can be used to finance both the supply and demand sides of water-related investments. Financial markets normally work well for nation states and big companies. However, outside of developed nations, municipalities and transboundary water organizations cannot access finance for development purposes. Creating a new market and introducing financial instruments that allow the blending of public funds with private sector funds to finance sustainable water-related projects will unlock access to capital for municipalities and transboundary water organizations – this in turn will provide new and larger forms of private-based capital to development projects in line with the SDGs. Once the financial market has begun to invest in water-related livelihood assets and public goods, investments through capital markets would open a new window on sustainable development financing. It is with this aim that Blue Peace will support the formation of this market.

Conclusion

Water has an inestimable value, and therefore should not be traded as a commodity as such. What should be traded are the livelihood assets derived from water. This approach ensures that while everyone has equitable access to these, water will be available in the same quality and quantity at the entry and exit points of the production cycle – a circular economy. This chapter has introduced a new way of financing transboundary and multisectoral water cooperation by creating new ways to access financial capital, which in turn will lead to a circular economy and stable societies; the advantages of this innovation are summarized in box 14.3.

Financing currently approaches water investments in a country-based, sectoral manner rather than a basin-wide approach; it is therefore often inefficient. There is an urgent need for systemic change to move us from sectoral and national to systemic and transboundary thinking and investing. The Blue Peace approach suggests that water is the optimal entry point in the nexus between sustainable development and peaceful societies and to overcome a sectoral and national approach to water while moving towards sustainable, integrated, cross-sectoral and transboundary management of water for both people and planet – leading to prosperity and peace. Investments are undertaken as a result of negotiated political agreements among widely diverse interests which define how to share common water resources.

The need for the creation of a new market and the introduction of financial instruments that allow the blending of public funds with private sector funds to finance sustainable water projects generating multiple benefits will unlock access to additional capital for municipalities and transboundary water bodies. This in turn will provide new and larger private-based capital to development projects in line with the 2030 Agenda. This new financing paradigm will support capacity building within transboundary water organizations and municipalities and change the game – in the sense that they will go to the market with their own master plans, pre-negotiated and based on the needs of the local community (rather than external conditionalities), and investors will compete to invest in these master plans. The Blue Peace financing instruments will have a meaningful impact in helping to achieve the SDGs and the Paris Agreement and will create real systemic change, leading to sustainable and economic development as well as peaceful societies.

Box 14.3 Reasons to invest in peace through water

1. **Investing in sustainable impact.** There is a growing demand for impact investing. The Blue Peace way of financing is actually impact investing – it enables the investor to generate positive, measurable social and environmental impact alongside a financial return.
2. **Good risk return profile.** It is an investment with a good risk return profile since there are a number of de-risking factors and mechanisms, as well as a good return on investment that can be expected.
3. **Long-term investment.** Long-term investments face lower volatility and are therefore less risky. Long-term investments also often provide tax advantages and have lower transaction costs.
4. **Multisectoral investment.** Where the interests of water, energy and food are balanced, it is possible to achieve higher returns on investment. Multisectoral dialogue and negotiation are key to maximizing benefits for all stakeholders and actors. Since these multisectoral investments are based on pre-negotiated joint investment plans, they have considered the different needs and interests involved and therefore reduce the risk of tension between the various actors, providing an improved risk return profile. Multisectoral investments are also less risky because of the diversified risk.
5. **Blended finance.** Blended finance is about coupling public and private as well as domestic and international resources. In blended finance arrangements, public finance, sometimes combined with philanthropic capital, takes over an important part of the risk mitigation to allow private investors to step in later. This strategy helps improve the risk return profile of investments and provides more security for private investors.
6. **Transboundary investment.** Investing in transboundary water projects incentivizes transboundary cooperation and promotes peace in the region. This in turn reduces risk through diversification (simply by having more than one country involved in the project) and facilitates an enabling environment for other projects to invest in the region, allowing for economic growth and sustainable development.
7. **Investing in water.** It is expected that water will in future become more valuable than oil as rising demand from people, industries and agriculture will apply pressure on the scarce water supplies worldwide (Uddin, 2018). To ensure long-term returns on investments in goods and services that are related to water, water has to be preserved in quantity and quality at both the entry and exit points of production systems. This implies ensuring that water does not become a scarce commodity and is traded accordingly.
8. **First mover advantage.** As this is a new financing mechanism in something that cannot yet be invested in – transboundary water cooperation / water and peace – there will be a first mover advantage for any investor at this stage of the process. Being first will allow these investors to establish strong brand recognition and customer loyalty before competitors enter the arena.

Notes

1. This chapter was largely inspired by the recommendation on financial innovation for trans-boundary water cooperation of the Global High-Level Panel for Water and Peace in its report, *A Matter of Survival* (GHLPPW, 2017); in particular, discussions among the authors on contributing to implementation of this recommendation revealed the need for such a publication. We thank the institutions that provided insight and access to the various actors who greatly assisted in our discussions, especially the Swiss Agency for Development and Cooperation, the United Nations Capital Development Fund and the Geneva Water Hub. We would like to also express our gratitude to other institutions that are working on implementation of the above-mentioned recommendation, such as the Earth Security Partnership and the Strategic Foresight Group as well as the authorities representing the Senegal and The Gambian rivers, for the open and constructive discussions we were fortunate to have with them. The views expressed by the authors do not necessarily represent those of their institutions.
2. We refer here to the perspectives and interests of different sectors and stakeholders such as energy, agriculture, industry, households and fisheries as well as the private sector, governments, citizens etc.
3. Source: [Blue Peace website](#).
4. The Blue Peace Index scores countries on their management of shared water resources across five pillars; see [Blue Peace Index web page](#).
5. Utilities are here referenced in generic terms and include companies, associations, foundations or any other institution with legal status allowing them to manage funds.
6. The twinning mechanism is based on the concept of twin towns (also called sister cities), which describes cooperative agreements between towns, cities or even counties in geographically and politically distinct areas to promote cultural and commercial ties.

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15

Taxing the Digital Economy: Alternative Revenue Generation for Local Governments

SHADE AMOLE

A functional and well-funded local government system proves to be an approach to accelerate development. Further, the COVID-19 pandemic and its containment efforts demonstrated the importance of local governments and their unique position in providing solutions to some of the world's most challenging problems. But the pandemic also exposed the inherent vulnerabilities in local government finances.

The primary source of funding for local governments typically consists of heavy allocations from the central government. Unfortunately, central governments in developing countries are saddled with debt and other developmental issues and do not prioritize local government funding to the extent they should. Thus, in developing countries, local government structures are often left underfunded, strive to maintain balanced budgets and commonly lack the authority to access financial markets. To provide a cushion for future economic shocks, local governments in developing countries should embrace innovation and find other avenues to generate income, notably in the digital economy.

This chapter is divided in three sections. The first explains the necessity of a functioning local government system and its role in developing countries' economic advancement. It describes the revenue generation limitations faced by local governments in developing countries, and the need to think outside the norm by seeking alternative methods of revenue generation. The second section delves into the digital economy, taxation of digital platforms, and the

benefits available for cities and local governments. The final section discusses Internet-based short-term vacation rentals and their impact on municipalities and local governments. It advocates that cities and local governments in developing countries should not shy away from tapping into the digital economy's revenue generation potential.

The importance of an effective local governance system

The local government system is the form of government closest to the people and arguably the most effective. Local governments determine specific local public needs and how these needs can be met. The purpose of an effective local government system is to provide an inclusive quality of life for the people who reside in that area. This inclusive quality of life would require services such as education, police protection, road building and maintenance, welfare pro-

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grammes, community water and drainage systems, and healthcare. Unlike in developed countries, however, these services can be deemed a luxury for local governments in developing countries. Reasons for this perception include lack of decentralization and autonomy, illiteracy of elected officials, lack of a skilled workforce, and – most importantly – lack of revenue and the inability to leverage or access the fiscal market.

Compared to their counterparts in high-income countries, local governments in developing countries have limited revenue generation capacity, which hampers their ability to address their citizens' social needs. The funding source for local government bodies in developing countries is limited in scope and generally dwindling. To build and sustain an effective local government system, it is crucial to improve current revenue generation capacities and introduce alternative revenue generation models to improve service and infrastructure delivery.

Impact of local government on the economy of developing countries

Most of the world's developing countries are characterized by low economic growth, massive unemployment, low income and investment, poor infrastructure, weak institutional capacity, extreme poverty, and economies that are highly vulnerable to external shocks and the adverse impact of global problems, pandemics and climate change. An effective local government system plays a crucial role in the economic development of any country. Local governments

worldwide create the foundation for the survival of small businesses within their communities, foster new enterprises and business, and take action to ensure that marginalized members of the community have access to decent livelihoods. As the public institution closest to the people, local government bodies' economic empowerment is an essential nexus to complement efforts at the central level. The ideal scenario is that national and central governments focus on economic issues appropriate to their jurisdictions, such as fiscal and monetary policy, large infrastructural investments, and international trade agreements and relationships. Just as central governments are in the best position to deal with those issues, local governments are ideally situated to tackle problems and barriers specific to their local economies and foster integrated development initiatives that directly affect the people. Local governments exist to bridge the gap national governments are too remote to fill. They are recognized as an essential instrument for rural transformation and the delivery of social service. The healthy, resilient communities that result are the building blocks of prosperous nations (UCLG, 2014).

**LOCAL GOVERNMENTS
WORLDWIDE CREATE
THE FOUNDATION
FOR THE SURVIVAL
OF SMALL
BUSINESSES WITHIN
THEIR COMMUNITIES.**

Obstacles impeding local governments' contribution to the economic growth of developing countries

Numerous constraints hinder local governments' contribution to the growth of developing countries. The major limitation is the lack of financial resources and the inability to generate sustainable revenue. The funding stream is usually limited for local governments in developing countries. For example, a 2016 study of local government finance carried out by the World Bank in Uganda showed that 90 per cent of local government financing was in the form of conditional grants earmarked for specific areas, mainly essential service delivery, leaving no room for infrastructural development (World Bank Group, 2016). These unconditional grants, combined with dwindling own source revenues, only cover recurrent expenditures, leaving no reserve in case of emergencies. The decline in local government revenue and population explosion have made Uganda's local governments more reliant on the central government for financing. According to this study, local governments in Uganda suffer from the problem of unfunded mandates, which results in subpar service delivery and perpetuates a cycle that does not enable businesses or encourage them to thrive.

The primary revenue source for local governments in developing countries comes from the central government through intergovernmental transfers. But heavy reliance on the central government may not accelerate development

for people in the community. Local governments need to focus on what they have rather than what they lack and be innovative in sourcing additional revenue generation by looking internally at existing potential.

The digital economy as a source of public revenue

Understanding the digital economy

The digital economy is the economic activity that results from billions of daily online connections among people, businesses, devices, data and processes. According to the Organisation for Economic Co-operation and Development (OECD), the digital economy enables and executes the trade of goods and services through electronic commerce on the Internet (OECD, 2012). The digital economy upends traditional notions about business structures and how con-

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THRIVE' (HUFBAUER
AND LU, 2018).**

sumers obtain goods and services. A popular digital economy website, TechCrunch, succinctly described the challenge thereby posed to traditional notions: 'Uber, the world's largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate. Something interesting is happening' (Goodwin, 2015).

More positively, according to Andrew Wyckoff (2016), the OECD Director for Science, Technology, and Innovation, the digital economy is a driver of inclusiveness that links communities in a 'global village', sharing information, ideas, and products and allowing countries to rise through the value chain. The digital economy has an important influence on the world's trajectory and on the societal well-being of ordinary citizens. It affects everything from resource allocation to growth and income distribution.

There is no one way to measure the size of the digital economy accurately, and experts recognize that there is some difficulty in evaluating its precise size due to its rapid evolution and the disagreement as to what constitutes a digital platform. As of 2017, research estimated that the digital economy was worth \$11.5 trillion globally, equivalent to 15.5 per cent of global gross domestic product (GDP) (Henry-Nickie, Frimpong and Sun, 2019). Moreover, it has grown two and a half times faster than global GDP over the past 15 years (Huawei and Oxford Economics, 2017).

Sharing in the wealth of the digital economy

The digital economy has brought about many benefits that may reduce the vast economic gap between developed and developing countries. And many wealthy countries reap the various benefits of the digital economy's success, but the story is not the same for low-income countries.

Technology creates both opportunities and challenges; however, it is undeniable that its revenue generation potential is essentially limitless. It takes time for legislation to catch up with technological advancements. However, developed countries find ways to work with industry stakeholders to regulate digital platforms and reap revenue generation benefits. Low-income countries should enact laws and make policies regarding digital platforms and their impact on their shores. If done correctly and effectively, such legislation and regulation could prove critical to the economic development they seek to achieve.

A large share of the growing market of digital platforms comes from developing countries. One such platform, Airbnb, notes on its website that 'according to the World Travel & Tourism Council (WTTC), travel to emerging economies is expected to increase at twice the rate of travel to advanced economies from now until 2030. By 2030, more than 1 billion travellers will arrive in emerging economies annually' (Airbnb, 2019c). The company has also experienced a surge across emerging destinations worldwide, especially those in Asia Pacific, Africa and Latin America. While increased tourism is a good thing, the revenue generated does not go into the coffers of the involved cities, municipalities and local governments.

**COUNTRIES MUST
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TO HARNESS THE
BENEFITS OF THE
DIGITAL ECONOMY TO
INCREASE COUNTRY
COMPETITIVENESS
AND ECONOMIC
DIVERSIFICATION,
AND IMPROVE
CITIZENS' LIVES
(UNCTAD, 2019).**

Taxing the digital economy

Taxing digital assets is challenging for everyone, but particularly for developing countries (Pathways for Prosperity Commission, 2019). Existing tax regimes in the least developed economies are inadequate to sufficiently address the pressing need to tax digital platforms.

Most companies that offer digital platforms are usually registered and domiciled in wealthy countries while providing goods and services worldwide. In earlier decades, multinationals like Unilever, Shell, Coca-Cola, Deloitte, Exxon-Mobil, and the like had to establish a physical presence in countries in order to sell their goods and offer their services. This circumstance subjected the companies to corporate taxation in the host country. In today's more virtual world,

physical presence is not essential to many multinationals' business models, enabling them to avoid corporate taxation in places where they operate online but maintain no physical presence.

There is ongoing controversy on the taxation of purely digital companies because of their complete lack of physical presence and existing tax treaties. The COVID-19 pandemic brought about renewed talks on the need to tax the digital economy: although many traditional business models had failed to withstand the pandemic's impact, digital platforms thrived. Several mechanisms for taxation of the digital economy exist; these fall into two basic types:

- **Direct**, including income tax, corporate tax and digital service tax (DST)
- **Indirect**, including consumption tax, value added tax (VAT), goods and service tax, tourism tax and occupancy tax

The form of taxation generating the most controversy is the DST. The DST is a tax on search engines' revenues, social media services and online marketplaces that derive value from users in various jurisdictions. The concept is attractive to both developing countries and wealthy nations alike. Since 2018, the European Union has sought ways to impose a DST on digital companies such as Google, Amazon and Facebook. The United Kingdom recently enacted a law levying a 2 per cent DST on local revenue of digital platforms (Jones Day, 2020). According to the government, 'this measure will ensure the large multinational businesses in-scope make a fair contribution to supporting vital public services'. The United Kingdom commits to ending the DST once an appropriate international solution is in place. France similarly had set out to levy a 3 per cent tax on digital companies' local revenue as of the end of 2020.

**ESTABLISHING
A STANDARD
FRAMEWORK FOR
DIRECT TAXATION
WILL ENABLE
DEVELOPING
ECONOMIES TO
BENEFIT FINANCIALLY
FROM THE DIGITAL
ECONOMY.**

To achieve uniformity, the OECD looks to reform the international corporate tax framework and establish a global minimum DST. Establishing a multilateral framework will enable developing economies that lack the might and capacity to engage in trade wars to benefit financially from the tech boom (Clavey and others, 2019). With potential revenues in the millions in play, developing countries can channel these funds to build their local government structures – entities that are the most beneficial to their country's development.

In the meantime, though, the DST is fraught with debates and controversies. Thus, based on the revenue deficits and funds depletion triggered by COVID-19, the immediate focus for governments will be to implement indirect taxes on the digital economy. An indirect form of taxation can be immediately implemented

in developing countries either through existing laws or an update of existing laws and policies, without subjecting developing countries to trade wars. Swift implementation will generally increase revenue.

Various countries have either proposed or implemented an indirect tax regime on both domestic and international digital platforms. The Nigerian Government recently passed the Finance Act of 2020. The law imposes a 7.5 per cent VAT on non-resident companies that transmit signals, sounds or images by electronic or wireless means regarding any e-commerce activity, provided it has a significant economic presence in Nigeria and profits are attributable to such activities. This will bring into its ambit digital platforms such as Airbnb and Netflix. Angola has a 14 per cent VAT on foreign providers of digital service, which must register as soon as they have an Angolan customer. The Bahamas has a 12 per cent VAT in place for all online marketplaces that advertise and facilitate vacation home rentals. Bangladesh requires non-resident vendors of digital services to consumers in the country to register for and collect VAT if the annual taxable sales exceed Tk 30 million, or approximately \$350,000¹; Costa Rica has a 13 per cent VAT on electronic and digital foreign providers' services. This list is not exhaustive (KPMG, 2021), and continues to grow as countries become more aware of the potential revenue generation capacity of taxing digital platforms.

**AN INDIRECT FORM
OF TAXATION CAN
BE IMMEDIATELY
IMPLEMENTED
IN DEVELOPING
COUNTRIES.**

As developing countries look to levy digital taxes to shore up their revenue base, it is necessary to factor in local governments' contribution to the growth of the digital economy and allocate to them their share of the revenue generated. Local governments in developing countries usually do not have the legal right to levy taxes on non-resident digital companies even though local governments bear the most impact of these companies' activities. The appropriate measure would be for the central government to levy the taxes and remit to the local government. Legislation, regulations and policies need to be in place to ensure the success of this scheme.

An alternative revenue source for local governments: Internet-based short-term vacation rentals

According to Statista, the total contribution of travel and tourism to the world's economy between 2006 and 2019 was \$9.25 trillion (Lock, 2021). Even given lower revenues because of the effects of COVID-19 on the travel industry, several cities and countries around the world have used shored-up revenue from tourism to combat the virus. And the tourism industry is poised for a comeback when people are assured of their safety to travel.

Tourism integrates many industries, including lodging, transport, attractions and travel companies; we focus here on lodging. In its broadest sense, 'tourism is defined as when people travel and stay in places outside of their usual environment for less than one consecutive year for leisure, business, health, or other reasons' (Lock, 2021). By a vast margin, travellers in recent years have opted to stay in short-term vacation rentals instead of traditional hotels. This

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preference for short-term vacation rentals stems from the fact that travellers like to stay among locals, participate in their culture, and get the home feel even though they are away from home. The majority of companies offering these services are Internet-based and do not own property; their business model is predicated on people listing their properties on these sites for short-term use.

Airbnb, the most popular digital platform that offers short-term vacation rentals, has witnessed a surge in demand for listings in emerging economies in Africa, Asia and the Pacific, and Latin America. The company estimates that by 2030, over 400 million guests will have used the platform to arrive at listings in emerging markets (Airbnb, 2019c). In 2014, Airbnb listings from Africa, Asia and the Pacific, Latin America and the Middle East were at 15 per cent; by 2019, those regions accounted for over 30 per cent of all Airbnb listings (Airbnb, 2019a).

Adverse effects of short-term rentals on cities and local governments

Short-term vacation rentals create an avenue for ordinary people to become microentrepreneurs and diversify their income by utilizing what they already own – their homes. When left unchecked, short-term vacation rentals result in more negative situations for cities and local governments than positive. Local governments and cities bear the adverse effects of an unregulated short-term vacation rental regime. Following are a few issues typically encountered.

- **Housing shortage.** Renting out homes on a short-term rather than long-term basis has become preferable, and lucrative, for homeowners. With only a limited amount of housing in cities and municipalities, this leaves traditional renters with a scarcity of homes available for long-term rent – and those are frequently priced at exorbitant rates. And investors who do not reside in the area purchase real estate for the sole purpose of utilizing them for short-term rentals. City governments, including London, New York, Johannesburg, Amsterdam and

Barcelona, have imposed regulations such as reducing the duration of home-sharing on digital platforms, or a registration requirement on the homeowners. With the projected rise in tourism to developing economies and increased urbanization, it is only a matter of time before these problems replicate.

- **Less reliable revenue source.** Tax payments from traditional hotel businesses, in the form of lodging and consumption taxes, have long been a reliable revenue source for local governments and cities. Local governments also benefit from the informal revenue generated due to a hotel being in their locality. Though hotels and Internet-based short-term rentals perform the same functions, the tax policy for hotels is set and predictable, while Internet-based short-term rentals pay little to no tax. As tourists and consumers shift towards digital-based vacation stays, this creates a dent in local government coffers.
- **Impact on local labour market.** Traditional lodging entities like hotels are job creators and employ many workers, from cleaning staff to front desk workers. These workers contribute to the tax pool of cities and local governments. With a higher demand for short-term vacation rentals, the job market for hotel workers is reduced significantly, which negatively affects the revenue generated for local governments because those workers contribute to commerce and taxable income.
- **Impact on existing service delivery and infrastructure.** Cities mostly plan their infrastructure and service delivery according to their estimated population. For typical local governments, essential services may include sanitation (both sewer and refuse), water, street repair, library, schools, food inspection, transport, fire department, police, ambulance and other health department services. Residents pay taxes to keep these services and infrastructure up and running. Untaxed short-term vacation rentals enable transient residents to utilize services and infrastructure without contributing to their maintenance.

Taxation of Internet-based short-term vacation rentals

As emphasized in this chapter, the impacts of Internet-based short-term vacation rentals are mostly felt in cities and local governments. It is thereby appropriate that operators of these businesses pay taxes to support local government and city structures. Given the unresolved OECD debate on DST and trade war debacles, it may violate international protocols to levy direct taxation on non-resident digital companies. Thus, the most appropriate form of taxation is a VAT or other indirect taxes.

**LOCAL GOVERNMENTS
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PARADIGM.**

In some cities and local governments in developed countries, including the United States and France, Airbnb has made arrangements to collect and remit provincial taxes to the state and country on behalf of hosts. Airbnb imposes the taxes at the time of booking and remits same to the applicable tax authority on the hosts' behalf. Additionally, as explained on the Airbnb website, 'Airbnb is required to collect VAT on its service fees in countries that tax electronically supplied services. Currently, that includes all countries in the EU [European Union], Albania, Chile, Colombia, Iceland, Mexico, Norway, Saudi Arabia, South Africa, Switzerland, and Uruguay. This list also includes Japan, where consumption taxes are assessed'².

On its website, Airbnb noted that, as of the end of 2019, it had reached a landmark cumulative \$2 billion in tourist-related taxes collected and remitted to local governments on behalf of the global host community for the past four years (Airbnb, 2019b). The beneficiary local governments were all in the United States, Canada, Latin America and Europe.

Things are not as clear-cut or beneficial in developing countries, many of which have not fully grasped the revenue generation possibilities and adverse effects of Airbnb and its peers. Moreover, many have yet to regulate the activities of short-term rentals because their laws and regulations have not kept pace with the digital revolution. Short-term rental companies themselves are not highly motivated to protect the interests of developing countries, or the local governments therein. Although Airbnb encourages hosts in several developing countries to manually calculate applicable taxes and add it to their fees on the booking page, this approach does not foster transparency or consistency and will deprive countries of revenue.

Airbnb takes pride in being an industry leader and claims to support 'revenue generation for thousands of small and medium cities' (Airbnb, 2019b). To date, however, local governments in developing countries that are in dire need of revenue for necessary infrastructure development are not accounted for in the Airbnb paradigm.

How local governments can benefit from short-term vacation taxation: a tale of two cities

Kumasi, Ghana

Kumasi is the second-largest city in Ghana, covering 254 square kilometres, with 10 submetropolitan areas. The city boasts a rich cultural heritage and successfully

blends its traditional and modern cultures. It is located strategically in south-central Ghana, and all major roads converge at the city centre (see figure 15.1). Kumasi has a population of about 3.4 million and is part of the Millennium Cities Initiative³, a project of the Earth Institute at Columbia University established in early 2006 to help sub-Saharan African cities achieve the Millennium Development Goals. Kumasi is one of the most visited cities in Ghana, largely because of its significance to the Ashanti kingdom, which makes it an attractive destination for local and foreign visitors.

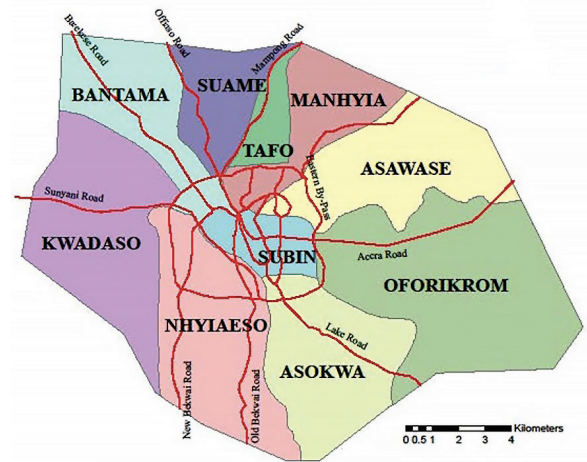
Tourism is a significant area of focus for Ghana's central government. Ghana's tourism sector is experiencing steady growth. As of July 2018, Airbnb guest arrivals to Ghana had increased by 141 per cent (Airbnb, 2018). For 2019, the central government organized the Year of Return for people of African descent in diaspora to commemorate the 400-year anniversary of enslaved people landing in the United States. Ghana's Ministry of Tourism claimed that the event injected about \$1.9 billion into the economy.

Kumasi generates revenue from business operating permits, property rates, developmental grants, and fines and taxes. In the wake of the pandemic, the city's budget decreased 30 per cent (\$2 million), affecting ongoing projects.

A further strain on its budget is meeting the ongoing challenge of climate change, embodied in Sustainable Development Goal 13. As the United Nations has noted, 'climate change presents the single biggest threat to development, and its widespread, unprecedented impacts disproportionately burden the poorest and most vulnerable'⁴. Kumasi is experiencing the adverse effects of climate change with flooding and warming temperatures, which have become frequent in the last few decades (Cobbinah and others, 2019). To a large extent, this is attributable to the encroachment and destruction of green spaces and inadequate solid waste management practices. For Kumasi to continue to position itself as a city destination of the future, these concerns must be addressed.

The tax rate for traditional hotels in Ghana is set at 22 per cent. To generate additional revenue for cities and local governments including Kumasi, indirect

Figure 15.1 Kumasi submetro areas and major roads



Source: © M. Maoulidi, Millennium Cities Initiative, Earth Institute, Columbia University.

taxes such as VAT, occupancy or consumption tax can be made applicable to the Internet short-term vacation industry. Kumasi could direct the alternative revenue derived from the taxation of short-term vacation rentals to infrastructure needs, such as combating incessant flash floods and climate change.

Kampala, Uganda

Kampala is the capital city of Uganda, with a population of about 1.65 million. Uganda has some of Africa's most diverse wildlife, dramatic landscapes and immersive cultural experiences; the country is working to position itself as a premier destination in Africa. Kampala boasts such tourist attractions as the Kasubi Royal Tombs, the Ndere Centre, the Uganda National Museum and Kabaka's Palace. The city is the first point of arrival for international travellers to Uganda through the Entebbe Airport.

The Kampala Capital City Authority (KCCA) manages the city of Kampala. It generates own source revenue from property rates, business license fees, ground rents, commercial road user fees, local service taxes, market taxes, advertising and the like. Kampala's development partners include the World Bank, the European Union, the Netherlands and the Japan International Cooperation Agency.

**COLLECTION AND
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Uganda's Local Governments Act of 2008 explicitly authorizes and empowers local government bodies such as the KCCA to charge taxes on 'all hotel and lodge room occupants...[which are] to be collected and paid by hotel owners'. The act defines a hotel as 'a house intended for accommodating travellers or visitors for payment' (*Uganda Gazette*, 2008). By implication, a hotel can be an inn, a guest house, a serviced apartment, a motel or any suitable structure for a commercial residence. Within this broad definition, Internet-based short-term vacation rentals such as Airbnb should be included under the jurisdiction of the KCCA for local hotel tax collection purposes. However, a careful reading of the law may imply that the hosts/owners of the short-term rentals, as opposed to Airbnb, ought to be responsible for tax collection and remittance. Collection and remittance of taxes by hosts do not provide accountability, and thus should be discouraged.

The local hotel tax ranges from \$0.54 to \$2.00 per night. The tax was introduced to raise revenue for urban authorities to offer services such as street lighting, road and drain maintenance, garbage collection etc. The increasing popularity of Airbnb and its ilk in Uganda warrants immediate attention in terms of its taxation so as to not lose revenue needed for essential services.

About 60 per cent of Kampala's urban population lives in slums. The KCCA requires additional revenue sources to alleviate these conditions, not least because of the associated epidemiological risks. According to the United Nations Development Programme, an estimated 828 million people around the world live in slums. To attain Sustainable Development Goal 11 by 2030 and make our cities and human settlements inclusive, safe, resilient and sustainable, Kampala must be aggressive in combating its slum problems. Alternative revenue generation and affordable quality housing offers a solution in this regard.

The need to expand local government revenue sources is increasingly important. As cities like Kampala continue to attract visitors and further urbanize, the activities of short-term vacation rentals must be monitored and regulated. Regulations include limiting the number of days properties can be rented in a year, and registering property to ensure that rentals are not concentrated in an area.

Implementing a tax regime for digital vacation rental companies to benefit local governments

Unregulated short-term vacation rentals result in tax losses across all levels of government, and companies like Airbnb will not voluntarily remit taxes without some arrangement or agreement in place. As noted earlier, until a standard regime is in place, central governments can implement indirect taxes such as VAT, service and consumption with immediate effect. A policy or an amendment to existing laws can be implemented to bring digital companies into compliance. Once laws and policies are put in place, central governments should enter into collection and remittance agreements with the digital platforms. For example, for short-term vacation rental digital platforms, central governments can enter into a voluntary collection agreement through their department of revenue with the companies offering these services. The agreement will facilitate the reporting, collection and remittance of VAT to the central government either monthly, quarterly or annually, depending on the most suitable model. For transparency purposes, it is advised that an audit process be negotiated and included in the voluntary collection agreement.

Given that many of digital platforms are not domiciled in developing countries, local governments may not be able to access direct taxes on them, were any to be had. They should look instead to institute some form of revenue sharing with the central government in its taxation of digital platforms. As described above, central governments can impose indirect taxation on these digital platforms – and then remit same to local governments measured by the short-term vacation stays in each local government area.

Challenges

Several challenges face central and local governments in pursuing alternative revenue generation through digital service providers.

- **Accuracy of remittance.** The collection and remittance of taxes should be the responsibility of the relevant digital service providers, with taxes collected and remitted to the central government in a lump sum by the respective digital platform. This model, however, raises two issues: (i) How can we determine the accuracy of funds remitted by the companies to the central government? and (ii) How can we determine the accuracy of funds remitted by the central government to the local government? As to the first issue, unlike a traditional hotel with a physical presence, it is somewhat difficult to ascertain the exact number of accommodations available for rent on digital platforms and the taxes collected on them. Governments might have to set up an oversight and audit system to ensure accuracy, rather than rely on an honour system. This audit and oversight process should be discussed during the voluntary collection agreement negotiation process and incorporated into the agreement. As to the second issue, it has been established that the local government needs this money the most. The central government is only acting as a conduit between the digital platform and consumers for tax remittance purposes. To ensure adequate housing for its residents, local governments in some countries require hosts to register their property before listing them on digital platforms like Airbnb. With these data on hand, local governments can audit the tax remitted to them by the central governments against the registered homes on the digital platforms. Various types of short-term rental compliance software can be employed to assist local governments in monitoring rental activity in their area. This field is constantly evolving, and much fine-tuning will be required.
- **Inequality of bargaining power.** For local governments to receive the maximum revenue for their contributions to the sharing economy, they need experts at the table. Most digital platforms have agreements in place all over the world, and they have sophisticated negotiators. Local governments need to engage expert consultants, train their staff and ensure that they present a unified front to negotiate their government's best position.
- **Financial literacy of local government officials.** Proper management of additional and alternative revenue is critical. Financial literacy is the 'ability to make informed judgments and effective decisions regarding the use and management of money' (Miller, 2020). Local government officials at all

levels – particularly decision-makers – must undergo financial training. Without financial literacy in place, the alternative revenue generated may not be accounted for or be mismanaged.

Conclusion

Local government advancement is a primary key to the development of any country. In developing countries, local government systems are often neglected and underfunded, mainly because the central government itself is struggling.

Properly harnessed, technology can play a vital role in shaping the financial future for local governments. Local governments in developing countries should not wait their turn to take advantage of the digital revolution. Developed cities of the world from Barcelona to Boston are securing their cities' financial future by harnessing the revenue generation potential of the digital economy. In the case of short-term vacation rentals, cities in developing countries should pre-empt issues like rent control and housing shortage and put regulations in place before the industry becomes uncontrollable. Airbnb restated its efforts to work with countries and their tax systems, issuing the following statement: 'Airbnb has worked with and continues to support the OECD in their efforts to develop model tax information reporting rules for governments worldwide. We encourage governments around the world to strongly consider adopting the rules and avoid unilateral measures' (Airbnb, 2020). While countries await the OECD's model tax rules, developing countries can immediately implement indirect taxation that conforms to their needs and interests.

Local government leaders have a unique understanding of the financial and economic obstacles that have negative impacts on their communities. They are in a strong position to drive initiatives that make a lasting difference. However, it may be challenging to embrace digital development strategies and economic sufficiency without intellectual leadership or expert engagement. The ideal council and staff pool will possess the skills and knowledge needed to embrace technology and manage financial resources effectively. Partnerships can be leveraged to build healthy financial well-being for local governments, contributing to their respective country's broader economy. There is no one size fits all approach; individual governments should propose policies that meet their legitimate interests to continue to adapt in a rapidly changing world.

**PROPERLY
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Notes

1. Based on a 31 December 2021 exchange rate of 1 Bangladeshi taka = \$0.011668.
2. Airbnb website, [How do taxes work for hosts?](#).
3. See the [Millennium Cities Initiative website](#) of Columbia University's Earth Institute.
4. Source: United Nations [Sustainable Development Goals Knowledge Platform](#).

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