02

PART II

Case studies

INTRODUCTION

The five case studies analysed in Part II aim to ground in concrete examples the understanding of blended finance's role in LDCs and to contribute to a richer description of the challenges and opportunities of applying blended finance in LDCs. While the sample is necessarily limited, the studies aim to capture some of the diversity that characterizes blended finance in LDCs.

The five countries covered represent a fairly diverse geographical sample, with different social and macroeconomic conditions and enabling environments. Four are in Africa, the continent with the highest density of LDCs: Tanzania, Mali, Rwanda and DRC. The fifth is Myanmar, one of the fastest-growing LDCs.

The case studies also examine the application of blended finance in different sectors. Two case studies involve the infrastructure sector: a solar power project in Mali and a water supply infrastructure project in Rwanda. They highlight the challenges of attracting private capital to countries where the affordability of user tariffs for basic infrastructure is limited and PPP regulation is still developing. The African Development Bank (AfDB) (in Mali) and the Private Infrastructure Development Group (PIDG) (in Rwanda) were extensively involved in project development and as providers of loans, grants and technical assistance. Their involvement and that of other concessional providers helped mobilize commercial loans and equity for projects that would otherwise have been unbankable.

Given its focus in this report, three of the case studies concern the missing middle. As highlighted in Part I, these blended finance projects present different opportunities and risks from infrastructure projects.

One case study involves the agriculture value chain: a project to scale up a sunflower oil processing business in rural Tanzania. This study highlights the difficulty in raising commercial loans for SMEs with limited collateral, informal budgeting and reporting practices, and promoters that, while commercially savvy, lack the formal training necessary to secure financing from commercial lenders. UNCDF supported this project by providing technical assistance, a grant and a concessional loan, helping to attract a larger commercial loan from a local bank.

A further case study involves the microfinance sector: a hedging facility aimed at crowding in international lenders to MFIs in Myanmar. This study highlights the difficulty in raising external capital for financial institutions in countries subject to currency depreciation and undeveloped capital markets. It also shows how regulatory restrictions can create a real challenge for the growth of a business sector, regardless of underlying consumer demand. TCX provided a currency hedging solution, subsidized by the Livelihoods and Food Security Trust Fund (LIFT), a multi-donor trust fund, which helped local MFIs raise significant amounts in commercial loans from international DFIs so that they could expand their operations.

The final case study involves the private equity sector: a first-time fund to support growth of SMEs in DRC and CAR. This study highlights the difficulties in raising capital for SMEs lacking collateral and track record and the need for more flexible financing solutions, such as private equity and long-term loans. It also shows the challenges in fundraising from commercial investors faced by first-time private equity funds in frontier markets. XSML, a Dutch private equity fund, managed to raise capital from DFIs and deploy it to more than 50 SMEs. Thanks to a concessional technical assistance facility, it also helped investees improve budgeting, ESG standards and reporting.

Each case study discusses a specific development challenge and related barriers, the blended finance solution adopted and key takeaways. Five general considerations emerge from the case studies:

First, to succeed, projects need to be supported through their life cycle—from preparation through to financing and transition to commercial solutions. Whether in infrastructure or SMEs, even in difficult contexts and underserved regions in LDCs, there are opportunities for profitable investments. However, blended finance projects require a hands-on approach by concessional providers and a significant time commitment, especially in project preparation. In Tanzania, UNCDF devoted 18 months to due diligence and to bringing the project promoter up to speed with the governance, accounting and disclosure standards required by commercial lenders. UNCDF also continued to provide support after the financing stage of the project. The solar project in Mali was initiated in 2012, when the developer first approached the government, and took a while to get off the ground. The Rwanda project was initiated in 2010, but only reached financial close at the end of 2017; a restructuring of Rwanda's water and electricity utility took place in between. The TCX/LIFT hedging solution in Myanmar was implemented after significant preparatory work on the ground, including a proactive dialogue with the regulator and government stakeholders. In DRC and CAR, XSML has provided technical assistance to its portfolio companies to help them improve their operations and skills.

Second, going from individual projects to scale is important but requires systematic approaches. Because of the effort often required by blended transactions in LDCs—coupled with smaller transaction size—scalability and replicability become important factors when concessional providers decide to commit to a certain project, alongside efforts not to distort markets or over-subsidize the private sector. UNCDF's involvement in the Tanzania project is part of its broader Local Finance Initiative, aimed at supporting a range of missing-middle projects in LDCs. Based on the lessons learned from these projects and the findings from a recent mid-term evaluation, UNCDF is helping LDC governments to set up national platforms that will take over the activities of the programme when it comes to an end. XSML, with its flexible capital, presence on the ground and technical assistance, has provided growth funding to dozens of SMEs in DRC and CAR since 2010.

Connected to this, the case studies also highlight the need for robust M&E as well as the capture and sharing of knowledge, especially in LDC markets. In Mali, for instance, where the first utility-scale on-grid solar photovoltaic power plant is being deployed under an independent power producer structure, performance during project implementation will be monitored and reported to relevant stakeholders. The types of lessons captured could inform other similar projects aimed at addressing Mali's large power deficit.

Third, early and strategic engagement with national authorities and other government stakeholders supports national ownership. The success of blended projects in LDCs—especially infrastructure projects—hinges on close collaboration and coordination not only among multiple commercial and concessional providers but, crucially, government stakeholders. Rwanda is a case in point: an infrastructure developer contributed equity; the AfDB and the Emerging Africa Infrastructure Fund (EAIF) provided commercial loans; other PIDG units facilitated the project through a grant and technical assistance; and the local utility signed a long-term PPP agreement, guaranteed by the government. Mali presents similar features: three equity co-investors, two commercial lenders, a concessional lender and a power purchase agreement with the national utility, backed by government and IDA guarantees.

Fourth, in LDCs the path to full commercial solutions, involving private investors, can be very gradual, and DFIs may initially be the main investors in some cases. In the case of infrastructure projects, given social equity considerations and tariff affordability constraints, a full commercial solution may not be possible for a long time. In the case of the missing middle, this may include mobilizing domestic investments. It is important to maximize the demonstration effects of individual transactions as a way to support commercial replication.

In the Mali and Rwanda cases, loans were provided by a development bank, a DFI and a donor-funded infrastructure facility; as business models and transaction structures become proven, private lenders could be involved in future financing rounds. In Myanmar, the hedging solution mobilized primarily DFI loans to MFIs; as the microfinance sector reaches critical scale, in part because of the funding facilitated by TCX/LIFT, and if regulatory bottlenecks are resolved, MFIs might be able to access private sources of capital more directly, alongside domestic savings. In the Tanzania case study, UNCDF specifically sought to mobilize domestic investors into the project; not only was their risk tolerance for supporting SMEs ostensibly higher, among other reasons because they faced no foreign currency risks, but the engagement of one local investor can demonstrate to others that such projects in their own countries can be financially viable investments.

Finally, the proactive involvement and leadership of national authorities is a crucial factor in addressing enabling environment barriers. This highlights the importance for providers of concessional finance to: (i) use lessons learned from blended transactions to support governments to improve the investment climate; (ii) ensure, where possible, that the deployment of concessional resources does not substitute for or delay required reforms; and (iii) ensure that there is greater coordination between blended transactions and other efforts to support governments in improving the enabling environment. In Myanmar, MFIs are only allowed to borrow at local currency rates capped by regulation. Because of this cap, absent the TCX/LIFT hedging facility, international lenders would not be able to fund local MFIs at rates commercially attractive to them. The infrastructure projects in Mali and Rwanda show the importance of regulatory dialogue to design PPP concession frameworks that reward commercial investors while ensuring service affordability.

CASE STUDY 1

DEMOCRATIC REPUBLIC OF THE CONGO AND CENTRAL AFRICAN REPUBLIC

A FIRST-TIME PRIVATE EQUITY FUND

Development challenge

In 2010, when the fund in this case study was launched, DRC had seen strong headline GDP growth, but the poverty rate stood at 71 percent[177] and the country was looking to recover from years of conflict. Today, DRC ranks 176th out of 189 countries on the UNDP Human Development Index,[178] and is heavily dependent on the commodity industry. Macroeconomic indicators such as GDP, exchange rates and inflation can fluctuate significantly with commodity prices. Other sectors of the economy remain underdeveloped, as is the financial system, with few banks catering to the small formal sector.

For its part, CAR is ranked the country with the second lowest level of human development in the world.[179] Around the time the project was launched, the country saw a modest increase in GDP growth from 3.3 percent in 2011 to 4.1 percent in 2012, but a subsequent 36 percent contraction in 2013 following civil conflict.[180] The primary sector currently accounts for over 50 percent of the country's economy, and agriculture is the main economic activity: over 70 percent of the population are engaged in subsistence farming. The country is endowed with significant mineral reserves and, prior to 2013, was ranked 12th in the world as a producer of rough diamonds (according to volume).[181]

SMEs can be especially important drivers of economic growth, innovation and job creation, including in countries affected by crisis. The availability of SME finance is positively associated with the number of start-ups—an important indicator of entrepreneurship—as well as with business dynamism and innovation. Moreover, SME finance allows existing firms to exploit growth and investment opportunities.[182]

Yet, as Part I in the report notes, SMEs in LDCs often lack access to the capital they need to grow and thrive. In LDCs, only 25 percent of small firms and 40 percent of medium-sized firms have bank accounts.[183] In DRC specifically, there can be little to no long-term financing available for SMEs—the maximum credit duration is typically six months to two years, and in exceptional cases up to three or four years. As a result, commercial banks mainly finance trade businesses, rather than production, agriculture or services, where long-term credit is needed. Further, interest rates can be high, typically ranging from around 12 percent to 40 percent per year. Most loans are not investment loans, but rather used to finance working capital or to overcome cash flow shortages.[184]

Barriers to private-sector investment

In DRC, the main constraints to access to finance for SMEs include: a lack of financial products customized to their specific needs; the perception of risk of investing in SMEs; the inflexibility of credit disbursement processes and practices at financial institutions; the inability of SMEs to provide the required collateral; and concerns over the management skills of SME owners.[185]

177 International Monetary Fund (2010). 'Democratic Republic of the Congo: Poverty Reduction Strategy Paper', IMF Country Report 10/327, Washington, DC, 2010. https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Democratic-Republic-of-the-Congo-Poverty-Reduction-Strategy-Paper-Progress-Report-Joint-24301.

178 United Nations Development Programme (2018). 'Human Development Indices and Indicators. 2018 Statistical Update'. New York: UNDP.

179 Ibid.

180 United Nations Development Programme (2017). 'Country programme document for the Central African Republic (2018-2021).' New York: UNDP. http://undocs.org/DP/DCP/CAF/4.

181 Ibid.

182 Beck, Thorsten, and Robert Cull (2014). 'Small-and Medium-sized Enterprise Finance in Africa'. Washington, DC: Africa Growth Initiative at Brookings. https://www.brookings.edu/wp-content/uploads/2016/06/SME-Finance-in-Africa-Designed_FINAL.pdf.

183 International Trade Centre (2015). 'Competitiveness Outlook 2015: Connect, Compete and Change for Inclusive Growth'.

184 KfW (2011). 'Financial Institutions' Challenges to Provide Credit in the Democratic Republic of Congo: Experiences from Financial Cooperation'. Frankfurt am Main: KfW. https://www.kfw-entwicklungsbank.de/Download-Center/PDF-Dokumente-Sektoren-Berichte/2011_06_Congo-Kredit_E.pdf.

185 See, for example, http://www.elanrdc.com/sme-finance.

To bridge this gap, there was and still is a need for governments and market players to strengthen existing, traditional credit channels (e.g. bank finance), as well as to expand SME financing options. Ripe investment opportunities with development impact exist even in complex operating environments, but they remain unexploited due to the lack of risk capital and long-term financial support.

In countries such as DRC and CAR, SMEs are often reliant on straight debt to fulfil their start-up, working capital and investment needs. The need for a wider range of terms and conditions (e.g. tenor and security coverage) make mezzanine capital, equity and quasi-equity important types of alternative financing for SMEs there. By investing risk capital, private equity investors can become partners in a firm's growth, providing technical expertise and networks, driving operational advances and improving ESG standards.

Currently, there is very little private equity in many of Africa's LDCs. In addition to higher operating costs in these countries, management costs tend to be high relative to the unit values of the transactions, which are often small in an industry where certain costs (e.g. those arising from pipeline origination and deal due diligence) are inescapable. Attracting private investment—domestic or international—can be very difficult, with costs having an automatic knock-on effect on net profitability for investors.

Against this background, DFIs remain a crucial source of capital for private equity funds in LDCs, especially in countries where most private investors—outside sectors such as extractives—are reluctant to allocate resources. DFIs can play an important role by providing the early financing needed to prove the commercial viability and attractiveness of investing in such vehicles and countries. Yet, even then, attracting private finance to support SMEs in crisis or post-crisis settings remains challenging. That is why providers of development finance have considered taking on an even more catalytic role by creating new fund managers in LDCs (e.g. private equity funds) and backing intermediary partners with adequate commitment and capability to reach SMEs.

Blended finance solution

The Central Africa SME Fund (CASF) is a $19 million fund that provides private equity, long-term debt and technical assistance to SMEs in DRC and CAR. CASF leverages a grant-funded technical assistance facility to support SMEs pre- and post-investment. The fund aims to achieve sustainable economic development by: (i) encouraging entrepreneurship; and (ii) creating a local manufacturing, services and agricultural base to provide Central African economies with locally produced goods and services.

CASF was launched by XSML in November 2010. XSML is an independent private equity fund manager, founded in 2008, with a focus on frontier markets in Central and East Africa. CASF was the first of several private equity funds launched under the IFC's SME Ventures Program, which provides risk capital and technical assistance to locally based fund managers to drive growth and job creation, with an emphasis on crisis-and conflict-affected countries. CASF is the first private equity fund in DRC and CAR to provide scarce, high-risk capital to SMEs. IFC subscribed to $12.5 million in equity, with the intention of mobilizing a total of $25 million for the fund from other DFIs and the private sector.

In addition to equity, IFC also provided XSML with grant capital for a small $1.3 million technical assistance fund. Operating in DRC and CAR is not easy. Key challenges include scarcity of qualified human resources, high operating costs, lack of electricity and basic infrastructure, corruption, concerns over the macroeconomic as well as the political and security situation, and lack of transparency. While SMEs in DRC and CAR hold potential to generate attractive returns for investors, providing only capital is not enough—businesses need expertise and guidance to achieve sustainable growth. Therefore, in addition to capital investments, pre- and post-investment technical assistance is an important part of CASF's work, including business plan development, strengthening of financial systems and controls, and ESG support.

Through the IFC's anchor investment and accompanying technical assistance funds, XSML was able to attract additional equity investments from FMO and the Lundin Foundation. FMO committed $5 million equity from the MASSIF Fund, which FMO manages on behalf of the Dutch government. MASSIF provides both concessional and quasi-commercial investments in the form of seed capital, local currency debt, and mezzanine structures to direct equity and investment funds. In addition, the Lundin Foundation, a Canadian non-profit organization, committed $1.5 million. CASF closed at $19 million, less than the $25 million target, which indicates the significant challenges to raising capital—commercial or quasi-commercial—for private equity in DRC and CAR.

With offices and a team on the ground in DRC (Kinshasa) and CAR (Bangui), XSML developed a model inspired by private equity: highly selective and providing close management support. CASF targeted investments in at least 30 SMEs across various sectors, all financed through secured loans. In addition, XSML acquired minority equity stakes in about 40 percent of the companies. Ultimately, CASF allocated 90 percent of its risk capital to DRC and 10 percent to CAR, with an investment size ranging from $100,000 to $500,000. Key investment criteria included: (i) economic impact: in-country production and/or increased access for the general population; (ii) collaborative mindset: a willingness to work with the fund manager towards common goals; (iii) growth potential: opportunity for business growth; and (iv) track record: experience in the focus sector or proven success in business.

Following the success of CASF in deploying and managing invested capital, XSML closed its second fund, the African Rivers Fund (ARF), in February 2016 at $50 million. ARF has an expanded geographical focus—adding Uganda, the Republic of the Congo and Burundi to the eligible country list—and an increased target investment size ($250,000 to $5 million). The three existing investors in CASF—IFC, FMO and the Lundin Foundation—were joined by additional capital providers, including the Belgium Investment Company for Developing Countries (BIO), CDC, the Dutch Good Growth Fund and Proparco, the French development finance institution. ARF also has a technical assistance facility for pre- and post-investment support to investees, with $1.3 million contributed by IFC and the Dutch Good Growth Fund.

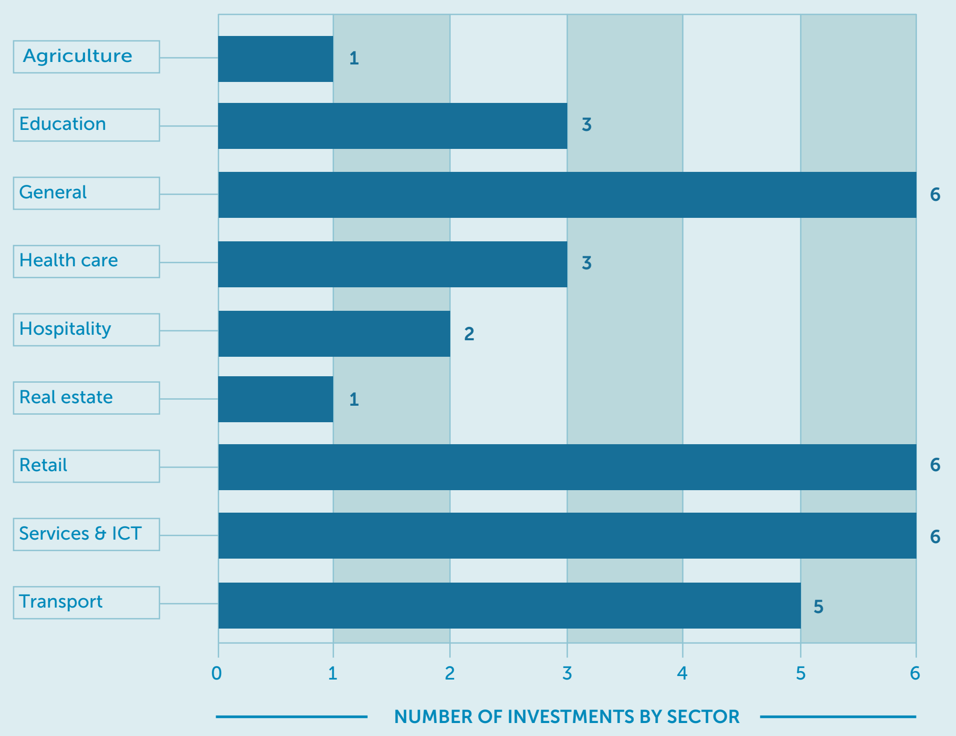
Figure 21 outlines the current portfolio by sector across all eligible countries (Burundi, CAR, DRC, Republic of the Congo and Uganda).

Outcomes

CASF supported underserved SMEs, creating opportunities for economic and social development. CASF became fully invested in 2015, providing finance to 32 SMEs across 10 sectors in DRC and CAR. Since February 2016, the new fund (ARF) has made investments in 19 companies in a range of industries and has committed 72 percent of its capital. CASF has exited four investments completely and has so far returned over 50 percent of invested capital to investors, performing in line with initial return targets.

This track record makes XSML the most active private equity investor in both DRC and CAR. CASF's tailored investment offerings and pre- and post-investment technical assistance have created strong business partnerships and sustainable companies that positively contribute to the economic and social development of the Central African region. Investee firms have expanded their businesses, created significant numbers of jobs and provided essential goods and services to their local populations. More than 500 jobs have been created at portfolio companies since investment by CASF alone.

FIGURE 21. Current portfolio by sector



Takeaways

1. Even more challenging contexts provide many profitable opportunities that are waiting for investment.

With the right support, SMEs even in more challenging contexts offer growth potential, as evidenced by XSML's ability to invest its funds—both CASF and ARF—in a short time period. XSML invested over 50 percent of ARF's total capital within the first two years.

The public and philanthropic sectors can play a catalytic role in sponsoring riskier, impact-focused funds and projects, and should consider supporting even more instruments (e.g. private equity funds) and backing intermediary partners with adequate commitment and capability to reach SMEs.

2. Crowding in private commercial investors—particularly in crisis or post-crisis settings—is difficult.

CASF demonstrates both the challenges associated with attracting private commercial capital to crisis or post-crisis settings, despite market opportunities, and the important role DFIs and foundations can therefore play in supporting SMEs. Likewise, while XSML attracted additional development capital to ARF, it did not mobilize private commercial capital.

This further underscores why efforts to crowd in additional capital—in this case for SMEs—must be complemented by government-led efforts (with backing from donors where appropriate) to improve the business enabling environment and investment climate through policy reforms and enhanced legal and regulatory frameworks.

3. A combination of financing and technical assistance is particularly useful to SMEs.

DFIs can play a catalytic role in sponsoring riskier, impact-focused funds and projects. SMEs benefit from being supported with more than just funds. In addition to equity and quasi-equity finance, the second category of resources needing rapid deployment is technical support. Private equity funds can use such resources to benefit the companies in which they are investing. Through investment capital, technical support and active management, fund managers can optimize the value of the business for exit and longer-term growth.

Between the two funds, XSML has provided technical assistance to more than 35 of their portfolio companies to help them improve their operations and skills. XSML provides both pre- and post-investment technical assistance, but primarily post-investment and with an emphasis on financial management as well as ESG reporting. As early-stage companies begin to grow and mature, they require increasingly robust and sophisticated systems for financial management. SMEs greatly benefit from support to manage cash flows, generate and analyse financial statements, develop financial plans and structure capital. Many impact-driven investors, such as XSML, also use technical assistance to improve companies' ESG compliance and adherence to other international and regulatory standards.

CASE STUDY 2

MALI
A SOLAR POWER PROJECT

Development challenge

Mali suffers from a deficit in power generation capacity, owing to a combination of underinvestment and growing electricity demand. The electrification rate is around 35 percent nationwide.[186] Rural areas are particularly underserved. Growth in demand is significant—estimates indicate 10–12 percent per annum[187]—driven by demographic trends and economic expansion, particularly in the mining sector.

The Government of Mali has considered several solutions. Some hydropower plants are under construction, but progress is slow, and hydro resources are exposed to the risk of droughts and climate impacts. Connections with neighbouring countries can provide some stability in supply but would not solve the energy deficit alone. Thermal power capacity has increased, especially in the mining sector, but it is expensive to operate, environmentally unfriendly and exposed to volatility in oil prices.

Given Mali's low income per capita, power affordability is limited. The end-user tariff charged by the State-owned utility Energie du Mali (EDM) is well below the average production cost. As a result, the government steps in every year to plug EDM's financial gap, with these subsidies representing approximately a third of EDM's revenues.

Mali has optimal conditions for the deployment of solar photovoltaic (PV) technologies, with solar radiation potential well above average[188] and 7–10 hours of sunlight per day. Since on-grid utility-scale solar PV power plants can be deployed in a flexible, scalable and rapid manner, this is an attractive approach to fill the capacity gap. Solar PV is becoming more and more established and cost-competitive. Based on a positive track record in other regions, developers are open to new investment opportunities in frontier markets such as Mali.

Barriers to private-sector investment

Solar PV developers in Mali face several first-mover challenges, which have significantly hindered the development of this industry:

- **High transaction costs:** Even without accounting for equipment, it costs on average $2 million per MW to set up a solar PV project in Mali. Equipment needs to be shipped to Senegal and transported from there. Negotiating bankable concession and power purchase agreements (PPAs) is time-consuming. There is no established domestic financing scheme for renewable energy projects, and sponsors must find solutions to mitigate off-taker risk, linked to EDM's financial position.

- **Off-taker risk:** EDM is indebted and has a low credit rating as a result of revenue uncertainty (issues with collecting payments and illegal connections), the high cost of fossil fuel imports for its thermal power plants, and growing capital expenditure. Under these conditions, any sponsor and lenders may find that a long-term PPA, critical to the commercial feasibility of a utility-scale solar PV, is not bankable without additional and expensive insurance.

- **Limited commercial financing options:** International banks tend to shy away from this sector in Mali owing to political and off-taker risk. Local and regional banks face capital restrictions and are unable to offer loans with tenors above 8 years, well short of the 12 or more years required by solar PV projects. Expertise in renewable energy financing is limited, given the paucity of previous similar deals in this space.

- **Limited investor expertise in the local renewable market, resulting in high risk perception:** Developers and lenders are concerned about the lack of an established supply chain, experienced local operators and off-taker risks. The cost and time to build, operate and maintain a solar PV system are high, as is the risk of prolonged downtimes and expensive repairs. Environmental and social risks are also difficult to evaluate (e.g. risk of claims over land purchased for the solar site).

186 See, for example, https://www.usaid.gov/sites/default/files/documents/1860/Mali_Fact_Sheet_Power_Africa.pdf.

187 Ibid.

188 Solar radiation potential estimated at 5–7 kWh/m^2/day vs. a global average of 4–5 kWh/m^2/day.

- **Lack of regulation for solar PV:** The Government of Mali has approved renewable energy policies and targets, but specific regulations regarding feed-in tariffs and investment/production tax credits are not yet in place. Permitting procedures are unclear.

- **Weak transmission network and unreliable grid:** The electricity grid's ability to absorb and transport generation to load centres, especially large amounts of intermittent power, is limited or unknown, adding potential cash flow risk to renewable projects.

- **Country risk:** High poverty levels and political and security concerns further increase project risk for investors and sponsors.

Blended finance solution

In 2012, the project developer, an integrated independent solar power producer, approached the Government of Mali to explore the potential launch of a solar PV plant in Mali. The company develops, builds, owns, operates and maintains solar PV power plants, and already has a total installed capacity in excess of 383MW. The company partnered with IFC InfraVentures[189] and another private company as co-developers and equity investors, and formed a project company under Malian law, responsible for the design, construction and operation of a 33MW solar PV power plant, located approximately 240km north-east of the capital Bamako, and 2km of transmission line connecting the plant to the grid. The site lies on 90 hectares of publicly owned land. The project is structured as a 25-year Build, Own and Operate & Transfer concession agreement with the Government of Mali with a 25-year take-or-pay PPA with EDM.

The Malian Regulatory Commission of Electricity and Water, established in 2000, is responsible for regulating and overseeing the provision of electricity and water services. However, in light of persisting regulatory uncertainties, the government offered strong support to the project, including being a joint obligor to the PPA in addition to EDM. Lenders also signed a direct agreement with the government to protect the project against any change of law.

The total project costs are approximately EUR49 million, financed 25 percent with equity provided by the sponsors according to their stakes (around EUR12 million) and 75 percent with debt (around EUR37 million). The AfDB and the IFC provided approximately EUR17 million in senior debt at commercial terms, split equally between the two, with the remainder amount coming from a $25 million concessional loan (in EUR equivalent) disbursed under the Scaling up Renewable Energy Program (SREP)[190] of the Climate Investment Funds (CIF),[191] on request by the AfDB as a CIF Implementing Entity. The SREP loan has a 17-year maturity and a 2-year grace period.[192] A cross-currency swap will be undertaken to hedge the currency risk arising from the fact that the SREP loan is denominated in US dollars but project cash flows will be in CFA francs,[193] the local currency pegged to the euro but floating versus the US dollar.

SREP concessionality improves the investment's risk–return profile for the equity sponsors, facilitates their involvement as first-movers in a new sector, makes the project bankable for the other lenders and contributes to lowering the overall cost of solar PV generation in Mali. Crucially, because of the concessionality of this loan, the purchase price for EDM under the PPA is set below the price currently charged by EDM to its end-users and, therefore, will allow EDM to improve its financial standing.

In addition to the SREP loan, concessionality comes in the form of a partial risk guarantee provided by the World Bank's IDA covering the risk of delay or non-payment by EDM, in breach of the obligations set out in the PPA and concession agreement. The guarantee package comprises: (i) a letter of credit from an international bank covering four months of power bills (equivalent to six months of debt service); (ii) a sovereign guarantee from the government backing all EDM contractual obligations; and (iii) IDA's guarantee covering the government's ensuing obligations.

The involvement of the AfDB and the IFC ensures the application of rigorous ESG criteria and performance standards. Early involvement of the private company co-developer helped the project reach financial close, minimizing concessionality in the pre-blend phase by rewarding project preparation assistance with an equity stake.

Financial close is expected in the third quarter of 2018. The construction phase should take approximately nine months.

Both SREP and the AfDB conducted an *ex ante* assessment of project outcomes, in line with their rules and procedures. During project implementation, performance against outcomes will be monitored and evaluated, and reported to relevant stakeholders.

189 IFC InfraVentures is a $150 million global infrastructure project development fund that has been created as part of the World Bank Group's efforts to increase the pipeline of bankable projects in developing countries. IFC InfraVentures project support is not grant funding. In return for its development funding and assistance, IFC will have the right to a stake in the equity of the project at financial close, in most cases the right to arrange the long-term debt for the project, and IFC may provide part of such debt. For more information, see https://www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Infrastructure/Priorities/Innovation/Infraventures.

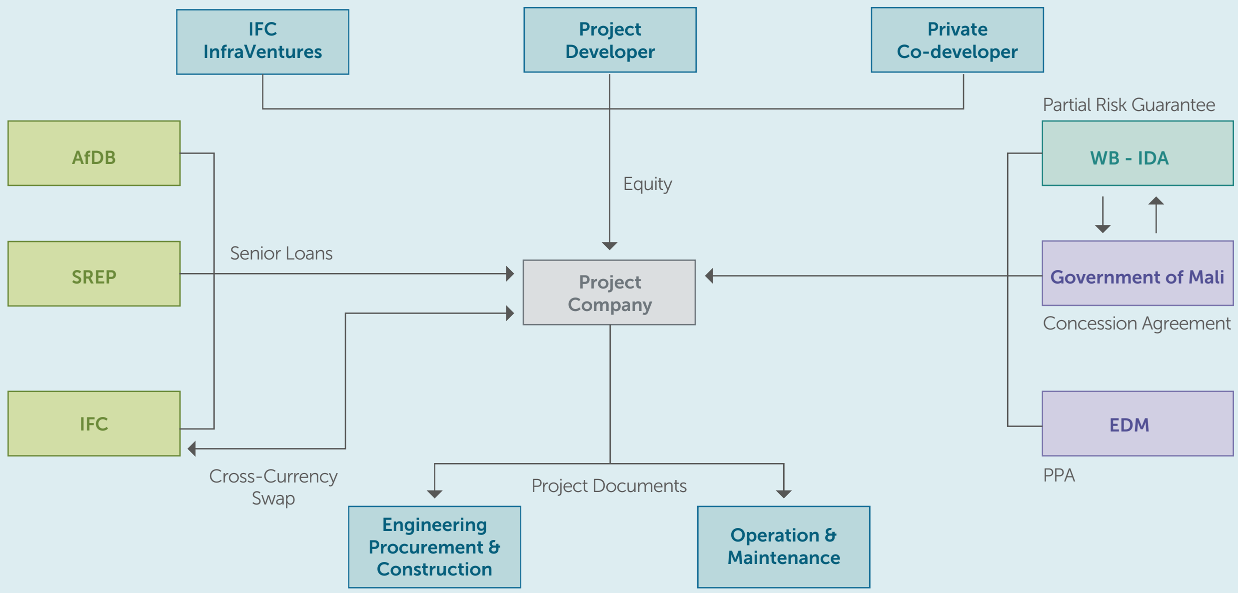
190 The Scaling up Renewable Energy Program (SREP) in Low Income Countries is a targeted programme of the Strategic Climate Fund (SCF), which is one of two funds within the framework of the CIF.

191 The CIF were designed by developed and developing countries and are implemented with the MDBs to bridge the financing and learning gap between now and the next international climate change agreement.

192 Other terms of the financial structure are confidential.

193 The West African CFA franc is the currency adopted in the West African Economic and Monetary Union and is pegged to the euro.

FIGURE 22. Project structure



Source: AfDB.

Takeaways

1. The project has clear development and financial additionality.

The project will install the first utility-scale on-grid solar PV power plant being deployed in Mali under an independent power producer structure. It improves the country's energy mix, reduces the current power deficit, and provides clean energy access at affordable prices. The power output of the power plant will be sufficient to power around 60,000 households, with a substantial reduction in greenhouse gas emissions over the concession period.

The project will contribute to reducing Mali's reliance on expensive fossil fuel imports for thermal power production and the government's subsidies to the electricity sector. The project will also mitigate the negative impact of Mali's droughts on hydropower production.

The terms of the SREP loan were determined as a result of a detailed sensitivity analysis undertaken on the project's financial model. This took into consideration the need to abide by the principles of minimum concessionality, avoidance of market distortion and crowding-out of other investors, while preserving appropriate levels of debt service coverage and equity return. Concessional interest rates were carefully assessed against these variables.

2. Blended finance cannot solve all barriers to private investment but can contribute to market development.

A longer track record and a better understanding of the risks associated with these transactions in the country are needed to attract local commercial banks and other traditional financiers beyond MDBs. This is especially important, as, over time, the use of concessional finance must be phased out.

Although still in the early stages of implementation, the project's goal is to demonstrate the business case for solar PV in Mali and catalyse market transformation, while complying with strict ESG criteria. By supporting the first mover, SREP aims to contribute to the future bankability of solar PV, strengthen the enabling environment and facilitate sector transformation.

The project's demonstration efforts should also lead to an improvement in the capacity of local solar PV technology service providers (equipment supply, engineering, advisers etc.). This should further enhance the bankability of future utility-scale solar PV projects in Mali at prevailing tariffs, at the same time as global markets continue to grow and equipment costs continue to fall.

3. There is a need for strong M&E and knowledge capture.

Monitoring impact and capturing lessons in a market such as this can help to provide lessons learned that not only inform investors about opportunities in this sector in Mali, but that can also inform government-led improvements in policies and regulations. This also speaks to the importance of conducting and sharing publicly *ex post* impact evaluations.

CASE STUDY 3

MYANMAR

CURRENCY HEDGING TO SUPPORT LENDING TO MFIs

Development challenge

In recent years, Myanmar has experienced substantial economic growth, a decline in poverty[194] and an increase in FDI.[195] An estimated 70 percent of the population live in rural areas, where poverty, albeit declining, remains high.[196] Increased access to finance is important for improving the livelihood of rural communities in the country.

The Myanmar financial sector, however, is underdeveloped and tightly regulated. Nearly half (48 percent) of adults are formally served with financial service products, up from 30 percent in 2013, but only 25 percent of adults have access to bank accounts, up from 17 percent in 2013. Eleven percent of adults have access to financial services from MFIs. In addition, 50 percent are informally served—the same level as in 2013. Over one fifth (22 percent) of Myanmar adults only use informal financial services.[197]

To fill this gap, a number of MFIs have launched in recent years. LIFT surveyed the 22 largest, representing the majority of the market. At the time of the survey, they had an estimated 2.6 million loans outstanding and a combined loan portfolio of 723 billion kyat ($541 million). With the exception of Pact Global Microfinance Fund, with a loan portfolio of approximately $150 million (in local currency), the typical MFI had a balance sheet of $10–15 million. The average microloan is a couple of hundred dollars and has a maturity of around 12 months. Around 60 percent of microloans surveyed by LIFT were used for small livestock purchases (for household consumption and small business purposes). The industry-wide non-performing loan ratio is currently very low. The microfinance industry has its own regulator, under the Ministry of Planning and Finance. Most MFIs are not permitted to raise voluntary deposits among clients.

MFIs could expand their balance sheet significantly to serve the growing needs of households and SMEs. Macroeconomic and regulatory barriers, however, limit the appetite of commercial investors—international in particular—to fund Myanmar MFIs to undertake such an expansion.

Barriers to private-sector investment

As is the case with many LDCs, there can be barriers to private-ector investment. Myanmar is experiencing strong GDP growth (expected by the IMF to exceed 6 percent in 2017-2018).[198] The Myanmar economy is largely informal, but it is transforming and has a growing industrial base. Inflation and the current account deficit have put pressure on the currency. The kyat has been subject to several episodes of rapid depreciation, losing significant value against the US dollar in the five years prior to April 2018 and experiencing further sharp depreciation in recent months. In addition, the humanitarian context could affect investor decisions.

Strict regulations apply to the Myanmar financial services sector, preventing lending at market rates. This creates bottlenecks in the financial system that affect MFIs in particular. The primary sources of funding for MFIs are equity and long-term loans denominated in kyat—the latter capped in size to a maximum of five times equity. The interest rate on kyat loans to MFIs and banks or other borrowers is capped by regulation at 13 percent per annum. While domestic savings represent a sustainable source of long-term financing and provide proven benefits to savers, deposit-taking by MFIs is limited in practice, inter alia, both by regulatory barriers and the fact that some MFIs are still early-stage. The regulatory protections for MFI depositors become important in this context. On the asset side of the balance sheet, MFIs are not allowed to charge more than 30 percent interest to their end-customers (excluding fees).

[194] World Bank (2017). Myanmar Poverty Assessment: Part Two. Key findings. 12 December 2017. https://www.worldbank.org/en/country/myanmar/publication/myanmar-poverty-assessment-2017-part-two.

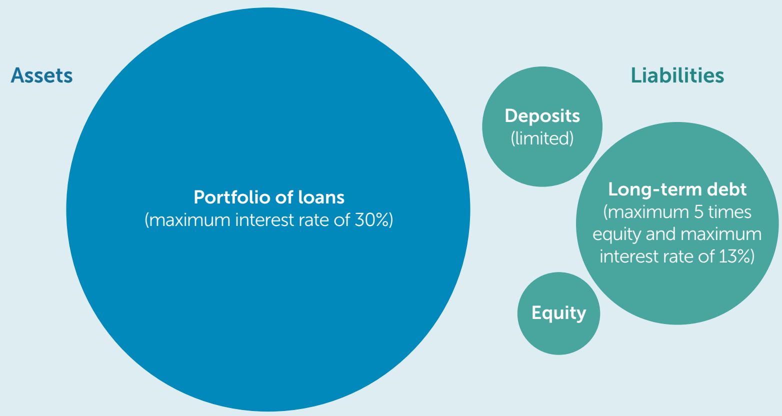
[195] World Bank. World Bank Open Data. https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS?locations=MM. (Accessed June 2018.)

[196] World Bank (2017). Myanmar Poverty Assessment: Part One. Key findings. 30 August 2017. http://www.worldbank.org/en/country/myanmar/publication/myanmar-poverty-assessment-2017-part-one-examination-of-trends.

[197] UNCDF and Finmark Trust (2018). 'Finscope: Consumer Survey Highlights, Myanmar 2018'. New York: UNCDF and Finmark Trust—a report published by UNCDF's Making Access Possible (MAP) initiative.

[198] See https://www.imf.org/en/Countries/ResRep/MMR.

FIGURE 23. Capital structure of a typical MFI in Myanmar



Source: TCX.

The 13 percent interest rate cap on lending severely limits the appetite of domestic and foreign lenders to finance MFIs. This is particularly true for foreign lenders that face currency risk, in addition to country- and company-specific credit risk. Indeed, rates of 13 percent have proven too low to incentivize lenders once the costs for currency hedging and the risk of supporting greenfield MFIs is taken into account. Local banks have also shown limited appetite for funding MFIs, though rising growth in private (local and foreign) bank MFI lending is showing promise.

The debt-to-equity cap, in addition to creating a concrete limit to the amount of debt an MFI can assume, also limits the appetite of equity investors to finance MFIs—returns on equity are limited by the inability to leverage the equity base beyond the cap.

A last resort would be for MFIs to borrow directly in US dollars or other hard currencies from foreign lenders, at an interest rate also capped by regulation at 8 percent per annum. However, they would need to find a way to hedge the currency exposure, since they must lend to end-customers in kyat. A local bank has launched a hedging facility addressing MFIs directly, but progress remains very limited due to the underdevelopment of local capital markets, and the pricing is roughly aligned to that of TCX.

Blended finance solution

In 2016, TCX and LIFT launched a joint blended facility that allows international investors to lend to Myanmar MFIs in kyat at the cap rates, while realizing their targeted commercial returns in US dollars.

TCX was founded in 2007 by a group of DFIs to provide currency and interest rate derivatives in financial markets where such products are unavailable or poorly accessible. It is backed by the Dutch and German governments and several other multilateral and bilateral development organizations. It acts as a market-maker, offering longer-dated foreign exchange forwards and cross-currency swaps to support local currency finance. TCX is active in over 70 currencies worldwide; since inception, it has hedged some 2,000 local currency loans for a total of $5 billion.

LIFT is a multi-donor trust fund established in 2009 to improve the lives and prospects of poor people living in rural areas of Myanmar. To date, donors have committed more than $400 million, used to finance 147 projects and provide technical expertise, research and oversight to improve programme design and impact. LIFT also works closely with the Government of Myanmar to promote pro-poor policies.

TCX was competitively selected by LIFT to run a currency hedging programme to facilitate international funding of Myanmar MFIs. $10 million in concessional resources from LIFT allowed TCX to hedge, at commercially attractive rates, $86 million worth of local currency loans, extended by 12 international lenders to 11 MFIs. The selection of the MFIs was left to the discretion of the lenders.

It took approximately two years to set up the programme. TCX conducted the first scouting mission in Myanmar in 2013 and started developing a macroeconomic forecasting model to construct a local currency yield curve, essential for pricing any hedging contract. Later, TCX, LIFT and UNCDF organized an investor conference, and TCX and LIFT launched a partnership to provide hedging. Stakeholders supported several other initiatives in 2014 and 2015, showcasing the need for an expanded microfinance industry. In 2016 LIFT and TCX signed the formal agreement detailing the size of the grant, its use and procedures.

Lenders approached TCX with the objective to secure a US dollar return of Libor + 5.83 percent on average on their kyat-denominated loans to MFIs. Without support, TCX would have offered such a US dollar rate only in exchange for a 19–20 percent interest rate in kyat. Since kyat loans to MFIs at rates exceeding 13 percent are forbidden by regulation, international lenders would not have been able to proceed with the transaction, leaving MFIs short of funding. The LIFT support allowed TCX to bridge the gap, swapping 13 percent kyat rates for Libor + 5.83 percent US dollar rates on average (the range was 4.5 percent to 6.5 percent).

The 12 international lenders include DFIs (40 percent of loans hedged), as well as international funds investing in MFIs, and other impact funds (the latter two categories representing 60 percent of loans). All of the latter and also some of the DFIs pursue commercial returns. The programme in Myanmar is, therefore, an example of concessional resources mobilizing private or commercial finance.

Additionality is ensured by the fact that TCX only intervenes when its hedging counterparties have no adequately priced commercial alternatives. In the case of Myanmar, no commercial banks are currently providing hedging solutions for kyat currency exposures of foreign lenders. The programme is, therefore, seen as filling a funding gap generated by regulatory constraints as well as real and perceived country and sector risks, providing an important bridge as private banks develop the systems and knowledge to lend to MFIs.

Outcomes

LIFT's support allowed TCX to hedge 40 loans issued by 12 lenders for 11 MFIs in Myanmar. The MFIs pay 13 percent interest in kyat, in compliance with the regulatory cap. International lenders realize a Libor + 5.83 percent return on average, in line with their commercial objectives.

Each loan to the MFIs averaged approximately $2 million in size. Since Myanmar regulation also caps the size of any loan to $3.6 million (local currency equivalent), some lenders had to extend multiple loans to the same MFIs to fulfil the requested amounts.

TCX hedged 109.3 billion kyat of funding, equivalent to $86 million of debt. Every dollar of concessional support mobilized 8.60 dollars of funding to Myanmar MFIs.

The average loan maturity is 2.8 years. MFIs lend to their end-customers for around 12 months. The loans hedged by TCX allow MFIs to cover two or three lending cycles.

The first loan was hedged at the end of 2016. Once launched, the entire hedging programme was executed in less than one and a half years.

The demand for TCX hedges far exceeded the $86 million available: 20 lenders approached TCX to hedge kyat exposures on 92 loans to 17 MFIs for a total notional amount of $200.7 million. This is a demonstration of the strong demand for such hedging programmes.

With the help of kyat-denominated loans, the MFIs served over 337,000 clients. The average loan size to clients was $237. Around 84 percent of the MFIs' clients are women, and 64 percent live in poorer rural areas. As a direct result of the LIFT facility, the workforce of the 12 borrowing MFIs increased by 21 percent (1,027 new jobs created in the MFI sector alone).

Takeaways

1. The specificities of each country, the barriers to finance in a particular sector, and the unique regulations in each country need to be taken into account when trying to devise blended finance solutions.

This type of currency hedging programme was designed in response to a situation where—and under the right conditions could potentially be replicated or scaled up in other LDCs where—(i) currency volatility constrains international investors from lending to financial institutions at affordable rates in local currency; (ii) the financial infrastructure to hedge currency exposures does not exist or is underdeveloped; and (iii) regulatory challenges and capacities limit the ability of MFIs to mobilize domestic savings to fund their loan portfolio.

2. Regulatory change, in addition to blended finance, is essential to produce long-lasting catalytic effects.

The programme achieved its goals and created important demonstration effects, allowing MFIs access to capital they needed to grow and extend their operations. TCX suggests that this growth in size could help the industry influence regulations.

At the same time, the hedging programme cannot on its own solve the two regulatory problems at the heart of the MFI funding gap in Myanmar:

- The regulatory barriers that limit financial service providers/MFIs—especially more established MFIs—from mobilizing domestic savings: Addressing these barriers could see domestic resources providing MFIs with the financing they need to expand their operations, while providing significant benefit to clients.

- The limitations to market pricing for loans by and to MFIs (and other financial institutions): If market dynamics could play out freely, MFIs could borrow at local rates higher than 13 percent and closer to the levels required for commercial-rate hedging. While domestic banks are increasing their lending to MFIs, even with the cap in place, the 13 percent cap nonetheless means that public support may continue to be required to offer attractive US dollar returns to international lenders.

Loans extended to MFIs under the programme will expire in 2019-2020, presenting MFIs with some level of risks. At that point, to pay back those loans, MFIs will have to find alternative sources of funding or they will not be able to renew their microloan portfolios. If the 13 percent cap is still in place, and assuming domestic commercial banks are not filling the financing gap, a new round of concessionality may be needed to allow the hedging programme to continue and attract more international funding. LIFT is considering the possibility of such a second round of concessional support.

This shows the importance of working on the enabling environment in addition and in parallel to the blended finance intervention. TCX, LIFT and development stakeholders in Myanmar are aware of the regulatory bottlenecks and are working with the government to try to address them. Indeed, the interest rate cap was raised from 8 percent in 2010 progressively to the current 13 percent level.

3. Blended finance has allowed the MFI industry to expand.

To get to the point where MFIs can raise more deposits, there is a need, inter alia, for a strong regulatory framework. The programme covered $86 million. Demand for microfinance loans in Myanmar, however, is substantial and growing fast. If MFIs are unable to source the required funding, a portion of this demand will go unmet.

Nonetheless, and notwithstanding the persisting regulatory bottlenecks, TCX and LIFT mobilized much-needed capital at a critical juncture and under specific circumstances; this helped the Myanmar MFI industry accelerate its expansion. MFIs have increased their balance sheet significantly, achieved greater efficiency (operating costs as a percentage of total assets decreased from 17 percent to 15 percent in the past two years), expanded their client base, and gained broader acceptance among households.

An evaluation on the first round of the blended facility could capture what worked and provide lessons to inform the development of any second round of concessional support, including helping to ensure that it has strong SDG impact, does not delay or disincentivize market reforms and supports local market development.

CASE STUDY 4

RWANDA
KIGALI BULK WATER SUPPLY PPP

Development challenge

Kigali, the capital of Rwanda, is a city of over 1 million people and growing rapidly. This is putting pressure on its water infrastructure. Rwanda has made impressive progress in expanding access to water over the last 15 years: access to improved sources of drinking water rose from 69 percent to 79 percent of the population between 2002 and 2015.[199] Still, many customers in Kigali are served by communal stand posts, and supply is intermittent because of limited water production capacity. Some residents have no alternative but to travel far, several times every day, to fetch drinking water from a nearby reservoir.[200]

In response, the Government of Rwanda included in its Economic Development and Poverty Reduction Strategy for the period 2013–2018 a commitment to achieve universal access to water and sanitation, improve the quality of water consumed, and increase management of water supplied by the private sector.

Barriers to private-sector investment

The barriers to private investment in water infrastructure in Rwanda are similar to those encountered in many other developing countries and LDCs, namely:

- There is a lack of commercial loans for the long tenors necessary for an infrastructure PPP project, often exceeding 15 years.
- First-time project under an untested regulatory framework: While PPP legislation was in place in Rwanda when the project was first considered, it had never been applied to bulk water supply, only to water distribution.
- Uncertainties surrounding the sector's governance framework: When the project was first considered by the government, one entity—the Energy Water and Sanitation Authority (EWSA)—was in charge of setting tariffs for and operating both electricity and water services. The government subsequently decided to restructure EWSA and unbundle its water and electricity operations. The former became what is now known as the Water and Sanitation Corporation (WASAC), which is in charge of setting tariffs for bulk supply and distribution of water as well as operating water distribution infrastructure in Kigali. In its capacity as a water distributor, WASAC is the off-taker in any bulk water supply project. As a new corporate entity, its financial performance and credit history were unknown, a risk for its counterparties in a long-term off-take agreement, which forms the basis of a PPP.
- Water tariff affordability is limited due to low levels of household income. WASAC water tariffs are currently insufficient to fully cover the capital investment, future capital replacement, operations and maintenance costs, financing costs, and the return on equity targeted by commercial infrastructure developers and operators.

Blended finance solution

In September 2010, the Government of Rwanda retained IFC PPP Advisory Services as lead adviser to develop and structure a bulk water supply PPP in the Kigali area (the 'project'). IFC was responsible for assisting the client in the preparation, design and implementation of private-sector participation in the project by attracting one or more private-sector investors with established financial standing and technical experience. The IFC project team carried out the assignment in two phases, including: (i) due diligence, which included identifying the most appropriate location for the project, as well as demand assessment to determine the plant sizing; and (ii) competitive selection of investors to implement the PPP.[201]

Capacity was limited within Kigali's public water utility, both in terms of developing and implementing the PPP and reforming the utility to ensure the long-term sustainability of water services in the city. Therefore, the IFC team also mobilized funding from the Public–Private Infrastructure Advisory Facility (PPIAF) to support capacity-building for the water utility and the water sector reform process. PPIAF is a multi-donor technical assistance facility, working closely with and housed inside the World Bank Group, focused on mobilizing private-sector participation in infrastructure in emerging markets. PPIAF complemented the IFC's transaction-specific advisory mandate.

199 World Health Organization and United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply and Sanitation: https://washdata.org/data.

200 Project Finance International (2018). 'Africa's First Water PPP'. London: Project Finance International. http://www.pfie.com/africas-first-water-ppp/21320834.fullarticle.

201 International Finance Corporation (2015). 'Rwanda: Kigali Bulk Water Project'. Public–Private Partnership Stories series. Washington, DC: IFC. https://www.ifc.org/wps/wcm/connect/cd5490004a9a80f99d5ddd9c54e94b00/PPP+Stories+2015+-+Kigali+Oct+26+2015.pdf?MOD=AJPERES.

The government announced a competitive tender for the Kigali Bulk Surface Water Supply PPP Project in 2013. EWSA managed the bidding process with the support of the Rwanda Development Board (RDB), the government department that integrates all government agencies responsible for the attraction, retention and facilitation of investments in the national economy. Technical advice was also provided by the Infrastructure Development Collaboration Partnership Fund (DevCo), a multi-donor facility managed by the IFC and part of PIDG.

Metito Utilities Limited, a Dubai-based global provider of intelligent water management solutions with 60 years of experience developing and managing water facilities across the world, along with two other developers, was pre-qualified in December 2013, with the bid due in August 2014.

The successful bidder was required to submit a detailed technical and financial bid package. Considering the strategic importance of the project for the Rwandan government, Metito put together a highly competitive financial and technical package, based on which Metito was awarded preferred bidder status in October 2014 in one of the first competitively tendered water concessions in sub-Saharan Africa outside South Africa.

EWSA undertook its restructuring, leading to the creation of WASAC, soon after the bid submission in August 2014. As a result, a realignment of the off-taker team was necessary, and the process was undertaken to finalize the concession agreement. Support from RDB and the DevCo IFC advisory team was instrumental in managing the transition.

Metito is the 100 percent shareholder of Kigali Water Limited (KWL), the Rwandan incorporated limited liability company which owns and operates the project. KWL will sell potable water to WASAC under a 27-year PPP agreement. The 27-year term includes a 24-month construction period. The Ministry of Infrastructure will be the guarantor of the project on behalf of the government. WASAC will pay a regulated tariff in consideration for the water supplied by KWL.

The project includes development, financing, construction and operation of a bulk water production facility in Kanzenze, in the south-eastern part of Kigali. This will supply 40,000m^3/day of potable water—equivalent to one third of Kigali's total supply—to the Kigali and Bugasera distribution networks of WASAC. Water will be drawn from the Nyaborongo River to be treated before distributing a clean supply to up to 500,000 customers.[202] KWL is a crucial part of Rwanda's drive to achieve universal access to clean water.

The project seeks to improve water supply, reduce water rationing, and enhance access to reliable and safe water for domestic and industrial use. These improvements are expected to contribute to: (i) improved health outcomes, including lower rates of water-borne diseases, higher productivity and lower health-care costs; (ii) time and cost savings for households in parts of Kigali that are currently underserved; and (iii) economic growth and job creation in businesses that are dependent on a reliable water supply, including tourism and manufacturing. The project will also employ 100 people during construction.

Based on its experience in financing two independent power producer concessions in Rwanda (Kivuwatt and Gigawatt), EAIF was appointed as the mandated lead arranger for the transaction, co-lending with the AfDB. EAIF is a donor-funded company launched by PIDG to support infrastructure PPPs in 47 sub-Saharan African countries with long-term debt or mezzanine capital on commercial terms.

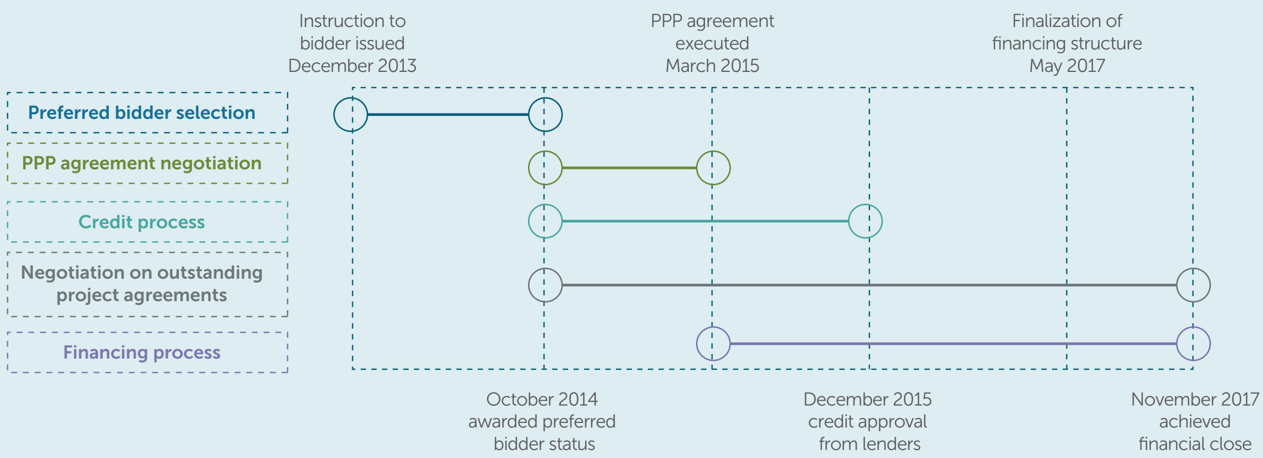
EAIF worked with Metito to refine the financing model and identified a need for subsidies to make the project viable for all parties—EAIF and the AfDB as commercial lenders, Metito as equity investor, and the off-taker with its tariff affordability objectives. As a result, another PIDG company—the PIDG Technical Assistance Facility—provided a grant as viability gap funding.

In addition, throughout the project structuring phase, DevCo provided additional support in the form of government advisory services worth $1 million.

The original project timeline envisaged a concession agreement by the end of 2014, and a fully operational plant two years after financial close. This timeline was revised following the EWSA restructuring and the set-up of WASAC. As the first project of its kind, there were also few existing project templates or benchmarks; therefore, additional time was needed to negotiate project agreements. As a result, the concession agreement was finalized in March 2015, project scope and costs were revised in 2016, and the project reached financial close in November 2017. Construction begins in 2018, with the plant due to become operational in 2020.

202 Based on the average water usage per person.

FIGURE 24. Project timeline to financial close



The total capital investment is approximately $61 million.[203] The funding mix comprises senior debt and junior debt facilities with an 18-year tenor, grants, and equity provided by Metito:[204]

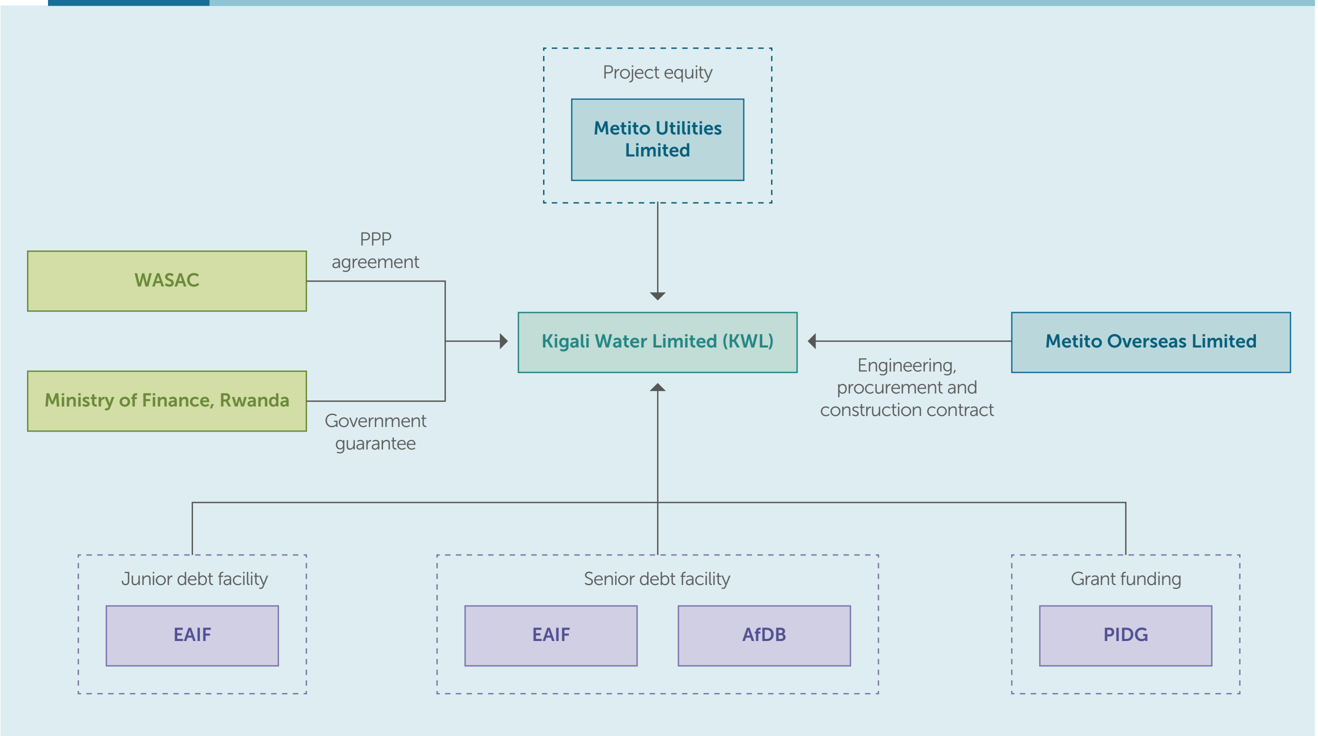
- EAIF and the AfDB each provided approximately $18.9 million of senior debt on commercial terms.
- EAIF provided an additional tranche of $2.6 million in the form of junior debt on commercial terms.
- The PIDG Technical Assistance Facility provided $6.25 million in Viability Gap Funding[205] to ensure the project was both commercially viable and affordable. This funding is crucial to reduce upfront capital costs and allow the government to enhance services and establish new connections to new customers classified as poor by international standards without the need to raise the existing tariff structure.
- Metito is providing the balance of funding as equity (approx. $11 million).

203 Without valued-added tax (VAT), the project budget is about $57.5 million.

204 Specific financing terms, beyond what is disclosed in this case study, are confidential.

205 The Viability Gap Funding grant is based on PIDG guidelines (PIDG Technical Assistance Facility (2016). 'Window 3: Project Capital Grants Policy and Procedures'. London: PIDG Technical Assistance Facility. https://www.pidg.org/resource-library/other-documents/vgf-policies-and-procedures.june-2016.pdf). These include: (i) disbursement pari passu with debt draw-downs once equity subscriptions are made; (ii) repayment requirements in the event of a serious contract breach; and (iii) requirements that projects include mechanisms to ensure pro-poor outcomes.

FIGURE 25. Kigali bulk water project structure



Takeaways

1. Adapting to evolving circumstances can help ensure a more timely and efficient execution.

The original scope of the project included production and distribution infrastructure such as pumping stations, reservoirs and piping, all of which are vital to delivering clean water to the local population. As the project developed, the Government of Rwanda sought to lower the infrastructure construction costs. An agreement was reached between Metito and the government to split the construction of the production and distribution infrastructure, delivering the latter through WASAC, supported by a separate concessional loan from the AfDB. The revised project will construct wells, a water treatment plant and two pumping stations. Three reservoirs, onward pipelines and a pumping station will be constructed under the separate project managed by WASAC. This helped lower the overall cost of the project led by Metito and EAIF from $79 million to $61 million.

2. Financial structuring is a dynamic process that must reflect policy and governance changes.

The project financing structure evolved to accommodate changes in the project and cost structure. One of the key challenges faced was to manage the credit risk of the newly incorporated WASAC as the off-taker. During the project preparation phase, WASAC was reorganized by the government as a new corporate entity, with implications for its credit standing. WASAC's credit risk was mitigated by structuring multiple layers of cash reserves to improve the credit profile of the project.

3. Coordination of blended finance providers and solutions is key to successful financial closing.

The project benefited from a well-coordinated package of blended finance: EAIF and the AfDB provided loans, DevCo provided funding for technical advice to help structure the project at the earliest stages, while a PIDG Technical Assistance Facility grant helped bridge the gap between the costs of development and operation, and the tariff level (set by WASAC) that is affordable. Blended finance will also play a critical role in the downstream infrastructure under development in separate projects, in particular the AfDB-supported development of reservoirs, pipelines and a pumping station.

4. Currency risk is a challenge where projects have long development timelines, significant hard currency costs in construction and operation, and are funded by foreign currency but generate revenue in local currency.

This was the case with Kigali Bulk Water. The project financing package is denominated in US dollars, which has the benefit of being compatible with construction costs and inputs also denominated in dollars, as well as allowing for cheaper debt than would be available in local currency. This, however, comes at the cost of higher currency risk for the off-taker, since the revenue stream is in free-floating Rwandan francs. The partners addressed this by finding ways to minimize project costs and maximize efficiencies, and by covering the project's distribution component through a separate concessional loan.

Projects with similar profiles may benefit from considering the appropriate roles for hard currency and local currency finance, and the role of grant or concessional funding to mitigate currency risks passed on, ultimately, to customers. Provision of hard currency debt during project construction, when most costs are incurred in dollars, followed by refinancing in local currency to match the off-taker's revenue stream, for example, may be one potential way to ensure an affordable service for the public.

5. Stakeholder engagement and country ownership are key in PPP projects.

As one of the first bulk surface water supply projects in sub-Saharan Africa to be structured on a PPP basis taking place in the context of an untested regulatory framework, close coordination with the government and among all the providers was essential in determining the project's scope, alignment with broader water access goals and water affordability implications. In addition, considerable time and effort were invested by the stakeholders to develop a bankable set of project agreements, which would serve as a benchmark template for future water projects in the region. Clear and continuous communication between all project stakeholders was crucial, particularly given changes between project procurement and financial close. Several rounds of all-party meetings were required during delicate PPP negotiations. Having Metito's commercially minded development team on the ground helped project partners to anticipate and mitigate issues in consultation with government stakeholders.

CASE STUDY 5

TANZANIA

MWENGE, AN AGRICULTURAL VALUE CHAIN PROJECT

Development challenge

The United Republic of Tanzania has a large national demand for edible oil. More than half of the demand is met by imported palm oil. The balance is covered by the local production of unrefined crude sunflower oil, which is primarily dominated by small producers and processors. Currently more than half of the edible oil consumed is imported. Local production of both factory and small-scale extracted oils contributes to about 40 percent of the domestic demand.[206]

National production of sunflower oil has been increasing over the years, including because the cost of producing sunflower oil in Tanzania is lower than for other oilseed crops (sesame, groundnuts), and because there is an active local market demand for sunflower oil for domestic use, as well as demand for the by-product (seed cake for livestock feeding).

Mwenge Sunflower Oil Company Limited (Mwenge) is a privately owned medium-sized oil mill that has been operating for over nine years. The company's main activities include processing sunflower seeds into oil, trading sunflower seeds and selling the by-products of the seed-oil process (e.g. animal feeds). Since 2012, Mwenge has been collaborating with the Singida district council (the local government), partnering with government extension officers in the field to identify and train farmers on proper agronomic activities and post-harvest treatment of sunflower seeds. At the time of the case study, Mwenge had registered 7,500 farmers in 50 villages to supply sunflower seeds to the factory.

For more than five years, the founder and owner of the company had been seeking financing to modernize and expand Mwenge's sunflower oil processing plant. The plant expansion would result in doubling Mwenge's crude oil processing capacity from 29 to 69 metric tons per day. A new 10 metric tons per day double refinery capacity will also be added; through the double refining process, Mwenge would also fortify the oil with vitamin A, which helps increase the shelf-life of the oil product and enhances its nutritional value, thereby helping to address malnutrition.

Singida is one of the poorest regions in Tanzania.[207] It is located in the central part of the country, and agriculture is the mainstay economic activity in the region. Singida is among the few regions in Tanzania with a small-scale sunflower oil industry using simple technology; this industry has limited productive capacity to meet increasing local consumer demand. While these companies have succeeded in introducing new cash crops into the region, the commercialization and production of new crops has been constrained by poor farming methods, seed selection and farm management. Often the absence of a sustainable value chain for these crops provides little incentive for smallholder farmers to invest and increase production.

Barriers to private-sector investment

Many local authorities in LDCs are able to identify projects with transformational impact on their communities, and typically undertake small-to-medium-sized public investments to promote equitable and sustainable local economies. Yet they frequently lack the resources (skills and finances) to do so.

Commercial banks and private investors are typically reluctant to fund associated private investments or revenue-generating PPPs, owing to the perceived risks and lack of knowledge of a specific sector. In addition, banks often favour short-term loans and have asset allocation strategies skewed towards microfinance at one end of the spectrum and urban real estate or import/export finance at the other. This means that little priority is given to more complex transformative investments that qualitatively change local economies and not just quantitively increase total output. This often holds back the expansion of economic activities that add value within the locality, resulting in the export of raw materials from the local economy with processing taking place elsewhere.

Mwenge's inability to obtain capital from commercial lenders illustrates these constraints:

First, the expansion plan required a significantly larger loan than most domestic private commercial banks were willing to take on, especially for a first-time borrower. Even though

[206] United Republic of Tanzania (2016). 'Sunflower Sector Development Strategy 2016–2020'. Geneva: International Trade Centre. http://unossc1.undp.org/sscexpo/content/ssc/library/solutions/partners/expo/2016/GSSD%20Expo%20Dubai%202016%20PPT/Day%202_November%201/SF%204_Room%20D_ITC/Value%20chain%20roadmaps/Tanzania/Tanzania%20Sunflower%20Sector%20Development%20Strategy.pdf.

[207] United Nations Development Programme and United Republic of Tanzania (2014). 'Tanzania Human Development Report 2014: Economic Transformation for Human Development'. New York: UNDP and United Republic of Tanzania. http://hdr.undp.org/sites/default/files/thdr2014-main.pdf.

the company was fully funded by the owner's equity and had been profitable for over three years, the company was perceived as high-risk with insufficient track record. The owner lacked experience in access to finance, could not post sufficient collateral and lacked a credit history.

Second, Mwenge's owner lacked the requisite skills and knowledge to prepare the necessary financing package and the resources to pay for such costs. Although a skilled entrepreneur, he lacked formal education and had been operating in the context of a mostly informal, rural economy. As such, he did not have the expertise to produce a business plan complete with risk assessment, a financial model, a project information memorandum and other documentation required to support a loan request.

Blended finance solution

In 2012, UNCDF launched the Local Finance Initiative (LFI), a programme aiming to unlock private finance so that these kinds of projects with strong development impacts can get to closure. The programme adopts a 'dual-key' screening system, through which UNCDF vets each investment on both development impact and bankability, taking measures to crowd in commercial finance from the domestic private sector. As appropriate, the team works jointly with UNCDF programmes on women's economic empowerment, climate resilience, fiscal decentralization and local economic development for the development of partnerships with potential sponsors. UNCDF ensures that the projects funded through this programme support national ownership and alignment of national priorities, and that lessons learned are captured to inform national policies.

The purpose of the UNCDF programme is to create demonstration effects for the viability of investing in local transformational projects. By using these lessons to inform national policies and regulations, the programme seeks to help correct market failures and attract greater amounts of private capital for investments that are not otherwise being picked up by investors. It does this by improving the capacities of public and private project developers to structure investments and sharing the risks with domestic investors so that they will fund them.

As part of LFI, UNCDF issued a call for proposals in 2015 and screened many applications submitted by entrepreneurs in Tanzania. Following the screening process, in early 2016 it decided to engage with Mwenge.

UNCDF's key activities in support of Mwenge—a mix of technical and financial assistance—involved three distinct phases over a period of 24 months: pre-financing, financing and post-financing.

In the **pre-financing phase**, lasting 18 months, UNCDF investment officers worked closely with the Mwenge project developer to conduct due diligence and structure the project financing and governance—ensuring the accuracy, validity, timeliness and completeness of all relevant operational, financial and legal information. Key tasks comprise project preparation, revenue and expenditure forecasting, governance structure, ownership structure, scenario planning, compliance with regulatory and tax laws, and designing the financing options.

Specifically, UNCDF advised the entrepreneur on: simplifying the shareholding structure by buying out minority shareholders; obtaining a certificate of incentives from the Tanzania Investment Centre to receive exemption on import duties for equipment; and delaying investment in anticipation of new legislation which expunged value-added tax on imports of oil processing equipment, generating an 18 percent saving that could be used towards loan repayment. UNCDF also prepared the investment package for submission to potential lenders and equity investors, connected the developer to local commercial banks and a guarantee institution, and supported the entrepreneur in the presentation of the investment and negotiation of the initial term sheets from potential private-sector financiers.

In the **financing phase**, lasting around seven months, UNCDF provided financing in the form of a grant and a concessional loan, and unlocked private domestic finance in the form of a commercial loan from a local lender and a loan guarantee from a local institution. This was one of the first loans issued under UNCDF's new loans and guarantees policy. The project raised a total of $1,165,000 (in addition to a $422,000 equity contribution by the owner) split as follows:

- a $150,000 grant from UNCDF to help the owner meet the equity capital threshold required by an external lender;
- a $250,000 UNCDF concessional loan in local currency. The loan is unsecured and has a six-year tenor and one-year grace period. The interest rate of 11.5 percent is below the 20–24 percent prevailing market rate at the time of issuance. The loan is subordinated and unhedged (i.e. UNCDF assumed currency risk);
- a $765,000 senior secured loan (in local currency) from the National Microfinance Bank (NMB), a fully commercial bank. Collateral came in the form of land and buildings, existing machinery, and new equipment to be purchased with the loan proceeds; and
- a partial guarantee issued by a local institution, Private Agriculture Sector Support (PASS), covering 50 percent of the senior loan principal. The loan guarantee enabled the owner to meet the collateral requirement of the bank (125 percent of the loan amount). Mwenge paid a one-off fee for the guarantee at inception; ongoing quarterly fees are paid by the bank to the guarantor.

In the **post-financing phase**, UNCDF provided technical assistance and advisory support in the recruitment process of the key management positions. This was particularly important, as bank loan disbursements were conditional on the hiring of a robust management team to strengthen the factory's operational and technical capacity. UNCDF also ensured that Mwenge engaged new professional service providers such as a corporate lawyer and an accounting and audit firm to increase accountability and transparency. The company also hired a collateral manager to monitor disbursements intended for working capital (for purchases of sunflower seeds), a measure meant to mitigate credit risk (for UNCDF and the bank) and ensure proper utilization of loan proceeds.

Takeaways

1. Concessional finance can crowd in private investors for transformational investments, even in underserved regions in LDCs.

The Mwenge case demonstrated that limited development finance from UNCDF helped unlock 65 percent of the total financing gap from a private-sector bank, with a leverage ratio of 1:2, and enabled the implementation of a $1.6 million (debt plus equity) local development project in rural Tanzania.

Although it remains early in the implementation process, UNCDF believes that Mwenge's expansion project can have broad impact, including: job creation, development of the sunflower oil value chain, increased work engagement of women (who play a significant role in sunflower farming), support for sustainable agriculture practices, demonstration effects for commercial banks considering financing similar projects, and, potentially, down the line, market expansion beyond Singida.

2. Technical assistance is important for pipeline development of transformational investment projects.

Mwenge shows the importance of technical assistance from an early stage to jumpstart project development and enhance bankability. Importantly, the scope of technical assistance was broad. UNCDF's capacity-building efforts helped Mwenge transition from a family business to a professional company with greater transparency, accountability and governance. To achieve this goal, technical assistance aimed to strengthen the project developer's financial and non-financial capabilities.

At the same time, the significant commitment of UNCDF staff time and resources in the pre-financing phase highlights the importance of focusing on projects with clear scale-up and/or replication potential. It also underscores the importance of having sufficient resources dedicated to supporting pre-blend work. UNCDF is seeking to establish platforms for local development finance in LDCs that mobilize these resources.

While UNCDF cannot take an equity stake, other models could be explored in the future in return for its support. These could include requiring project sponsors to co-finance project preparation; a convertible instrument that will trigger reimbursement of UNCDF support once a set profit threshold is reached; or requiring that the project reimburses a percentage of the UNCDF grant once the project obtains a loan.

3. Tailoring the solution to the local context is essential.

Mwenge shows the importance of precise tailoring of blended finance solutions. Without a combination of grant, subordinated concessional debt and guarantee, it would have been difficult to attract the senior commercial loan that represents the largest component of the capital structure. At the same time, UNCDF had to work within the constraints of its institutional mandate, which prevents it from making equity investments.

4. Concessional providers can actively support replicability.

Mwenge is one of a number of projects supported by UNCDF through the LFI. Based on the lessons learned from these projects and the findings from a recent mid-term evaluation, UNCDF is now helping governments in programme countries to set up national platforms (in the form of trusts or companies) that will take over the activities of the LFI programme when it comes to an end. These platforms would allow project developers, financiers and other stakeholders to network, share experiences and resolve constraints, so that the work of supporting missing-middle projects can continue after UNCDF support comes to an end.