

THE ROLE OF
PHILANTHROPIC CAPITAL IN
**SUPPORTING PRIVATE
FINANCE MARKETS FOR
RURAL WATER**



Acknowledgements

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Their perspectives helped ensure that the brief reflects both the realities and opportunities associated with funding and philanthropic support across the sector.



Preface

Rural water has structural barriers that prevent private finance from flowing: low and volatile revenues, high costs per customer, dispersed populations, and tariffs that rarely cover full costs mean that, in many contexts, private finance has reasons to stay away. This report is about the more specific role philanthropic capital can play within those barriers. Across eleven financing models now in use, philanthropic capital has repeatedly built the pipeline, shifted the risk, converted impact into revenue, or opened access to new pools of capital that a transaction needed in order to close. Deciding which intervention to pursue and the extent required depends on the market’s current stage, operator constraints, and how the mechanism is designed to develop the market.

The report builds this argument in stages. It begins with a typology of how private finance markets mature, and with the four levers philanthropic capital can pull within them. It then turns to eleven case studies, spanning green and blue bonds, guarantees, blended finance facilities, and outcome-based instruments across multiple countries, read not as success stories but as evidence for where each lever did and did not hold.

The cross-cutting findings and recommendations that follow are written for funders deciding how to deploy capital, but the case studies themselves are written for anyone trying to work out whether a specific transaction, in a specific market, is worth attempting.

Acronyms

ALN	Africa Legal Network
CO ₂ e	CO ₂ equivalent
COFIDE	Corporación Financiera de Desarrollo (Peru’s state development bank)
CWSPs	Community Water Service Providers
DFC	America’s Development Finance Institution
DFIs	Development Finance Institutions
ESG	Environmental, Social, and Governance
FSD	non-profit Financial Sector Deepening Africa
GBL	Guarantee Back Loans
ICDF	Taiwan’s International Cooperation and Development Fund
MISTI	Ministry of Industry, Science, Technology and Innovation of Cambodia
MXN	Mexican Peso
NPS	Net Promoter Score
PPP	Public-Private Partnerships
SIINC	Social Impact Incentives
SICAV	Société d’Investissement à Capital Variable (a French open-ended fund structure)
TA	Technical Assistance
TZS	Tanzanian Shilling
WPS	Water Service Provider

Glossary

Additionality

A mechanism is considered additional if it improves outcomes beyond what existing resources or markets would have delivered on their own.

Blended Finance

An approach that combines public or philanthropic funding with private investment to make projects viable that may not otherwise attract commercial interest. The goal is to unlock private capital for sectors or contexts where it would not flow on its own or scale the funds.

CO₂ equivalent (CO₂e)

A unit used to measure the climate impact of different greenhouse gases on a single, comparable scale. Because gases like methane or nitrous oxide trap more heat than carbon dioxide, each is converted into the equivalent amount of CO₂ it would take to produce the same warming effect.

Concessional Finance

Loans or equity investments offered on terms that are more favourable than what the market would normally provide. This typically means lower interest rates, longer repayment periods, or more flexible conditions.

Convertible Loan / Convertible Note

These two terms refer to the same instrument and are used interchangeably. A convertible loan is a loan that can be converted into ownership (equity) in the borrowing organisation at a later date, usually when certain conditions are met. It starts as debt, giving the lender repayment rights, but carries the option to become an investor with a share in the organisation instead.

ESG (Environmental, Social, and Governance)

A framework used to assess how an organisation manages its environmental impact, its relationships with people and communities, and the quality of its internal governance and decision-making.

ESG Mandates

Investment guidelines that require institutional investors to incorporate environmental, social, and governance criteria into their portfolio allocation decisions.

First-Loss Capital

Funding that is the first to absorb any financial losses if a project or investment underperforms. By taking on this risk, first-loss capital providers protect other investors, making it easier to attract additional funding.

Greenfield

Refers to a project or investment that is built entirely from scratch, with no existing infrastructure, customer base, or revenue history to rely on.

Institutional Investors</

Net Promoter Score (NPS)

A measure of customer loyalty based on a single question: how likely are respondents to recommend a product or service to others, on a scale from 0 to 10. The overall score ranges from -100 to +100, with higher scores indicating greater customer satisfaction and loyalty.

Patient Capital

Investment that accepts a longer timeframe to generate returns than conventional finance typically allows.

Preferred Equity

A form of ownership investment that gives holders a priority position over regular (common) equity investors when profits are distributed or capital is returned. Preferred equity investors receive dividends and repayment before common shareholders, but they rank below all debt holders.

Private Finance

Financing and revenue flows from non-public, non-grant actors. Private actors may seek financial returns, non-financial returns such as environmental or social outcomes, or both.

Quasi-Sovereign Risk

The credit risk associated with a state-owned or government-backed institution, such as a national development bank, rather than the central government itself. Investors treating an entity as quasi-sovereign are effectively treating it as nearly as reliable as the government, though without a full government guarantee.

Risk-Adjusted Return

The financial return on an investment measured in relation to the level of risk taken to achieve it.

Second-Party Opinion

An independent assessment provided by a specialised external reviewer, typically a ratings agency or sustainability research firm, that evaluates whether a bond issuer's thematic framework is credible, well-defined, and aligned with recognised international standards, such as the ICMA Bond Principles. It validates that the stated use of proceeds, eligibility criteria, and reporting commitments are consistent with the relevant principles.

Securitisation

A financial technique in which a pool of loans or other income-generating assets is packaged together and sold to investors as a tradeable security. This allows the original lender to free up capital and transfer risk, while giving investors access to returns generated by the underlying assets.

Senior Debt

The highest-priority layer of debt in a financing structure. This priority position makes senior debt the lowest-risk position in a capital structure, which is why it typically attracts the lowest interest rate.

Subordinated Debt

Introduction



¹ A financial technique in which a pool of loans or other income-generating assets is packaged together and sold to investors as a tradeable security.

1.1 Overview

This report does not attempt to revisit the now-familiar estimates of the rural water financing gap, nor does it assume that private finance alone can resolve it. Rural water systems in low- and middle-income countries rarely generate the stable and predictable returns that private investors typically require. Low and volatile revenues, high per-user costs, dispersed populations, and politically constrained tariffs mean that rural water does not naturally present itself as an investable sector. Traditional public and donor financing, therefore, remain indispensable. Yet despite decades of reliance on these sources, the financing gap persists, and is likely to widen under mounting fiscal pressures, declining aid predictability, and continued (political) resistance to cost-reflective tariffs.

This report argues that private finance (see Box 1) can play a meaningful role, but only under specific conditions and for particular functions within the sector. The pathways through which private finance can enter the sector vary considerably. In most low- and middle-income contexts, the most realistic near-term opportunities lie in blended finance mechanisms. More sophisticated capital market instruments, including bonds, securitisation structures¹, and institutional investment vehicles, remain a longer-term prospect, dependent on conditions that are still largely absent. Nevertheless, such conditions are beginning to emerge in contexts where deliberate market-building efforts have taken place.

Box 1 Private and Blended finance definitions used in this report

Private Finance

In this report, private finance covers a wider range of actors than the term usually implies. It includes commercial finance, capital from banks and institutional investors such as pension funds, insurers, and asset managers, that requires a market rate return, and it also includes impact capital, capital from investors willing to accept a lower return or take on more risk in exchange for a defined social or environmental outcome.

Blended finance is one of the ways that private finance plays out in practice. A modest amount of public, concessional, or philanthropic funding sits alongside private capital, absorbing risk or improving returns just enough to make a project viable that would not otherwise attract commercial interest on its own. The purpose is not to replace private capital but to draw it in, unlocking money that would otherwise stay on the sidelines, or making what is already committed go further than it could alone.

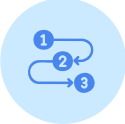
A central argument of this report is that philanthropic capital has a specific and underappreciated role in creating those conditions by targeting the precise constraints that prevent private finance markets from functioning. Innovative finan-

cing models aim to reduce downside risk, enhance returns, or otherwise change the conditions under which private capital can participate. In almost every case reviewed, the catalyst behind these models is philanthropic capital in one form or another: grants, concessional investments, guarantees, or outcome payments that absorb risks, build track records, or underwrite the impact that private investors require before participating.

The difficulty is that philanthropic capital is often deployed in the form of grants only or in a uniform way as though all contexts were the same. In practice, different models do different things, and the right deployment depends on the stage of development the market is in. A guarantee-backed loan, a development impact bond, and a blue bond all draw on philanthropic capital, but they answer very different financing challenges and are needed under very different conditions. Without a shared framework for distinguishing these questions, catalytic resources can be absorbed, but without producing the market-level change they are intended to support.

This report explores how philanthropic capital supports the development of private finance markets in rural water. Drawing on empirical evidence gathered through a review of eleven financing models currently in use, including interviews with practitioners and analysis of deal structures, it sets out a framework for understanding how financing models contribute to market development. This includes typologies of market maturity, identification of the financial levers through which philanthropic capital acts, and a mapping of models against those levers. The aim is to help funders, operators, and stakeholders make more informed decisions to match the right model to the right stage of development.

1.2 How to use this document

2	Section 2	Introduces the three-stage market typology used throughout the study.		Three-stage market typology
3	Section 3	Sets out the four financial levers through which philanthropic capital acts and shows how these levers map to stages of market development.		Four financial levers and how they map to stages of market development
4	Section 4	Presents the 11 financial models examined in this report, grouped by the stage at which they typically intervene.		11 financial models grouped by stage of intervention
5	Section 5	Draws out the role philanthropic capital plays in making each model viable.		Role of philanthropic capital in making each model viable
6	Section 6	Sets out recommendations.		Recommendations
7	Annex	Sets out case studies.		

ment types that have been applied in the rural water sector across different geographies and market stages, not to constitute a statistically representative sample. Each model is captured in a standalone factsheet and further elaborated in section 4 below.

Limits of evidence. The cases are not statistically representative, and the findings should be read as analytical rather than predictive. In several cases, evidence remains early-stage, transaction-specific, or dependent on practitioner interviews and available deal documentation. The report therefore does not claim that any model is universally replicable, nor that successful mobilisation of private capital in one context will translate automatically to another. The framework is intended to support structured judgement, helping funders ask better questions about market readiness, operator maturity, risk allocation, revenue reliability, and the role of public and philanthropic capital.

Market Typology



Private finance enters a sector gradually and depends on the emergence of viable operators, dependable revenue streams, acceptable risk profiles, and institutional systems capable of supporting transactions and enforcing agreements. Because these conditions evolve unevenly over time, financing strategies must be tailored to the stage of market development.

The report therefore proposes a market typology to illustrate how conditions for private finance evolve across different contexts. Derived from the study's empirical findings, the framework is intended to distinguish the stages of development of private finance markets in the water sector, rather than to serve as a formal classification system. It focuses on the evolution of capital flows and the constraints that affect them as financing ecosystems mature, rather than on the overall maturity of the water sector. It is important to note that the maturity of service providers operating in the market sometimes varies independently of market conditions.

Box 2 Market definition used in this report

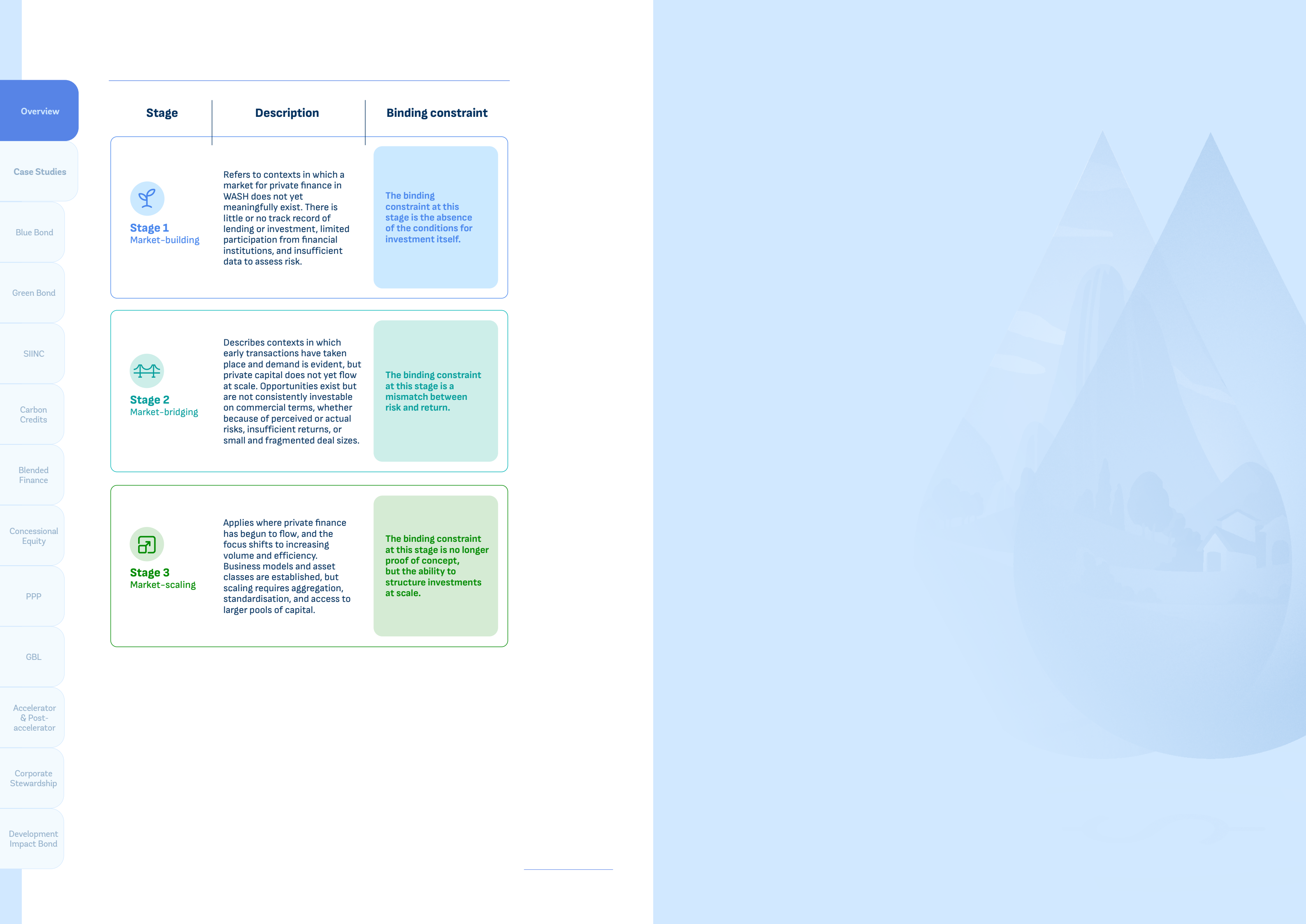
The term “financing market” or “market” is used throughout this report as shorthand for the ecosystem of actors, instruments, incentives, and institutional conditions that shape whether and how private capital can flow into the rural water sector. It does not imply a particular level of sophistication or the presence of formal capital market infrastructure.

This distinction matters because the viability, scalability, and replicability of the financing models presented in this report depend on the maturity of the market in which they operate. Conditions such as the presence of lenders willing to serve the sector, the creditworthiness of service providers, the availability of credit information, and the strength of contract enforcement vary considerably across contexts. A model that performs well in a relatively developed market may therefore require significant adaptation, or may not be feasible at all, where these foundations are weak, and the analysis in subsequent sections should be read with this in mind.

The typology is organised around three stages. The stages reflect qualitatively different configurations of market readiness, and the boundaries between them are not fixed. A given geography may shift rapidly following a regulatory change or the entry of a major anchor investor.

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Corporate Stewardship
Development Impact Bond

Stage	Description	Binding constraint
 Stage 1 Market-building	Refers to contexts in which a market for private finance in WASH does not yet meaningfully exist. There is little or no track record of lending or investment, limited participation from financial institutions, and insufficient data to assess risk.	The binding constraint at this stage is the absence of the conditions for investment itself.
 Stage 2 Market-bridging	Describes contexts in which early transactions have taken place and demand is evident, but private capital does not yet flow at scale. Opportunities exist but are not consistently investable on commercial terms, whether because of perceived or actual risks, insufficient returns, or small and fragmented deal sizes.	The binding constraint at this stage is a mismatch between risk and return.
 Stage 3 Market-scaling	Applies where private finance has begun to flow, and the focus shifts to increasing volume and efficiency. Business models and asset classes are established, but scaling requires aggregation, standardisation, and access to larger pools of capital.	The binding constraint at this stage is no longer proof of concept, but the ability to structure investments at scale.



Financial Levers



² As defined in Box 1, private investors are non-public, non-grant actors that may seek financial returns, social or environmental impact, or both.

This section sets out the mechanisms through which philanthropic capital unlocks finance. Four distinct financial levers are identified. Each answers a different question about why private capital is not currently flowing, and each one operates most effectively in specific market conditions.

Lever 1 Builds pipeline and demonstrates viability

Creates investable opportunities and generates the performance data and track record required to demonstrate financial viability. This is a foundational function, establishing the conditions under which private capital can engage with the sector.

Lever 2 Shifts risk

Alters the risk profile of investments (see Box 3) through instruments such as guarantees, first-loss capital, or subordinated positions. This enables private investors² to participate in transactions that would otherwise fall outside their risk tolerance.

Box 3 Transactional risk vs. systemic risk

Transactional risk refers to the risk within a deal, the risk that financial levers are designed to address. Guarantees, first-loss capital, aggregation, and outcome payments can shift, absorb, or reprice this kind of risk enough for a transaction, or a portfolio of similar transactions, to close.

Systemic risk refers to the risk embedded in a market's underlying conditions, such as weak sector governance, inconsistent regulation, or other enabling-environment constraints.

Deal-level structuring cannot resolve systemic risk. Because it stems from the fundamentals of governance, regulation, and institutional capacity, addressing it durably requires sustained, long-term change in those areas.

The models in this report each mitigate a specific transactional risk, while also examining the enabling environment, the governance, regulatory, and institutional conditions, within which that transaction sits.

Lever 3 Converts impact into revenue

Creates new income streams by linking payments to verified outcomes. This lever bridges the gap between financial sustainability and social affordability by transforming positive externalities, such as environmental or service delivery outcomes, into predictable cash flows. These payments, which may come from governments, donors, corporates, or other outcome funders, enable organisations to generate revenue beyond user tariffs, helping them close the financing gap, where affordability

constraints or unpriced benefits would otherwise limit cost recovery. This lever attracts investors motivated by financial returns, as well as those driven by non-financial objectives, particularly the measurable social or environmental impact generated by the project.

Lever 4 Opens new investor pools

Enables access to capital from investors operating under impact, ESG, or sustainability mandates. This lever focuses on asset institutionalization: “packaging” water investments into standardized, scalable instruments (such as green or blue bonds) that align with the expectations, risk profiles, and operational constraints of larger investors. It is not only about identifying new sources of capital, but about adapting the structure of investments so they can flow through existing capital market channels.



Lever 1
Builds pipeline and demonstrates viability

This lever is needed where the sector lacks investable opportunities or the track record to attract investors in the first place.



Lever 2
Shifts risk

Financing Models and Cases Examined in this Report



In recent years, the water sector has introduced a range of financing models often described as catalytic, blended, or impact-linked. This study examined these models to identify recurring patterns in how they support market development and which levers they pull. On that basis, eleven financing models were selected for analysis, each illustrated by a real-world case study (presented in a dedicated factsheet in the Annex to this report).

4.1 Overview matrix

The models were mapped against the market stages and financing levers identified in the framework, showing where they most commonly intervene and how they support market development in practice.

The matrix below provides a consolidated overview, organised by the three market stages. Each row summarises the illustrative case study and rates its engagement with each of the four levers.

Each model was rated against each of the four levers on a three-point scale (Strong, Moderate, Limited, Not a primary function) using three criteria applied consistently across all 11 cases:

-  **Centrality:** Is this lever the primary mechanism through which the model works, a secondary effect, or incidental?
-  **Intentionality:** Was the lever deliberately designed into the instrument, or does it arise as a consequence of something else?
-  **Materiality:** Does the lever operate at a scale and with a reliability that would meaningfully influence an investment decision?

The matrix is intended as an orientation tool rather than a precise measurement instrument, and readers are encouraged to treat it accordingly³.

³ These ratings are necessarily indicative. They are based on the case evidence reviewed and the analytical judgements of the research team, and reasonable assessors may rate individual cells differently depending on the cases they weight most heavily or how they interpret the boundaries between levers.

Table 1. Mapping of 11 financing models against the four levers, grouped by stage of market development.

●●● Strong ●●○ Moderate ●○○ Limited ○○○ Not a primary function

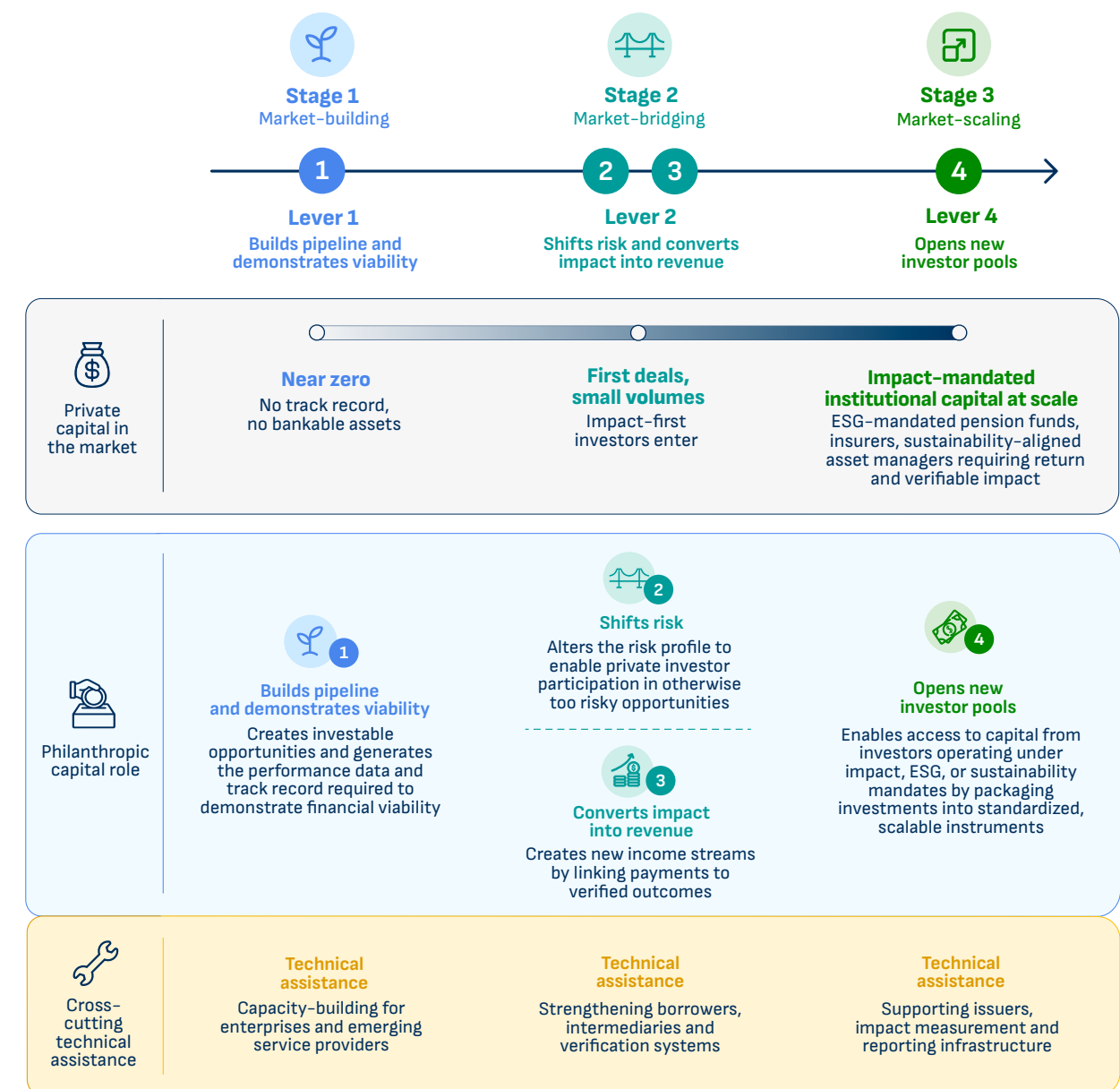
Financing model and Case study	Lever 1 Pipeline & viability	Lever 2 Risk	Lever 3 Impact → revenue	Lever 4 Investor pools
Stage 1 – Market-building Models Creating investable enterprises, pipelines and conditions where none yet exist.				
Accelerator + Post-Accelerator Case study: Cewas + Maji Fund — Kenya, Ghana, Uganda A programme combining grants, concessional loans and technical assistance to develop early-stage water enterprises into investment-ready operations. The Accelerator shapes business models and governance; the Post-Accelerator provides patient capital that bridges graduated enterprises toward mainstream investment.	●●●	●○○	○○○	○○○
Corporate Social Responsibility (CSR) vehicle Case study: Women + Water Collaborative — India A pooled structure that channels corporate contributions into WASH delivery, tied to companies’				

The Role of Philanthropic Capital



5.1 The Role of Philanthropic Capital at Each Stage

The volume of private capital that can flow into the rural water supply sub-sector depends on the stage of market development and the maturity of the service providers operating within it. As markets evolve from market-building to market-bridging and market-scaling, different constraints emerge, and different financial levers are required to address them. Philanthropic capital plays a catalytic role in this progression by deploying these levers at the most relevant point in both the market development and the service providers operating within it.



Across all stages, technical assistance acts as a cross-cutting enabler. Its role evolves alongside both the market and the provider: from building enterprise and system capacity in early stages,

and fund the pipeline development, technical assistance, and transaction preparation that make aggregation viable.

Institutional embedding. One successful transaction has limited market value if institutions do not change how they operate. The third function is to embed new lending practices, appraisal tools, due diligence standards, and partnership models within banks, DFIs, utilities, and public agencies.

Standardisation. As legal frameworks, reporting systems, and performance metrics become more consistent across transactions, the cost and complexity of assessing new opportunities can decline for both investors and intermedia-ries. But standardisation must remain flexible enough to avoid excluding less mature providers or prioritising easy-to-measure indicators over service quality and inclusion.



Recommendations



Philanthropic engagement in rural water finance is still largely treated as grant-making, funding technical assistance, subsidising operations, or covering project costs. The cases examined in this report show that this framing underestimates what philanthropic capital can do. Foundations have the mandate, risk appetite, and time horizon needed to unlock private finance. Across the eleven cases, philanthropic capital was used to absorb first-loss risk, provide concessional loans, fund outcomes-based payments, and cover bond issuance costs that attracted institutional investors. These were targeted interventions that improved the risk-return profile for other financiers and helped markets grow.

The report, therefore, concludes with practical recommendations for how philanthropic funders can deploy capital more strategically: diagnosing market stage, identifying binding constraints, matching instruments to operator maturity, and designing for market-level catalytic effects rather than transaction success alone.

- 1 Diagnose the market stage before selecting an instrument.** Before committing philanthropic capital, funders should formally assess the stage of market development in the target geography and sub-sector. This diagnosis should be repeated at sub-market level rather than assumed at country level. A single country may contain market-scaling opportunities around urban or peri-urban utilities, while rural providers remain at the market-building stage.
- 2 Match the lever to the binding constraint(s).** Funders should select models on the basis of which of the four financial levers addresses the most binding constraint in their context. Where the main barrier is the absence of investable operators or assets, philanthropic capital should build pipeline and demonstrate viability. Where the main barrier is investor risk, it should shift risk through guarantees, first-loss capital, or concessional positions. Where revenues are insufficient, it should convert impact into revenue through outcome payments, carbon revenues, or viability support. Where transactions are too fragmented for larger investors, it should support aggregation, standardisation, and access to new investor pools. If several constraints are present, funders should identify the most binding one first.
- 3 Match instruments to both market maturity and operator maturity.** Funders should assess whether the target operator can absorb the proposed finance. More complex instruments should be reserved for operators with sufficient institutional capacity. For

Case Studies



Blue Bond



Green Bond



Social Impact Incentives (SIINC)



Carbon Credits



Blended Finance



Concessional Equity



Enhanced Viability Gap Funding: The Guaymas-Empalme Desalination PPP



Guarantee Backed Loan



Accelerator & Post-Accelerator



Corporate Stewardship Through CSR

 **Viability Gap Fund (PPP)**
● Mexico

 **Carbon Credit Finance**
● Mali

 **Maji Fund**
● Ghana
● Uganda
● Kenya

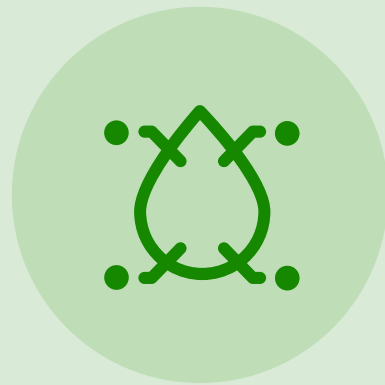
 **NBK Guarantee**
● Kenya

 **Development Impact Bond (DIB)**
● Cambodia

 **Concessional Equity (Danone/Naaandi)**
● India

 **Social Impact Incentives (SIINC)**
● India

 **CSR Vehicle (Women + Water)**
● India



Blue Bond

Blue Bonds for Water and Sanitation in Peru

Case Studies

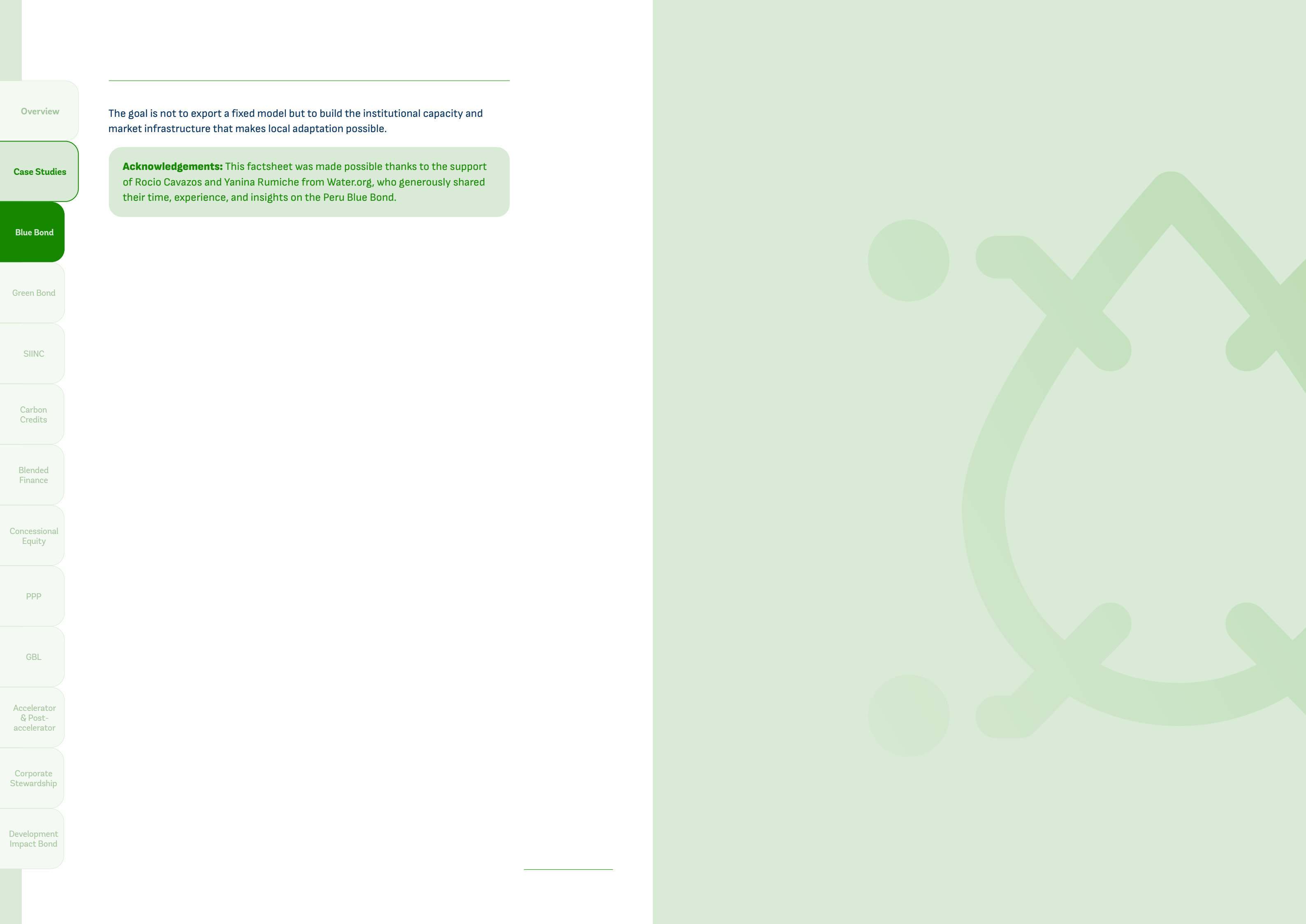


Peru's Blue Bond demonstrates how capital markets can be used to mobilise private investment for water and sanitation at scale. By structuring the bond through a credible public issuer and established microfinance institutions, the model aligned investor requirements with household-level financing needs. The result was a market-based instrument that expanded access to capital while improving affordability for low-income households.

Key insights

- Blue Bonds can crowd in private capital to water and sanitation when three conditions are met: i. credible underlying assets (in this case, well-performing water and sanitation loan portfolios held by participating microfinance institutions), ii. a trusted aggregating issuer, and iii. a market able to absorb the instrument.
- Risk structuring helped attract investors: by working through Perú's national development bank, the bond turned small, risky loans into a safer investment backed by a public institution.
- Access to capital markets can improve both scale and affordability. Increased and lower-cost funding for microfinance institutions expanded lending and contributed to lower interest rates for low-income households.
- Replication depends on enabling conditions and may require adaptation: in weaker contexts (including less mature capital markets, less established microfinance sectors, or issuers without existing market credibility), additional credit enhancement or concessional support may be needed to achieve similar outcomes.

⁴ Professional investment entities, including pension funds, insurance companies, sovereign wealth funds, asset



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The goal is not to export a fixed model but to build the institutional capacity and market infrastructure that makes local adaptation possible.

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Green Bond

Green Bond Tanga Urban Water Supply and Sanitation Authority (UWASA)

Case Studies



Tanga UWASA issued a pioneering local-currency green bond (USD ~20.8 million) for water infrastructure in Tanzania, proving that creditworthy utilities can attract unsubsidised private capital without sovereign guarantees.

Key insights

- A USD 1 million catalytic grant from the United Nations Capital Development Fund (UNCDF) mobilised USD 20.8 million in institutional capital: a 1:20 leverage ratio and an efficient use of concessional finance.
- The bond closed 103% oversubscribed at a fully commercial rate of 13.5%, demonstrating that well-managed WASH infrastructure can compete for domestic institutional capital without subsidised pricing.
- For rural water, the four structural constraints: i. borrower standing; ii. portfolio scale; iii. revenue reliability; and iv. technical preparation, must be solved before Green Bonds become a viable mechanism.

¹⁴ Many institutional investors operate under formal investment policies that require a defined proportion of their portfolio to be allocated to assets that meet recognised ESG criteria. A bond carrying a credible green label, aligned with internationally recognised standards such as the ICMA Bond Principles and verified by an independent Second-Party Opinion, qualifies for these allocations. The ESG label expands the eligible investor universe by making the bond legible within frameworks that screen investments by sustainability criteria.

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- **The revenue problem:** Weak and unreliable tariff collection cannot underpin commercial debt service. Alternative payment mechanisms need to be structured in their place to guarantee a reliable flow of income.
- **The technical assistance problem:** The preparation required to reach bankability cannot depend on one-off donor support; it must be institutionalised, with predictable technical support delivered at a cost that does not absorb the efficiency gains the instrument is supposed to create *(for additional information, please refer to the Factsheet – CRS/Azure)*.

8 Role of Philanthropic Foundation

Foundations can play a catalytic role in Green Bonds from three distinct angles, each corresponding to a different stage of market development.

The first is the longest and most upstream role: supporting water service providers to build the foundation that a capital market transaction requires. A foundation can **support individual providers to improve their financial performance**, reach the level of professionalisation, and develop the operational maturity that makes debt issuance viable. However, as mentioned, doing this alone is challenging for rural service providers, so foundations can in parallel support development of an architecture or platform that allows providers who could never issue a bond alone to participate collectively.

The second angle is more targeted and immediate: **covering the transaction costs that prevent issuers (particularly first-time issuers) from entering the public market** even when they have the underlying portfolio to support it. This was the role played by UNCDF in this structure. These costs include the development of a thematic bond framework aligned with international standards, a Second-Party Opinion from an independent reviewer confirming such alignment, legal and



Social Impact Incentives (SIINC)

The case of Khmer Water Supply Holding (KWSH)

Case Studies



SIINC is an Impact-Linked Finance instrument that provides time-limited, outcome-based payments to enterprises achieving predefined social outcomes. In June 2021, KWSH, a rural Cambodian water provider, joined the SIINC for WASH programme, co-designed and implemented by Roots of Impact and Aqua for All. KWSH faces constraints in financing network expansion in low-income and higher-cost service areas. The SIINC mechanism was designed to address this challenge by complementing a simultaneous private investment round, improving KWSH's revenue profile, and reducing risk for investors. Two outcome metrics triggered payments: increased household connection rates in target districts with higher proportions of low-income households, and expansion into high-need licence areas.

Key insights

- Cambodia's relatively stable regulatory environment, private concession model, and growing private sector experience provide a more supportive context than many other emerging markets.
- KWSH's decade-long commercial track record and existing investment pipeline made outcome targets credible and reduced delivery risk.
- The SIINC mechanism ran over a three-year period (June 2021 – May 2024) and was designed to increase access to piped water, including for low-income rural households.
- SIINC payments strengthened KWSH's financial profile, enabling it to attract equity investors and demonstrating a clear crowding-in effect.
- Over this period, KWSH grew significantly, reaching over 28,00

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providing capital where standard debt was not available, aligning financing with the company’s longer payback period and social impact.

For enterprises at an even earlier stage, the SAFI offers a third pathway. Unlike traditional debt, SAFI repayments are tied to actual revenue generation, and the cost of capital depends on whether agreed impact goals are achieved. In addition, rather than fixing all impact targets up front, the SAFI creates space for learning, adaptation, and growth while linking financial terms to verified impact as it is created. If the enterprise performs strongly on impact, it repays less; if it falls short, it repays more, up to a pre-agreed ceiling. Purefresh, a Kenyan social enterprise providing safe drinking water through automated outlets in under-served areas, illustrates the model in practice. Purefresh raised USD 200,000 through a SAFI under the Impact-Linked Finance for WASH program, with repayments ranging from 0.85x to 1.32x²⁷ of the invested amount, depending on verified impact performance, including the placement of outlets in low-income areas and the reach of target communities. The SAFI also included a one-year grace period, giving Purefresh time to build operations before revenue sharing began.

SAFI (early stage, flexible targets, revenue-based repayment) → ILL (growth stage, defined metrics, structured loan with forgiveness) → SIINC (scaling stage, running a parallel investment round, bonus payments on top of commercial investment)

7 Role of philanthropic foundations



Carbon Credits

Carbon Credits in the Water Sector

Case Studies



²⁸ "Certified" here means that an independent third-party body has verified that the emissions reduction or avoidance actually occurred and meets the requirements of a recognised standard, such as Gold Standard or Verra/VCS.

²⁹ CO₂ equivalent (CO₂e) is a unit that expresses the warming effect of any greenhouse gas in terms of the equivalent amount of carbon dioxide, allowing different gases to be measured on a single comparable scale. Global Warming Potential values are established by the Intergovernmental Panel on Climate Change (IPCC). For a full table, see: ourworldindata.org/grapher/global-warming-potential-of-greenhouse-gases-over-100-year-timescale-gwp

³⁰ Carbon credits are traded in two markets: compliance markets, where companies must meet regulatory emission limits, and voluntary markets, where organisations purchase credits as part of sustainability commitments without legal obligation. Rural water projects typically operate in the voluntary market.

Carbon credits offer rural water service providers a potential source of supplementary revenue by converting the climate benefit of safe water delivery, specifically, the avoided greenhouse gas emissions from households that no longer need to boil water, into tradeable financial instruments sold



Blended Finance

Azure Source Capital (Azure) Blended Finance Facility

Case Studies



Azure is a lending facility that channels capital to rural and peri-urban water service providers in Central America by combining technical assistance with concessional and private investment. It has mobilised \$31 million including grants for capital expenditure and technical assistance, loans, and co-investments and has disbursed \$15 million in loans to date, reaching over 311,000 people with zero defaults.

Key insights

- Technical assistance is as important as the capital itself. The zero-default record depends on ongoing support to WSPs, not just careful loan selection.
- The model works because risk is layered. Catholic Relief Services (CRS) and Interamerican Development Bank Lab(IDB Lab) absorb the first losses if loans fail, giving private investors enough protection to participate.
- Majority of the lending is through local banks in each country, so the Fund maintains exposure to the bank's balance sheets and not to the underlying funded projects
- None of the water service providers have defaulted on their loans, which indicates the strong value households place on reliable water services.
- So far, the facility has been funded by impact investors rather than fully commercial ones.
- The goal is to demonstrate that rural water can be creditworthy, not to subsidise it indefinitely, but to build the track record needed to attract commercial finance.



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backstop individual WSP loans. This is a targeted, project-by-project de-risking tool that foundations could provide without needing to function as lenders.

Grant funding for technical assistance and guarantee provision therefore represent two entry points for foundations that wish to support similar blended finance models without participating directly in the lending structure, although, as the capital structure demonstrates, some foundations already engage as senior debt investors, which represents a third role for such funders.

Acknowledgements: This factsheet was made possible thanks to the support of Maren Barbee from CRS, who generously shared her



Concessional Equity

Danone Communities
and Naandi Water in
India

Case Studies



Concessional equity is capital provided at below-market returns to support social or environmental impact, offering patient, risk-tolerant funding suited to early-stage social enterprises. In this case, Danone Communities used concessional equity to help build and scale Naandi Water in India, enabling access to affordable drinking water in underserved rural areas.

Key insights

- Concessional equity is a mechanism for investors to accept lower returns and higher risk to enable social enterprises to grow in challenging markets.
- Danone Communities provided not just funding but governance, technical support, and introduced networks to strengthen Naandi Water's operations.
- A hybrid financial model combining grants, user fees, and urban cross-subsidisation was critical for sustainability.
- While effective for impact and scale, concessional equity does not automatically create pathways for commercial investment in low-profit sectors.

1 What is concessional equity? And how was it applied here?

Concessional equity is an investment approach in which the provider of capital accepts below-market financial returns in exchange for a social or environmental impact. The investor becomes a

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That said, concessional equity plays a critical role in early-stage development and innovation, enabling enterprises to move from proof of concept to operational scale in contexts where commercial viability is not immediate.

6 Role of Philanthropic Foundation

Foundations can engage with the concessional equity model from two entry points, both of which address the key constraints that social enterprises like Naandi Water face on the path to financial sustainability.

The first is co-investing alongside funds like DC. Foundations with programme-related investment (PRI) mandates can contribute capital to impact equity vehicles that invest in WASH social enterprises. By increasing the pool of concessional capital available to these funds, philanthropic foundations help expand the pipeline of social enterprises that can receive the long-duration, risk-tolerant investment they need.

The second is funding the technical assistance that makes concessional equity catalytic. Philanthropic foundations are well positioned to finance this type of non-financial support, by funding dedicated TA programmes the success rate of portfolio enterprises may increase as they would have tools that prevent operational risk.

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6 Role of Philanthropic Foundation

Philanthropic Foundations could potentially play a role in VGF in several ways in contexts which are conducive to such PPP arrangements:

Technical assistance and project preparation

The PPP-VGF structure requires significant preparatory work, including feasibility studies, socioeconomic assessments, and procurement advisory before a project can access VGF. In contexts where public capacity or funding for project preparation is weak, philanthropic capital could fund this pre-investment phase, reducing the time and cost of getting projects to a bankable stage.

First-loss capital to reduce VGF requirements

In contexts where a FONADIN-equivalent has limited resources, a philanthropic foundation could provide a first-loss tranche that sits below the VGF grant in the capital structure, absorbing the highest-risk portion of the investment and thereby reducing the grant required from the public fund.

Upstream system strengthening

Beyond project-level financing, philanthropic capital is well suited to addressing the structural conditions that make VGF necessary in the first place. In contexts like Mexico, the core issue is not a lack of

