

Innovative Finance Options

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CEPT University (India)

In cooperation with:



Sanitation is traditionally financed through public funds, but repayable finance is also an option

Own sources or grants

- Transfers/ Grants – from higher level of government: State and Central, can be tied or untied
- Own sources of revenue of the local government or utility – taxes, fees, rental income, etc.
- Grants from ODA and other development partners

Repayable finance

- Governments can also take loans from financial institutions, bilateral or multilateral international agencies, commercial banks, Municipal Development Funds (MDFs)
- Market borrowing – municipal bonds /commercial projects
- Borrowing by households from banks, MFIs, SHGs for sanitation improvements

New sources of funds and funders

New sources and methods of financing urban sanitation

But there are some **new emerging financiers** –

- Private foundations and CSR
- Philanthropist foundations/donors /individuals – looking to improve effectiveness of their grants/ funding, or because of CSR requirements as in India
- Social investors – looking beyond financial returns to social/ environment impacts, patient capital

And **new methods of financing** being used by other funders..

- Multilateral and bilateral agencies using Output based Aid (OBA) and Program for results (P4R)
- Government programs using OBA / Results based funding (RBF) approaches
- Blended finance to leverage private and commercial finance

Results based approaches have started to become the norm

New breed of bilateral donors - example UKAid

- There are new ideas of **measurable impacts on the ground**
- For donor countries there is a need to show results to voting population e.g. UKAID, UK now has an **Act (International Development (Official Development Assistance Target) Act 2015)** that requires UK Government to put **aid to developing countries at 0.7% of GNI**
- The Secretary of State must make arrangements for the **independent evaluation of the extent to which UK ODA represents value for money**. The Secretary of State must include in each annual report a statement as to how he or she has complied with this duty

Who are the potential social impact investors ?

- “Actively placing capital in businesses and funds that generate social /environmental good and at least return nominal principal to the investor” (Monitor group)
- Social impact investors emerging as a potential new source.. They include:
 - High net worth individuals (HNI)
 - Institutional social investors
 - Foundations
 - Large funds such as pension funds

Sources of funds for social impact investment

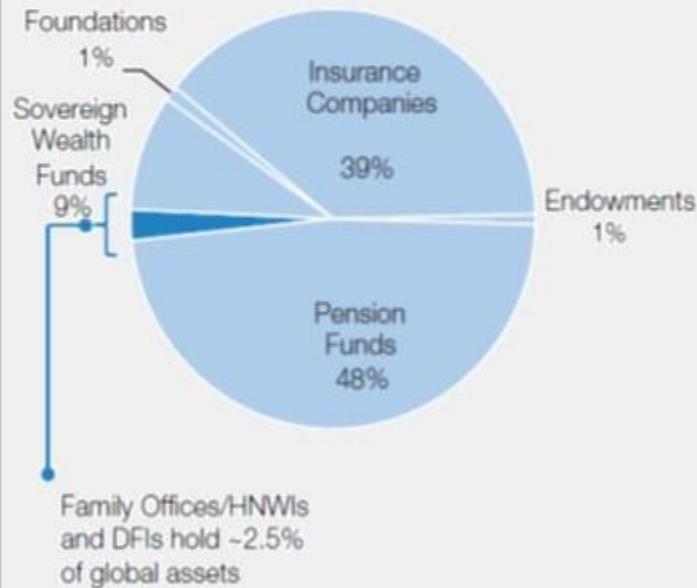
Figure 2: Source of Funds for Impact Investment Fund Managers, 2012

Source: GIIN, J.P. Morgan



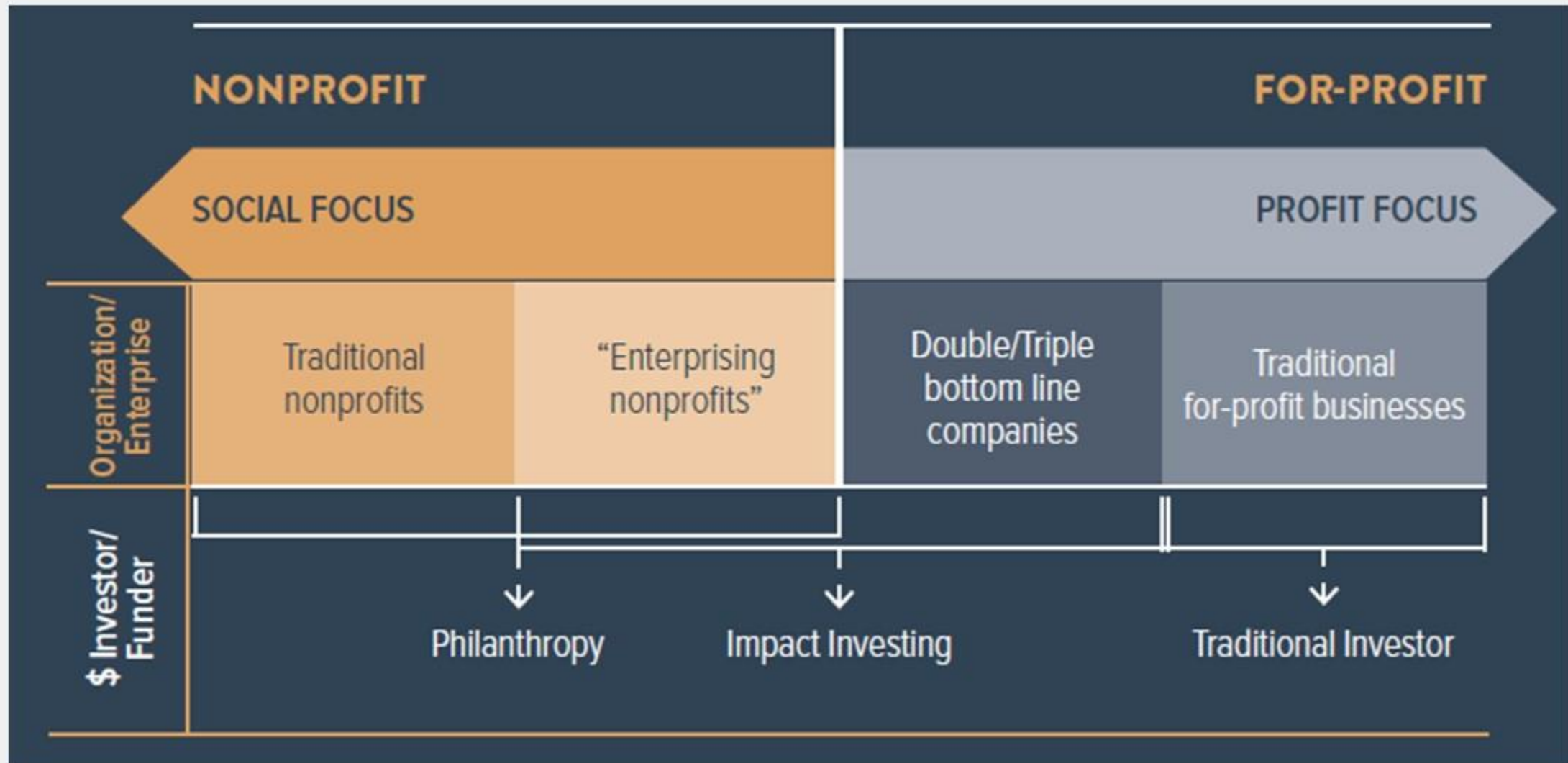
Figure 3: Distribution of Global Asset Ownership, by Investor Type, 2011

Note: Omitted from the analysis include Mutual Funds, Asset Management Divisions of Bank and Fund Managers (Private Equity, Hedge Funds, etc.)
Source: OECD, Foundation Center, NACUBO, Overseas Development Institute, Deloitte Analysis

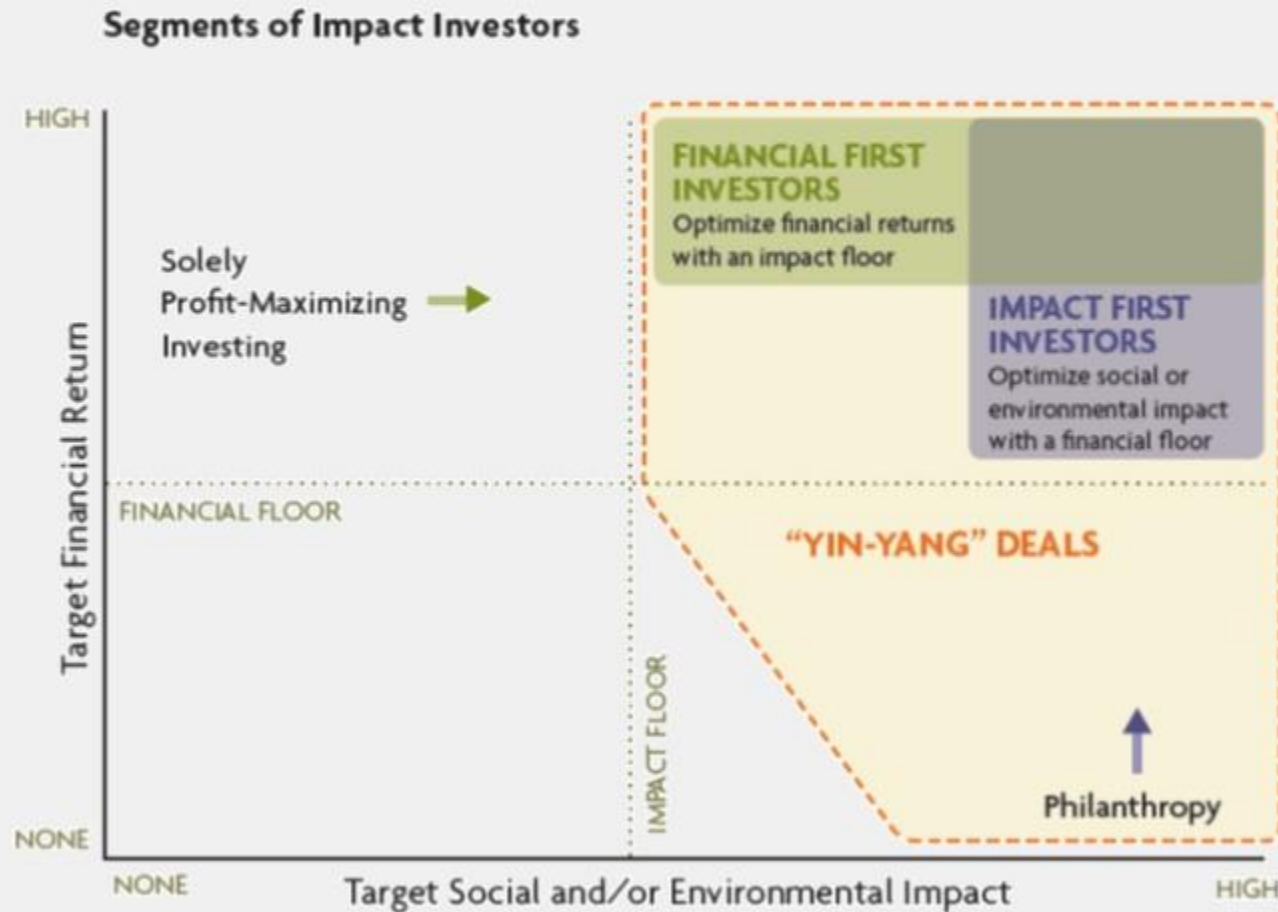


- Fund Managers
- Development finance institutions
- Diversified financial institutions/banks
- Private foundations
- Pension funds and insurance companies
- Family Offices
- Individual investors
- NGOs
- Religious institutions

Who makes social investments and where?



Segments of social impact investors



- **Financial floor and impact floor** distinguish two groups..
- **Philanthropy/ grants** will play a key role in supporting initial deals
- **Philanthropy Foundations** have emerged as important funders

Social impact investors – and an Indian example

- A recent 3-year Debt Funds for Cancer Cure by HDFC Mutual Fund mobilized about Rs 77 + Rs 180 crore. **The dividend from this was provided to Indian Cancer Society.** The first HDFC-CC Debt Fund provided **Rs 11 crore to ICS in two years.**

HDFC DEBT FUND FOR
CANCER *cure* **2014**

A 3 year closed ended capital protection oriented income scheme®



CSR – a potential new source in India

- The Companies Act, 2013 allows new models of social engagement by mandating that large companies spend 2% of their three-year average annual profit towards corporate social responsibility (CSR)
 - potential estimated annual flows from CSR of **Rs 17,000 Crores**
- Challenge to direct **CSR funds to urban sanitation**
- Many companies already active in sanitation space but largely in rural areas – HUL, Ambuja Cement, ACC, Amul, GAIL, NTPC
- Swachh Bharat Kosh – mainly to be used for school sanitation



Its community development work is based on its mission and underscores our belief in communities and in our role as catalysts to bring in change.

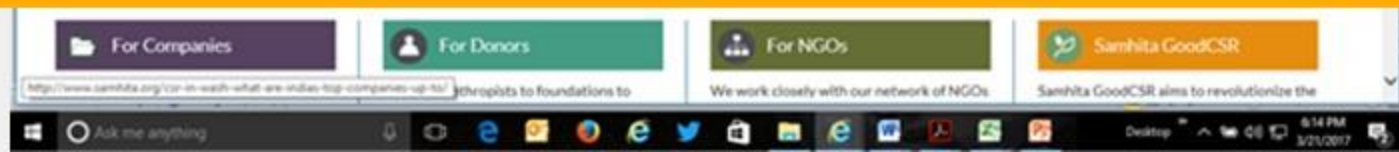


New Platforms to facilitate giving in India – Dasra, Samhita.

How GiveIndia Works



Donate to any cause of your choice, we guarantee your money will reach the needy

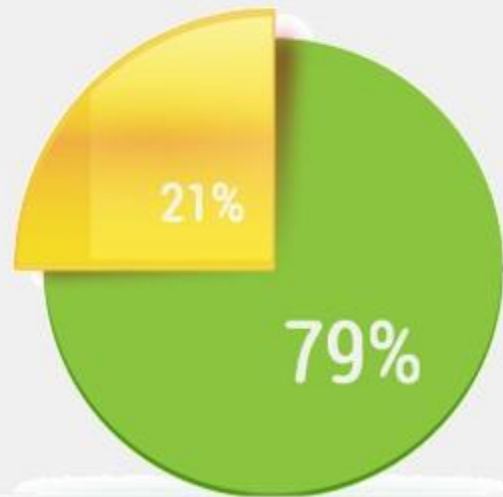


Reality of CSR in India

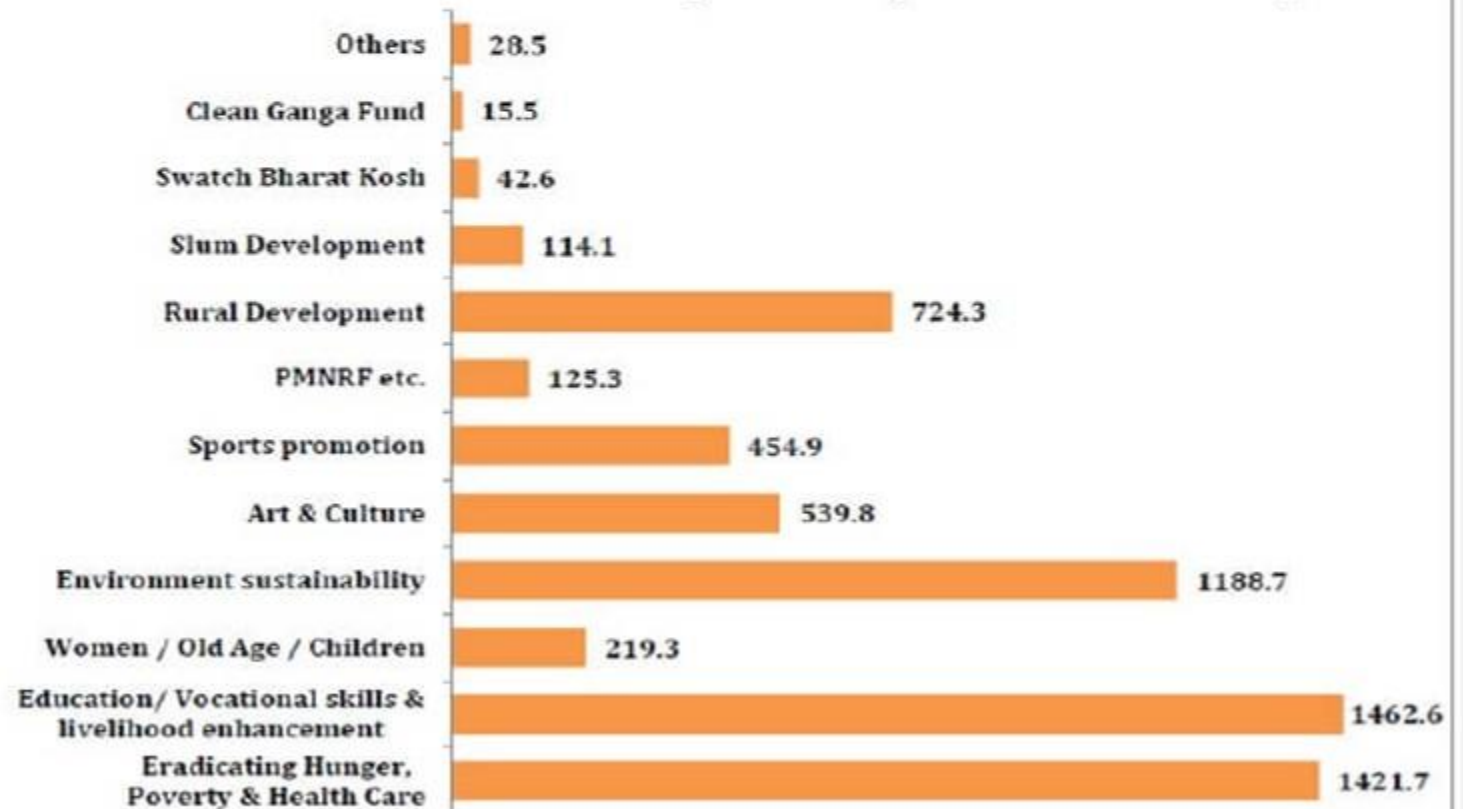
- The reality is inadequate spend (21%)
- Focused on a few sectors – RD, Education, env sustainability

Prescribed CSR Budget and Actual CSR Spent
FY 2014-15 (INR Cr)

■ Actual CSR Spent ■ Unspent CSR Budget



Sector wise CSR Expenditure (2014-15 in Rs Crore)



Results based funding mechanisms

What is 'Results Based Funding'?

Public funds or those from donors or social impact investors are made available not as “inputs” but only **on delivery of “outputs or agreed performance”**, generally for innovative approaches

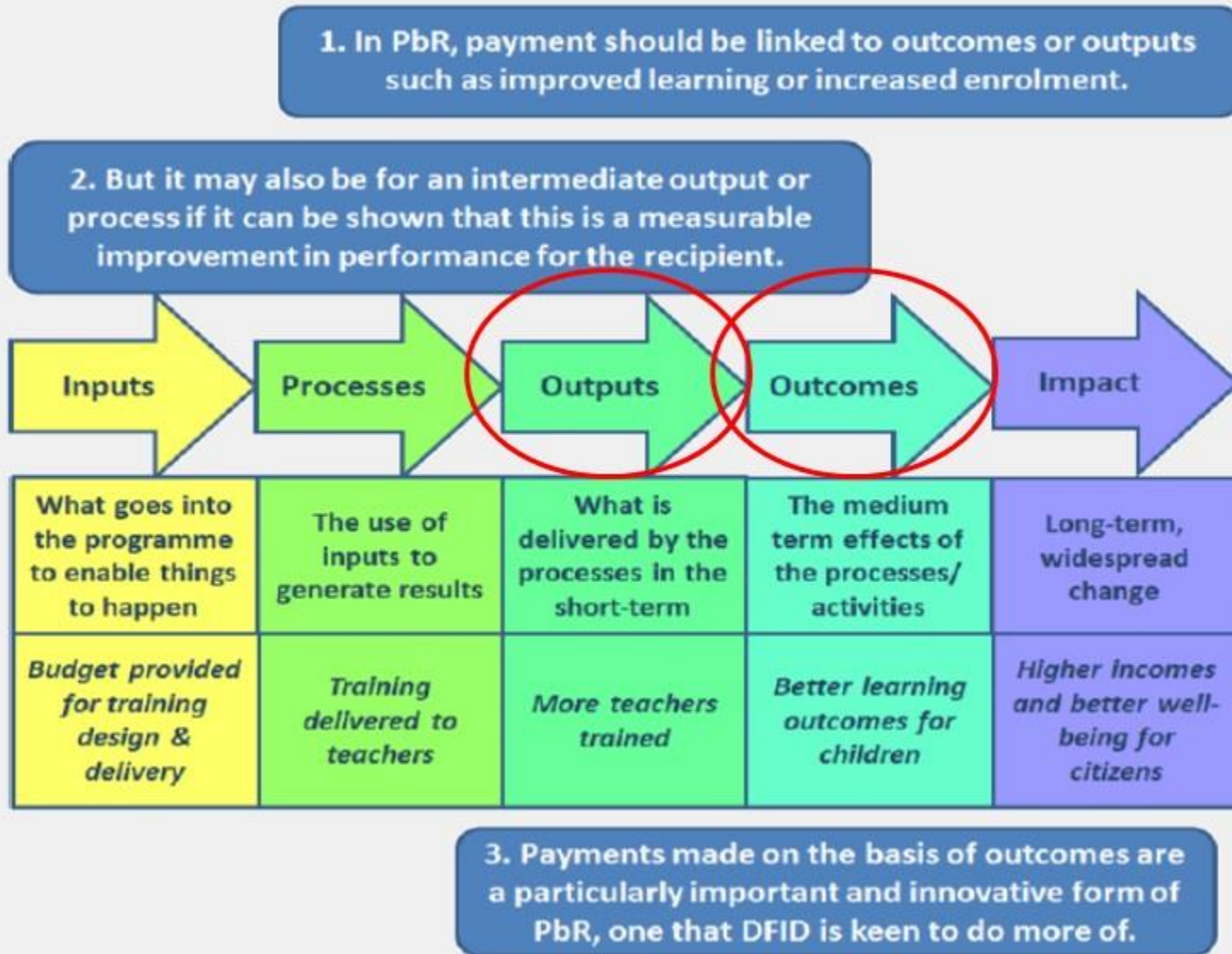
Also referred as **Payment by Results (PbR)** particularly by DFID, UK

Why is results-based funding needed?

Results focus may not happen on its own...

- Government funding is often **insufficiently focused on results and performance** and more on outputs and fund utilization
- **Inadequate performance evaluation** allows ineffective programs to persist
- The **proof-of-concept process for social innovations is slow**
- **Innovation is risky and public officials are wary of failure**
- Performance-based funding requires **upfront investments and the ability to absorb risk**

Figure 1: The results chain



Results chain is critical

Different methods such as (RBA, RBF, COD, OBA, P4R etc.) reflect a combination of financier, recipient and results for payment. Some are linked to **outputs (OBA)** or some to **outcomes (COD, SIB, DIB, P4R, etc.)**

Extent of financing /funding linked to results can also vary

New emerging results based mechanisms

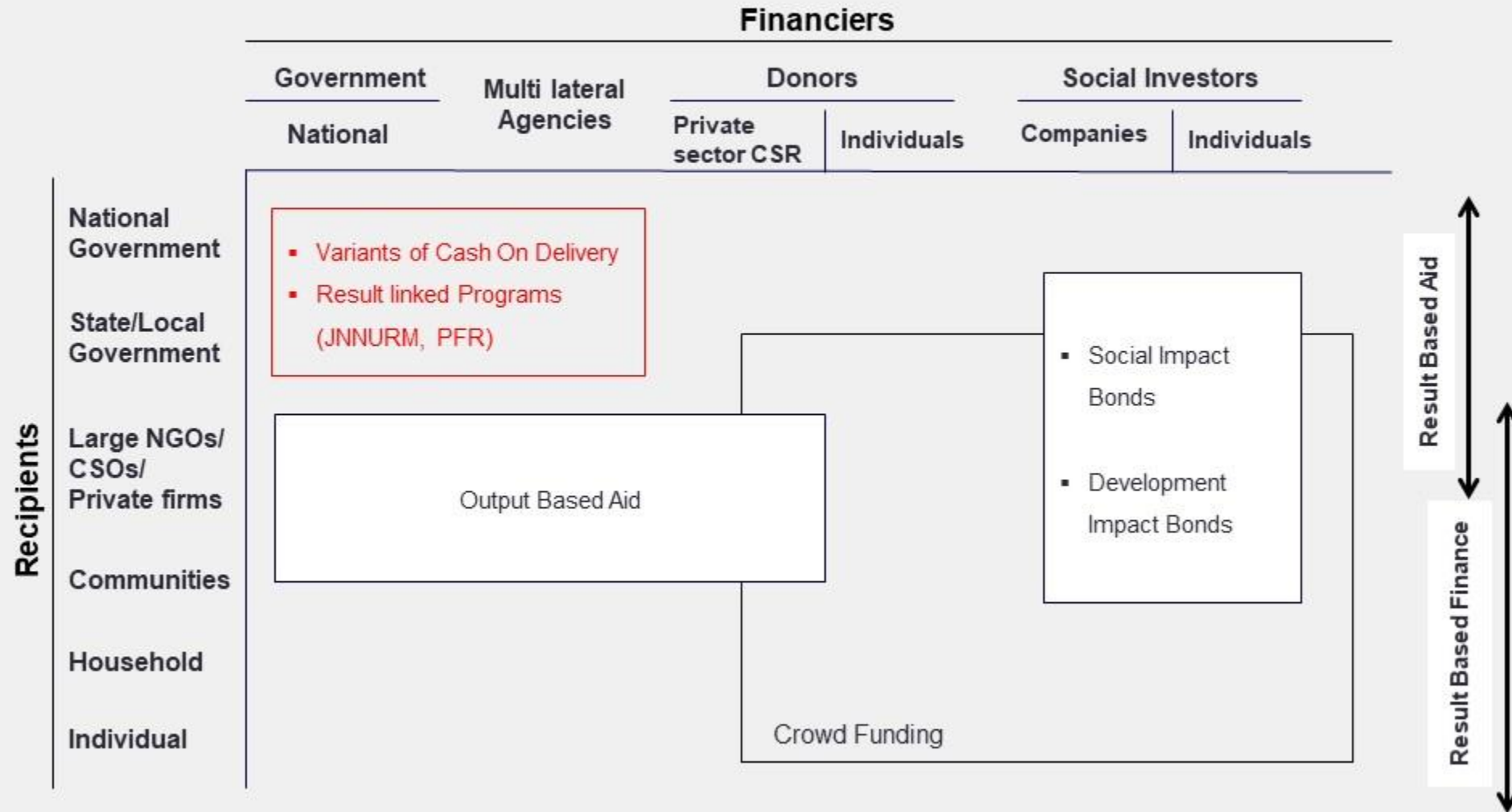
- **Results Based Aid**

- Variants of Cash-on-Delivery (COD)
- Results linked programs: World Bank/ ADB – programme for results (PFR)
- Output based aid (OBA)
- Crowd funding (grants)

- **Results based financing**

- Social impact bonds, development impact bonds
- Crowd funding (debt)

Innovative Financing – an overview



Cash on Delivery Aid

Cash 
On
Delivery 



- Cash on Delivery is a new approach to foreign aid that focuses on **results, encourages innovation, and strengthens government accountability to citizens rather than donors.**
- Under COD Aid, donors would pay for measurable and verifiable progress on specific outcomes, such as \$100 dollars for every child above baseline expectations who completes primary school and takes a test.

How is COD supposed to work?

- “**Pecuniary interests**. Countries will **change their priorities because they need the money**.”
- “**Attention**. Because funds are linked to outcomes, **politicians and bureaucrats will pay more attention to results** and manage things differently than they would otherwise.”
- “**Accountability**. RBA agreements make outcomes visible to citizens in funding and receiving countries, allowing **citizens to hold their governments accountable for performance**.”
- “**Recipient discretion – innovation**. By linking payments to outcomes rather than inputs, funders give recipients **wider latitude to design and implement strategies** of their own making.”

World Bank – Program for Results (P4R)

- WB financing instruments
 - Investment project financing
 - Development policy lending
 - New: “**Program-for-Results**” (P4R) financing
- Key features of P4R
 - Disbursements are linked to the achievement of tangible and verifiable results
 - **Disbursement-linked-indicators (DLIs)** play a critical role
 - **DLIs can be ‘outcomes, outputs, intermediate outcomes or process indicators**
 - Builds capacity and strengthens program institutions

World Bank – Program for Results (P4R)

- Provides assurance that financing is used ‘appropriately’, and environmental and social impacts are addressed
- Strengthens **effective partnerships with governments** and their agencies – as results are defined by governments in consultation with the Bank
- **P4R helps leverage Bank funding by linking with Government’s own programs.** By 2018, 77 operations with \$19.9 billion Bank financing. By 2013, it had helped **leverage 2.4 times government funding**

Examples of DLIs from Bank P4R Operations



Program Outcomes

Percentage of children aged 12-23 months immunized with Pentavalent 3 vaccine

Access to Services

Percentage of population provided with access to improved water supply in rural communes

Participatory Governance

Percentage of women and youth in local governance bodies

Systems Improvements

Percentage of key staff (in specific units) trained in environmental and social safeguards and management guide

Source: Saadah Fadia (n.d.), "Beyond the Boundaries: Program-for-Results and the Role of Leverage in Scaling up Results", p. 7.

Examples of DLIs – Sanitation Rural, India – USD 1.5 billion

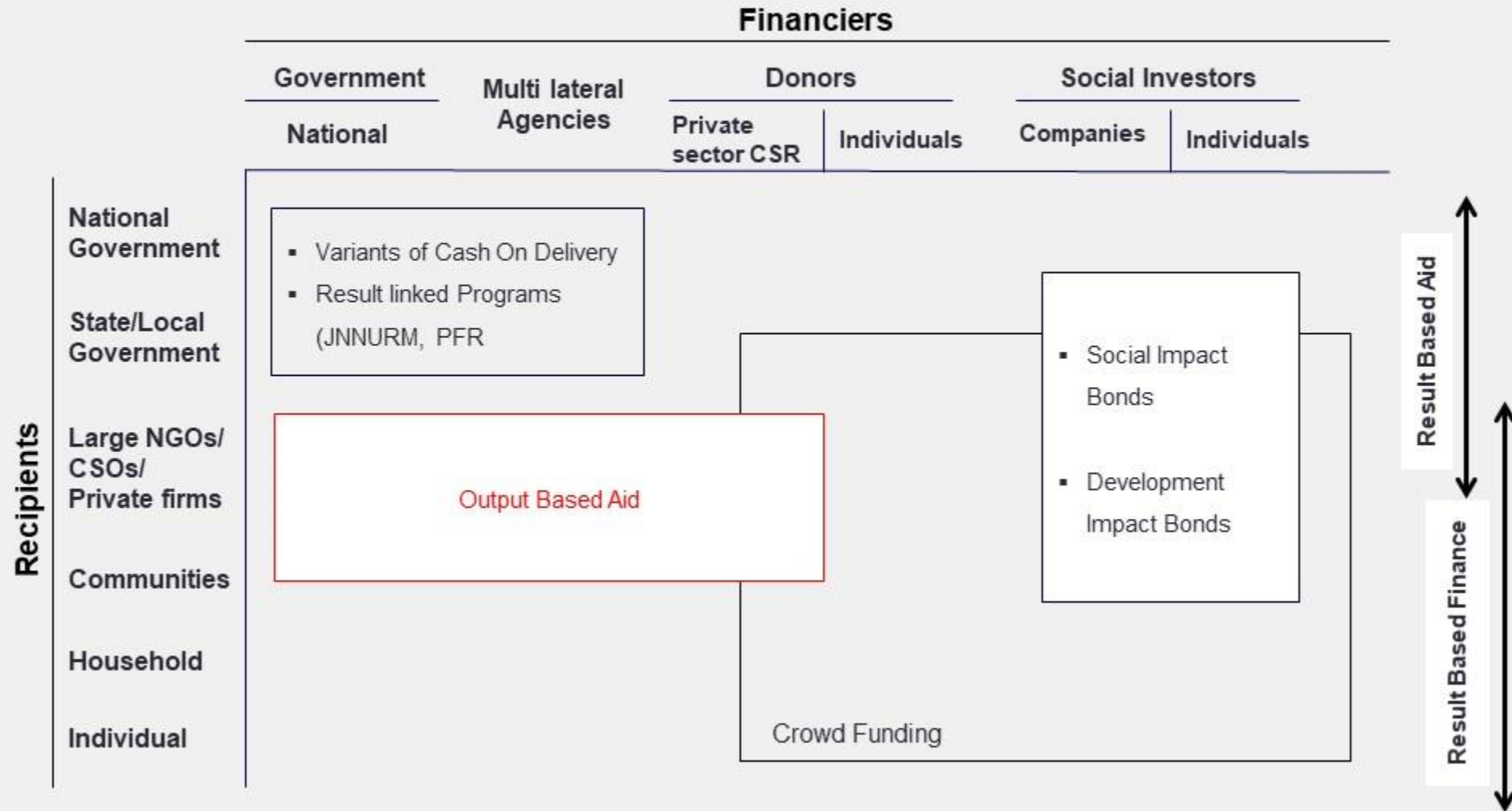
Question:

- What could be examples of DLIs in a P4R project by the World Bank for rural sanitation (SBM) in India?

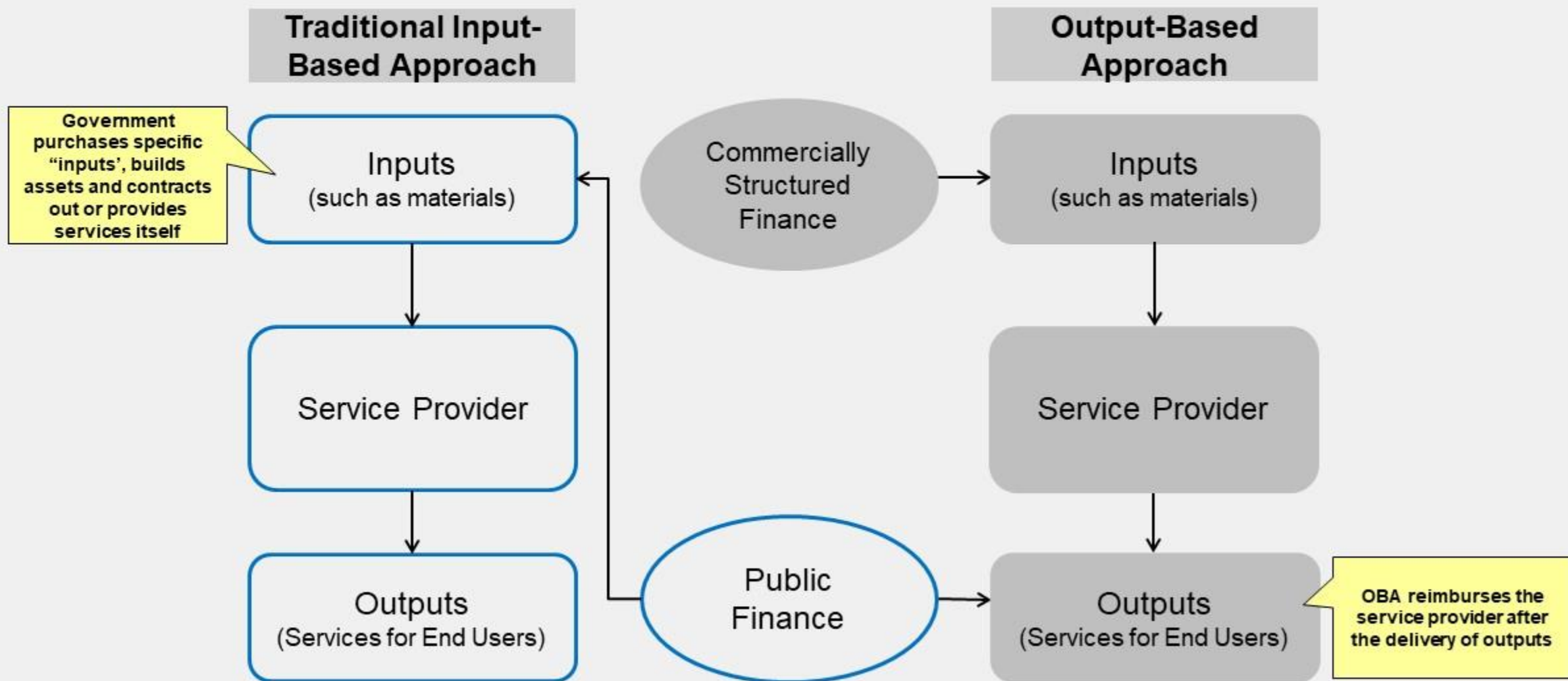
Examples from WB's SBM Grameen support program

- Reduction in the prevalence of open defecation (Number)
- Sustaining ODF status in villages (Number)
- Increase in rural population with Solid and Liquid Waste Management (Number)
- Operationalization of Performance Incentive Grant Scheme by Ministry of Drinking Water and Sanitation (Yes/No)

Innovative Financing – an overview



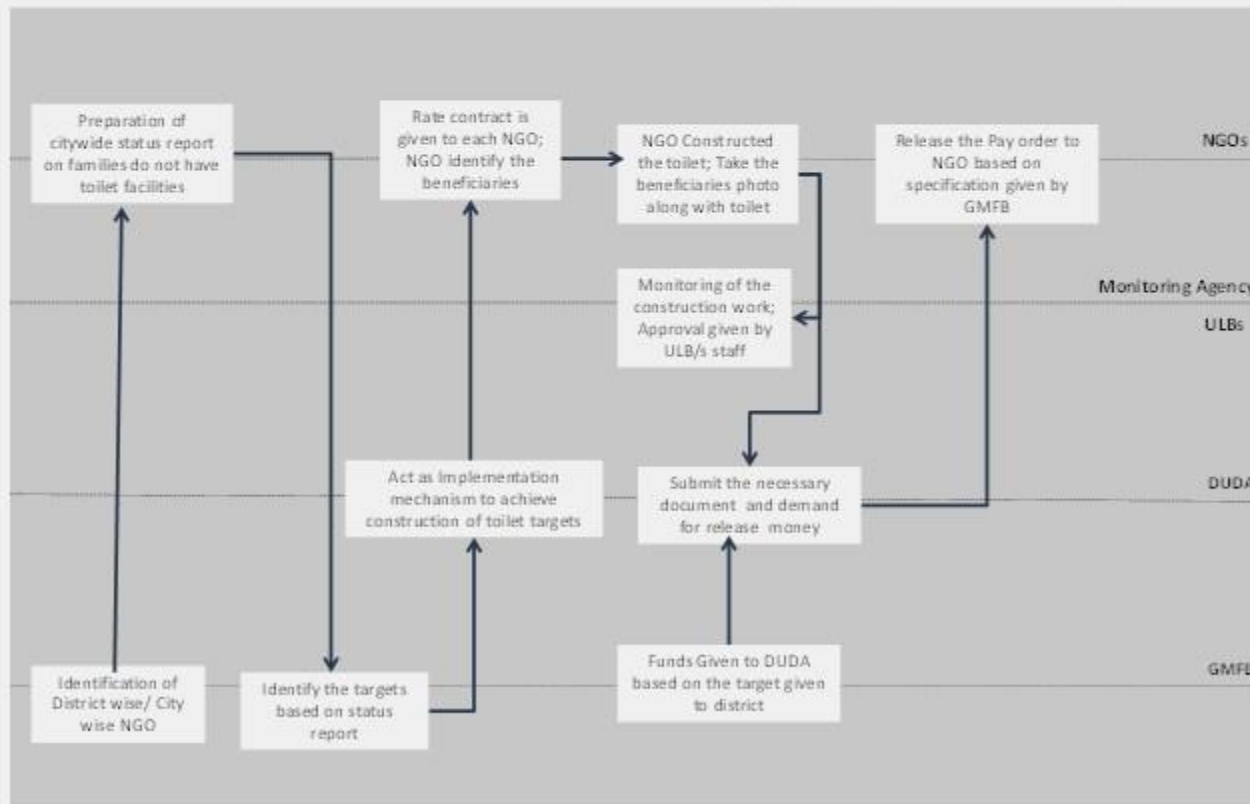
Output Based Aid – OBA Approach



Toilet scheme as OBA, India

Nirmal Gujarat Sanitation Program

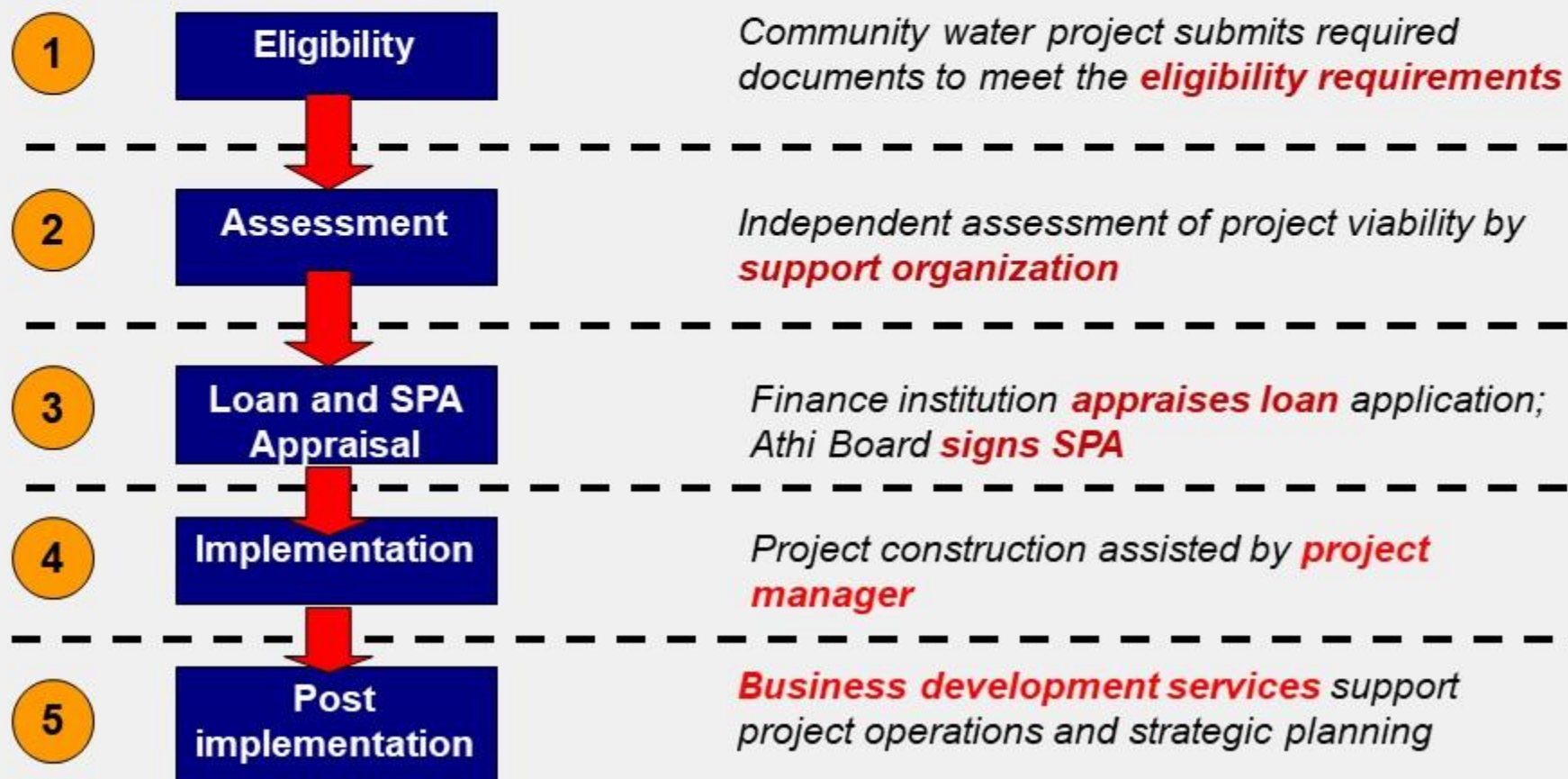
NGSP (GMFB) Toilet Scheme (2007-08)



Example of an OBA Project from Kenya – 1

Community Project Cycle (K-Rep Bank Kenya)

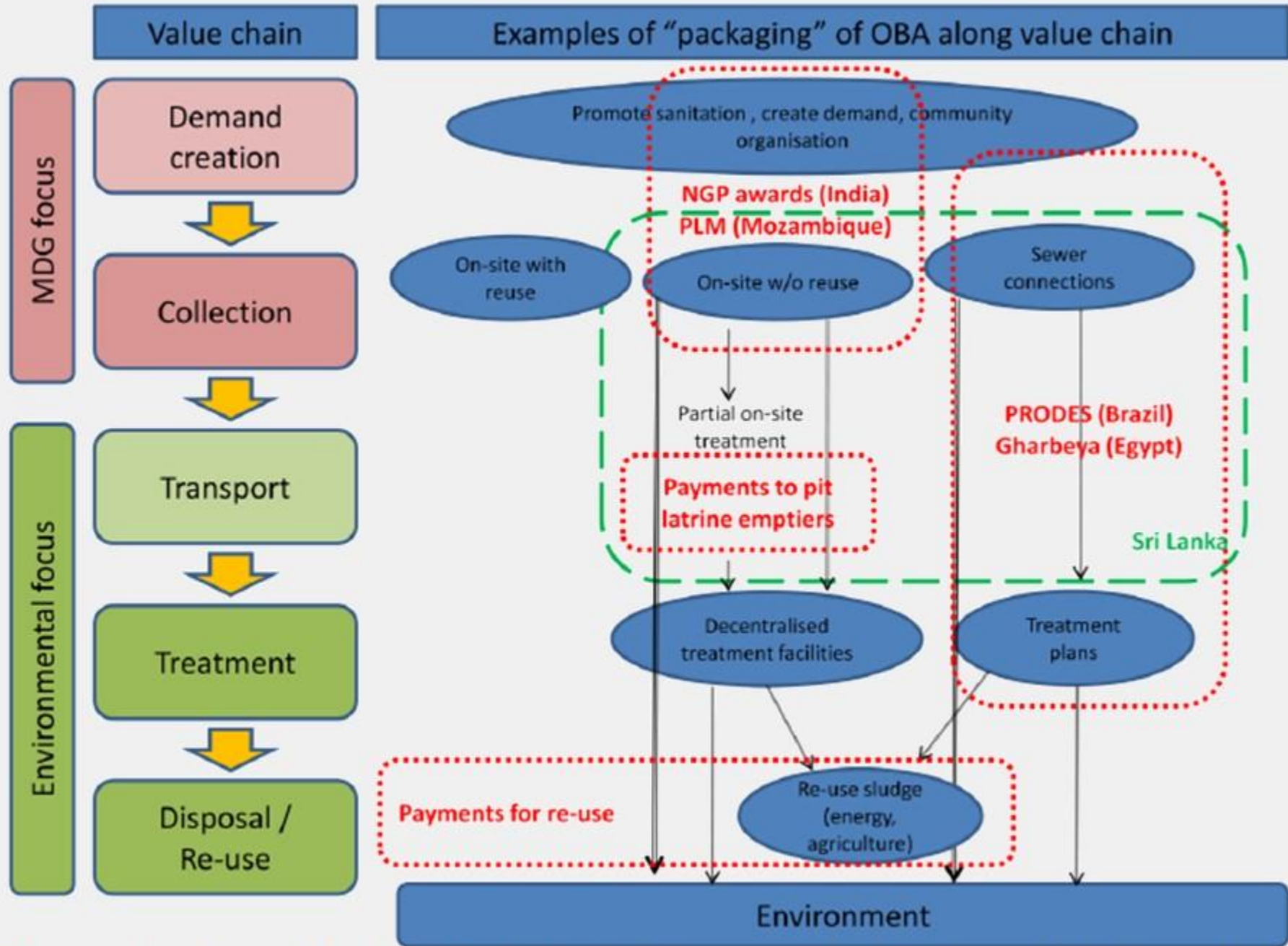
PROJECT STAGES



Example of an OBA Project from Kenya – 2

How was Microfinance used in Kenya?

Organization	During construction	After 'Outputs' are achieved
Community contribution	20%	20%
K-Rep Bank – loan	80%	40%
OBA subsidy	0%	40%
Total	100%	100%



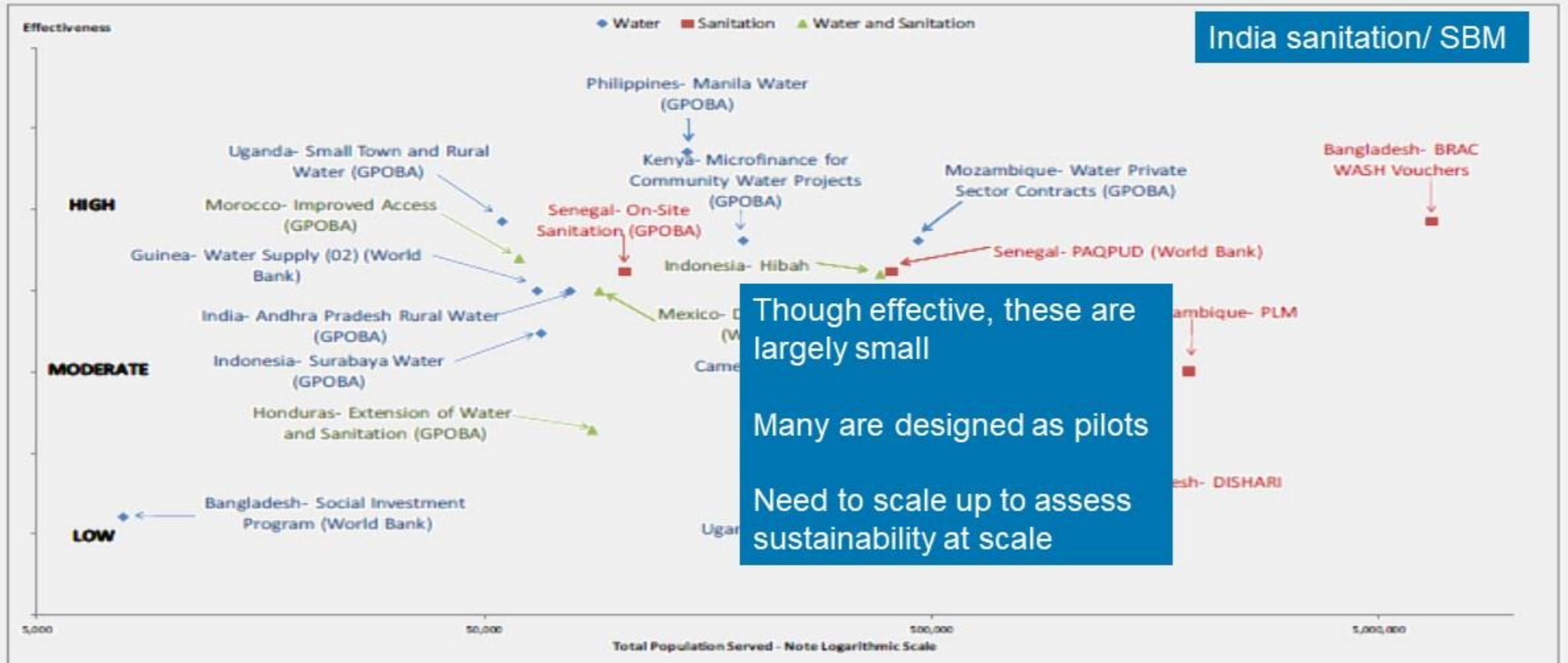
Packaging OBA across sanitation service /value chain

Note: a package that would include OBA subsidies for all segments of the value chain could also be considered. This is what is currently envisaged in the Ganges valley in India.

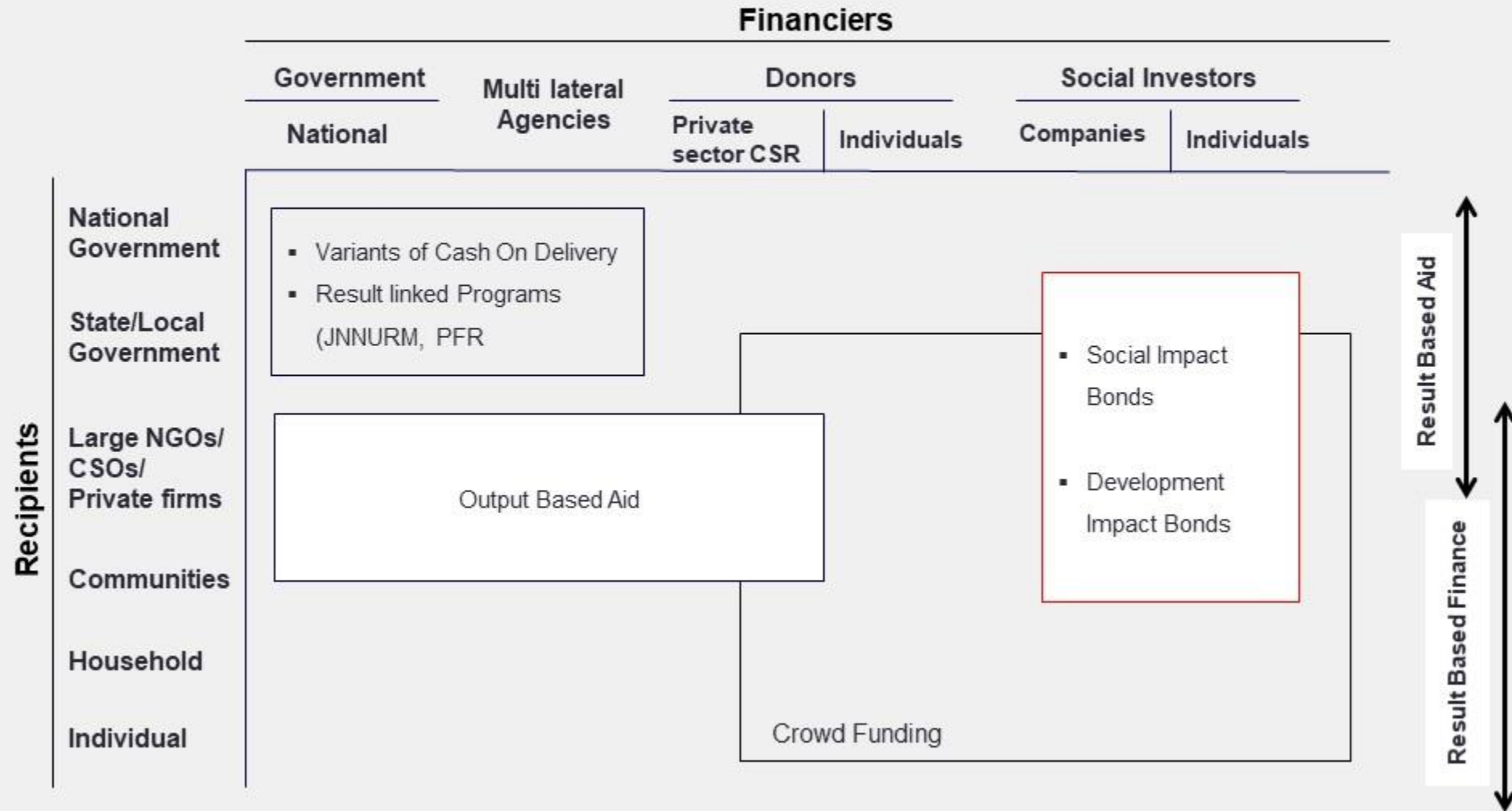
Tremolet Sophie and Barbara Evans (2010), "Output based Aid for sustainable sanitation", GPOBA working paper series: paper no 10., Figure 4.1, p.

Scale and effectiveness of RBF/OBA in WASH

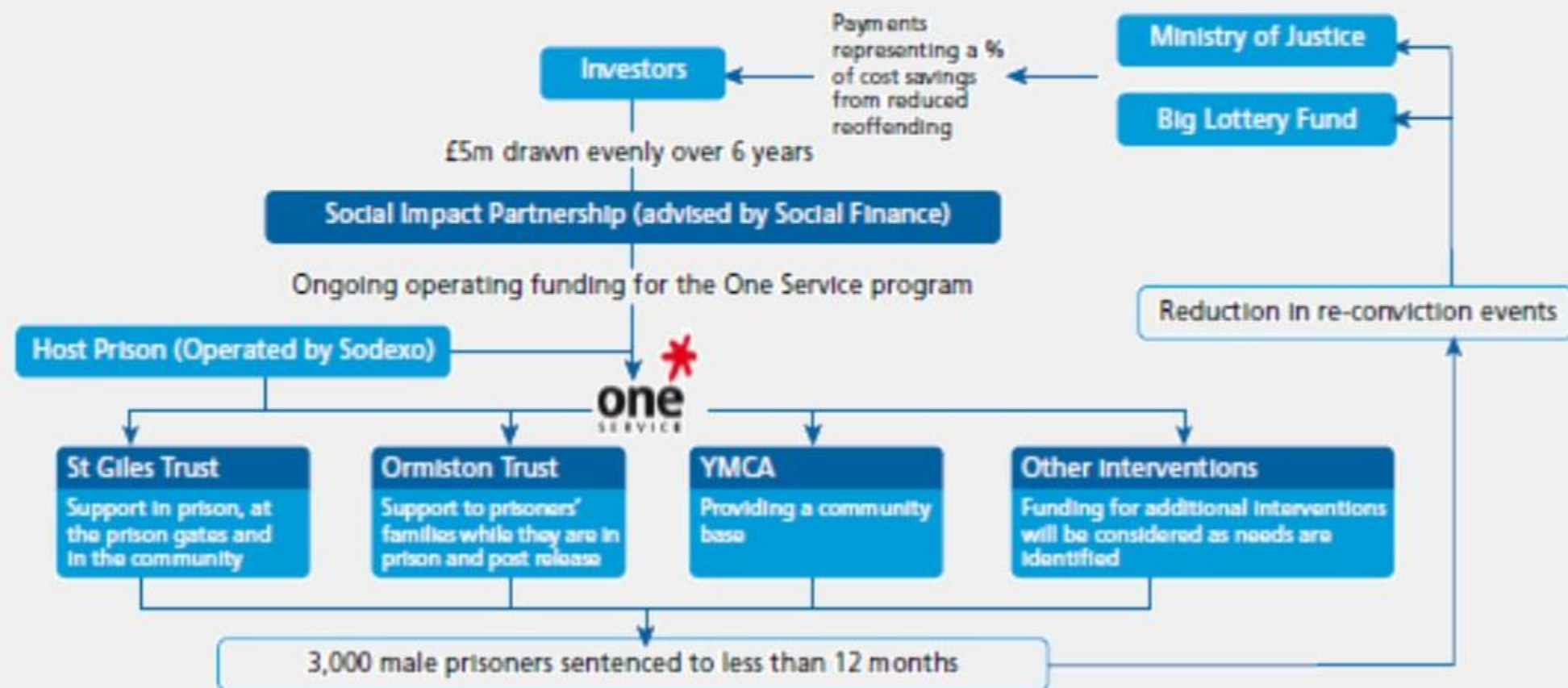
Figure 0.2: Scale and Effectiveness of RBF in WASH



Innovative Financing – an overview

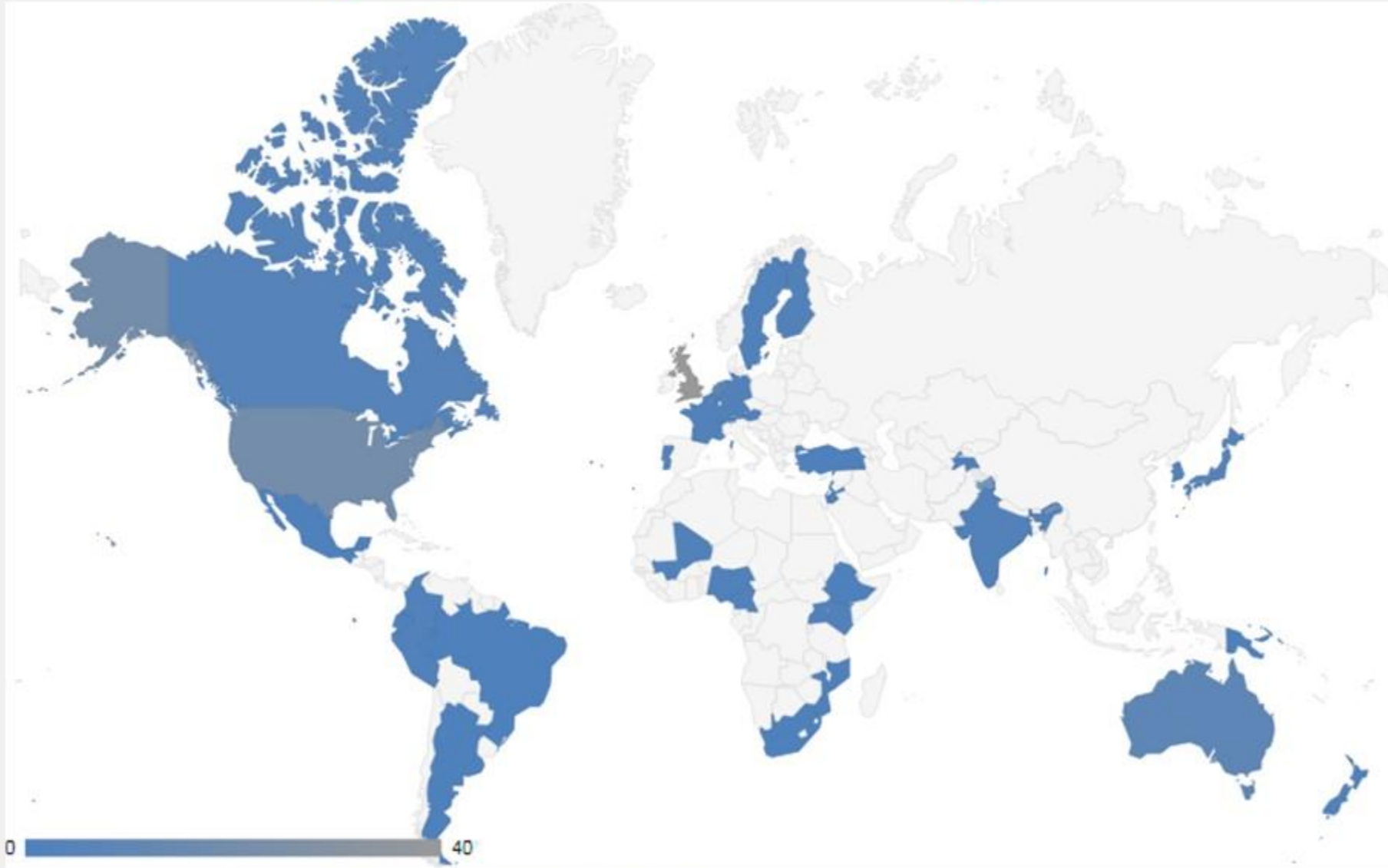


Peterborough – SIB for prison improvements



The
first
SIB in
the
world!!

SIBs and DIBs have been used in developed countries as well as developing countries to generate investment for a range of social issues



Significant
spread of
Social and
Development
Impact Bonds
across the
world

Why Development Impact Bond?

Monitoring systems

Introduce a culture of good and strong monitoring systems



Focus on outcomes

Rather than only inputs or outputs



Collaboration

Collaboration and partnerships are critical

Attract new investors

Create opportunities to attract new impact investors for sanitation



Structure to attract large and small investors

Create structures to attract both large impact investors (new generation of families/ Foundations) ones, but also smaller ones of the type that have invested in HDFC Cancer Debt Fund



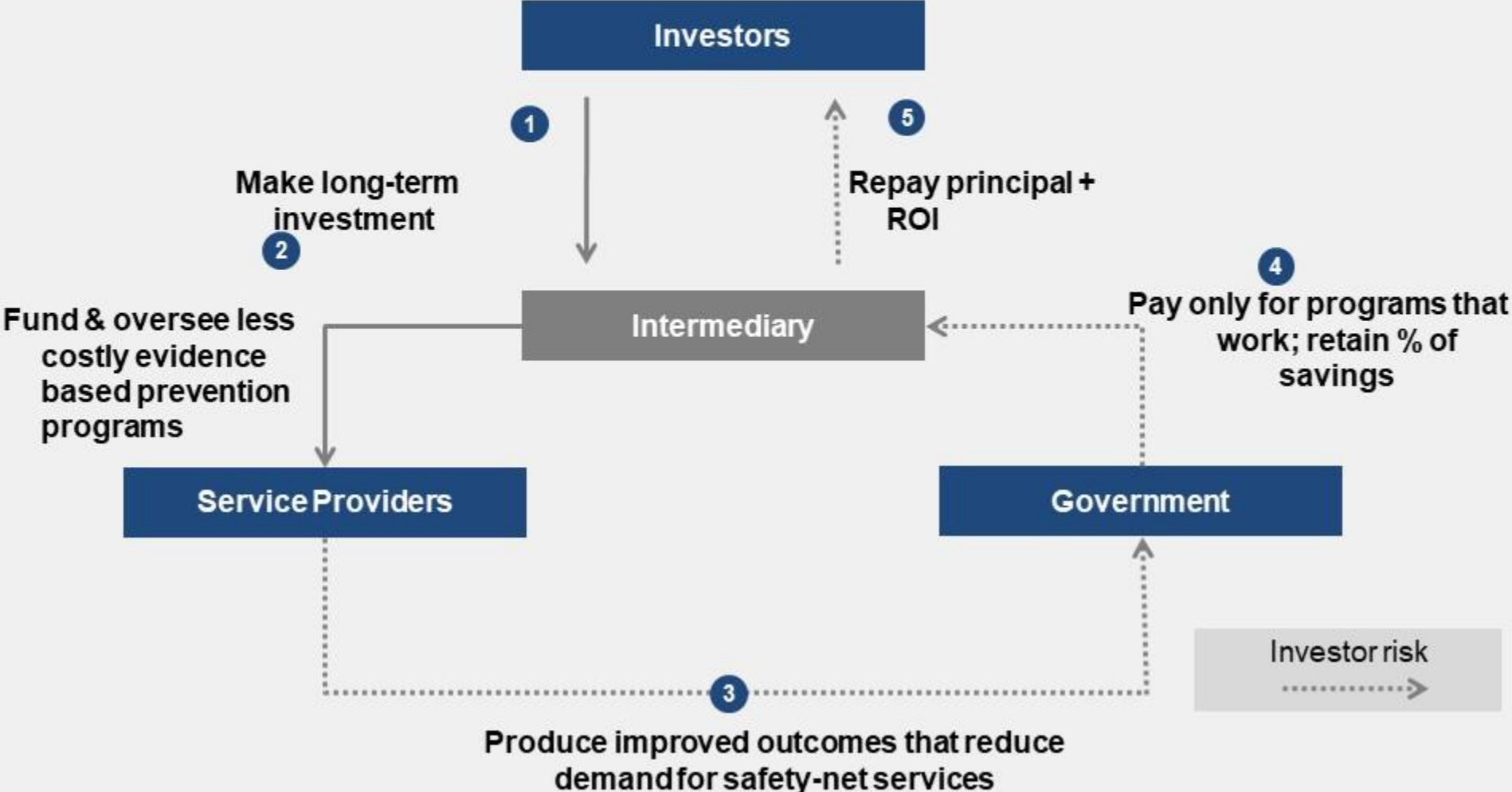
Attract CSR funding

Attract CSR funding focusing on to results based outcomes and for sanitation- possibly as outcome payers



Social Impact Bond Mechanics for Investments and Service Delivery

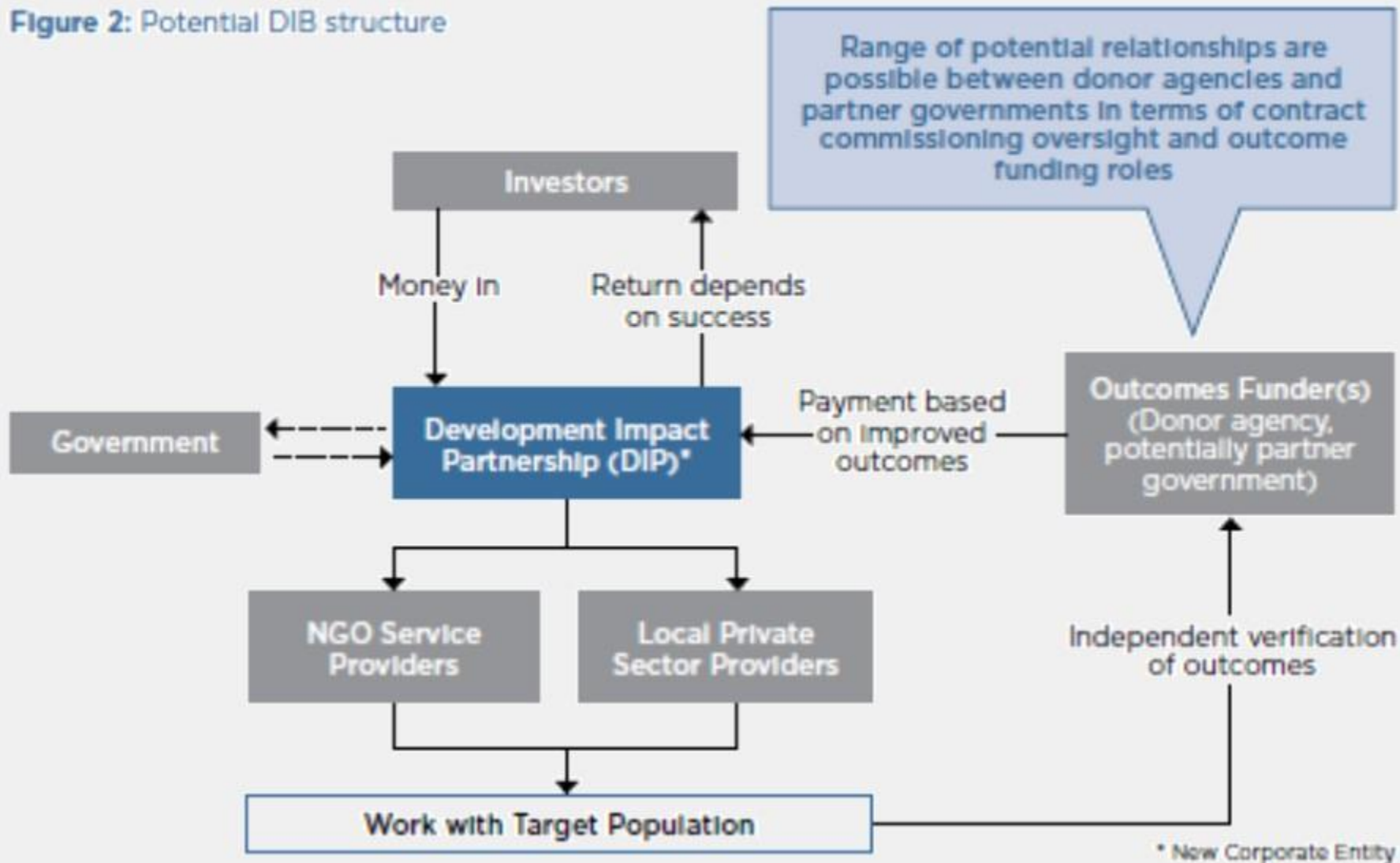
Illustration – Social Impact Bond Mechanics



Source Adapted from Social Finance (2012), "A new tool for scaling impact: How social impact bonds can mobilize private capital to advance social good", supported by Rockefeller Foundation, figure 1, p.12

Development Impact Bond – structure

Figure 2: Potential DIB structure



First Development Impact Bond in India

- In June 2014, Instiglio, Children's Investment Fund Foundation (CIFF), Educate Girls and UBS Optimus Foundation launched the first DIB is to reduce the gender gap in education in Rural India by getting girls into school and learning.
- UBS is providing an investment to an Indian NGO, Educate Girls. After three years, CIFF (the outcome payer) will pay based on enrolment and learning outcomes. UBS Optimus Foundation stands to receive their initial investment back plus a return on investment based on the performance of the program.

Why DIB for FSSM...??

An impact bond for FSSM is envisaged to provide –

- A case that scheduled desludging done in a proper manner is possible and profitable
- Enterprises and local governments need demonstration models to emulate
- Desludging operations require less initial outlays but benefits are large and residents are willing to pay taxes/ user charges for this service
- Treatment facilities may need to be at least partially funded by governments – but the emerging HAM models will require initial capital by private service providers
- Demonstrate effective role of private sector provider in the FSSM service chain

Possible options for a DIB in FSSM



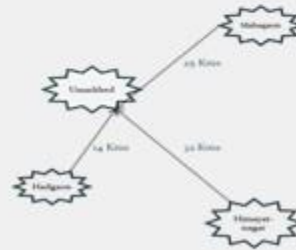
1

Scheduled desludging
of Faecal
Sludge/septage



2

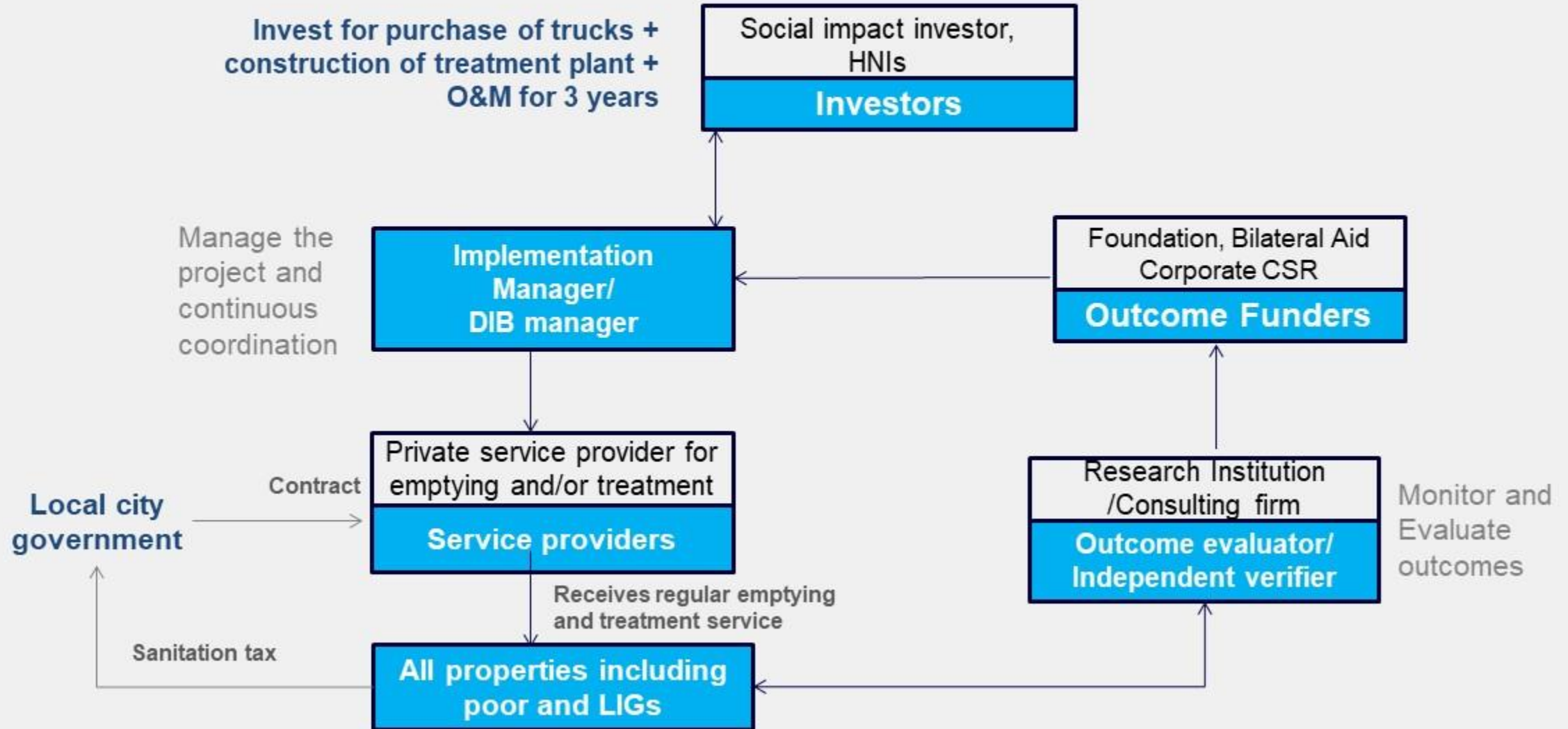
Integrated collection,
transport and treatment of
Faecal Sludge/septage



3

Integrated cluster model for
scheduled desludging and
treatment

Exploring a contract structure for a urban sanitation/ FSSM DIB



Measurable outcomes



Scheduled desludging of FS



Treatment of FS

Activities

- Procurement of trucks
- Operation and maintenance of emptying services for three year period
- Monitoring systems

- Construction of treatment plant
- Operation and maintenance of treatment plant for three year period
- Monitoring systems

Measurable Outcomes

- All Households covered for emptying services, especially poor and low income households

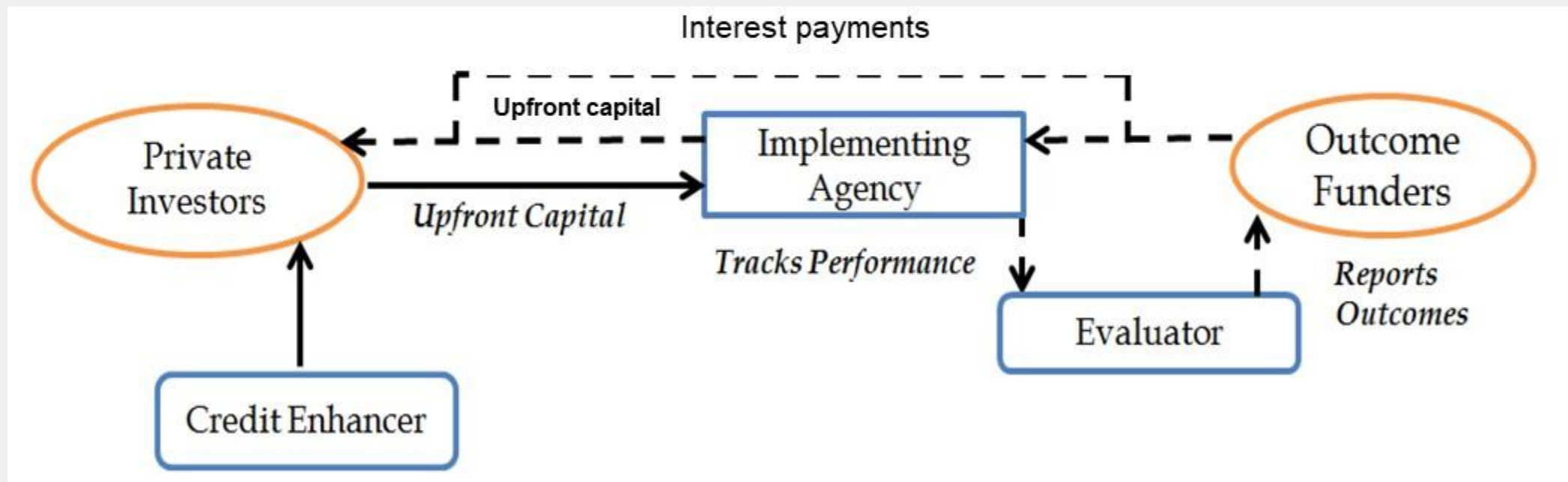
- Volume of collected FS that is treated
- Effluent characteristics of treatment plant meeting the environmental discharge standards (to be measured regularly for 36 months)
- Amount of treated wastewater and compost reused

Social and environmental impacts

- Health:** Reduced diarrhea among children, reduce morbidity
Education: school attendance
Environment: Ambient water quality in rivers and other water bodies, improved ground water quality

Interest Subvention for 'For-Profit' organizations

Development impact bond in form of interest rate subvention could be another form of DIB which could be explored where for-profit organizations are involved as an implementing agency



- Source: Grameen capitals and based on discussions with their team

Outcomes rate cards are being used in UK

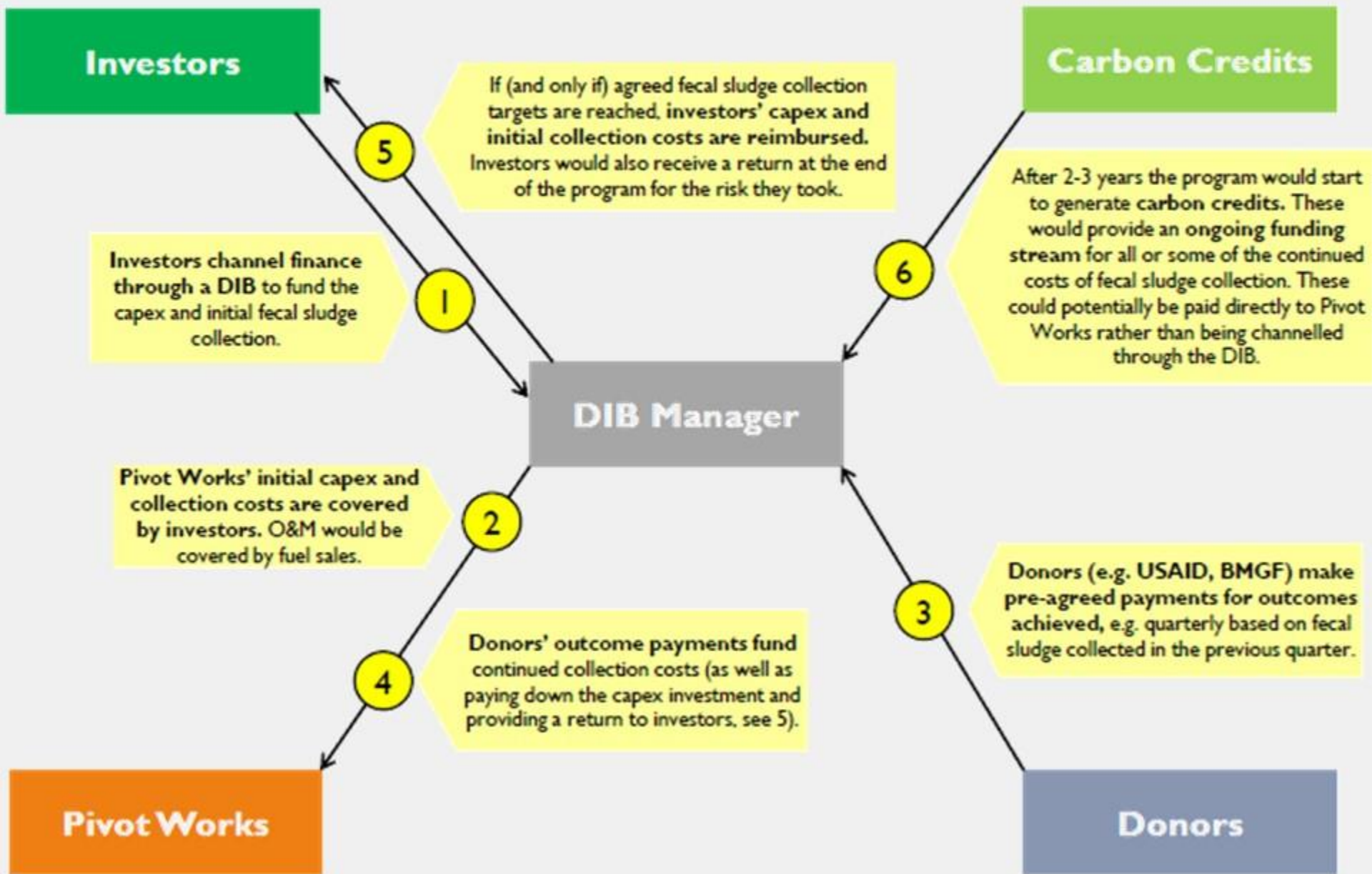
“Outcomes rate card is a menu of outcomes that government seeks to achieve and the prices they are willing to pay for each outcome achievement.”

OUTCOMES RATE CARD PROCESS



“They are used as a procurement and contracting tool with the ability to standardize performance-based financing, through Pay for Success, and drastically reduce the time such deals take to get to market. One rate card can result in multiple contracts with multiple providers, who must deliver against its pre-determined outcomes and prices, receiving payment only when the stated outcomes are achieved and participants’ lives are positively impacted”

A Development Impact Bond for FSM ?



Source: Outlaw Tom, Lisa Patel, Peter Nicholas, Doug Hull (2016), "Potential for a development impact bond in water, sanitation & hygiene", presentation at UNC, Mimeo. Accessed on April 8, 2018 from http://waterinstitute.unc.edu/files/gravity_forms/17-d870a27bf7d6bfcf4a097c589634863a/2016/10/Impact-Bonds-in-WASH-vUNC-Presented.pdf

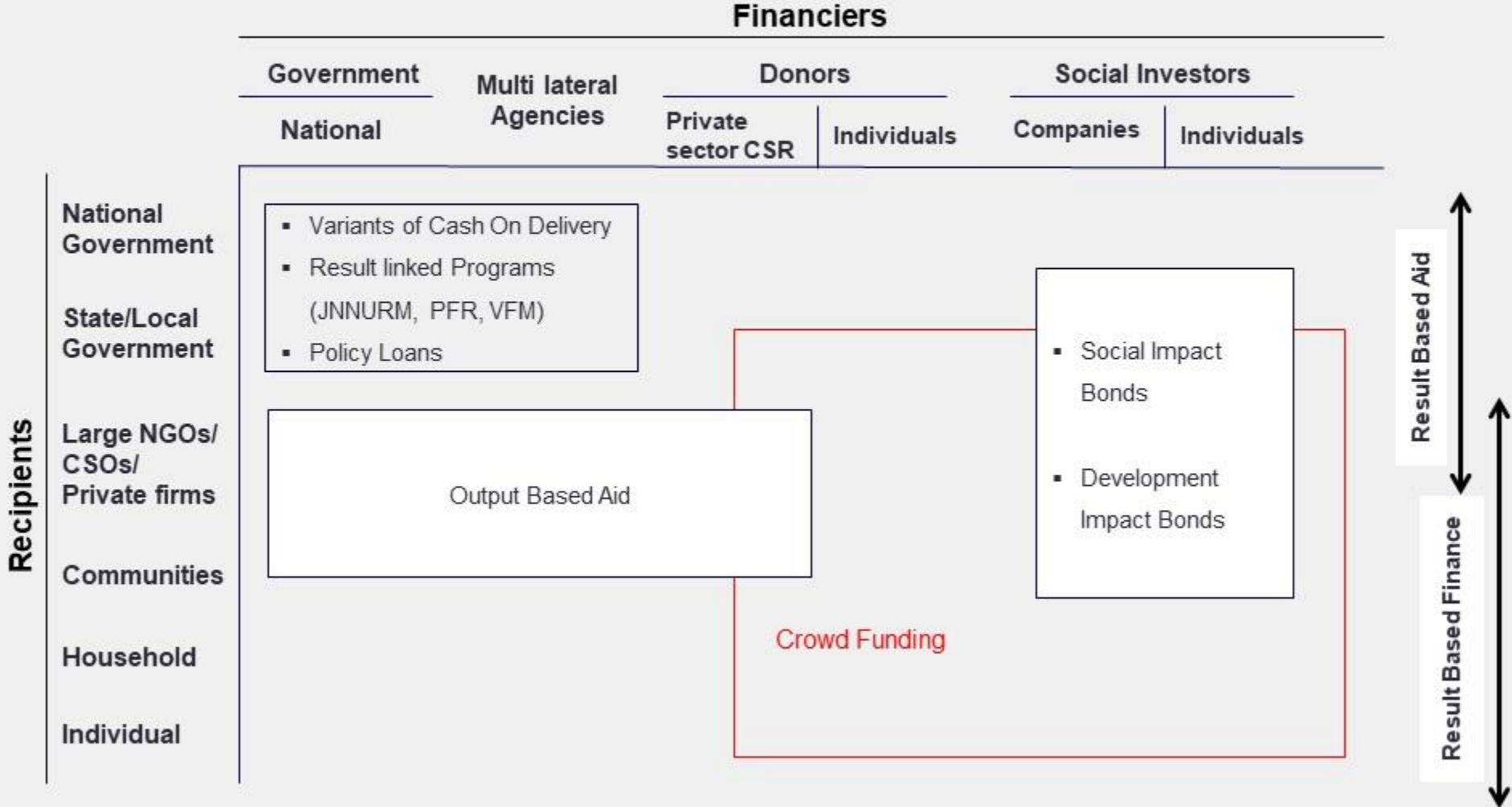
Difference between SIBs and DIBs

- What is the key difference between a Social Impact Bond and a Development Impact Bond?
- The Development Impact Bond is **almost exactly the same** as the Social Impact Bond.
- One key difference is **who repays investors if the program succeeds**. With a SIB the government does. With a DIB, payment would be made by a donor, a Foundation, a special Fund, or bilateral agencies such as Britain's Department for International Development or the U.S. Agency

Some Issues or questions?

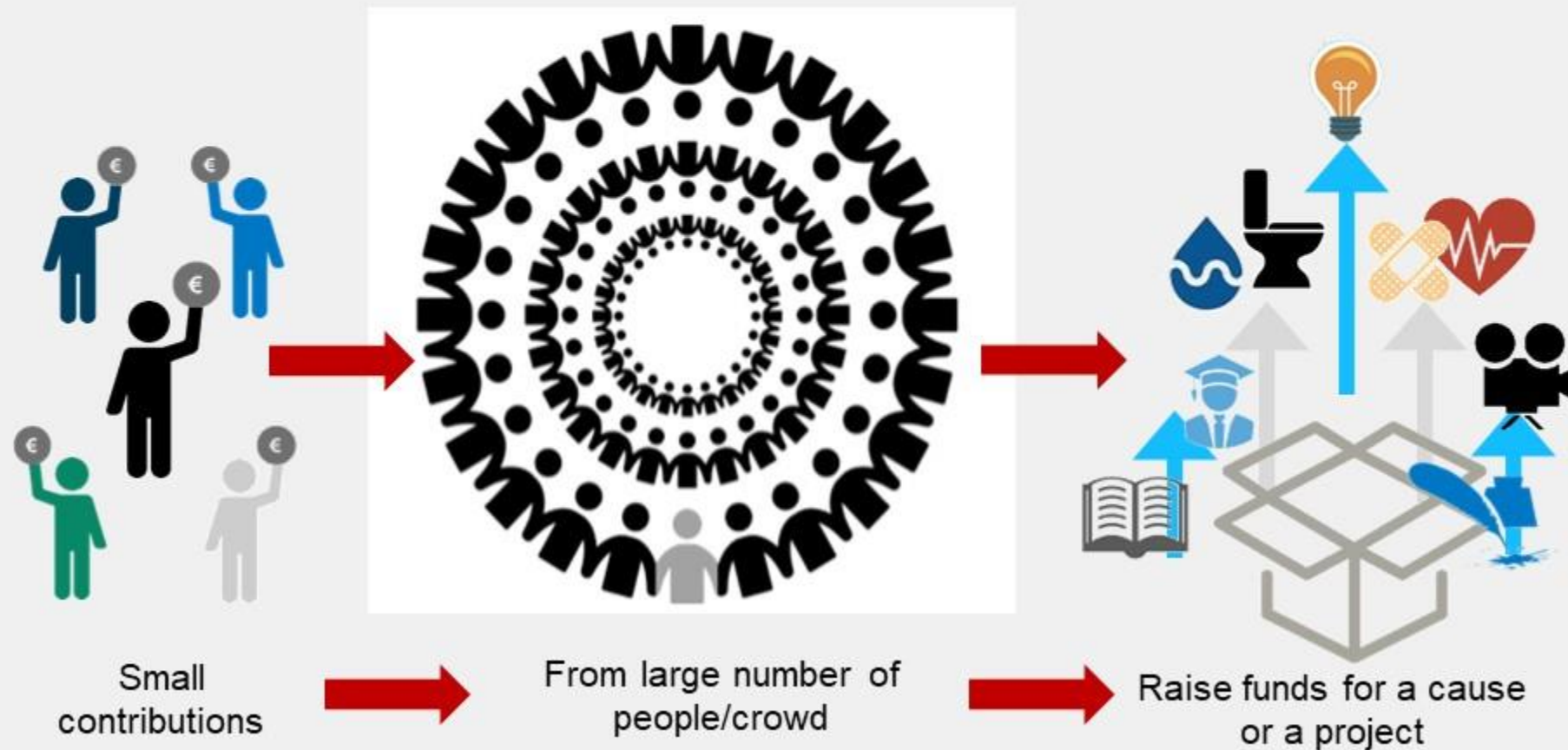
- **A DIB can be quite complicated and expensive- Ways to reduce DIB complexity and reducing costs to structure these?** *Minimum ticket size, Use of Rate Card ideas?*
- **There is a lack of awareness about DIB or SIBs among investors, implementation agency and government.**
- **Development Impact Bonds are currently including Non-profit organizations as an implementation partner. The key questions is can DIB be designed for “For-profit organization” as an implementation agency.**
- **In many developing countries, getting government on-board for DIBs will take time.** How to involve state / local governments and get them on-board? *Are SIBs feasible options for sanitation?*
- **Social impact measurement remains a key challenge across regions/sectors - It is necessary to identify clear, measurable and compelling indicators that are both ambitious and realistic.**

Innovative Financing – an overview



What is Crowdfunding?

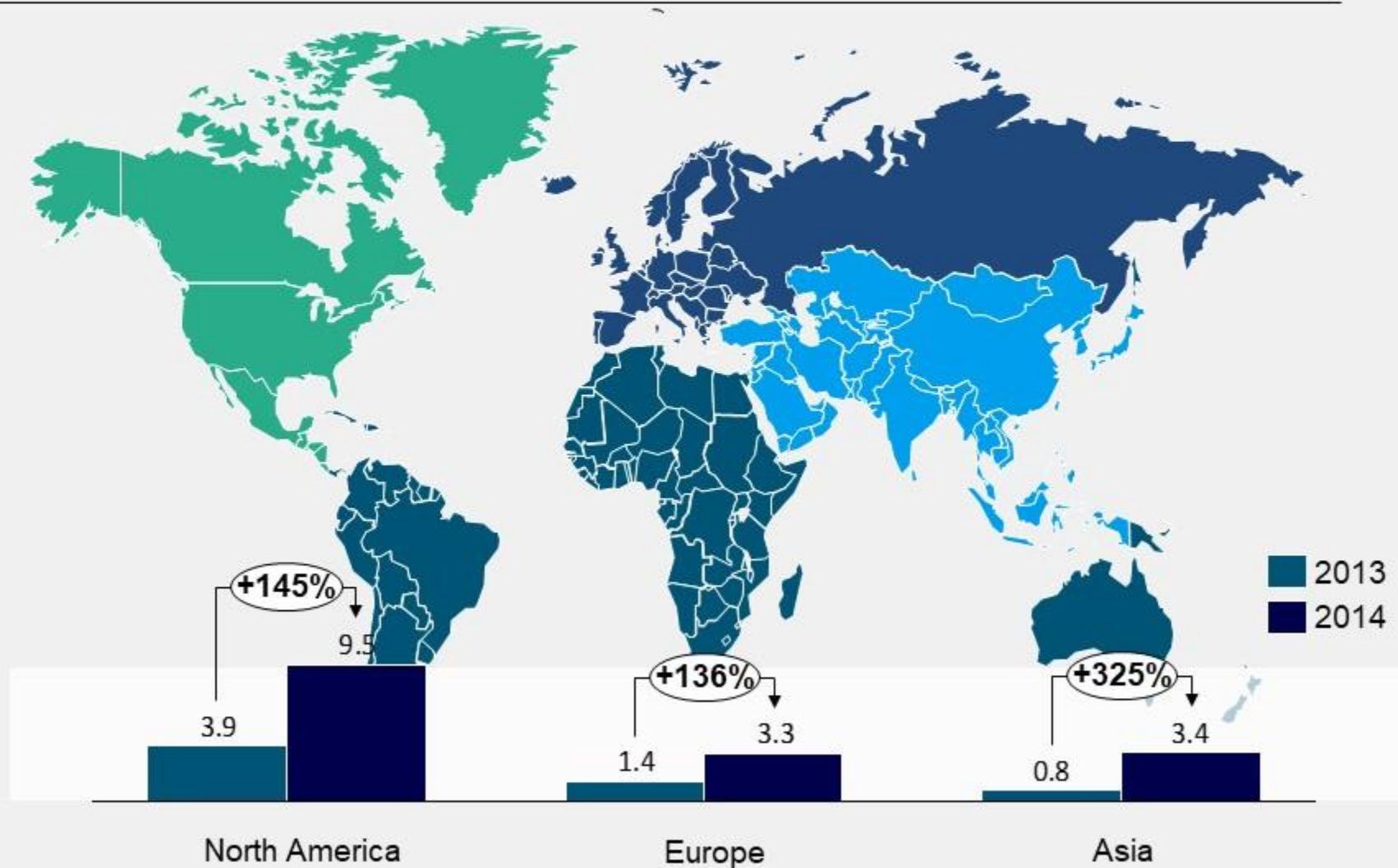
Crowdfunding platforms help connect a large number of individuals to contribute small amounts to support a cause or fund projects.



North America has the highest market size, Asia has the highest growth rate

Crowdfunding capital raised by geography

All figures in USD B, 2013-2014

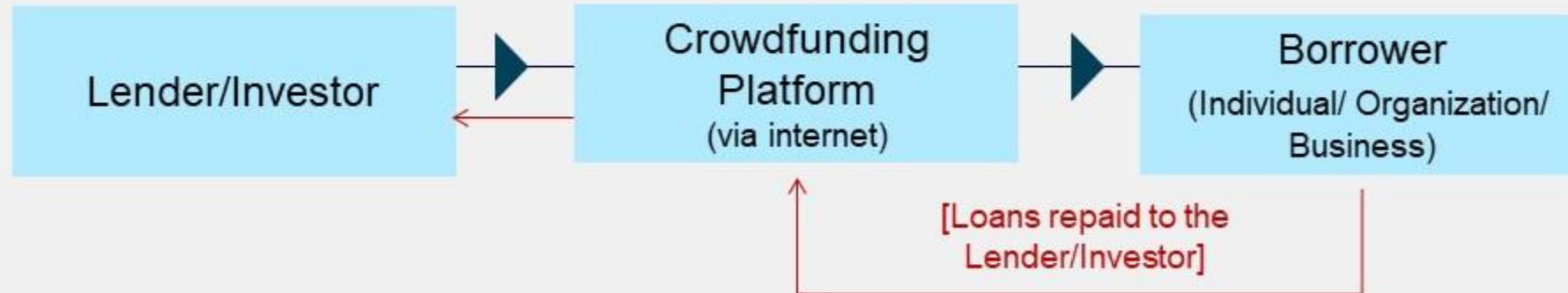


Types of Crowdfunding

Donation - based



Lending - based



Crowdfunding Models



Donation-based crowdfunding: funders donate without expecting monetary compensation, average funding sought (US\$) < \$10,000, e.g.: <http://Kickstarter.com>



Reward-based crowdfunding: funders receive a token gift of appreciation or pre-purchase of a service or product, average funding sought (US\$) < \$10,000, e.g.: <https://www.indiegogo.com/>



Lending-based crowdfunding: Funders receive a debt instrument that pays a fixed rate of interest and returns principal on a specified schedule, average funding sought (US\$) < \$50,000, e.g. <http://www.rangde.org>



Equity-based crowdfunding: Funders receive equity instruments or profit sharing arrangements, average funding sought (US\$) < \$250,000, e.g. <http://crowdfunder.com>

Spacehive – Transforming Public Spaces

- ✓ World's first funding platforms for civic projects
- ✓ Since Dec. 2011, platform to more than 240 civic initiatives in UK
- ✓ Hives- online hubs, bring local people and councils together
- ✓ Charges 5% fee (only when target is achieved)



Raised more than **792,000 pounds** to build a multi-purpose, energy efficient community center



Raised **36,850 pounds** to provide free access to Wi-Fi for visitors to Mansfield Town



Till now raised **40,800 pounds** for turning derelict flyover into urban park, backed by City Council

Illustrative Campaign for toilets

Illustrative Campaigns (1/4): Toilets for People! Join the Movement

Launched in 2014, to further access to toilets in developing countries using a new toilet design



The objective of the campaign is to:

- Install toilets in India, Nicaragua, and Peru through pilot programs
- Fabricate the mold to allow mass-production of toilets in these regions

Organizing Agency

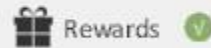
Jason Kass on behalf of Toilets for People¹

A social business that designs, manufactures and sells affordable, portable composting toilets to NGOs working to bring sanitation to communities in the developing world

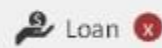
Financial Instrument



Grant² ✓



Rewards ✓



Loan ✗

- Type: One time
- Average Size: \$63
- Median Size: \$25
- # of Grants: 176
- Matching Campaign: No

- Memorabilia such as:
- T-shirts
 - Hats
 - Pictures of beneficiaries

N/A

USD 10,076 raised

by 166 people in 2 months

Goal: USD 10,000

101% funded

Status: Completed



Digital and Social Media Employed

551 shares

52 tweets

Note: (1) Toilets for People is the Field partner (2) Median and Average size calculated only for grant amounts that were disclosed; undisclosed grants are 8% of the total

Source: <https://www.indiegogo.com/projects/toilets-for-people-join-the-movement/x/12285215#/story>; accessed 14/10/15; thenounproject.com

Crowdfunding for school sanitation, India



India's largest crowdfunding site. Over Rs.315.2 Crores raised.

Donate now

Share

Support Toilets for Children in Zapwadi School

100
Shares

Share on Facebook



Rs.428,729

raised of Rs.400,000 goal

72 Supporters

0 Days to go

₹ 500

Donate now

Payment options: Online, cheque pickups

Campaign Organizer –
Center for Water and
Sanitation, CEPT
University

Beneficiary – Students
of Zila Parishad School,
Sinnar, Maharashtra

Purpose – Construction,
refurbishment and
operation and
maintenance of toilets.

Funds Raised – Rs
428,000 (USD 6700) in
2 months

Crowdfunding for purified water supply by TU Delft



Universiteitsfonds



Purified water in India

STILL TO GO 8 days 12 hours 44 minutes 33 seconds



€3.555
total raised

Donate now

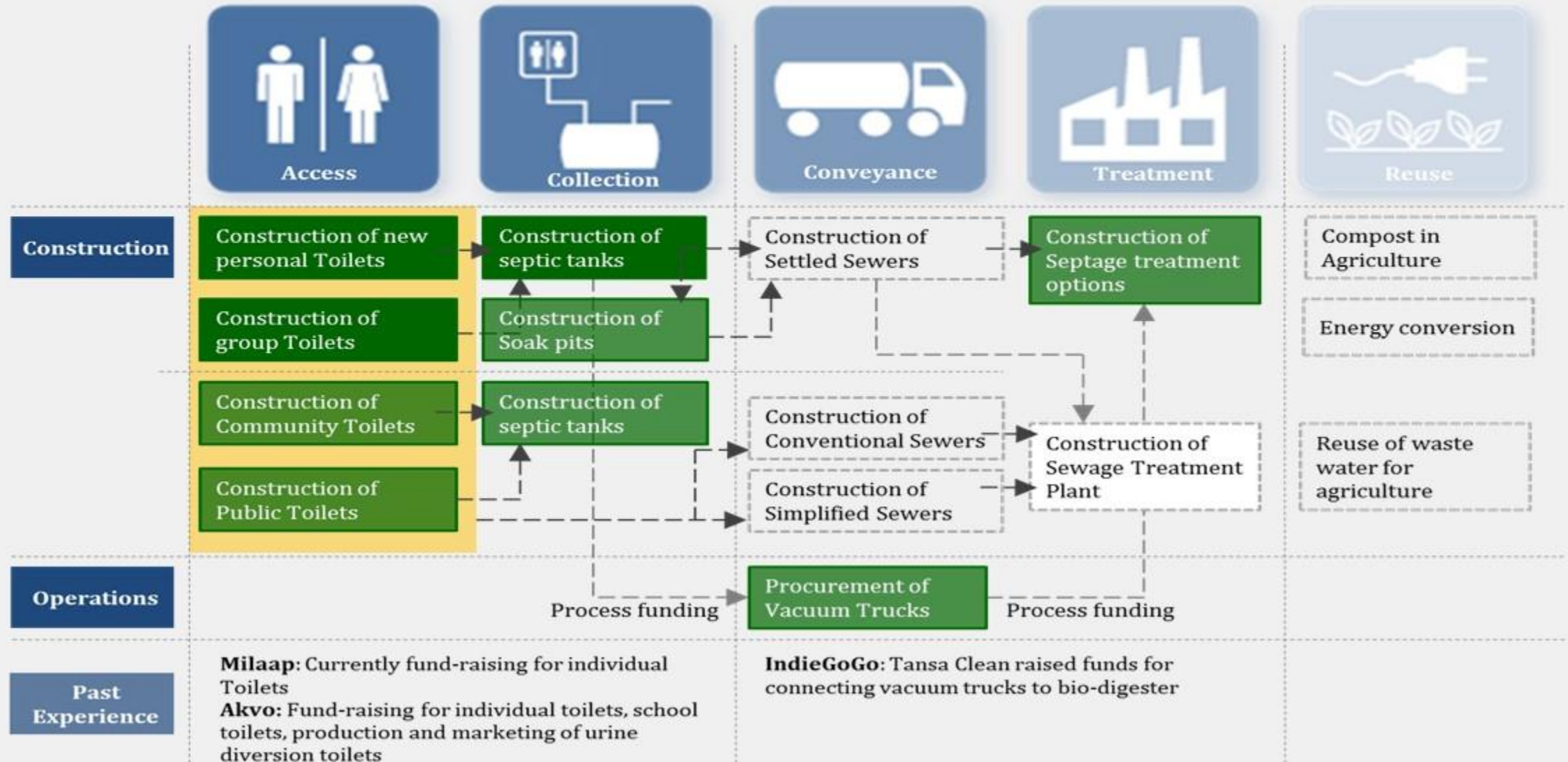
€ 15.750 goal

22% reached

22 donors



Crowdfunding in Sanitation Value Chain



RECAP - What is results based funding?

Public or donor or Social impact investor funds are made available not as “inputs” but only **on delivery of “outputs or agreed performance”**, generally for innovative approaches

“Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted”

Albert Einstein

“If you can't measure it, you can't manage it”

Peter Drucker

Benefits of results based funding

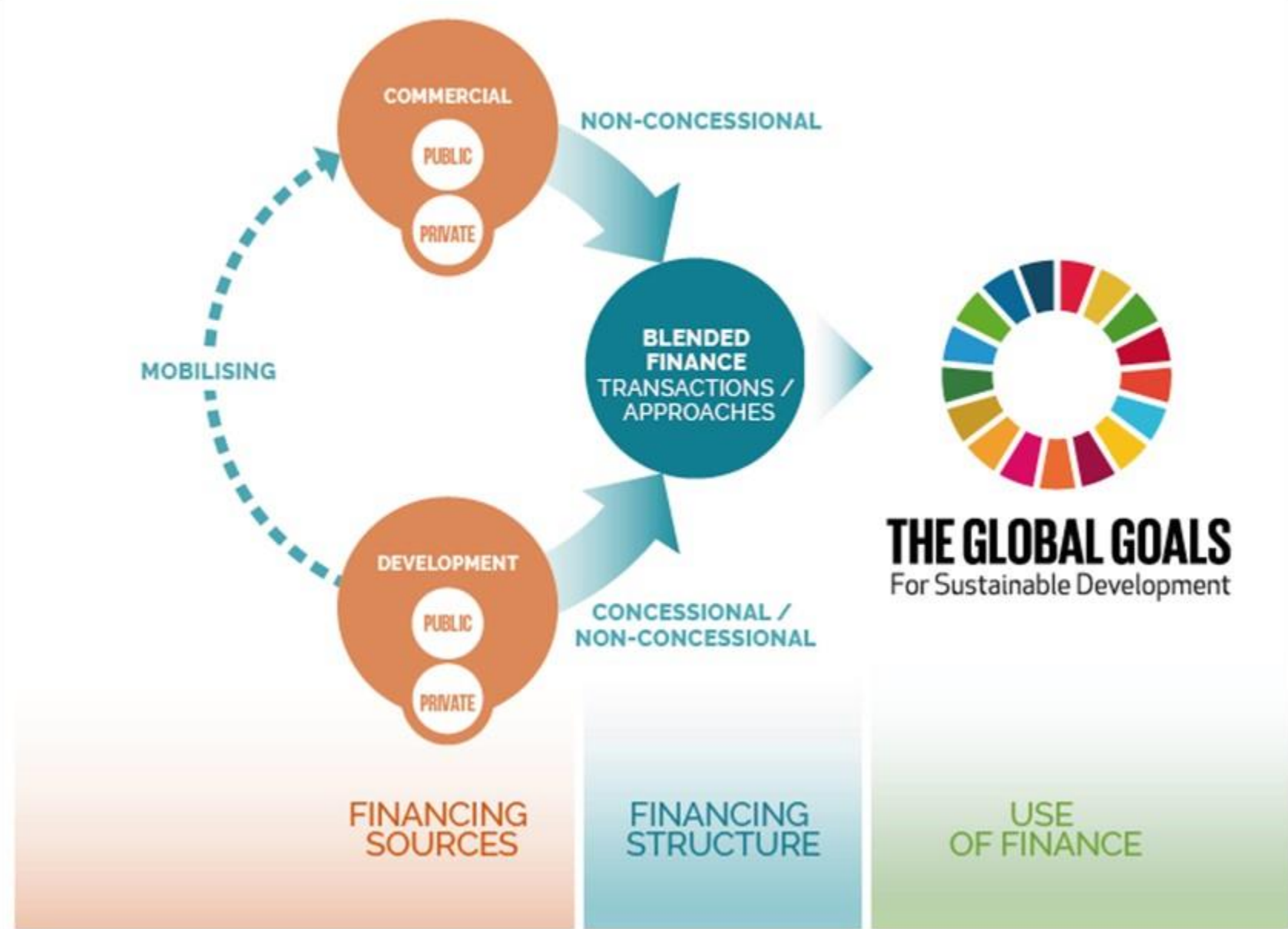
- “**Better quality of services** because incentives are placed on quality and timely delivery
- “Reduced corruption, due to increased transparency in the results-payment link
- “Change in culture, **from budget-driven to results-oriented**
- “**Closer supervision** as this is a necessary condition to issue payments
- “**Sustainability**, particularly if the **indicators are tracked throughout the project life**
- “**Increased autonomy for the implementing agency** as to “how” to deliver the results”

But, RBF also comes at a cost!!

- **High transaction** costs of developing the scheme that also requires large time investments during project preparation
- **Higher costs of monitoring and supervision**
- **Risk of unintended distortions caused by ill-defined incentives**
- RBF, **requires pre-financing!** This comes **at a high cost** particularly for non-governmental entities

Blended finance

What is blended finance?



Blended finance uses development (and government) finance to mobilize commercial finance to achieve different SDG goals

Source: OECD (2018), *Making Blended Finance Work for the Sustainable Development Goals*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264288768-en>, fig 1.1 p. 23

BLENDING FINANCE FOR THE SUSTAINABLE DEVELOPMENT GOALS

BRINGING DEVELOPMENT AND COMMERCIAL FINANCE TOGETHER

Blended finance could help bridge the investment gap for the Sustainable Development Goals in developing countries. Donor governments need to ensure blending approaches attract commercial sources of finance and direct these to development outcomes.

MORE FINANCING NEEDED TO MEET THE \$2.5 TRILLION INVESTMENT GAP FOR SDGs IN DEVELOPING COUNTRIES

Sources of external finance to developing countries



...BLENDED FINANCE COULD HELP BRIDGE THE INVESTMENT GAP...

What is blended finance?

Blended finance is the strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries.

Additional finance + commercial finance



BLENDING FINANCE CAN SHIFT THE RISK-RETURN PROFILE OF PROJECTS IN DEVELOPING COUNTRIES TO ATTRACT COMMERCIAL INVESTMENT.

BLENDING FINANCE IS GAINING TRACTION AMONG DEVELOPMENT FINANCE PROVIDERS

\$81 billion
private finance mobilised
by development finance 2012 - 2015



17 of the OECD Development Assistance Committee members now engage in blending

167 facilities launched, 2000 - 2016, to pool finance for blending

What is blended finance?

OECD describes it as “the strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets”

Blended finance can help risk-return profile of projects to attract private and commercial finance to project and activities that help achieve SDGs in different sectors

Source: OECD (2018), *Making Blended Finance Work for the Sustainable Development Goals*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264288768-en>.

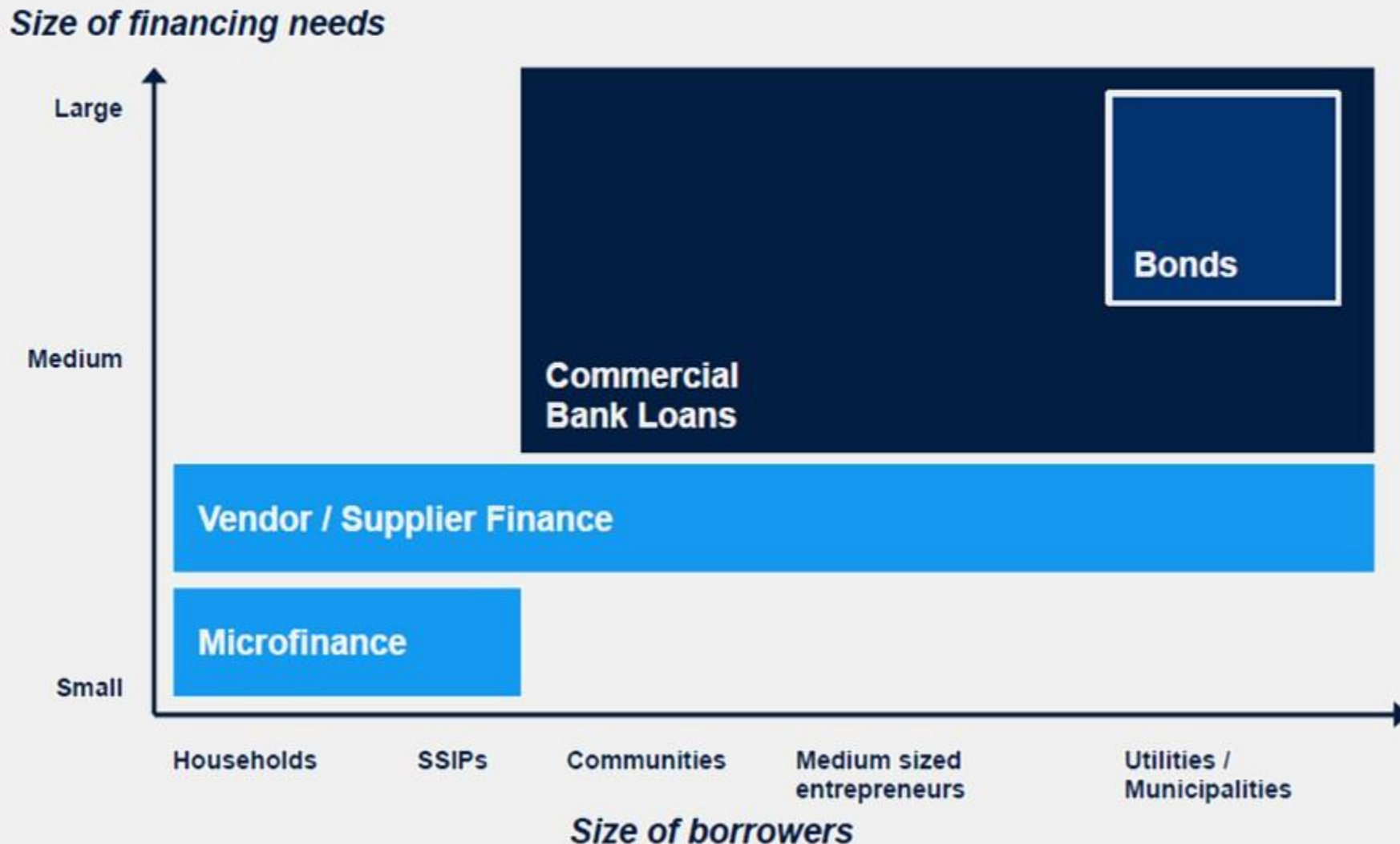
Blending instruments to leverage private/commercial finance

BLENDING: smart public finance to leverage private finance

Grants / subsidies	Concessional loans / public finance	Credit enhancements
<p>Results-based subsidies, <i>e.g. to support access extension</i></p> <p>Capacity-building and training <i>e.g. training of borrowers and lenders</i></p> <p>Technical assistance <i>e.g. sensitize banks to market opportunities, assess water investment projects, project preparation, shadow credit ratings</i></p> <p>Support water sector pooling / grouping to access larger commercial finance providers</p>	<p>Provide liquidity to commercial finance providers</p> <p>Blend concessional with commercial finance to soften lending terms</p> <p>“First loss” agreements</p> <p>“Patient capital”: equity participations at below market-rate return expectations can signal commitment</p>	<p>Guarantees: reduce risk perception, leading to lower interest rates and longer tenors</p> <p>Revenue intercepts, escrow accounts: to secure access to funds and reduce risk of non-payment</p>

Tools and instruments for blending to attract commercial finance

Types of private finance available –size of needs/ borrowers

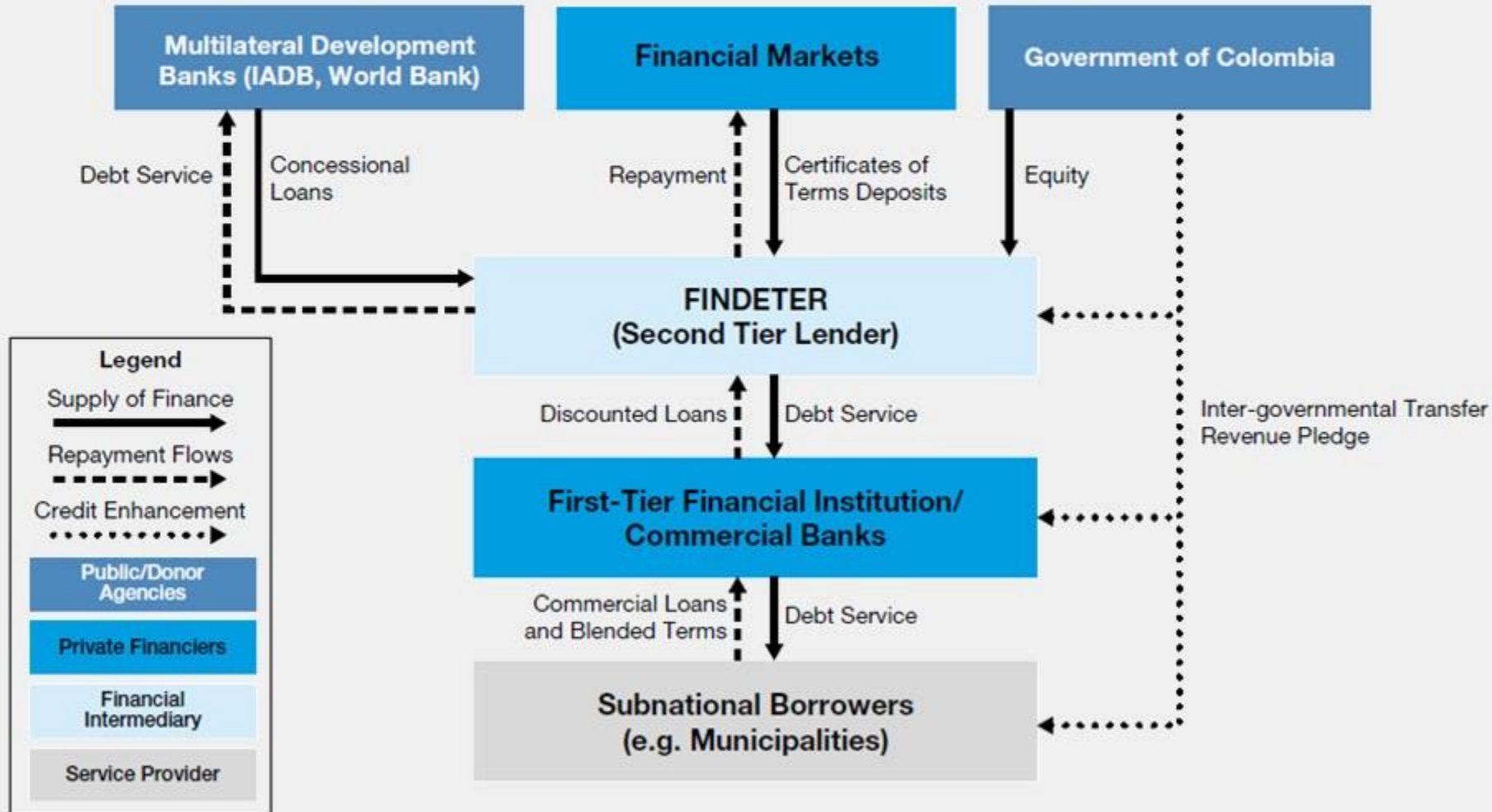


Use of types of private finance (from banks, microfinance and bonds) is linked to varied size of financing needs and size of borrowers

Source: Sanitation and Water for All (2017), "How can the financing gap be filled? A discussion paper", World bank, UNICEF, Fig 4.2, p. 26

Institutional Blending via Second-Tier Lender FINDETER in Colombia

FIGURE 1 Institutional Blending via Second-Tier Lender FINDETER, Colombia: Financial Structure

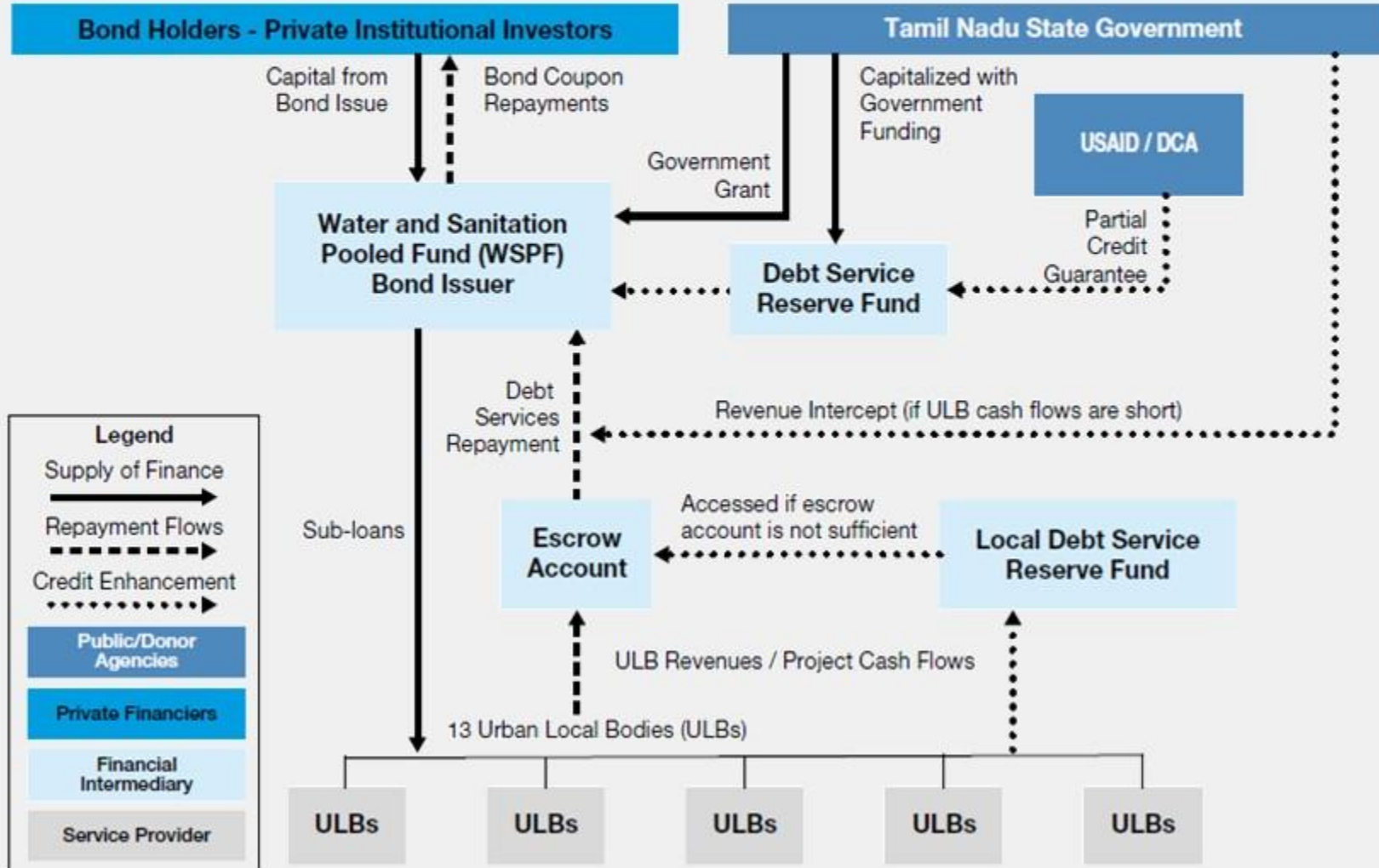


FINDETER has helped connect local municipal governments with commercial banks in Colombia

World Bank Group (2016), "Institutional lender via second tier lender FINDETER in Colombia" in Case studies in blended finance for water and sanitation", p. 2

Pooled bond funds from capital market in TN, India

FIGURE 1 Pooled Municipal Bond Issuance in Tamil Nadu, India: Financial Structure



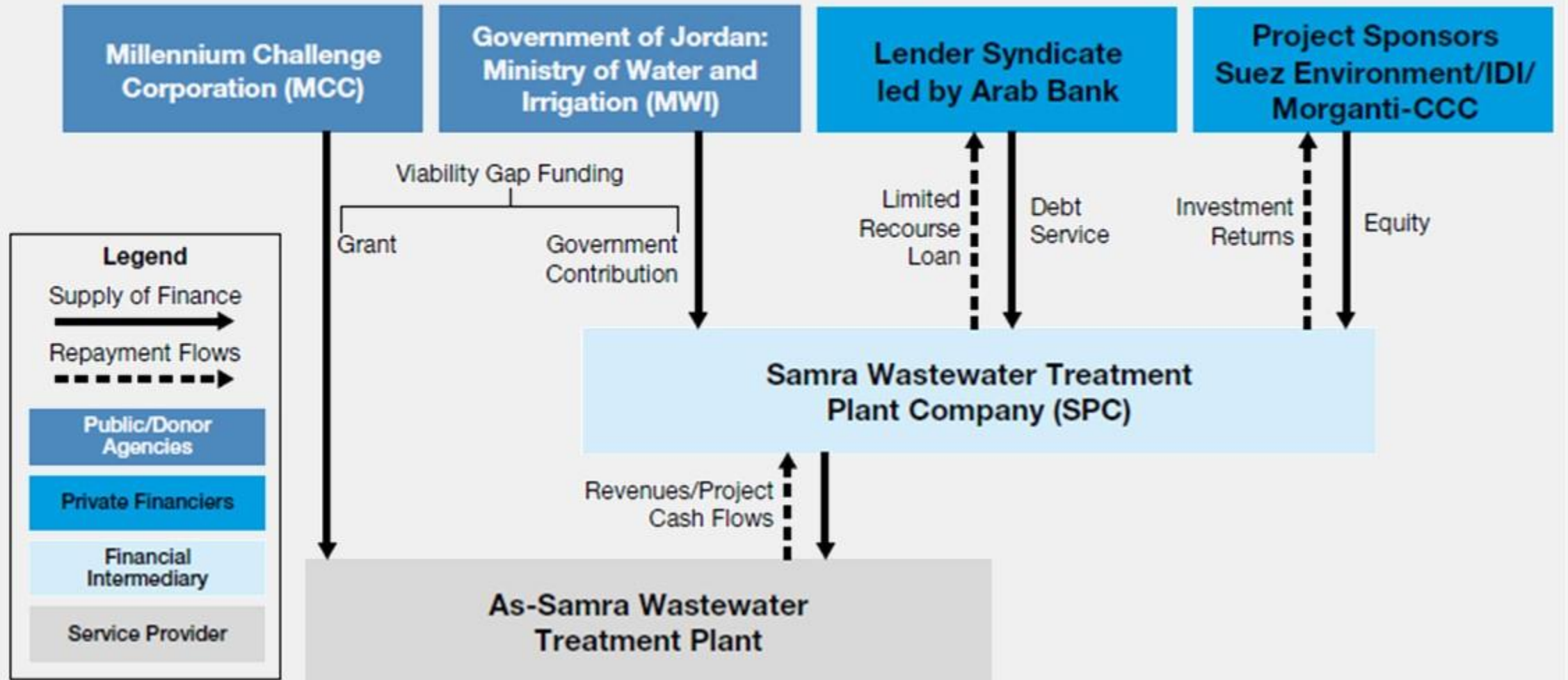
WSPF has been successful in mobilizing funds from the capital markets through 5 successive issues .

This approach can be used for pooling sanitation fund requirements for small towns

World Bank Group (2016), "Pooled Municipal bond issuance in Tamil Nadu, India in "Case studies in blended finance for water and sanitation", p. 2

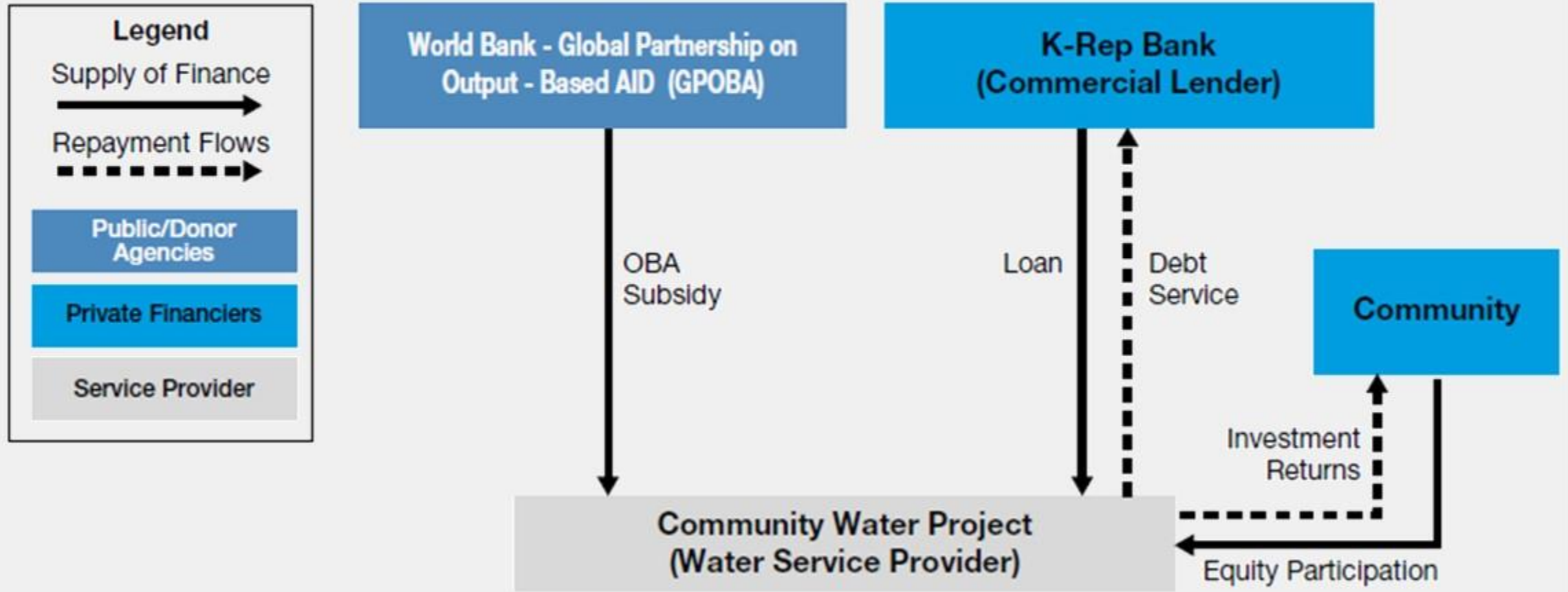
Viability Gap Funding for WW treatment in Jordan

FIGURE 1 Viability Gap Financing for the As-Samra Wastewater Treatment Plant Expansion, Jordan: Financial Structure



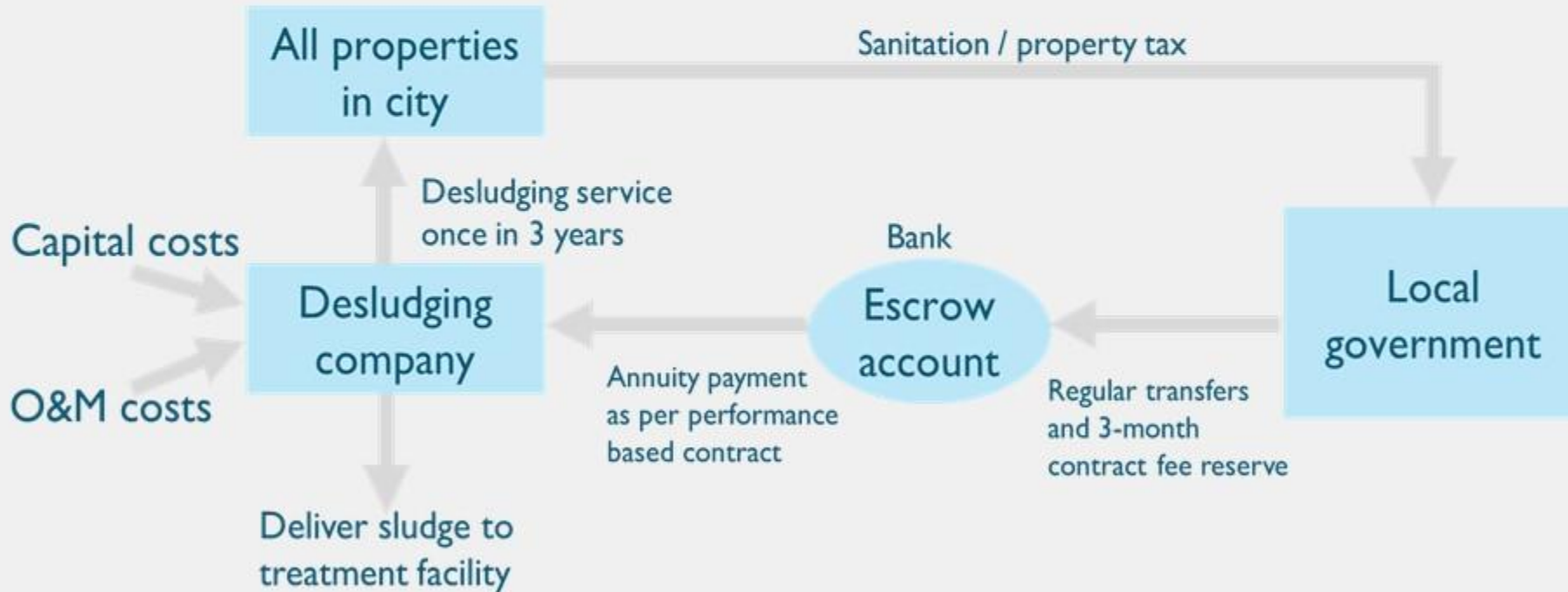
Mobilizing commercial finance with partial subsidies

FIGURE 1 Scaling Up Blended Financing for Water and Sanitation in Kenya: Maji ni Maisha Financial Structure



Performance linked annuity models in Wai/Sinnar, India (1/2)

Two ULBs in Maharashtra – Wai and Sinnar Municipal Councils – have contracted a private company to provide citywide services, and with performance linked payment – based on number of septic tanks emptied.



Innovative approach:

- Performance linked annuity model for scheduled desludging using a PPP route
- Levying a sanitation tax for FSM
- Monitoring systems

Performance linked annuity models in Wai/Sinnar, India (2/2)

1. Scheduled emptying

- Private company selected through bidding process
- All septic tanks in the city to be emptied once in 3 years – 1/36 each month

2. Performance based fixed monthly payments

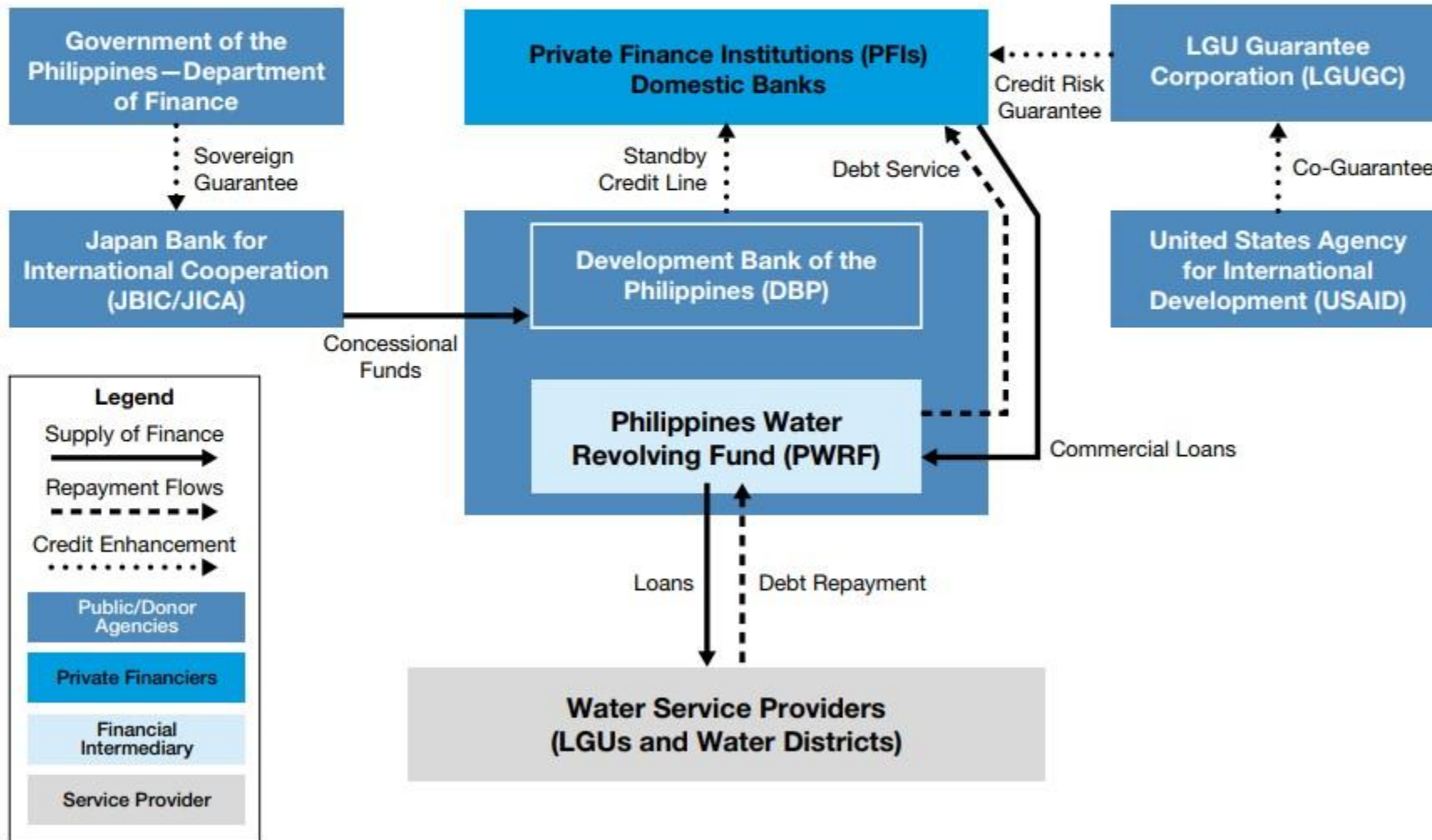
- Penalties deducted for non-compliance
- Payment linked to number of tanks emptied – Receipts signed by households
- Ensuring safe emptying – receipts signed by FSTP official
- No spillage
- Use of safe methods – e.g. PPE for workers

3. Sanitation Tax

- Each household pays a small fixed amount as sanitation tax, and Sanitation tax + property tax used to pay private company
- Emptying provided without “per-emptying” fee
- Sanitation tax much less than the cost incurred per household previously for emergency emptying

Water Revolving Fund in the Philippines

FIGURE 1 Philippine Water Revolving Fund (PWRF), Philippines: Financial Structure



The Philippines Water Revolving Fund (PWRF), leveraged overseas development assistance with local private funds using a co-financing arrangement between the Philippine government and private banks

DC water environmental impact bond

Pay for Success contract with tax-exempt

- Innovative bond to fund the construction of **green infrastructure to manage stormwater runoff** and improve the water quality.
- The bonds were issued at a **\$25 million face value** and an initial **3.43% interest coupon**, payable semiannually, for the first five years.
- In this, costs of constructing the green infrastructure are paid for by DC Water, but the **performance risks** of managing stormwater runoff **are shared amongst DC Water and the investors**.
- The performance outcome will determine whether Investors will be required to make the **Risk Share Payment**, receive the Outcome Payment or simply tender their bonds.
- The EIB allows DC Water to **better manage or hedge a portion of the risk** associated with green infrastructure.

Performance Tier	Outcome Ranges	Contingent Payment
1	Runoff Reduction > 41.3%	DC Water will make an Outcome Payment to Investors of \$3.3 million.
2	18.6% <= Runoff Reduction <= 41.3%	No contingent payment due.
3	Runoff Reduction < 18.6%	Investors will make Risk Share Payment to DC Water of \$3.3 million.



Lessons from case studies of blended finance

- There are only limited examples of use of blended finance to leverage private and/ or commercial resources. Amongst WASH, there are less examples for sanitation so far
- When designed properly, there are opportunities for scaling up as illustrated by the K-Rep case in Kenya. For this, it is important to align these approaches with the prevailing institutions in both water and sanitation as well as in the finance sector
- The level of development of the financial sector and capital markets will determine the extent of opportunities for water and sanitation. Strengthening links to financing institutions and capital markets is critical.

Summary on Innovative Finance

- It is important to recognize and tap the new sources of funds such as from social investors and from the domestic lenders and capital markets.
- For this use of results based funding (RBF) mechanisms will be key as funders look to ensure outcomes.
- While exploring private and commercial funding sources is an old story from 1990s, water and sanitation sector has lagged behind other infrastructure sectors. The renewed emphasis and emerging approaches of blended finance will need to be carefully designed and aligned with domestic institutions to show results at scale.

Innovative Finance Options

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