



World Water Week
Building Inclusive, at Scale Enterprises
Fecal Sludge Capture and Transport



August 28, 2017

- **Welcome**
- Dive into the world of business models
- Small group discussions around one model – or an alternative model!
- Wrap up and closure

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- Partner spotlight
- Designing Inclusive solutions
- Barriers to Creating Inclusive, Sustainable FSM Businesses
- Key Question

- **Partner spotlight**

- **Bill & Melinda Gates Foundation**

- IRC

- Ennovent

- Designing Inclusive Solutions

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WSH Team's Vision

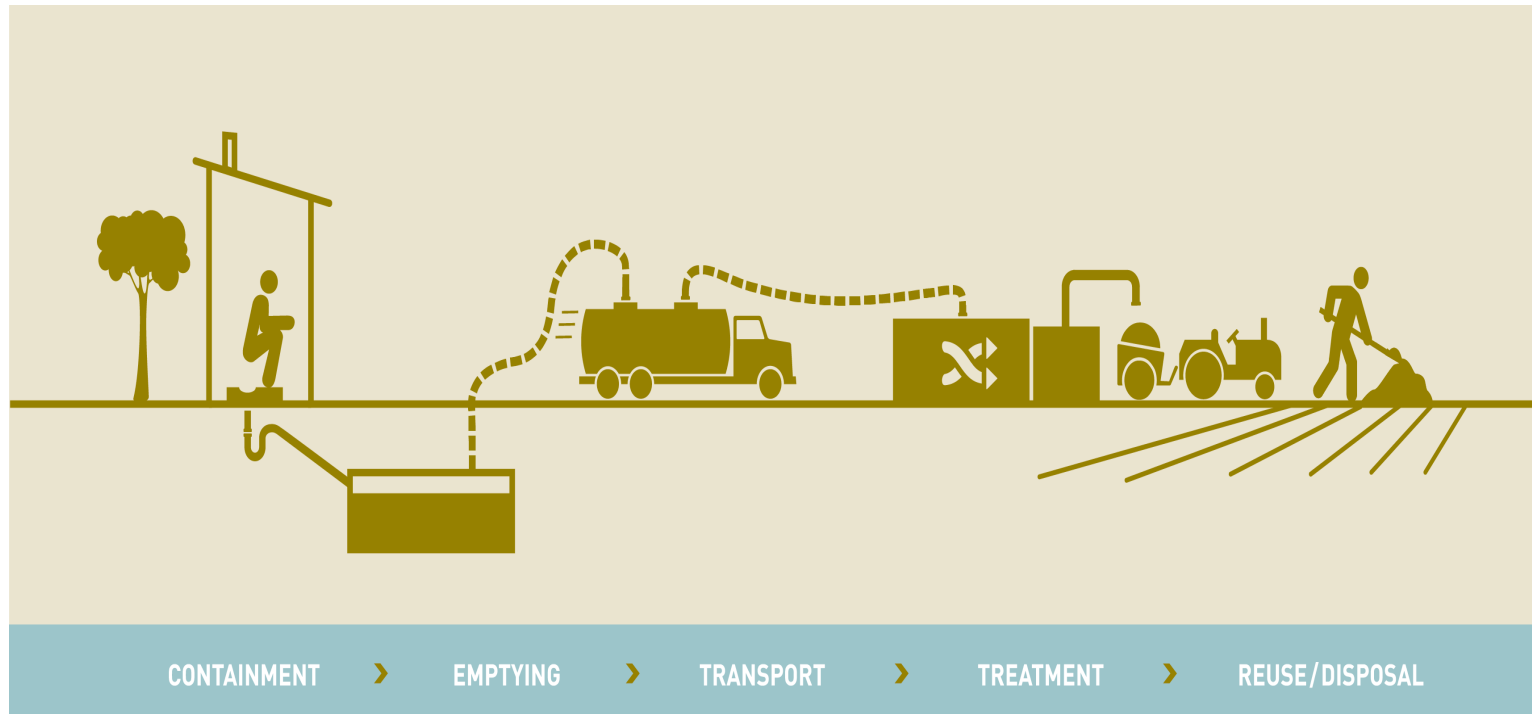
The universal use of sustainable sanitation services

To contribute to this outcome, we make investments, forge partnerships, and advocate for opportunities that have the potential to make quality sanitation technologies and services safe and affordable for everyone.

Our ideal role is to catalyze high-impact investments that would not otherwise happen.



Focus across the Sanitation Service Chain



Focus on two fundamental sanitation challenges:

1. Expanding and improving sanitation without central sewers, because this is – and will be – by far the most common type of sanitation service used by the poor
2. Making sanitation services safe and sustainable by addressing the failure to effectively transport, treat, and reuse waste captured in on-site facilities

SEEK to engage the private sector

Re-Invented Toilet



Omni-Ingestors



Omni-Processors



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- Designing Inclusive Solutions

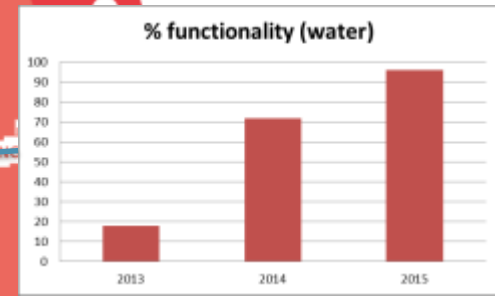
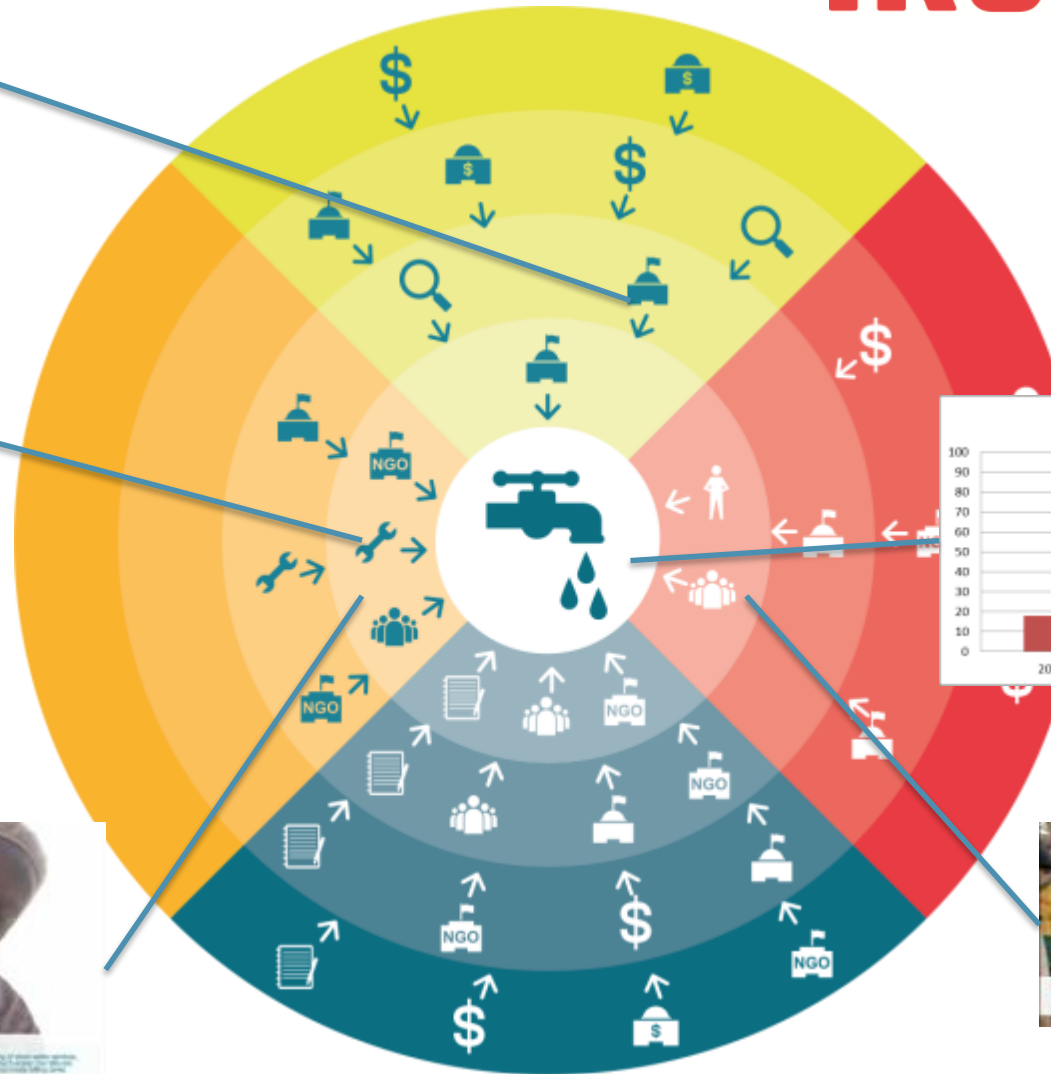
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Delivering a service takes many functions at various levels

IRC

Supporting water sanitation and hygiene services for life



The delivery of sustainable services requires that we

- assess all the individual parts of the (service delivery) system,
- address all the (relevant) weak parts, and
- that we do that by involving and working with all the (relevant) stakeholders.

Based on its experience with strengthening national WASH systems over the last 10 years IRC has identified building blocks that are required for sustainable service delivery.

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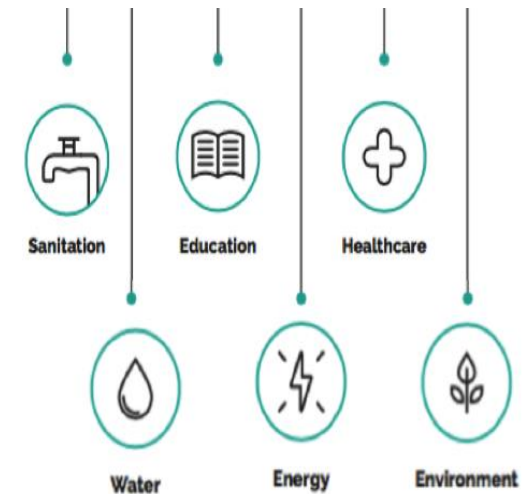
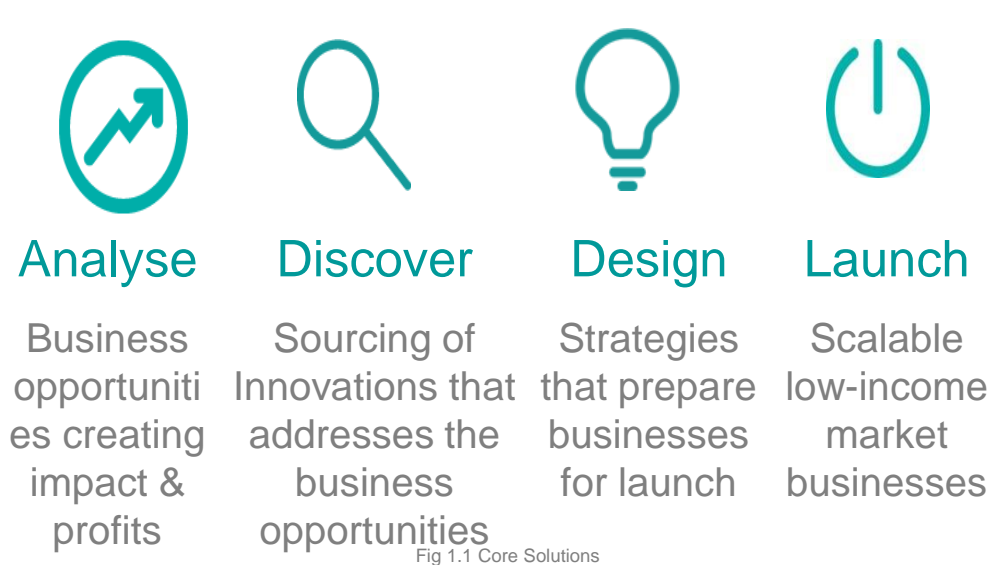
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Ennovent catalyses ideas into ready to scale businesses with sustainable solutions for low-income markets in developing countries

160+ Innovations Catalysed | 45+ Projects Implemented | 35+ Countries Reached



KEY FACTS

Partners: **IRC** Supporting water sanitation and hygiene services for the **TARU** LEADING EDGE

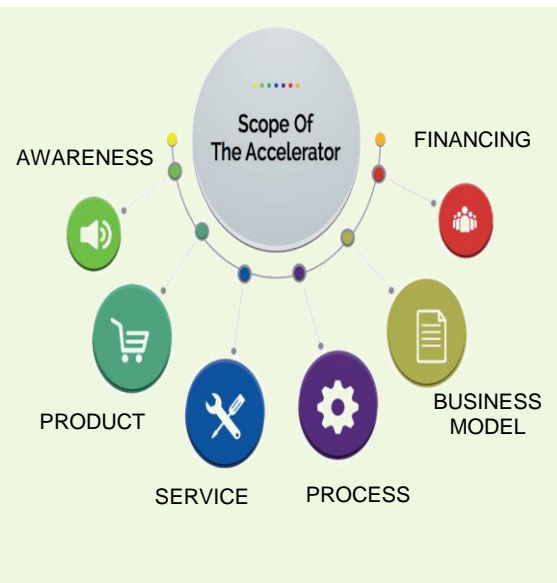
Project Name: **Sanitation Innovation Accelerator 2016 (SIA)**

Timeframe: **5 Months (May-Sept'16)**

Status: **Closed**

Sector: **Sanitation Value Chain**

Geography: **Rural India**



A nation-wide program to discover, startup, finance, and scale early-stage market-driven businesses across the rural sanitation value chain in India

Received 95% application related to Capture (product, awareness and financing innovations)

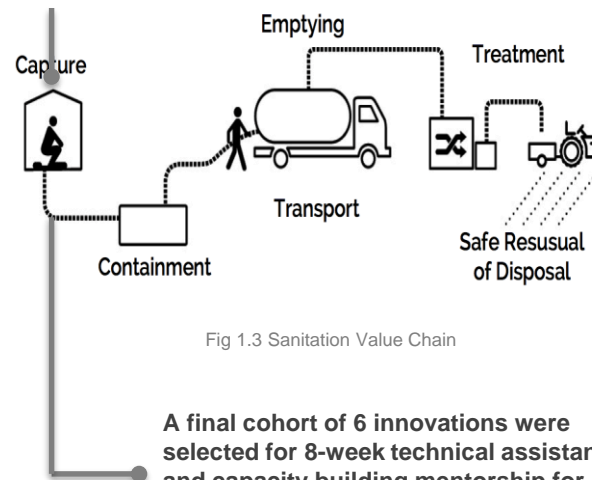


Fig 1.3 Sanitation Value Chain

A final cohort of 6 innovations were selected for 8-week technical assistance and capacity building mentorship for making them investment-ready

KEY FINDINGS

- Limited market-driven businesses in fecal sludge management
- Segment remains unregulated and informal
- Need for government engagement to make businesses commercially viable, technically feasible and socially inclusive

KEY FACTS

Partners:    

Project Name: **Innovation Hub for Urban Water, Sanitation & Hygiene (IHUWASH)**

Timeframe: **Ongoing | 3 Years (2017-19)**

Sector: **Urban Water, Sanitation & Hygiene**

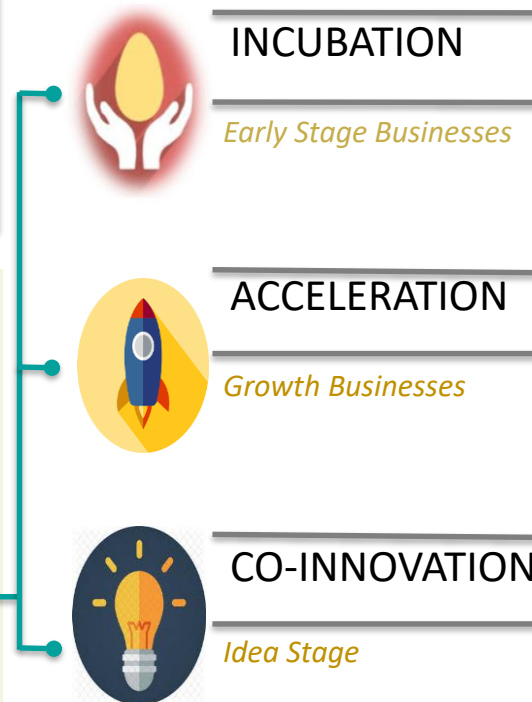
Geography: **Urban India**

City Partners: **Faridabad (Haryana), Mysore (Karnataka) and Udaipur (Rajasthan)**

Addressing city-level wash challenges through inclusive and viable businesses with active Urban Local Body (ULB) administration engagement

IHUWASH Building Blocks

- 1 **GRAND CHALLENGE:** International level competition for sourcing urban WASH innovations
- 2 **WASH LAB & PARK:** Localized WASH action research for Municipal Corporation by an academic institution with Knowledge-cum-exhibition Park on PPP for community awareness
- 3 **ACCELERATOR:** Scaling Innovative Urban WASH businesses with Financial and non-financial support
- 4 **WASH ECONOMY REPORT:** Focusing on contribution of the WASH industry in the country's economic and social development
- 5 **SANITATION BUSINESS CONFERENCE:** Platform for WASH stakeholders from India and abroad
- 6 **MICRO-UTILITY:** SPV based on PPP to manage public sanitation of cities



KEY HIGHLIGHTS

- Provides both financial and non-financial support
- Developing feasible government engagement models to work with private sector businesses
- Proactively co-innovate unaddressed business models with technology partners

- Partner spotlight
- **Designing Inclusive Solutions**
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Designing an Inclusive Solution – A Tale of Two Cities [1/2]

Dakar

Program Name

Restructuring the FS Market for the Benefit of Poor Households (IPA)

Poor named

Objective

- Support the creation of a large scale, sustainable sanitation value chain in Dakar, Senegal including mechanized fecal sludge management

Presumed solution

Problem Definition

- Affordability constraints lead to delayed emptying and reliance on manual desludging services instead of mechanized

Presumed cause

Target Outcome

- Increase sludge delivered to treatment facility
- Increase use of mechanized services

Benefit to poor presumed the same

Kampala

Improving FSM for On-Site Sanitation (KCCA)

Poor not named

- Achieve reliable, affordable FS collection & transportation service that promotes equity
- Enable urban-poor to realize public health and environmental benefits
- Reduced pollution, reduced water borne diseases & related expenditure

Outcomes for Poor

- FSM market not working for low income communities

Target client-focused

- Increase informal settlement FS to treatment
- Improve planning, monitoring, regulation
- Formalize FS collection and disposal businesses
- Increase demand for FSM services

Benefit to poor explicit

Designing an Inclusive Solution – A Tale of Two Cities [2/2]

Dakar

Key stakeholders engaged

- Urban HHs via surveys/ experiments
- Mechanized emptiers
- Call center operators

Solutions attempted

- Use subscription mechanism to distribute cost over time
- Establish call center to improve competition and efficiency among operators

Main results

- Call Center – efficiency gains to formal service provider and price reductions for mechanized emptying services
- No clear evidence of improved affordability for poor, reduction of manual emptying among poor, or improved/increased services in low income communities
- No engagement of manual emptiers to improve services, safety, or links to improved disposal options
- Mechanized emptiers' association drafts and proposes policy to ban manual emptying (was not approved)

Research-led, No manual emptiers

Pre-determined by objective statement

Pre-determined by objective statement; Private operators benefit/improve; Poor missed

Kampala

- City authorities;
- Landlords and HHs in informal settlements;
- Manual and mechanized emptiers

- City-wide sanitation mapping
- City-resident-service provider information and contact center for services, support, and feedback
- City-supported, LIC-focused marketing and BCC
- Capacity building for city, manual & mechanized stakeholders on improving services to the poor

(1 year into the project)

- Manual emptiers trained, formalized into businesses
- MOUs shifted to SLAs to improve emptiers' performance
- Illegal disposal incidents reported to City
- Increased focus on access among poor households
- Transfer stations being tested by settlements to improve safety of manual emptying/sludge disposal

Gov't-led. Diverse LIC stakeholder

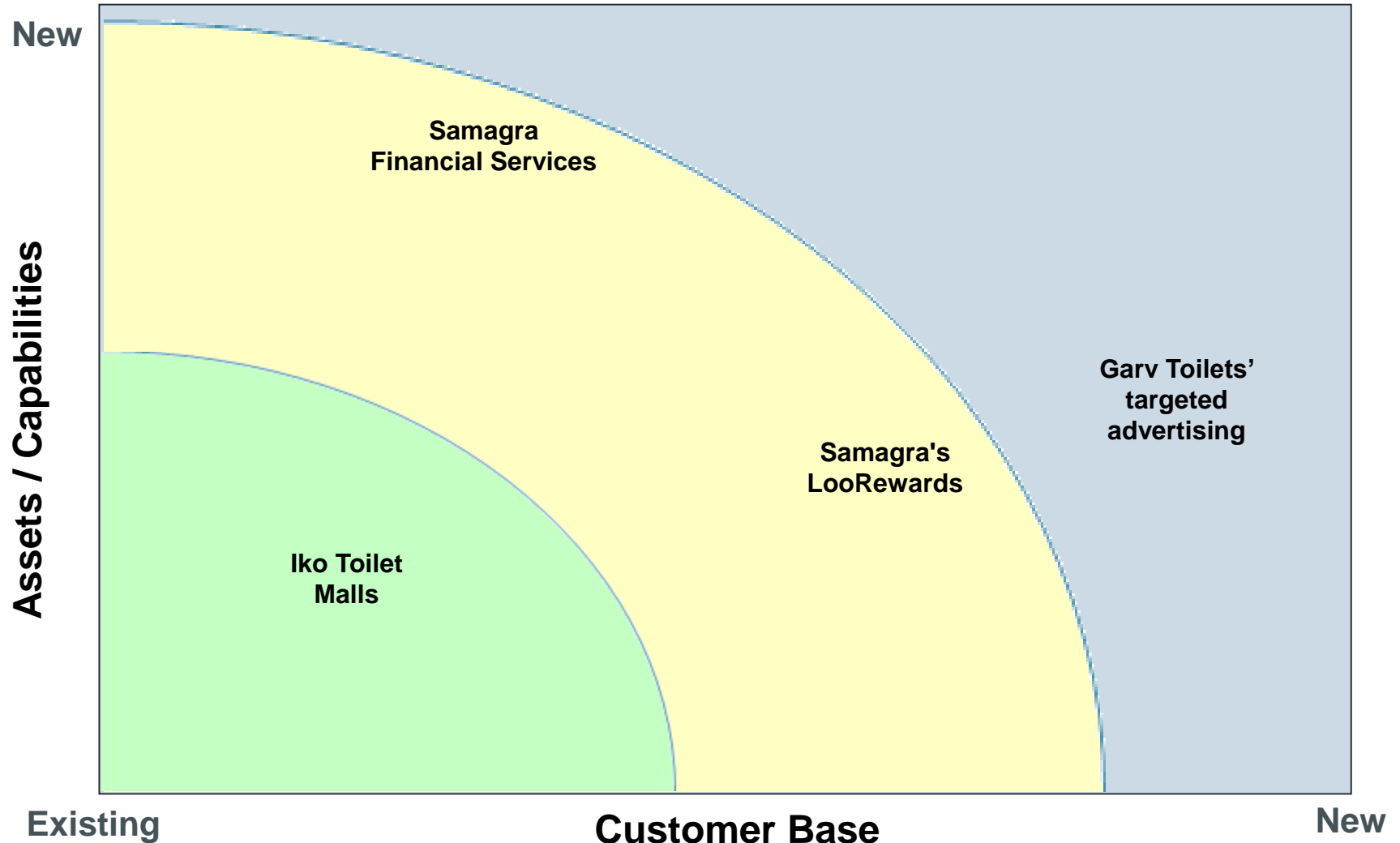
System-wide

Service to poor is central; Manual emptiers engaged; Gov't system improvements

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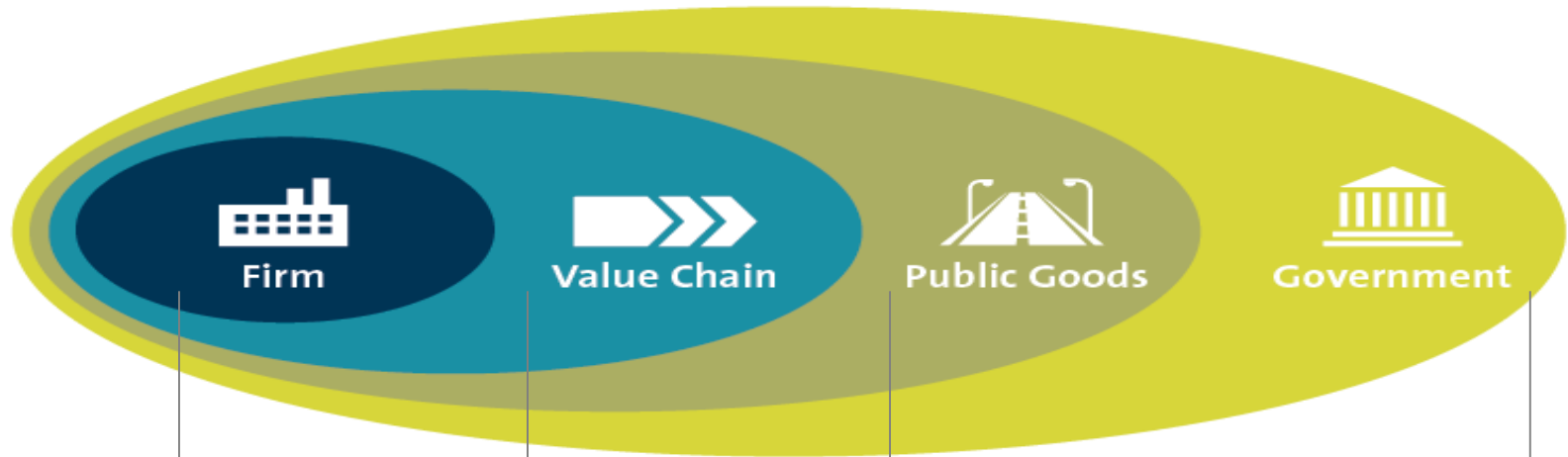
Business innovations to improve inclusion

Private enterprises should and do innovate to diversify their revenue model by layering varied revenue streams; however, barriers exist beyond the firm's business model



Barriers to Creating Inclusive, Sustainable FSM Businesses

The barriers to creating inclusive sustainable business come from the business model of the firm itself, value chain, the lack of public goods, and lack of government support



- Regular emptying is primarily a push service
- Population density – especially in peri-urban and rural areas – does not allow for scale required
- Lack of resources – capital and technology

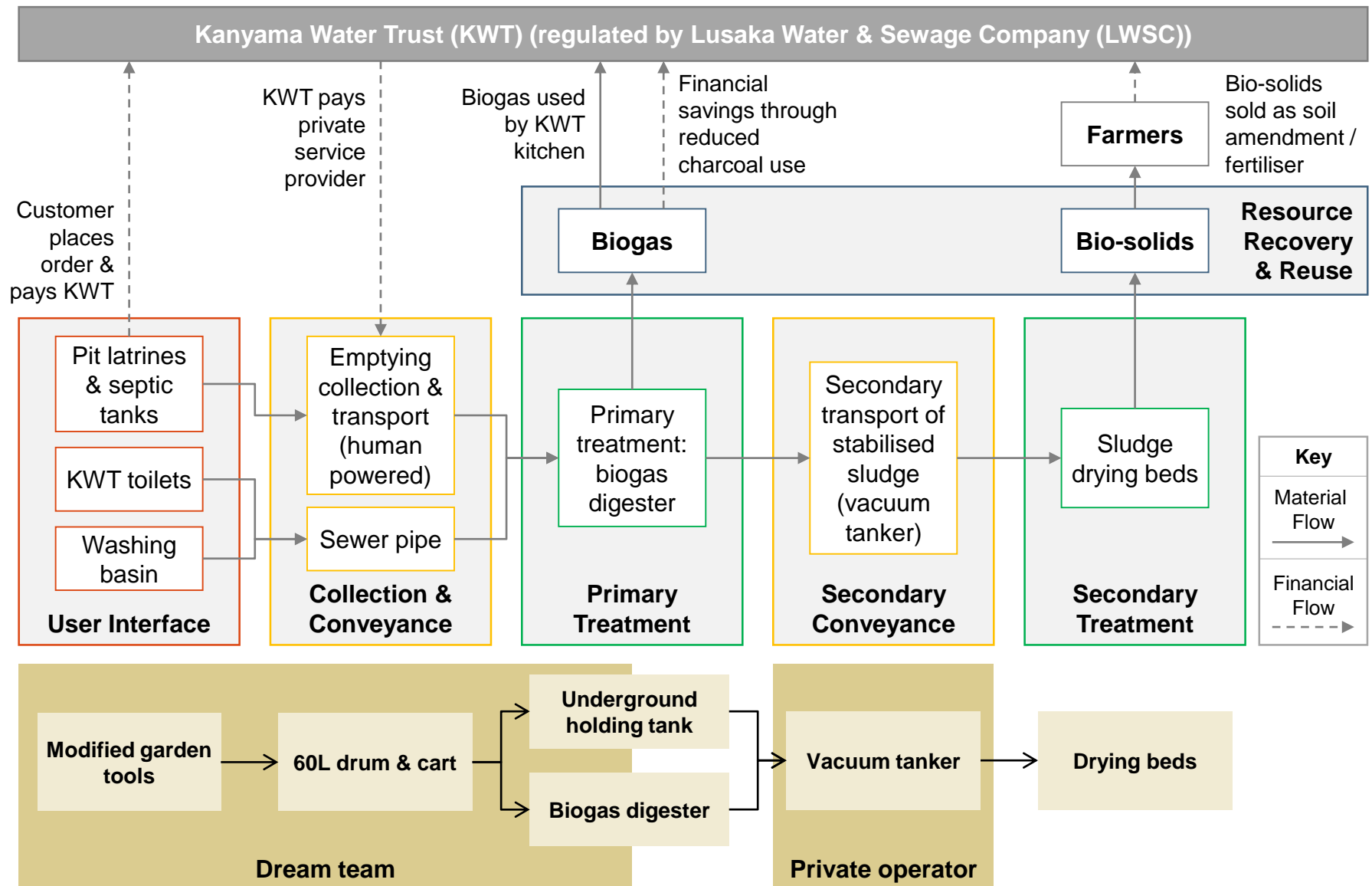
- Expensive last mile provision
- Lack of support service providers
- Poor value recovery from FS

- Absence of standards
- Lack of infrastructure, even in large municipalities

- Lack of implementation of laws and regulations around FS

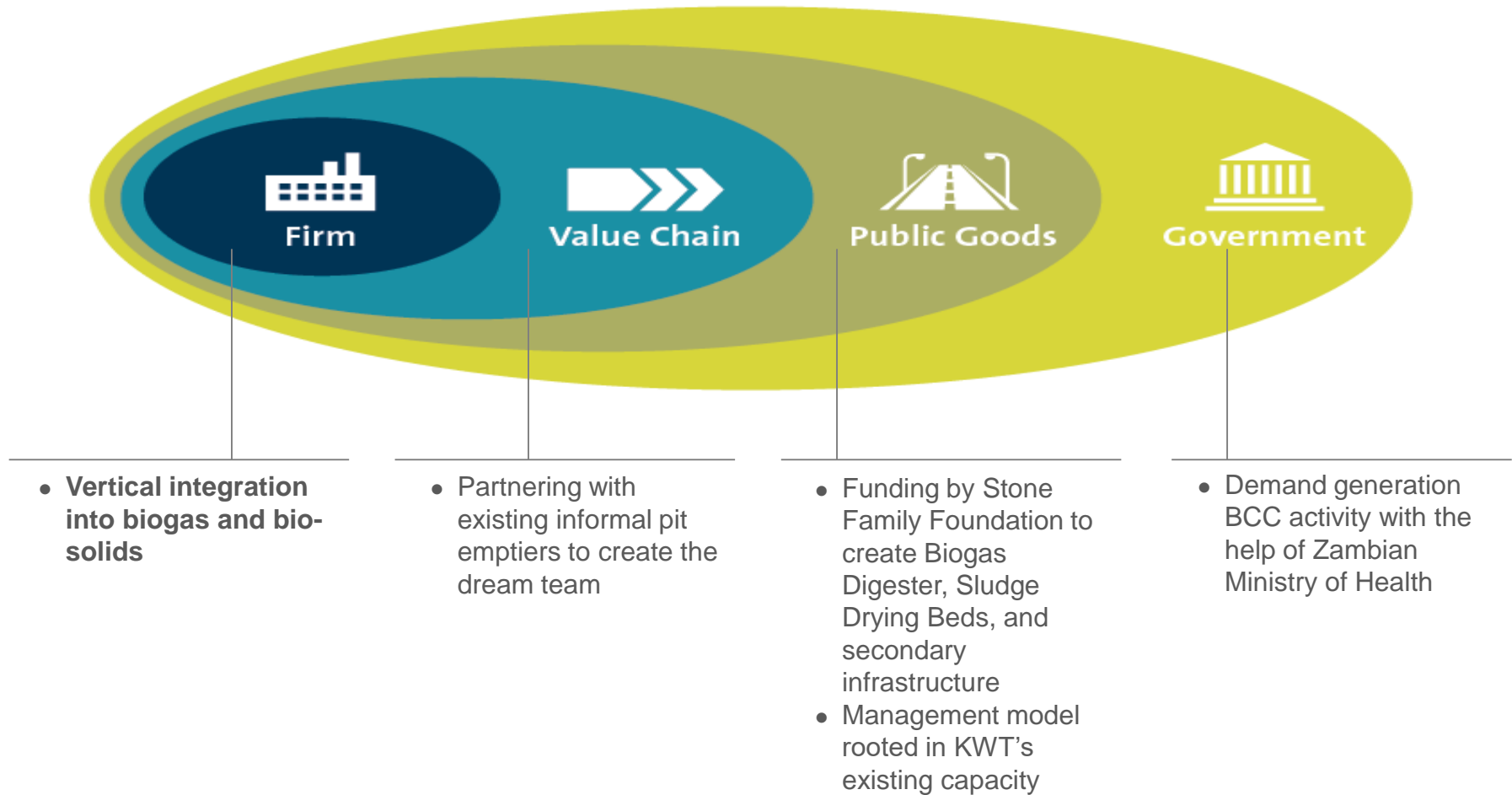
Vertical integration for better value – Kanyama Water Trust

FS enterprises need to innovate – within the FS business model, and looking beyond – to be sustainable



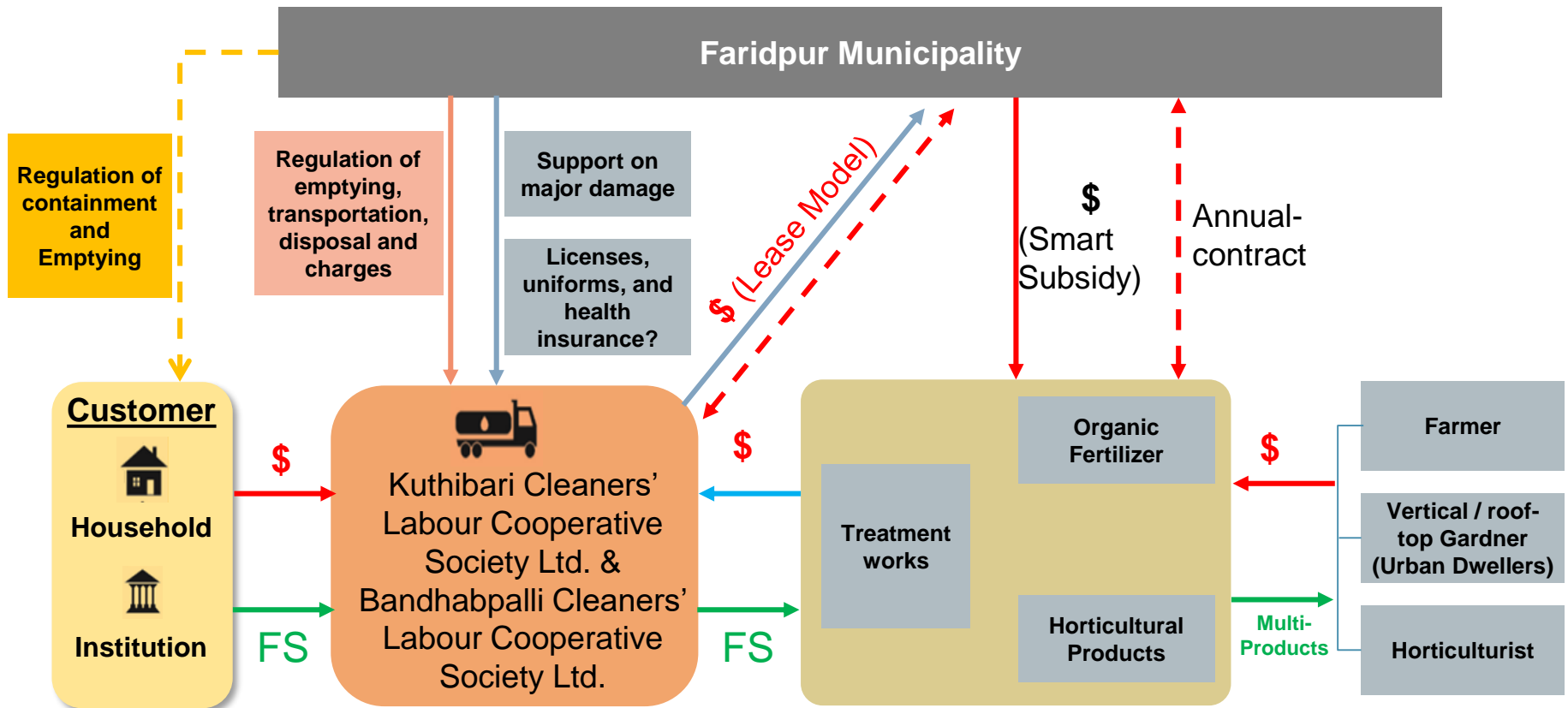
Vertical integration for better value – Kanyama Water Trust

KWT was able to address multiple barriers to create a successful inclusive FS business



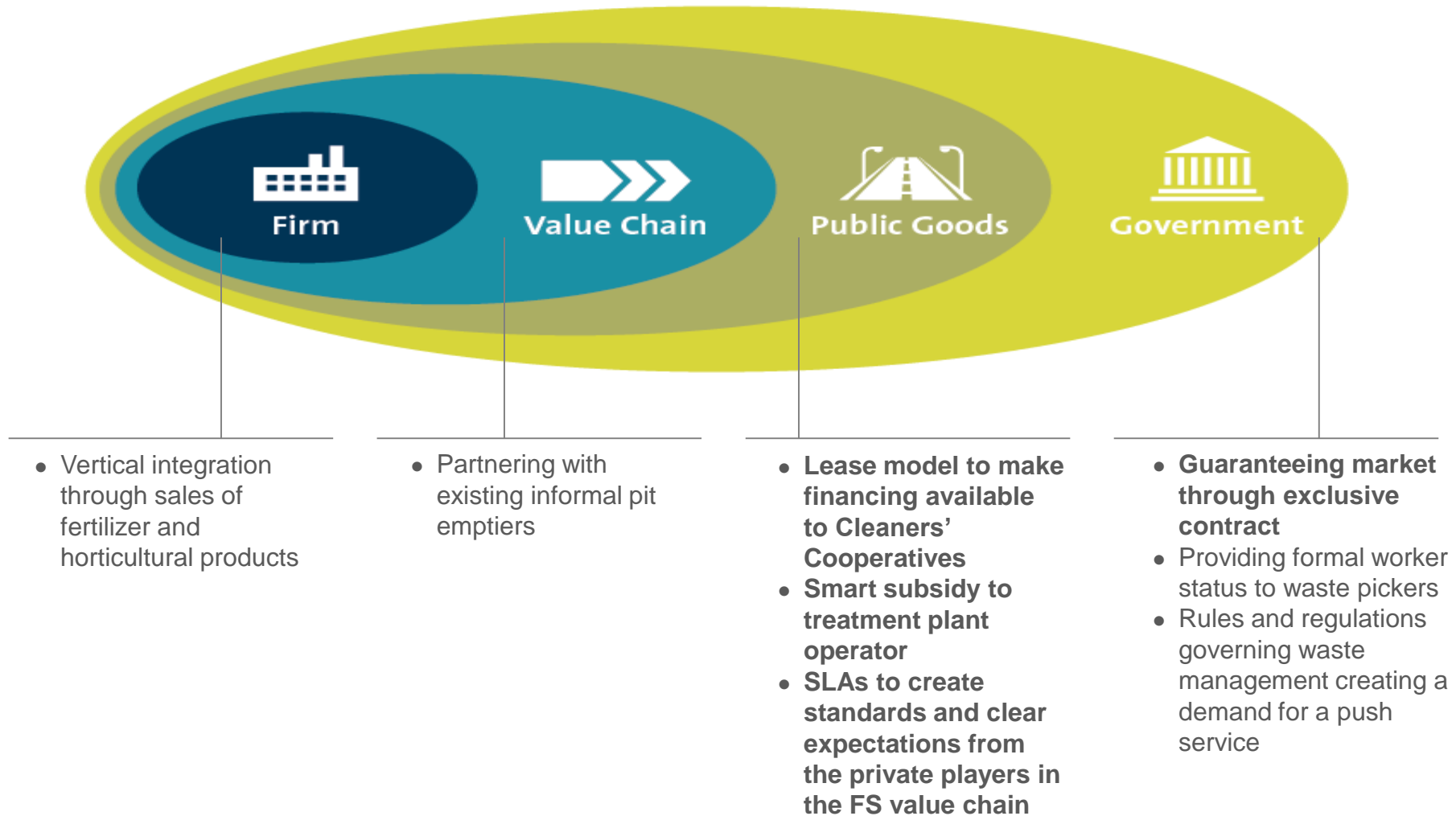
Lowering costs of public goods for private sector – Faridpur

(Society for the Urban Poor, Practical Action)



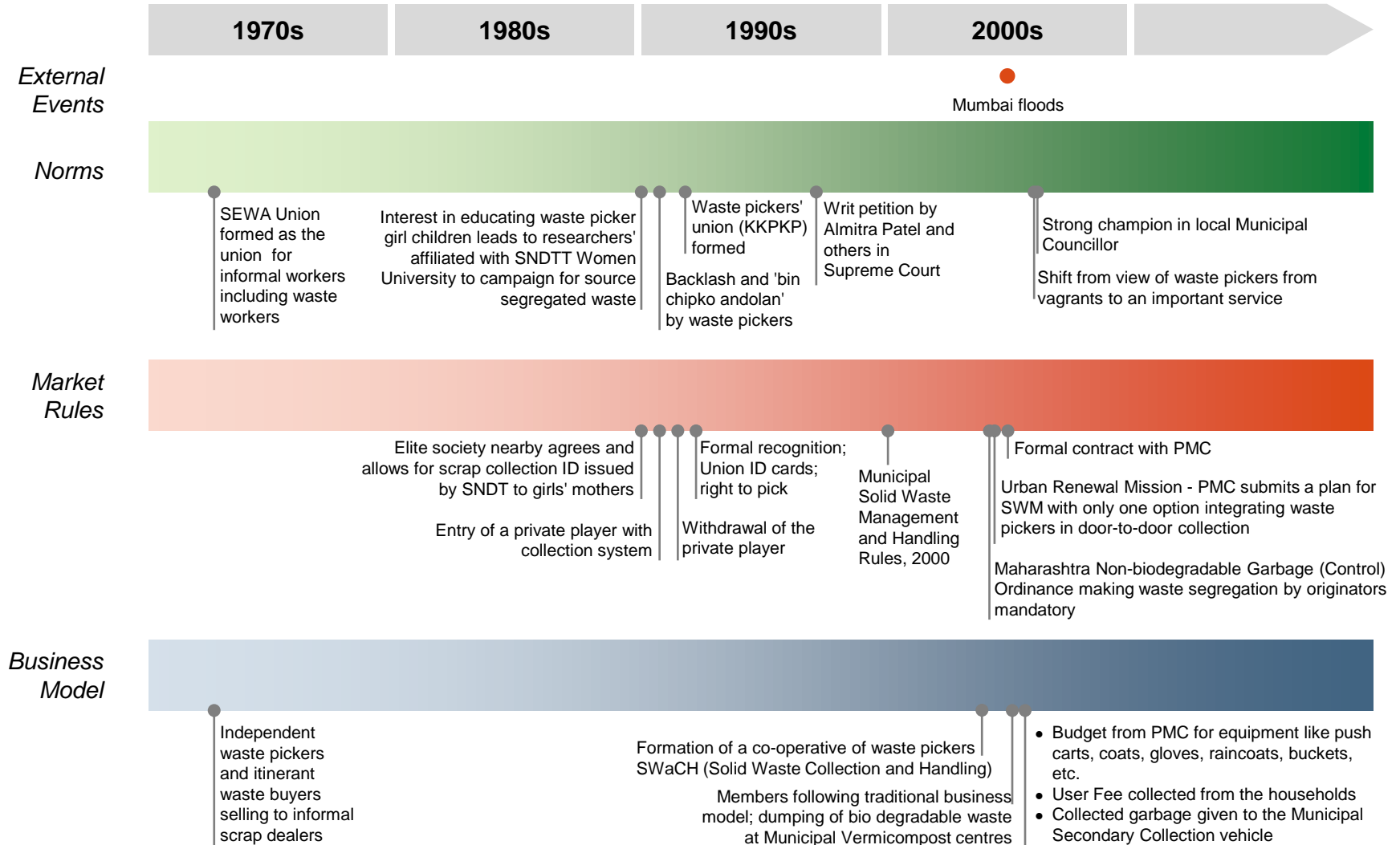
Lowering costs of public goods for private sector – Faridpur

KKPKP was able to address multiple barriers to create a successful inclusive waste management business



Legislative action to drive change – PMC / KKPKP

Government, through market rules, can play a significant role in creating inclusive market solutions – such as the waste management market in Pune, through KKPKP (Kagad Kach Patra Kashtakari Panchayat)

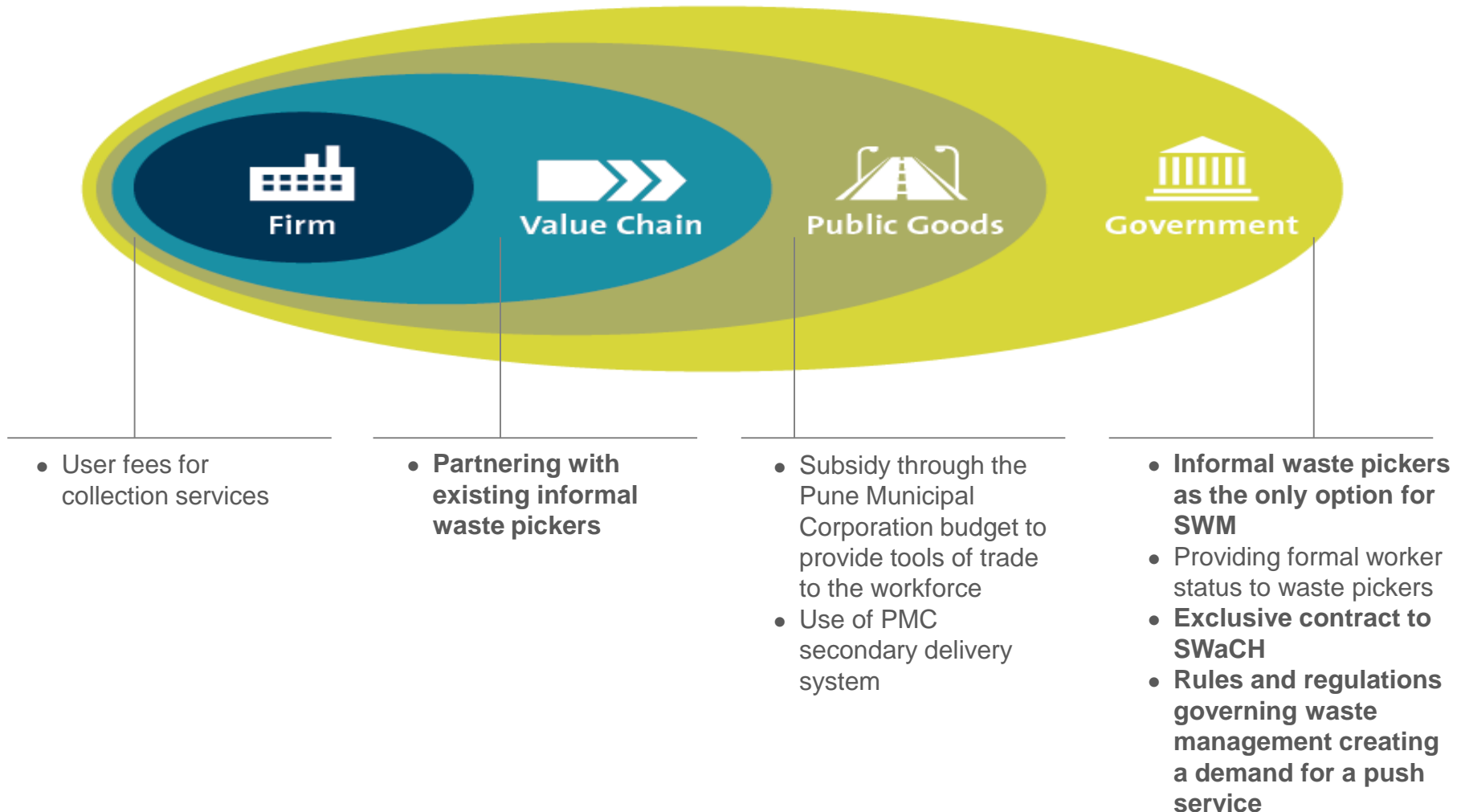


Note: For further information on the framework, please refer to *Shaping Inclusive Markets* (FSG, Rockefeller Foundation; 2017)

Source: The Story of Waste and Its Reclaimers (Anjor Bhasskar and Poornima Chikarmane)

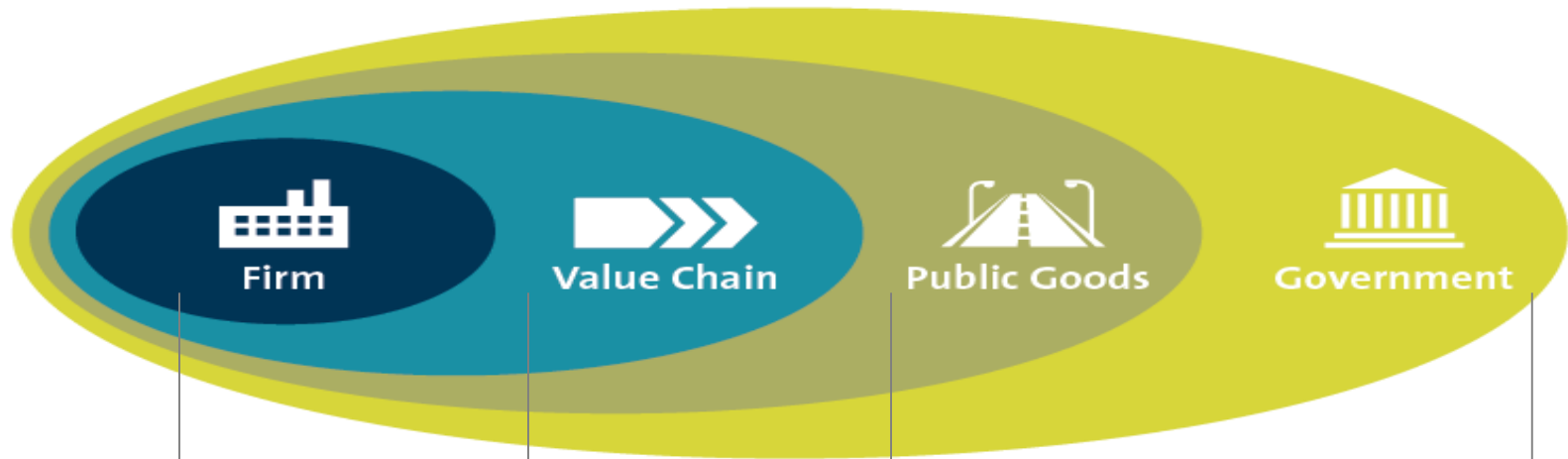
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Barriers to Creating Inclusive, Sustainable FSM Businesses



- Vertical integration

- Facilitating partnerships between informal sweepers/emptiers and formal service providers

- Reducing private sector costs associated with providing public good services

- Guaranteeing markets to enable company investments, while making companies access to higher margin markets contingent upon servicing lower margin markets in low income communities
- Direct or indirect subsidies

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