

SimpliSafi

A network-based, vertically-integrated sanitation business model

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“Lack of water, sanitation and hygiene costs sub-Saharan African countries more in lost GDP than the entire continent gets in development aid.”

UNDP (2006)



the Gambia

Guinea-Bissau

Guinea

Sierra Leone

Liberia

Bamako

Burkina Faso

Benin

Togo

Côte d'Ivoire

Ghana

Abidjan

Lagos

Lome

Gulf of Guinea

Nigeria

Cameroon

Yaounde

Equatorial Guinea

Gabon

Congo

Brazzaville

Luanda

Central African Republic

DR Congo

Angola

Zambia

Malawi

Mozambique

Zimbabwe

Bulawayo

Namibia

Botswana

Pretoria

Swaziland

Lesotho

South Africa

Durban

Cape Town

Google

Djibouti

Gulf of Aden

Arabian Sea

Ethiopia

South Sudan

Somalia

Uganda

Kampala

Kenya

Nairobi

Rwanda

Burundi

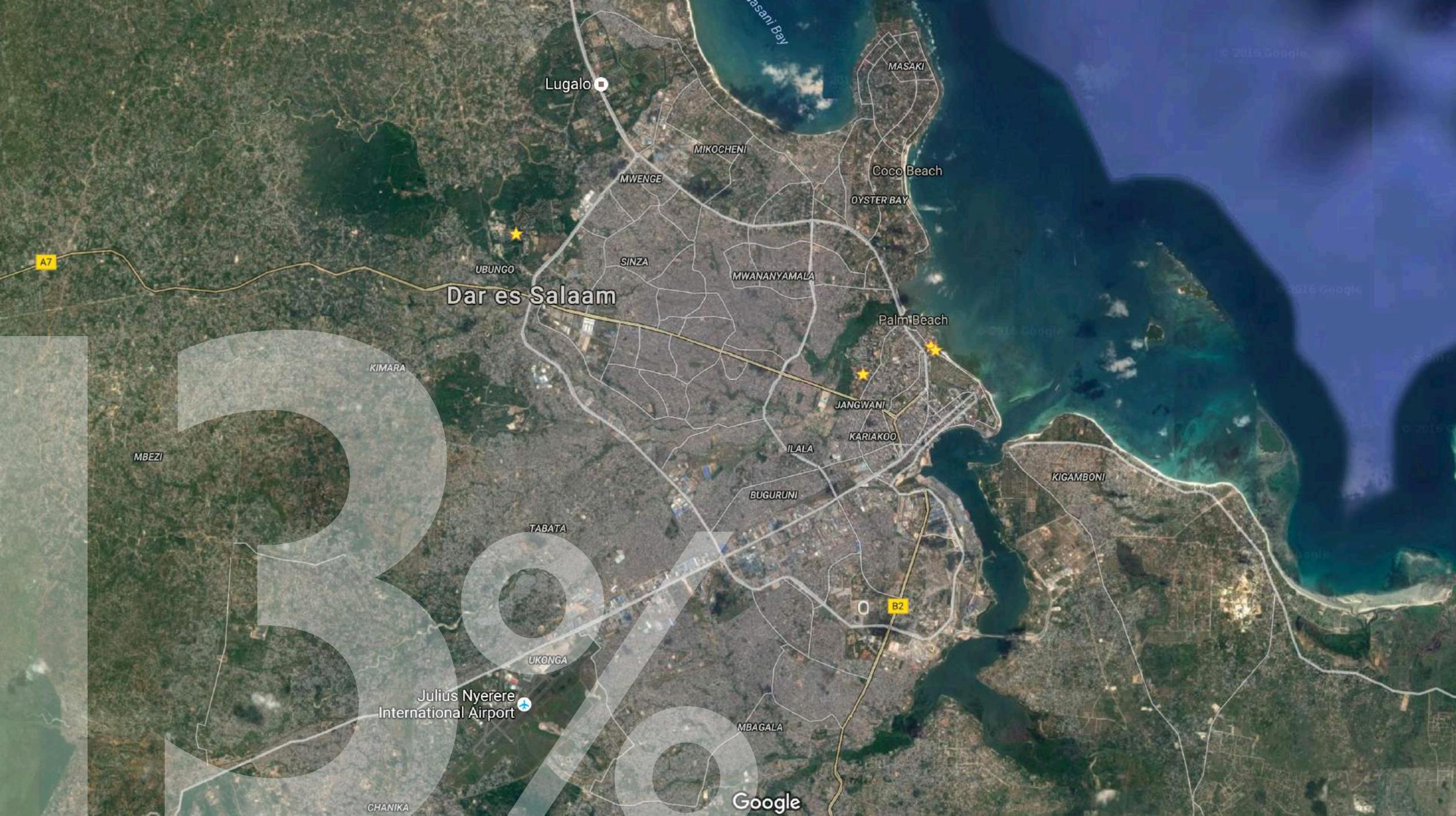
Tanzania

Zanzibar

Dar es Salaam

Madagascar

South Atlantic Ocean



Dar es Salaam

Lugalo

MIKOCHENI

MWENGE

SINZA

MWANANYAMALA

MASAKI

Coco Beach

OYSTER BAY

UBUNGO

Palm Beach

KIMARA

JANGWANI

ILALA

KARIAKOO

KIGAMBONI

MBEZI

BUGURUNI

TABATA

UKONGA

Julius Nyerere International Airport

MBAGALA

CHANIKA

Google

A7

B2



Lugalo

MASAKI

A7

Sokoni Bus

The Dreamers Executive

Asaki Technology

Sheli

Kobil

Chama

Nelson Mandela Rd

Ujuzi St
Nelson Mandela Rd

Counselling And Family
Life Organization

Pharmacy
(Meduka Mawili)

ASL TZ

Incar Tanzania Limited

Sadolin Paints (T)

African Inland
Container Depot

Julius Nyerere
International Airport

MBAGALA

KIGAMBONI

CHANIKA

Google

Vingunguti

An urban, informal settlement in Dar es Salaam



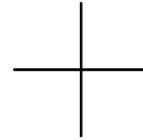


No feasible sanitation solution

The Innovation

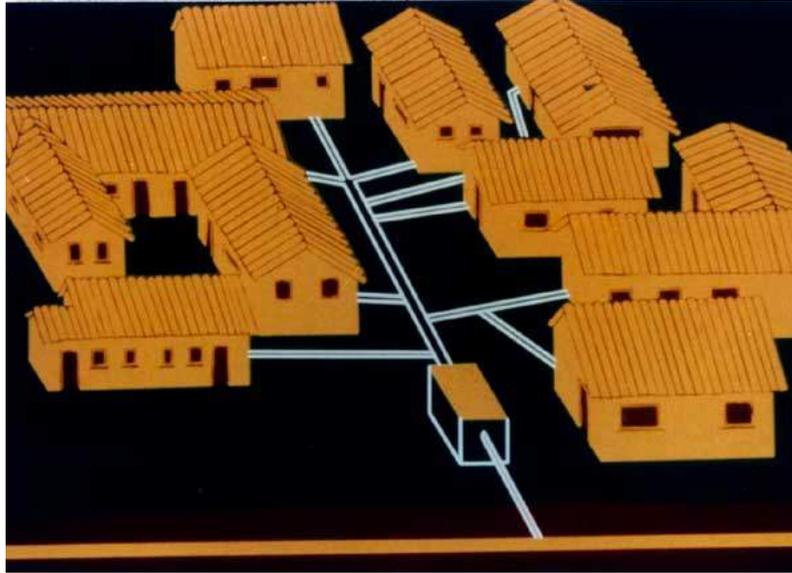


Simplified Sewerage

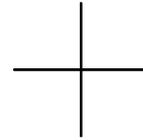


'Flexigester'
Anaerobic Digester

The Innovation



Simplified Sewerage



'Flexigester'
Anaerobic Digester



The Innovation



Upgraded Pour-Flush Latrines



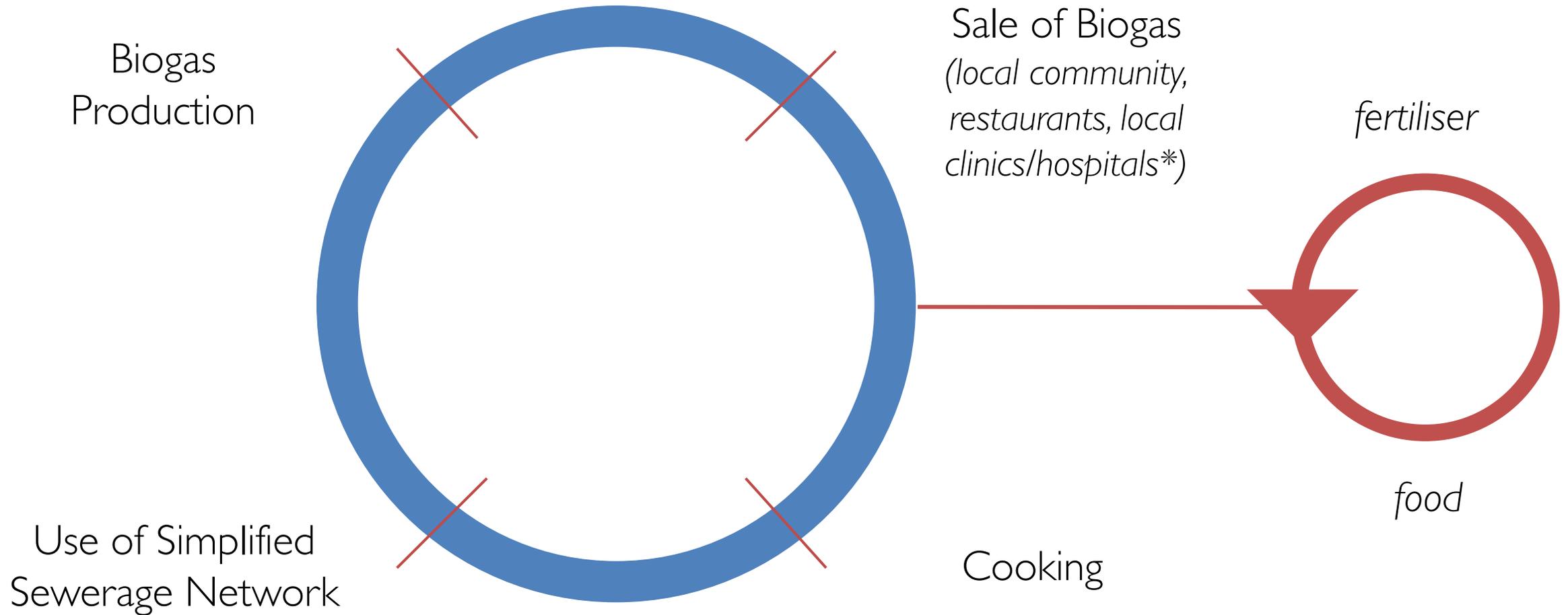
Simplified Sewerage Network

The Innovation

'Flexigester' Anaerobic Digester



The Circular Economy for Sanitation



The Kombo Affordable Sewerage Project

Progress thus far

Year	Number of Households	Project
July 2014	19	Simplified Sewerage
July 2015	15	SimpliSafi
August 2016	11	Simplified Sewerage Expansion



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CAMBRIDGE



Open Gate
Trust



Careful Implementation

Local Engagement





Careful Implementation
Sanitation Users Association



Careful Implementation
Community-led Construction



Careful Implementation
Sanitation Microfinance

Careful Implementation

Youth Engagement



The Kombo Affordable Sewerage Project

Financing

Anaerobic Digester

40m³ – 3,000 USD
(Butyl Rubber)

40m³ – 750 USD
(HDPE)

Simplified Sewerage

New pour-flush
latrine – 260 USD

Cost per connection
– 170 USD*

Monthly cost

Connection fee per
household –
1.60 USD

Projected Breakeven with Biogas Sales

With loan repayment: 1.5 years

Without loan repayment: 3.1 years



The Kombo Affordable Sewerage Project

Results thus far

Technical feasibility

- 4 blockages in past 12 months – each resolved
- Methane production – *distribution model to be tested*

Community experience

- High satisfaction
- Continued committee meetings

Health impact

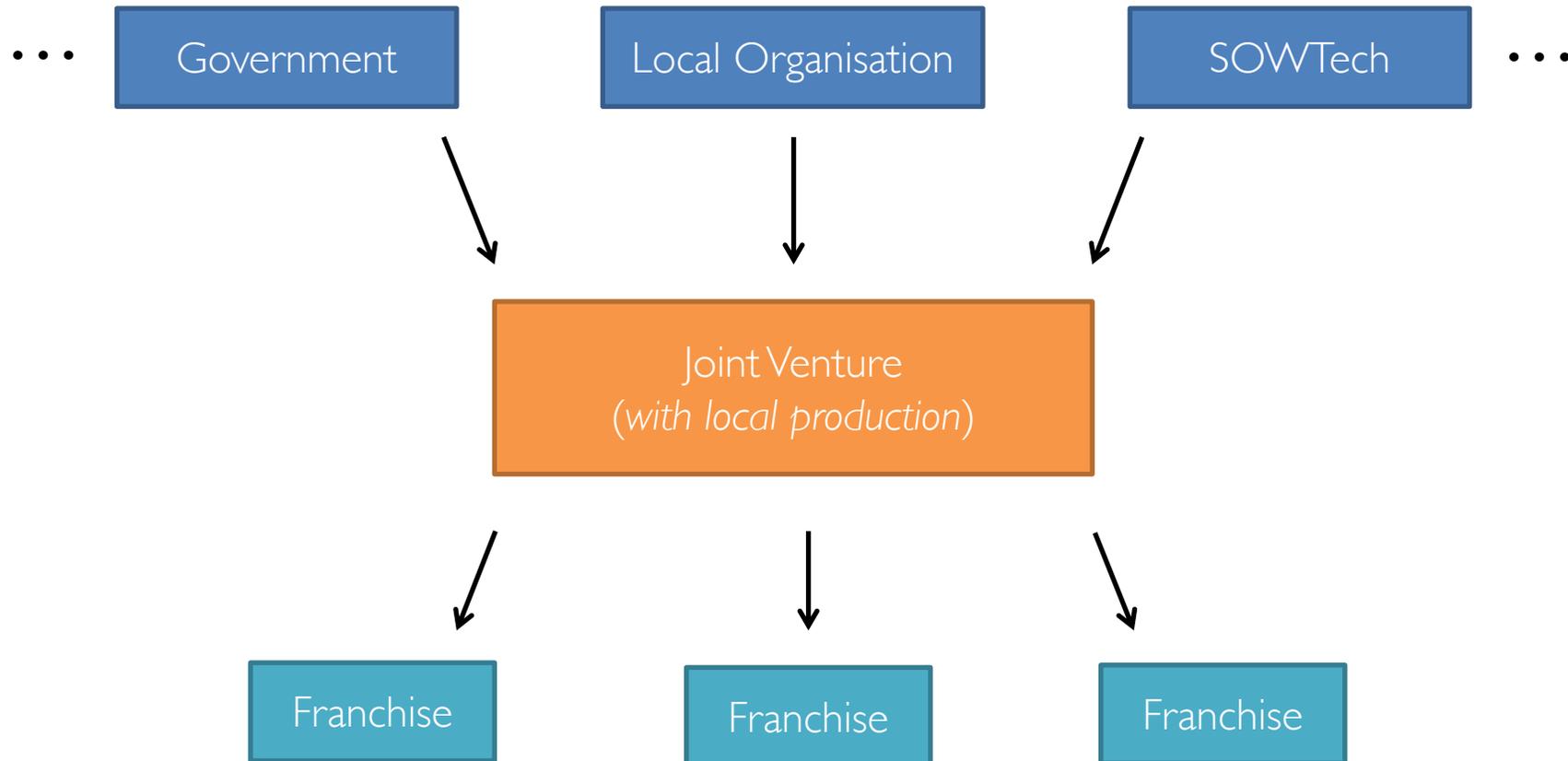
- Reduction in cholera*

Financing

- >95% repayment rate for microfinance loans



A Model for Scale





Challenges and Next Steps

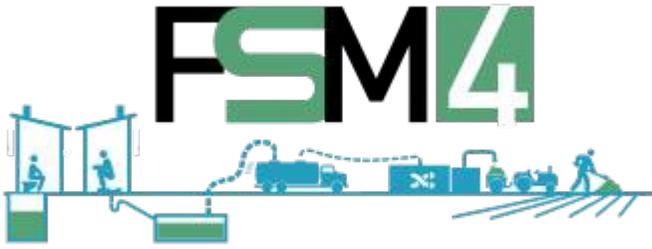


Effective Community Engagement



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An Epicentre of Ideas and Collaboration



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