



# Successful sludge enterprises in small urban centres in Zimbabwe

Innovation and Impact Grant



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# Research Questions



1. What are the key considerations in developing sustainable business models for desludging units in small urban centres?
2. What are the enablers and barriers to the success of mobile desludgers in the small urban centres in



# Research steps

Introduce Mobile Desludger concept and select Small Scale Operator/s

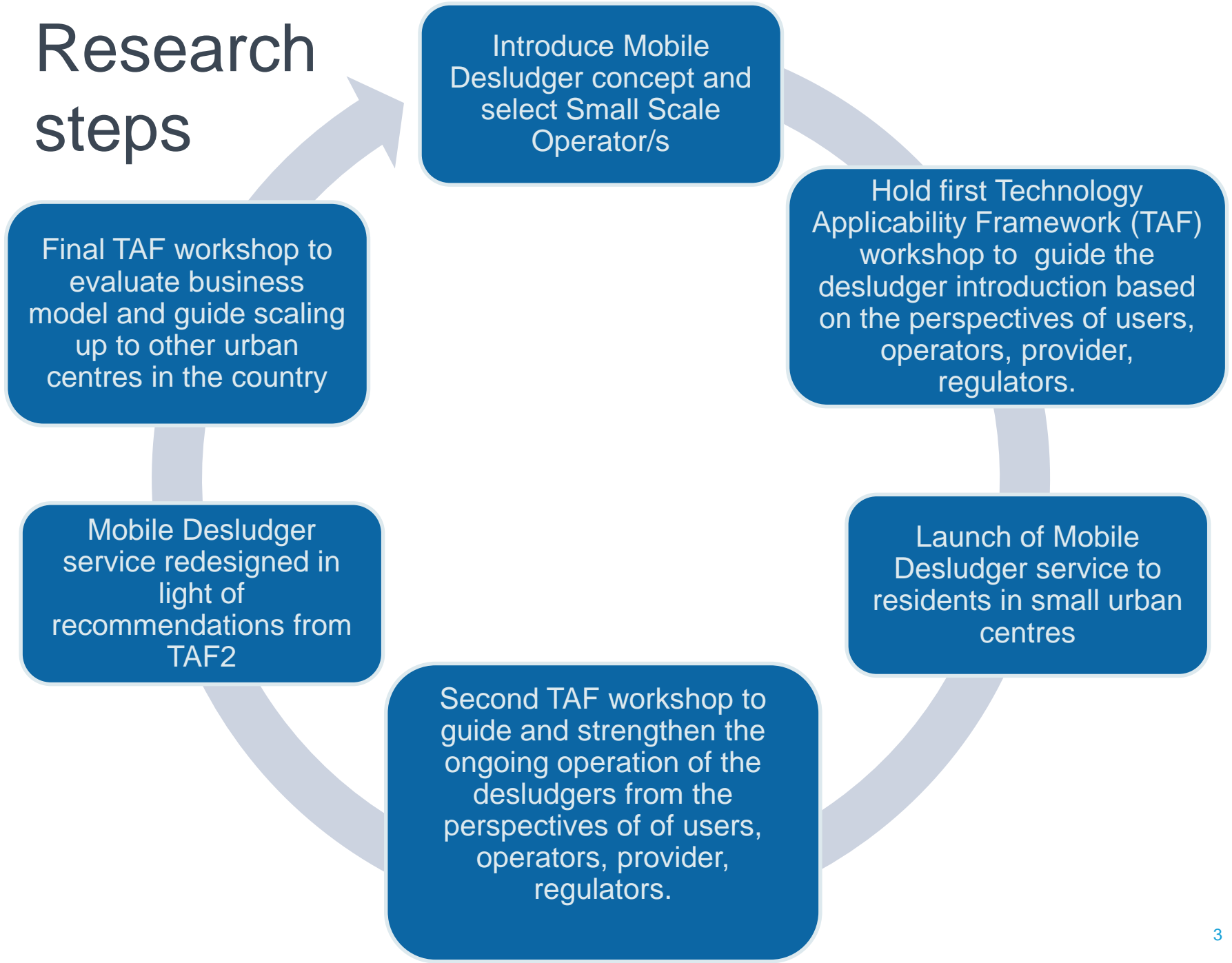
Hold first Technology Applicability Framework (TAF) workshop to guide the desludger introduction based on the perspectives of users, operators, provider, regulators.

Launch of Mobile Desludger service to residents in small urban centres

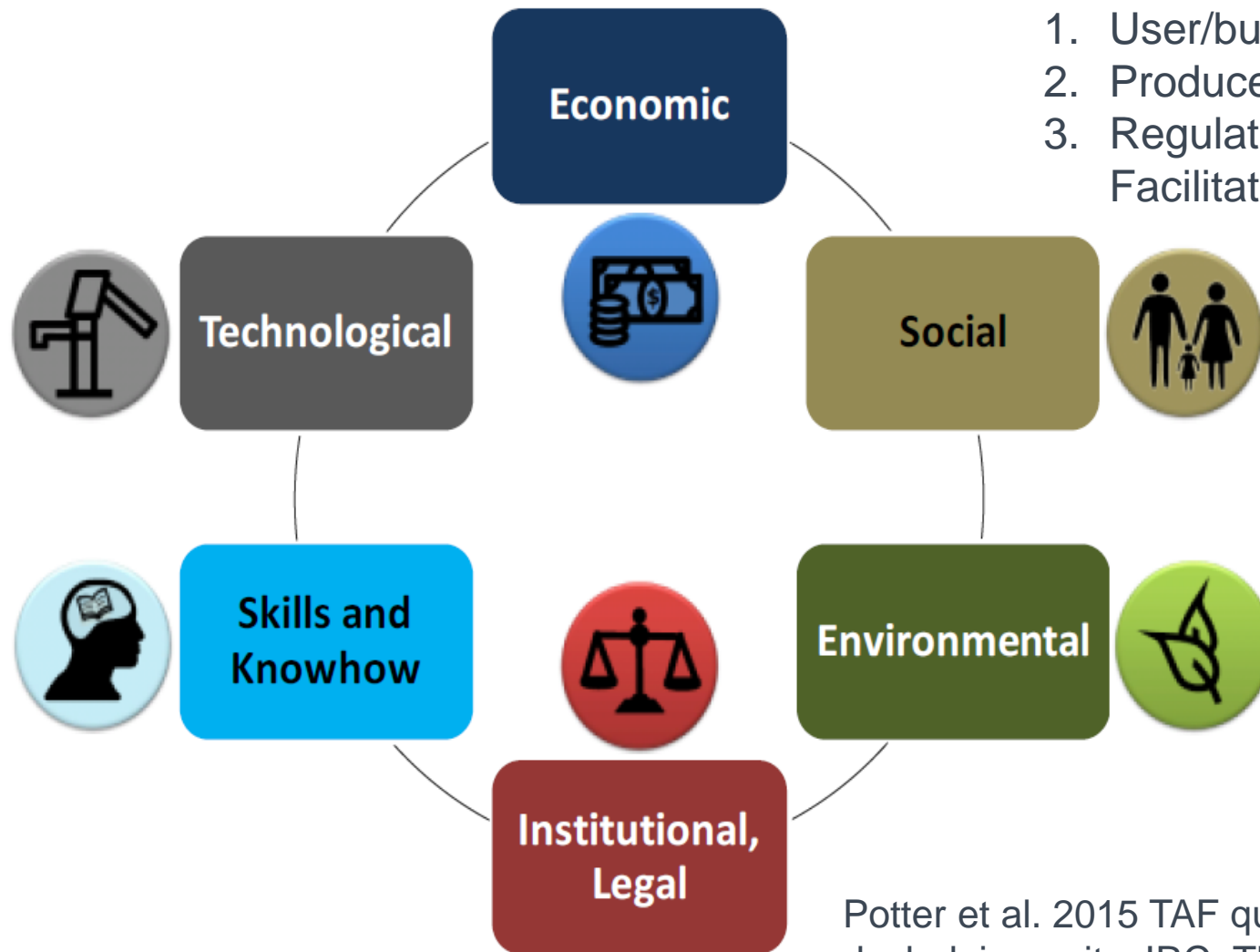
Second TAF workshop to guide and strengthen the ongoing operation of the desludgers from the perspectives of users, operators, provider, regulators.

Final TAF workshop to evaluate business model and guide scaling up to other urban centres in the country

Mobile Desludger service redesigned in light of recommendations from TAF2



# Technology Applicability Framework: 6 domains, 3 perspectives



1. User/buyer
2. Producers/Providers
3. Regulators/Investors/  
Facilitators

# Technology Applicability Framework (TAF)

Sustainability dimension	KPIs
<b>Social</b>	Sufficient demand for desludging
	Effective market insight – feedback from customers, data on customers etc
	Marketing is implemented
	User satisfaction
	Market responsiveness
<b>Economic</b>	Affordability
	Profitability
	Financing mechanisms
	Extended life of latrines
	Supply chain for spares
<b>Environmental</b>	Reduction in illegal disposal
	Safe disposal sites

# Technology Applicability Framework (TAF)

Sustainability dimension	KPIs
<b>Institutional</b>	Alignment with local standards and regulations
	Alignment with national policies
	Service level contracts between LA's and operators
	Customer relations/ feedback mechanisms in place
	Enabling regulations, including protocol for disposal outside NTC
	Financing mechanisms
	Accountability – authority, provider and user
<b>Capacity related (skills and knowledge)</b>	Business development skills
	O&M of the MDU itself
	Are current capacities and financial resources at national and district level sufficient?
<b>Technological</b>	Reliability – spares supply, maintenance,
	Effective and safe operations – safety gear etc to protect users and workers
	Does it perform to expectation?

# Lessons so far

- **Technology Applicability Framework is a useful tool** to spark and guide discussion between users, operators, authorities and regulators, and to form the basis of planning.
- The role of **WHH as an honest broker and mediator.**
- The **accessibility advantage of the MDU** has been as important for business as its ability to desludge high solid content.
- Local authority (LA) and the private sector to **synchronise prices.**
  - LA is charging US\$20/load
  - Private Sector charges US\$35/load
- **LA need to see the private sector services as complementary** to its efforts in providing sanitation services in their jurisdiction