

WASHTech TAF For MUS



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WASHTech

Introduction

WASH sector not short of technologies



Scale



Pilot



Approved



No formal standards for technology assessment or introduction

Burkina Faso, Ghana, Uganda

- ▶ Few formal procedures for approval and uptake of WASH technologies
- ▶ Where standards exist - informal, unclear, and overly bureaucratic, lack institutional home
- ▶ No systematic process for assessing WASH technologies and introduction approach

Consequences

- ▶ Technologies/services introduced that **do not meet user needs**
- ▶ Introduction of technologies/services that are **too expensive** for users to pay for
- ▶ Poor consideration of criteria likely to impact of **success** of a technology/service
- ▶ Introduction of technologies/services that are not scalable because of **multiple barriers**
- ▶ Perpetuation of **assumptions** about technologies

Aim of WASHtech

The WASHTech project aims to produce a systematic and robust framework for assessment of WASH technologies and the approaches used to introduce them (TAF). Also guidelines for technology introduction (TIP).

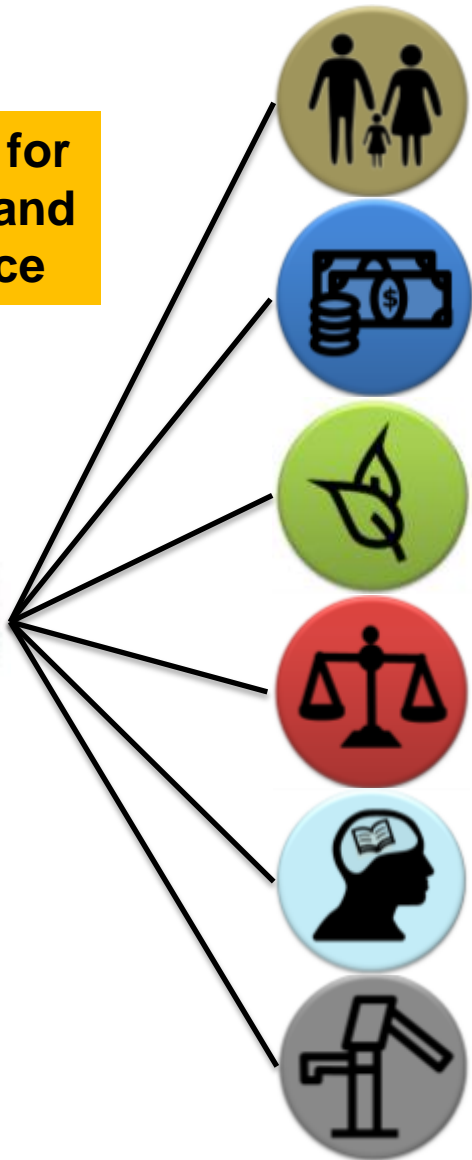
Why have a framework for assessment of technologies?

- Identify issues that could impact on the **sustainability** of a technology/service
- Identify issues that could impact upon the **scalability** of a technology/service
- Highlight priority areas that need to be addressed to avoid wasted time and money

Target Users of TAF

- District government institutions
- National government institutions
- R&D institutions developing technologies
- Donors and development partners
- Local and international NGOs
- Small and medium enterprises
- Training and academic institutions

Technology is entry point for analysis of sustainability and scalability of overall service



Social

Economic

Environmental

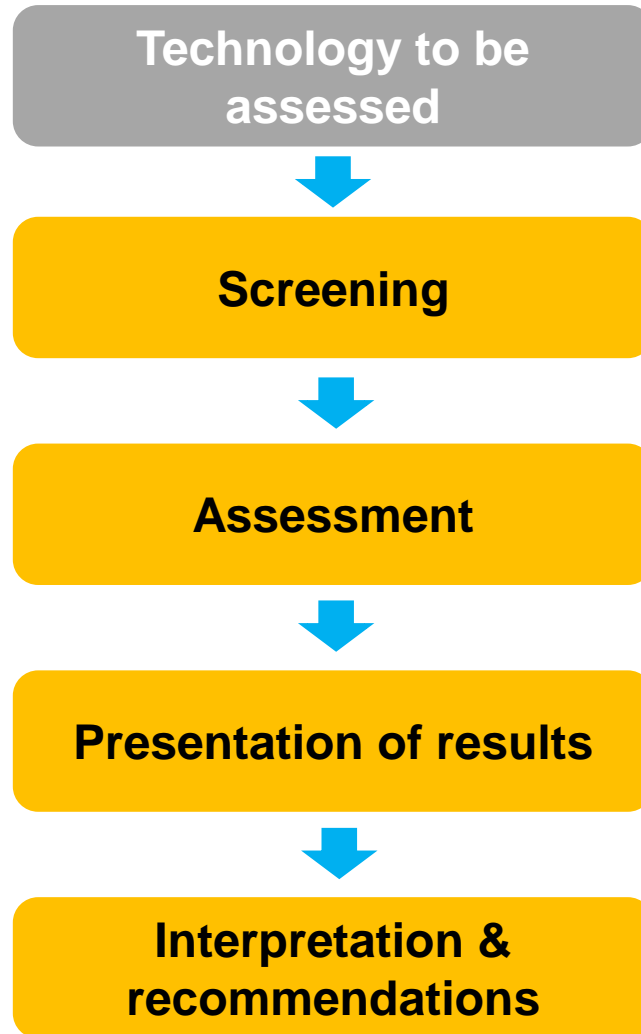
Institutional
Legal

Skills

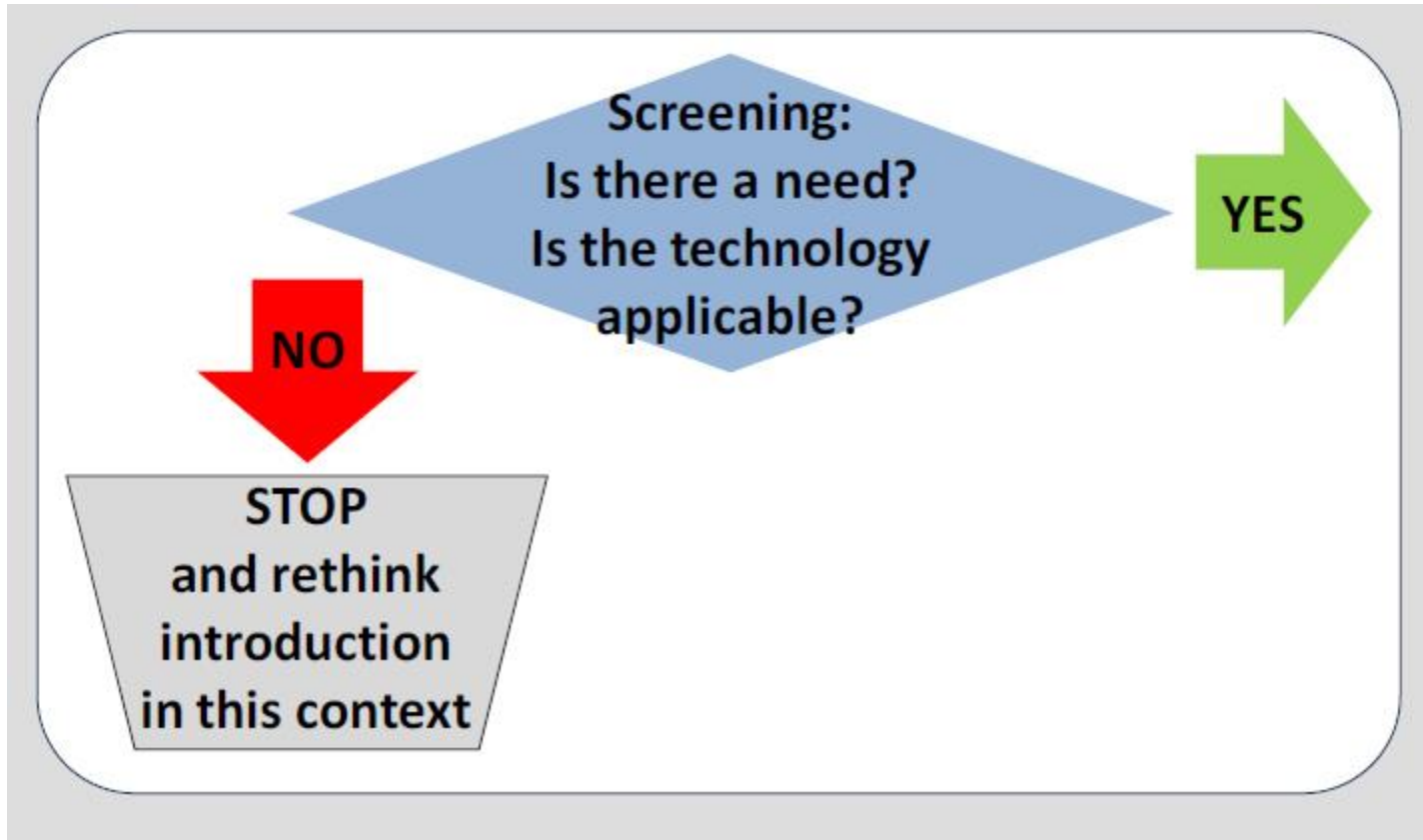
Technical

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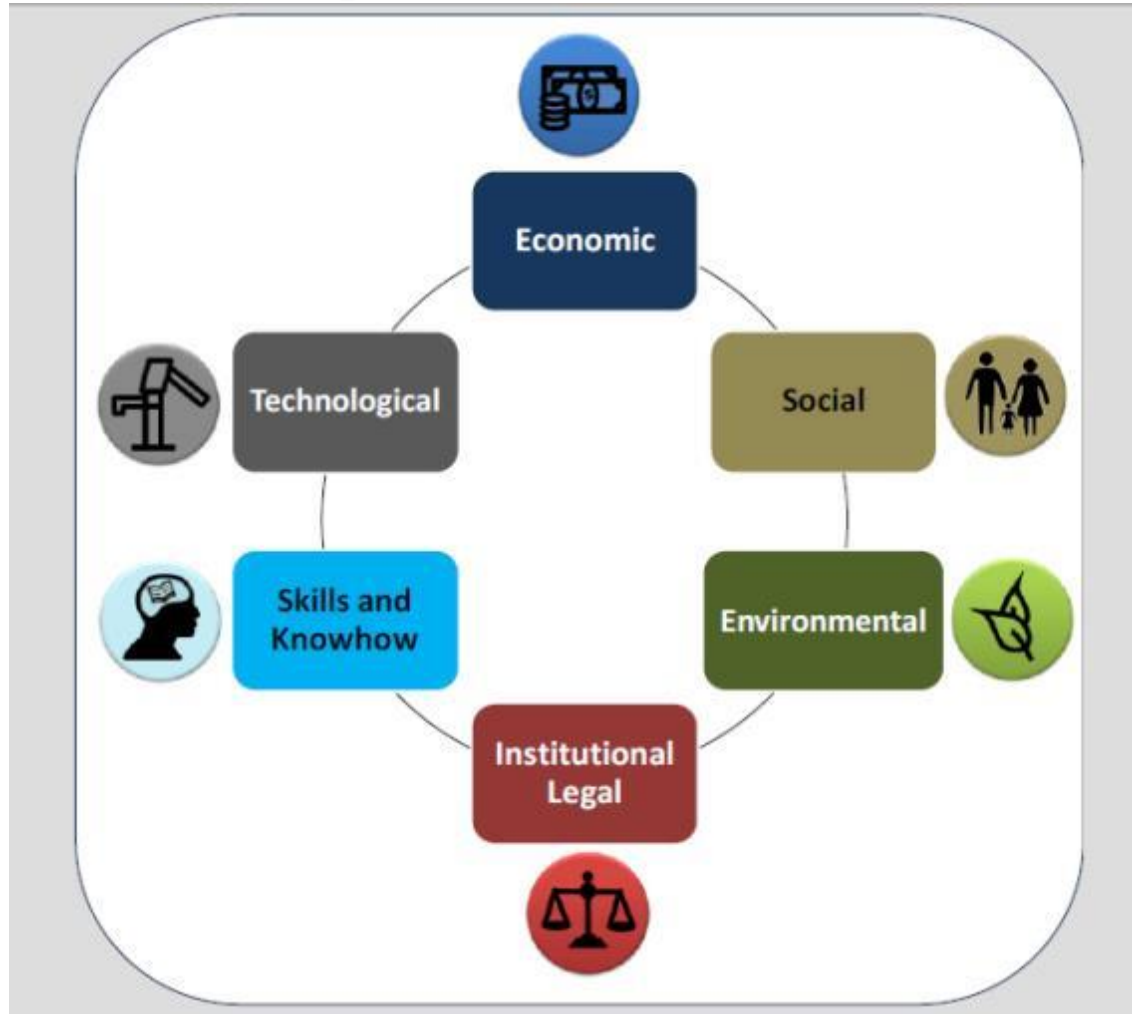
Technology Assessment Framework



Screening



In-depth assessment



Different perspectives

- ▶ User / Buyer
- ▶ Producer / Provider
- ▶ Regulator / Facilitator

Scoring



High value, positive, supportive characteristics



Neutral value, partly impact









Low value, negative, hindering characteristics



Unclear impact

Results

	(1) +	(2) +	(3) -
	(4) +	(5) ?	(6) 0
	(7) 0	(8) +	(9) -
	(10) ?	(11) +	(12) ?
	(13) 0	(14) -	(15) 0
	(16) +	(17) -	(18) ?

Technologies assessed

Burkina Faso	Ghana	Uganda
Rope Pump ●	Rope Pump ●	Rope Pump ●
VIP Latrine	Pour Flush	Tippy Tap
UDDT	Enviroloo	UDDT
India Mark II	Ghana Modified India Mark II	U2 Pump
Water Harvesting Tank ●	Biofil Toilet	Ferro Cement Tank ●
Sand Dam	Slow Sand Filter	Solar Water Pump

- ▶ Tanzania – Solar Water Pump
- ▶ Nicaragua – Pour flush

Findings – Rope Pump Uganda

- ▶ Introduction into situations with too many users
> frequent breakdown
- ▶ Frequent breakdown > user fatigue and abandonment
- ▶ Shallow well depth not sufficient to cope with seasonal WL fluctuations
- ▶ Almost 100% NGO subsidised
- ▶ Weak follow-up > issues not addressed
- ▶ Lack of district involvement and ownership

Findings – Rope Pump Ghana

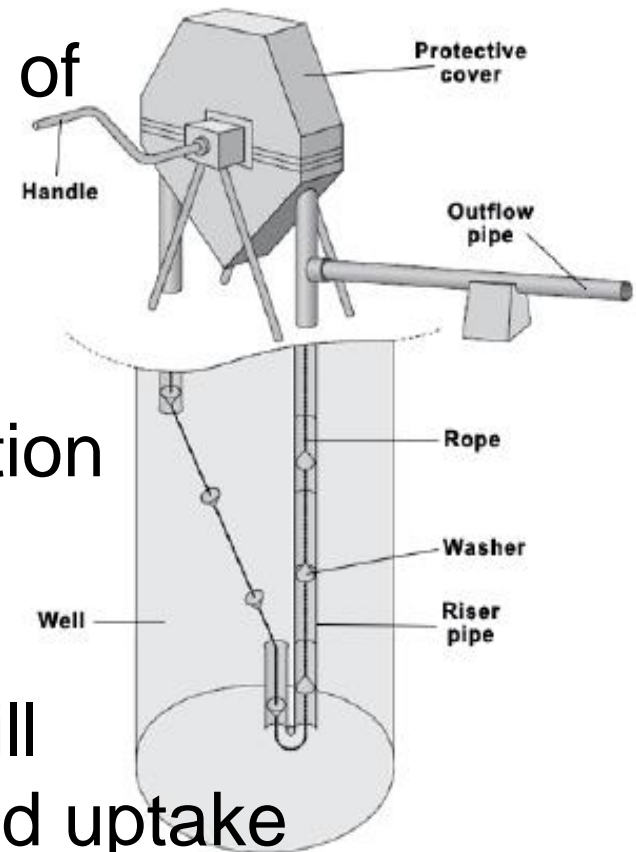
- ▶ Weak demand from users who voice preference for other pumps
- ▶ Lack of champion and effective promotion
- ▶ Negative perceptions of users and authorities

Findings – Rope Pump Burkina

- ▶ More +ve in terms of demand from users
- ▶ Still issues with affordability and level of subsidy
- ▶ Perception of authorities still not overly +ve

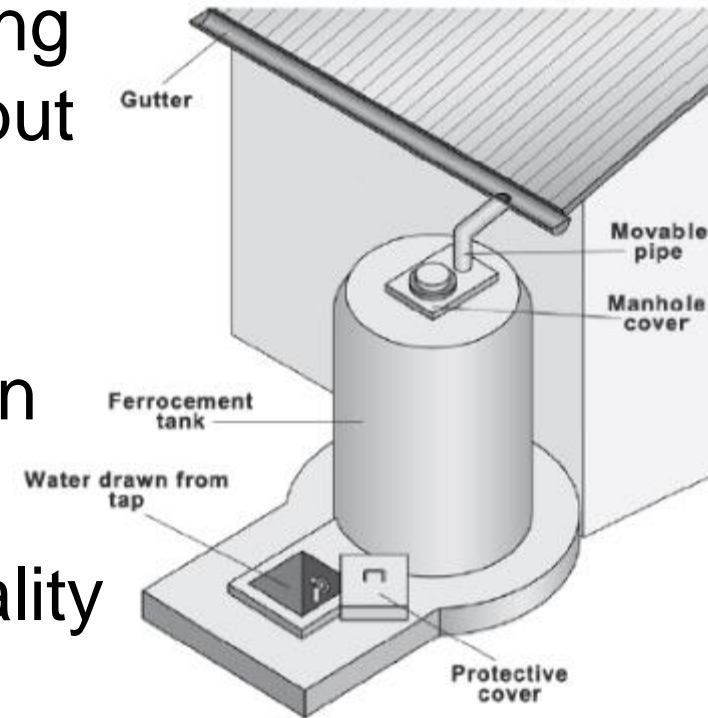
Recommendations

- ▶ Implement as self supply option with lower user numbers
- ▶ Ensure optimal siting and depth of shallow wells
- ▶ Do more trials of rope pump on boreholes
- ▶ Carry out more vigorous promotion especially in areas with shallow groundwater
- ▶ Needs institutional home that will champion its standardisation and uptake



Findings – Ferrocement Tank

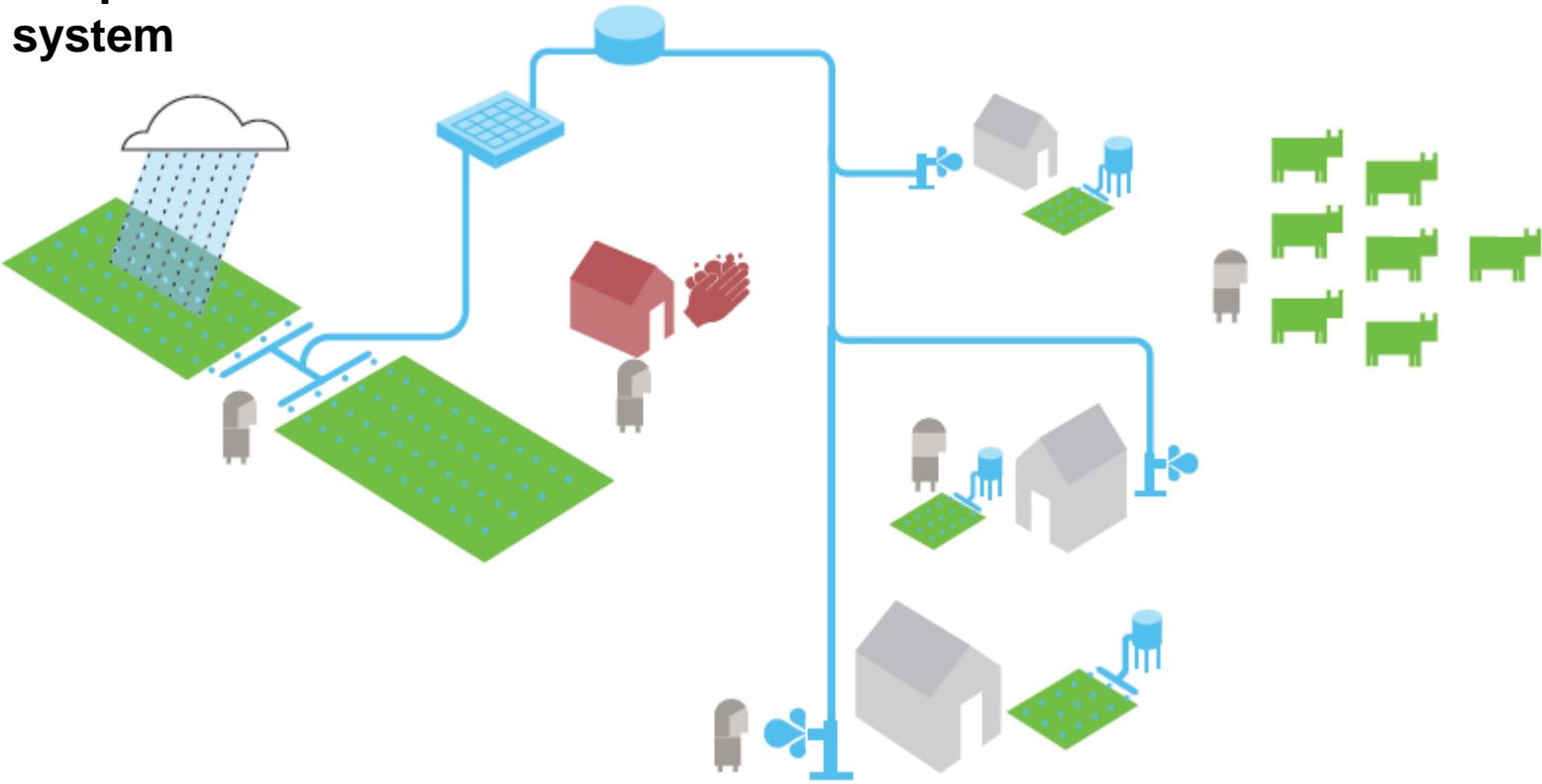
- ▶ High demand from users, strong willingness of users to invest but low income levels constrain scaling up
- ▶ Local expertise for construction
- ▶ O&M affordable to users
- ▶ Regulation of construction quality problematic
- ▶ Revolving fund or other supportive financing mechanism needed





TAF and MUS

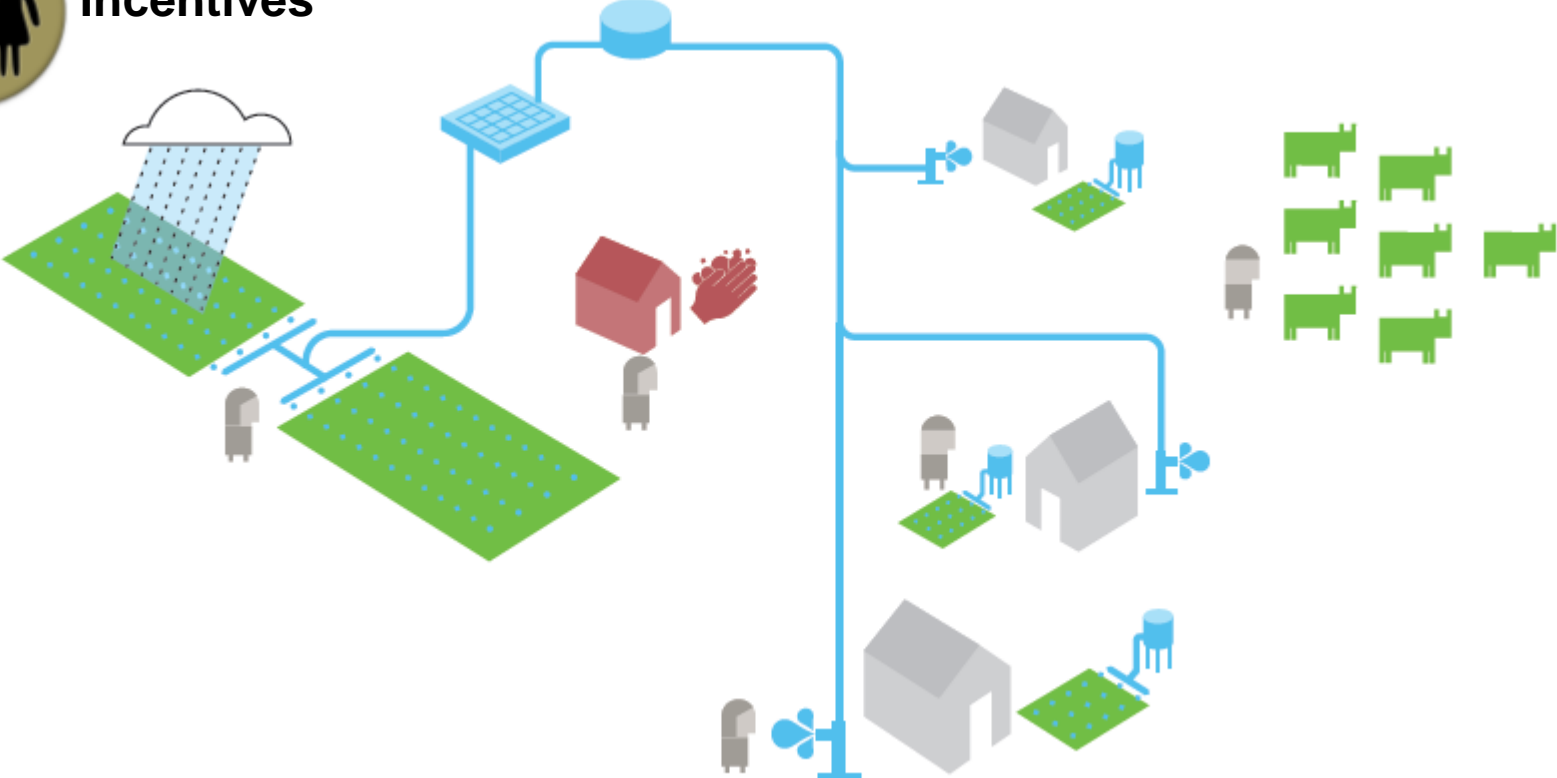
Scope – whole system



TAF and MUS



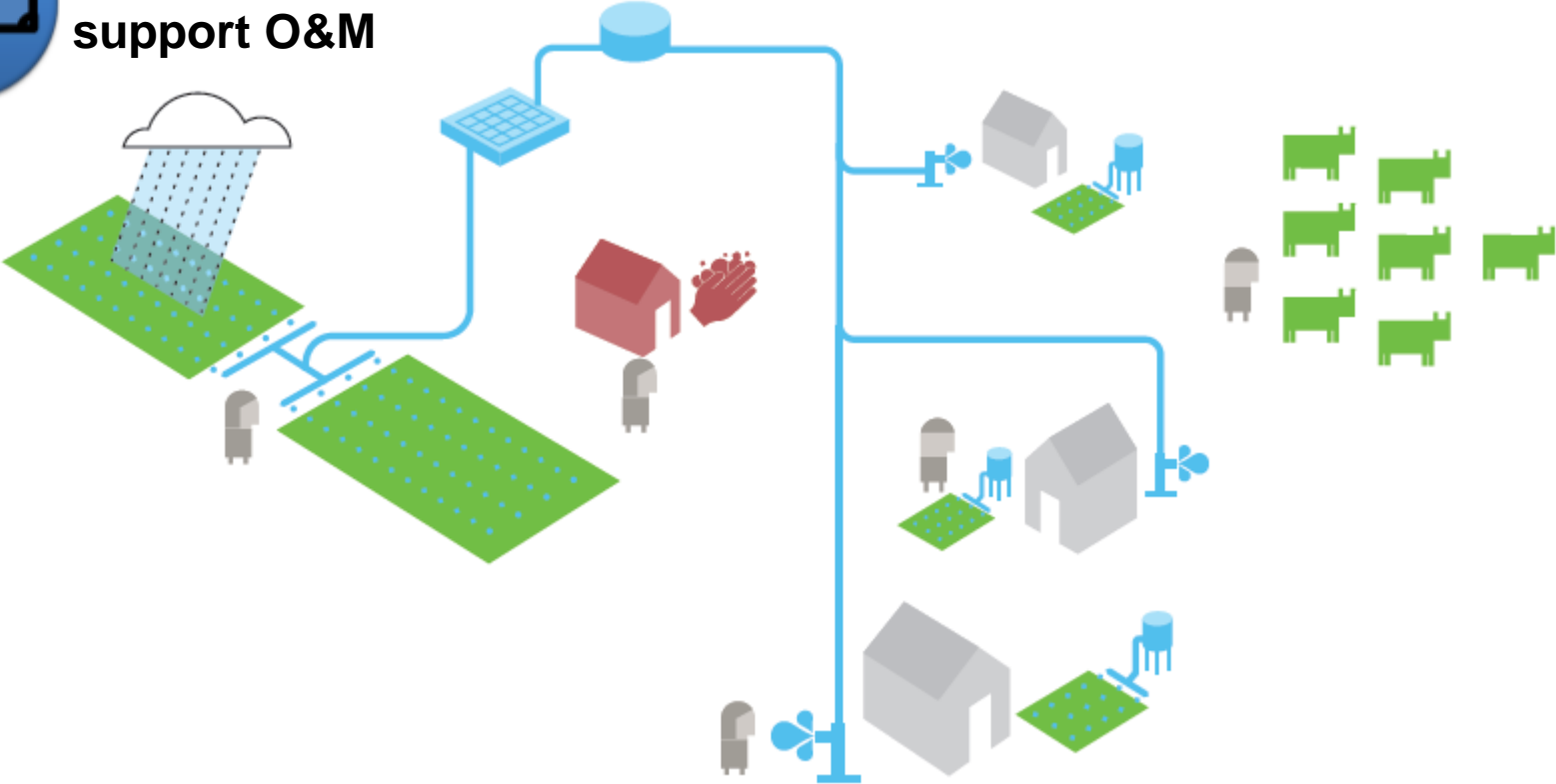
Incentives



TAF and MUS



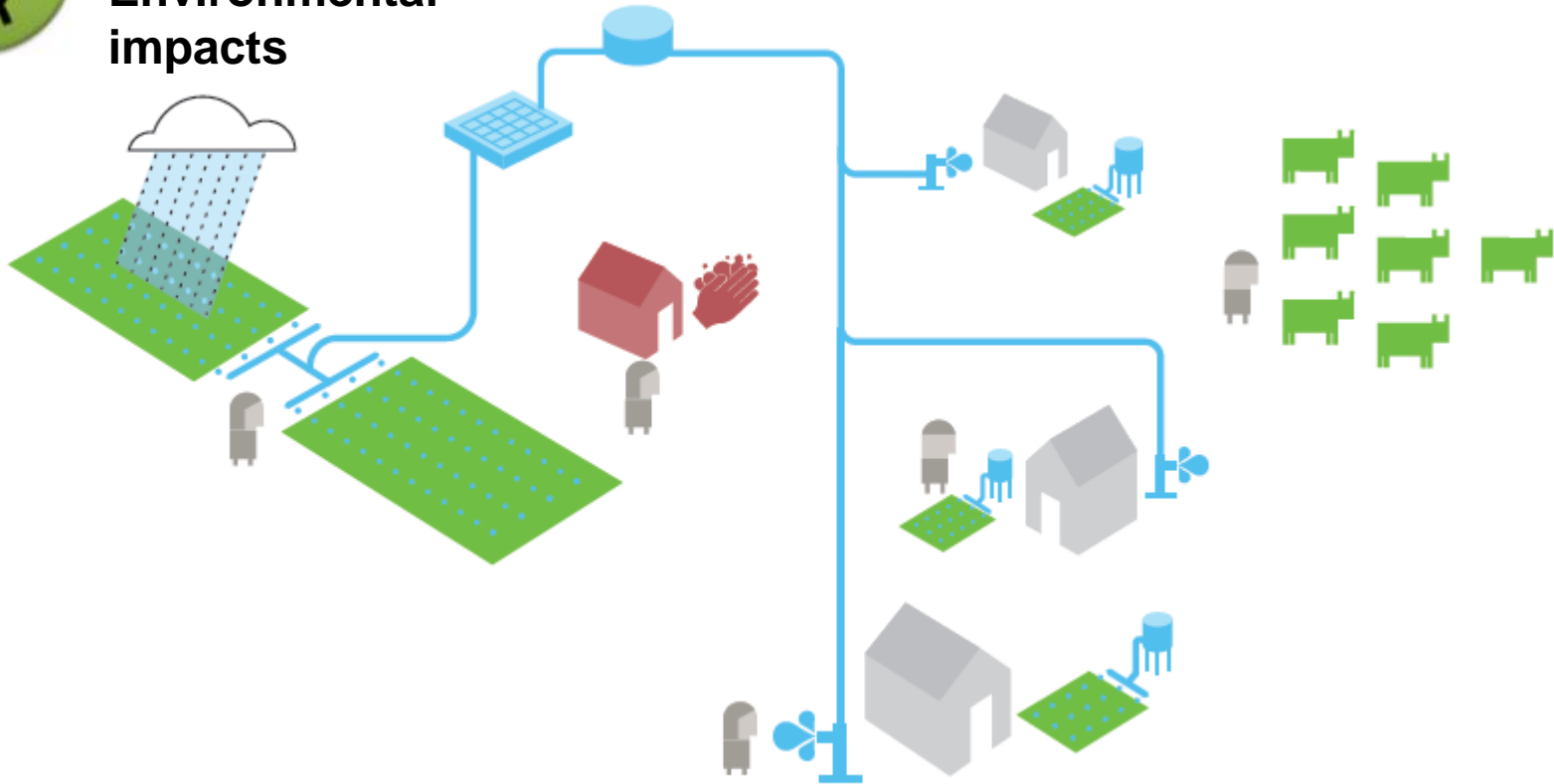
Revenue to support O&M



TAF and MUS



Water
availability &
Environmental
impacts



TAF and MUS

TAF can be customised and could help to unpack sustainability and scalability of MUS interventions.

More could be done to bring other aspects of MUS into TAF assessments.

Thank you



WASHtech