

Difficulties in replicating success stories: The Case of Domestic Rainwater Harvesting



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1: Introduction

- A desk study, based on previous field work (Saladin 2016, Bohara 2015), was undertaken to compare approach and results of DRWH promotion in Thailand and Nepal
- The Technology Application Framework (TAF) tool was used to assess the situation



2.Objectives

- To compare approach and results of DRWH promotion in Thailand and Nepal in terms of its replication at scale

3: Context

In Thailand, the DRWH promotion evolved as;

Phase-I; 1980s: National government led

- National policies, strategies, goals and plans including technical designs and training to local artisans

Phase-II; 1990s and 2000s: Private sector took the lead

- Govt. subsidies stopped, market competition, mass production, easy transportation helped mainstreaming upscale of DRWH



3: Context

In Nepal, efforts to implement DRWH were as;

- Pilot projects in 1996, acceptance by local authorities, inclusion of DRWH into national policies in 2009
- Replication by other donors and sustained use of DRWH in some pockets of the rural population, typically houses on hilltops,
- But no “ripple effect” at scale is observed until now

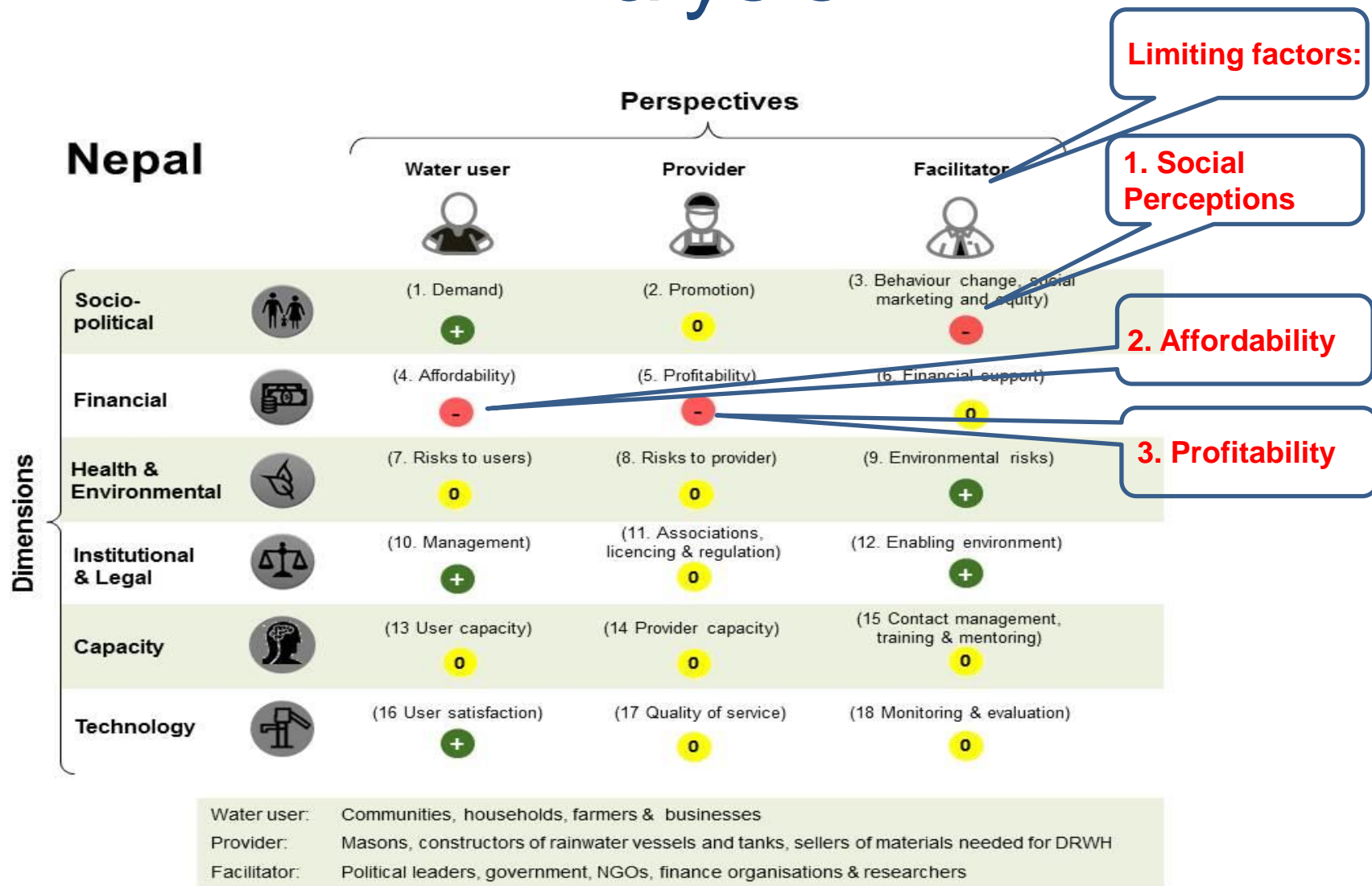


4. Analysis

Thailand		Perspectives		
		Water user	Provider	Facilitator
Dimensions		(1. Demand) +	(2. Promotion) +	(3. Behaviour change, social marketing and equity) +
		(4. Affordability) +	(5. Profitability) +	(6. Financial support) +
		(7. Risks to users) 0	(8. Risks to provider) +	(9. Environmental risks) +
		(10. Management) +	(11. Associations, licencing & regulation) +	(12. Enabling environment) +
		(13 User capacity) 0	(14 Provider capacity) +	(15 Contact management, training & mentoring) +
		(16 User satisfaction) +	(17 Quality of service) +	(18 Monitoring & evaluation) 0

Water user:	Communities, households, farmers & businesses
Provider:	Masons, constructors of rainwater vessels and tanks, sellers of materials needed for DRWH
Facilitator:	Political leaders, government, NGOs, finance organisations & researchers

4. Analysis



5. Results

- DRWH at households has been successfully implemented in both countries
- In Thailand this practice reached a massive scale and mainstream practice
- In Nepal it still is a challenge to replicate at scale

6. Lessons learned

The overall picture for Thailand looks much more positive than Nepal. The main factors;

Social perceptions

- Due to cultural factors (including religion), rainwater is considered the purest form of drinking water in Thailand.
- Culturally, there is a popular myth in Nepal that "flowing water is the purest water and stored water becomes stale ('baasipaani')

6. Lessons learned

Affordability

- Cost of one cement jar with 2,000 litres in Thailand were sold in the 1990s at 20 USD (1 cent per litre). This was possible due to mass production and low prices of the main ingredients.
- In Nepal, cost of ferrocement jar with 6,500 litres is around 375 USD per unit (6 cents per litre)

6. Lessons learned

Profitability

- Small, dispersed market to be served in case of Nepal, with only the poor people as potential customers
- This reduces profitability. Private sector has relatively minor role as profitability is limited.
- High chances for trained persons to end up in doing something else.

7. Conclusions

The successful diffusion of a technology depends very much on the context.

- Social factors (acceptance, desirability) play a key role, as does the price.
- Thailand was successful in bringing DRWH into mainstream, mostly because of a positive market environment and positive perception.
- In Nepal, common perceptions of RW as a source of drinking water, affordability and profitability of the technology and the capacity of the providers still are a challenge.

