

# Business Model Innovation in the Water Sector

## Safe and affordable water services in the low-income segment

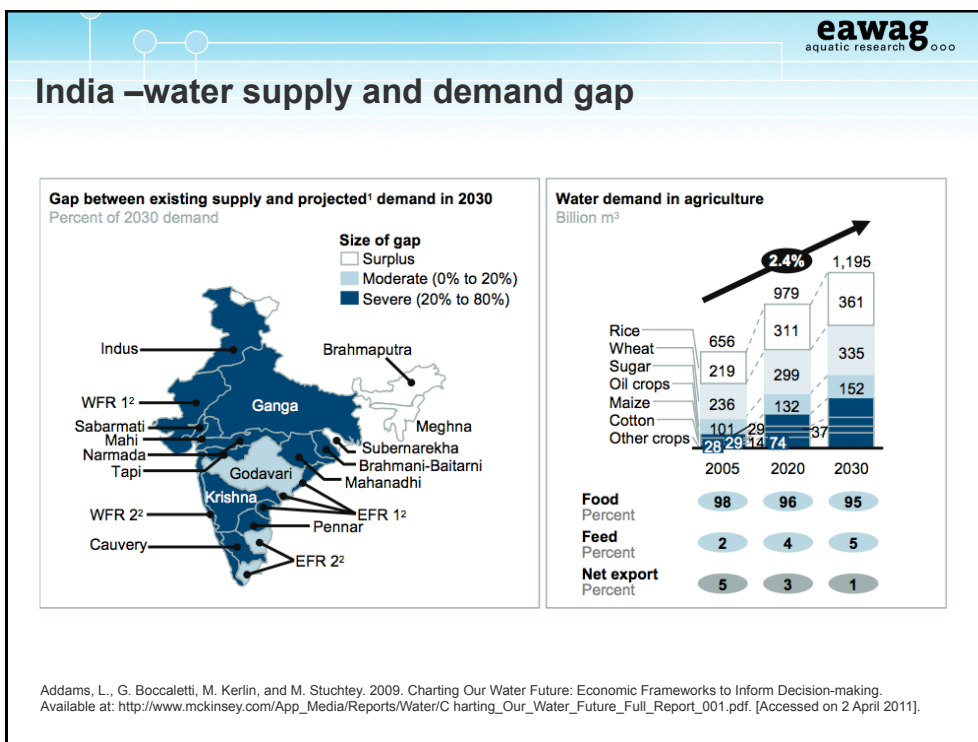
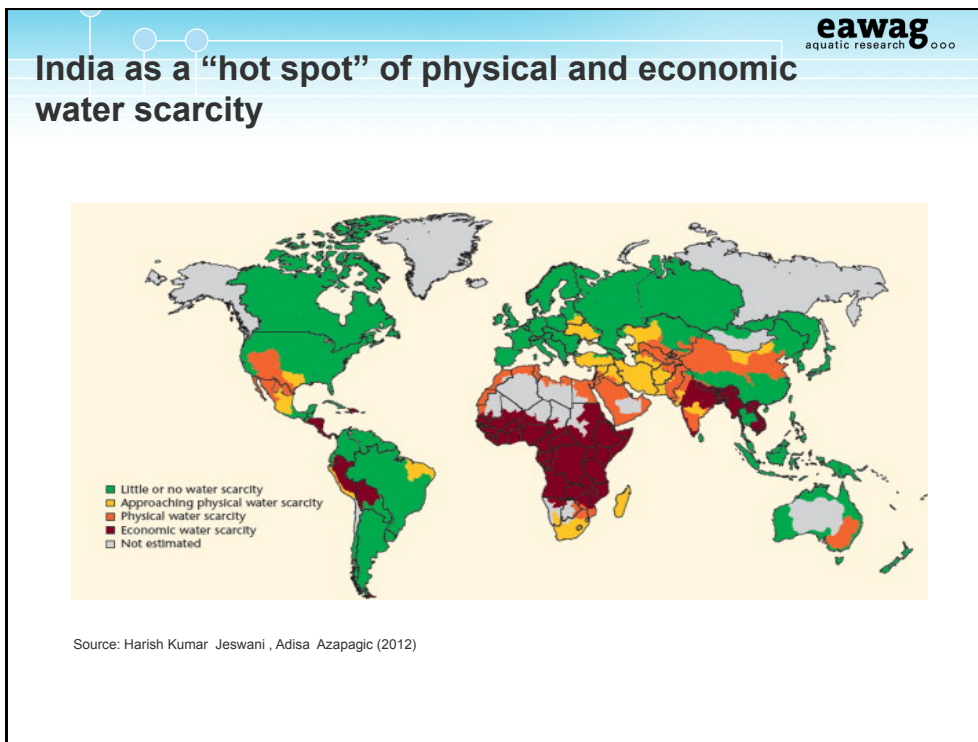
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Zurich, 06-05-2013

## Key facts on water in low-income countries


- **Water safety:** arsenic, fluoride, bacteria, and so on
- **Water scarcity:** physical and economic scarcity
- **Human water consumption:** drinking water, hygiene water, sanitation
- **Legal issue:** Drinking water as a human right
- **Water users:** agriculture has highest water demand, industry, and private water consumption
- **Water sources:** surface water, rainwater, groundwater, or sea water




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## Various water technologies might make drinking water safer and more affordable (1)

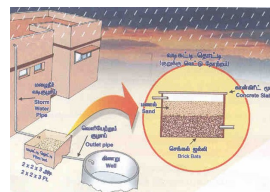
**Household devices**  
(e.g., Hydrologic Ceramic Rabbit Filters, Unilever Pureit, Tata Swach, Sodis)



**Tablets**  
(e.g., P&G sachets, PSI chlorine tablets)



**Rainwater harvesting**



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## Various water technologies might make drinking water safer and more affordable (2)

**Pumping**  
(e.g., Grundfos Lifelink)



<http://www.grundfoslifelink.com>

**Micro-treatment plant or water kiosks**  
(e.g, Naandi, Trunz, Sarvajal)







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## Business research has to decide on the way we take at the cross-road

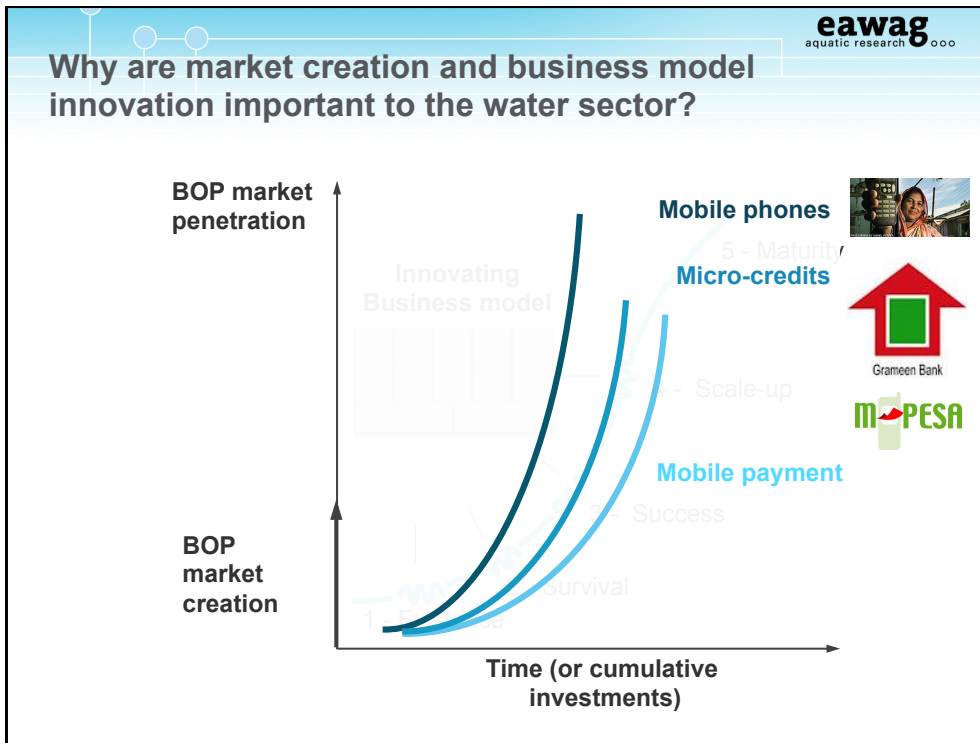
**Business at its cross-road**

**Base of the Pyramid (BOP)**

PPP <sup>1</sup>	Population in million	Market Type
> \$20,000	500	Industrialized markets
\$2,000-\$20,000	2,000	Emerging 'mass' markets
< \$2,000	4,000	1.2 Billion (≈ \$ 2000 annum)
		1.6 Billion (≈ \$ 725 annum)
		1.2 Billion (≈ \$ 365 annum)

Exchange market  
BOP (Submerge and poverty) market

<sup>1</sup> - PPP – Purchasing power parity  
Source Rangan, 2009:



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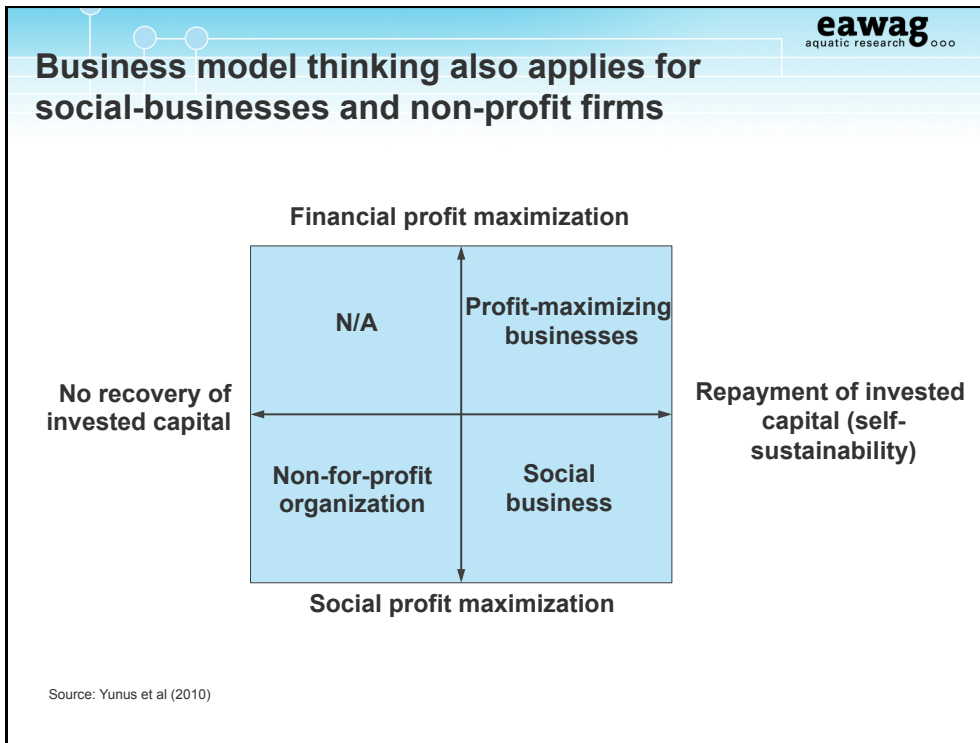
### Business model thinking inspires profit-maximizing firms

**Low-cost carrier**

**Razor & blade (inverse)**

**Franchising**

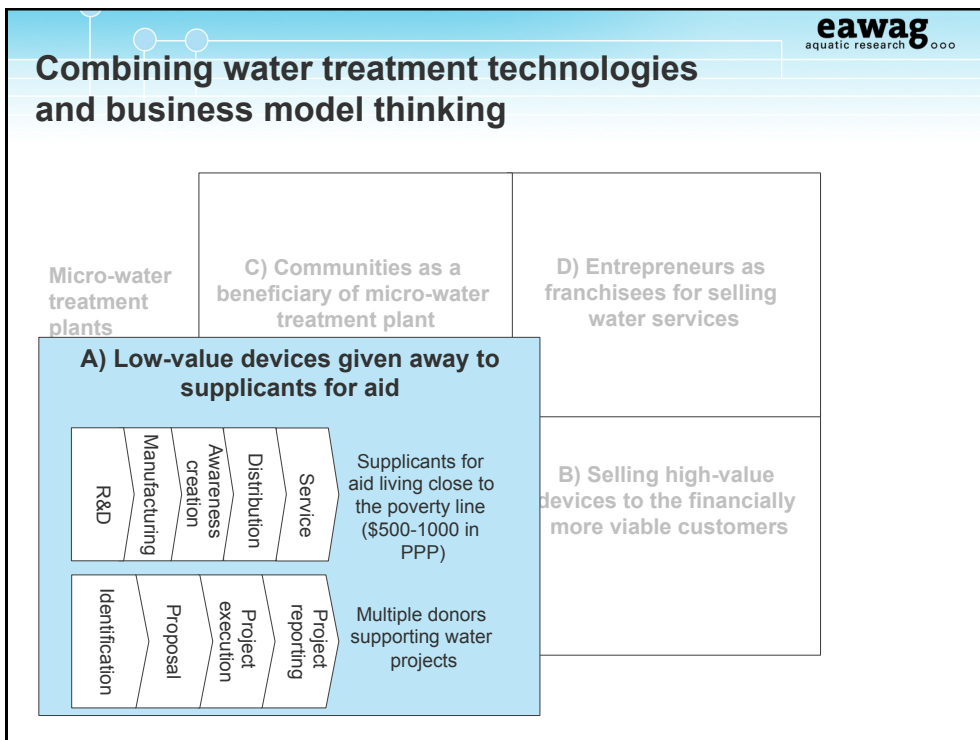
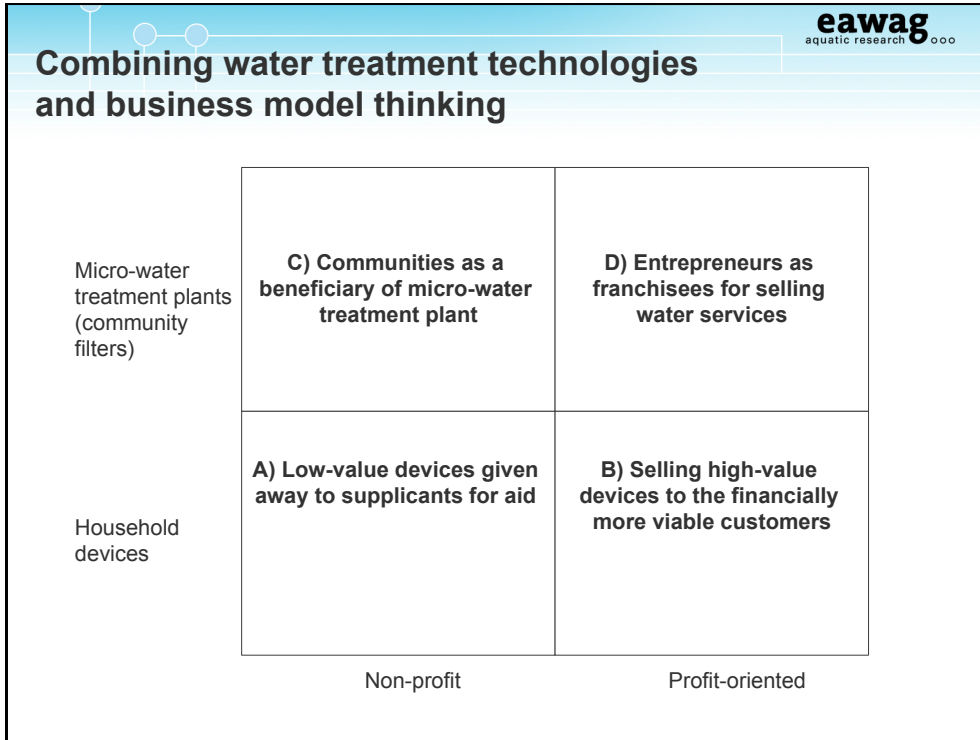
**Pay-per-use**



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### Do you know these business models?

Funding models for non-profit firms	Social business (models)
<ul style="list-style-type: none"> <li>• Member Motivator</li> <li>• Big Bettor</li> <li>• Public Provider</li> <li>• Beneficiary Builder</li> <li>• ...</li> </ul>	<ul style="list-style-type: none"> <li>• Entrepreneur Support Model</li> <li>• Fee-for-Service Model</li> <li>• Service Subsidization Model</li> <li>• ...</li> </ul>



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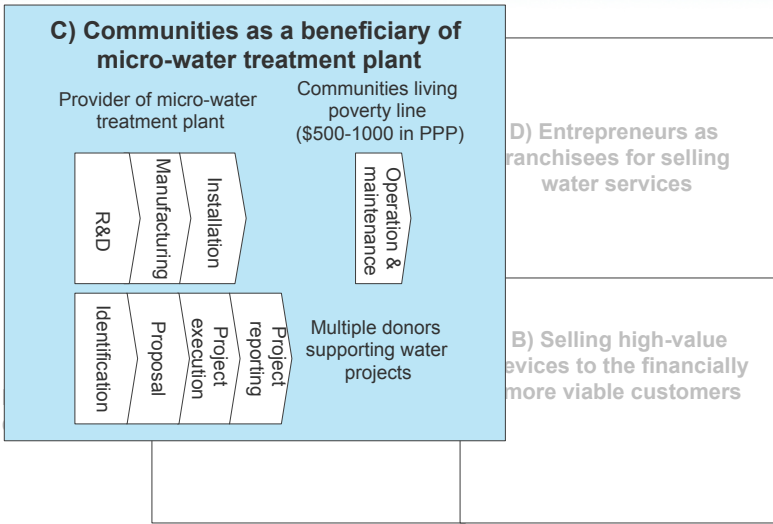
## Hydrologic in the Cambodian market



- Sales comes from bulk sales and subsidized distribution
- Original Tunsai product penetration is 3.5% (after ten 10 years), despite the fact that it was actually given away by NGOs
- Experimenting with different distribution models

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## Combining water treatment technologies and business model thinking



**C) Communities as a beneficiary of micro-water treatment plant**

Provider of micro-water treatment plant

Communities living poverty line (\$500-1000 in PPP)

Operation & maintenance

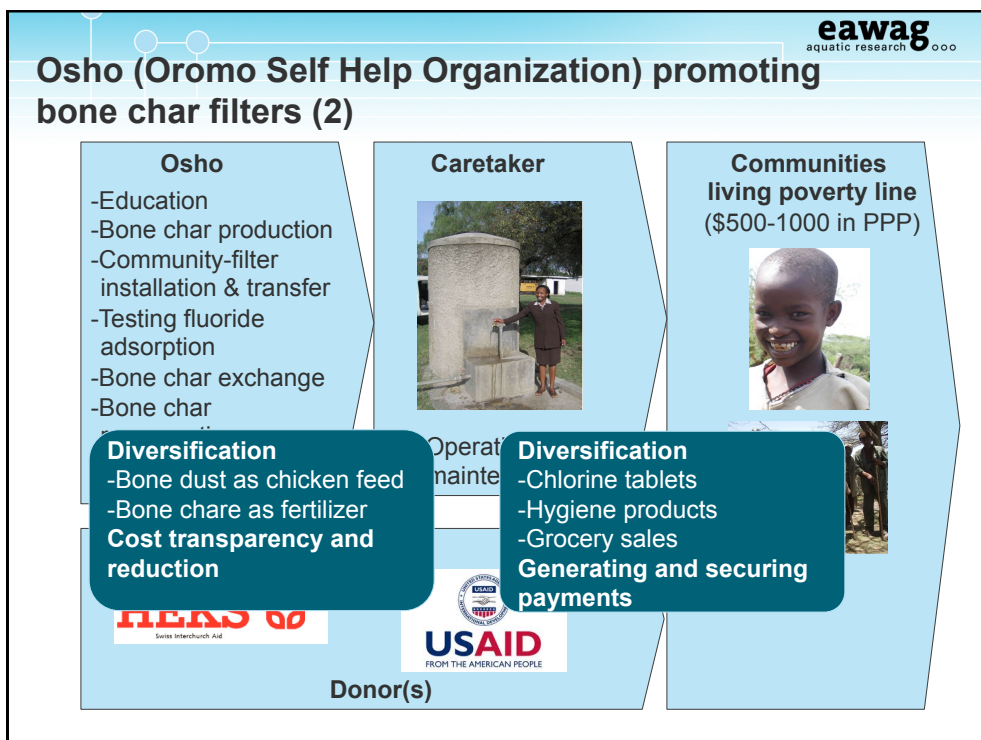
Multiple donors supporting water projects

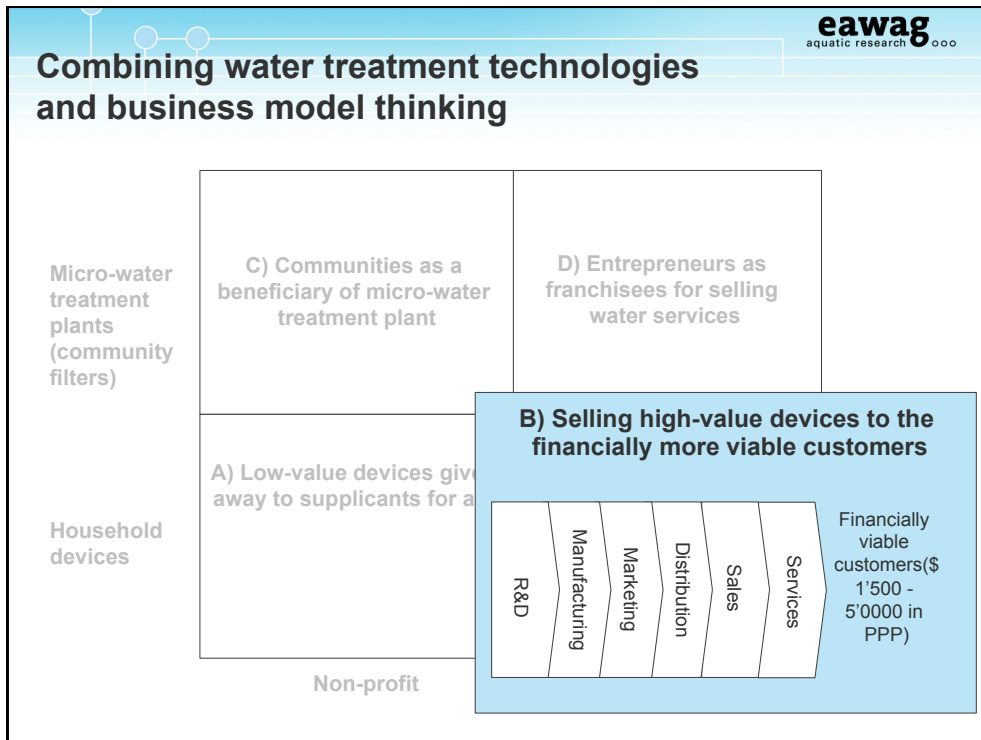
**D) Entrepreneurs as franchisees for selling water services**

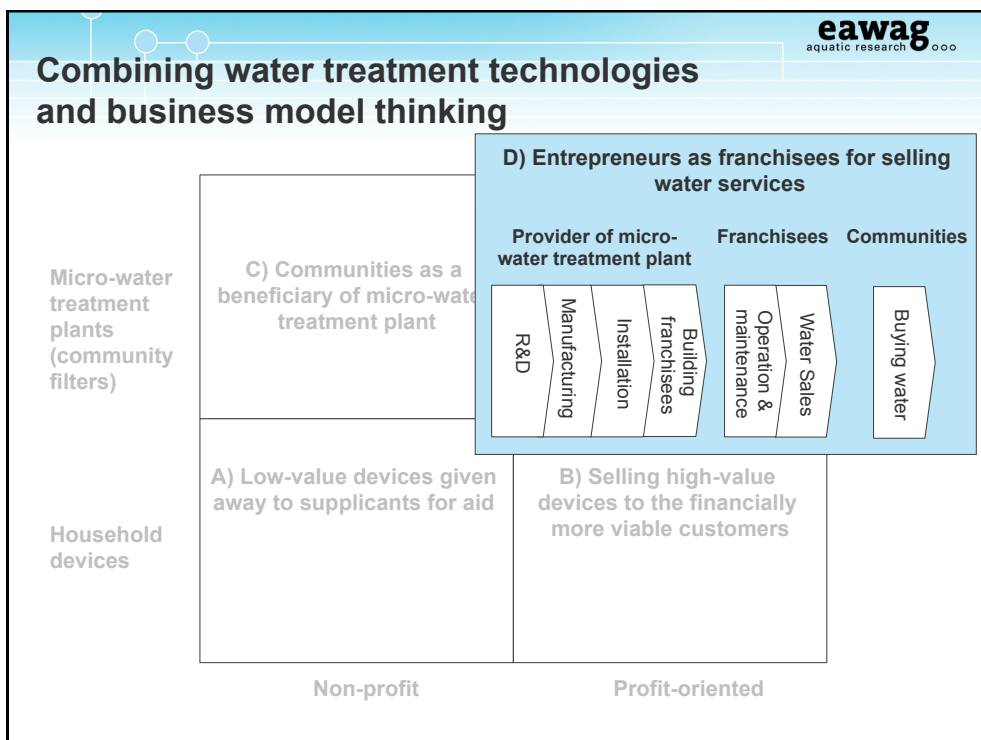
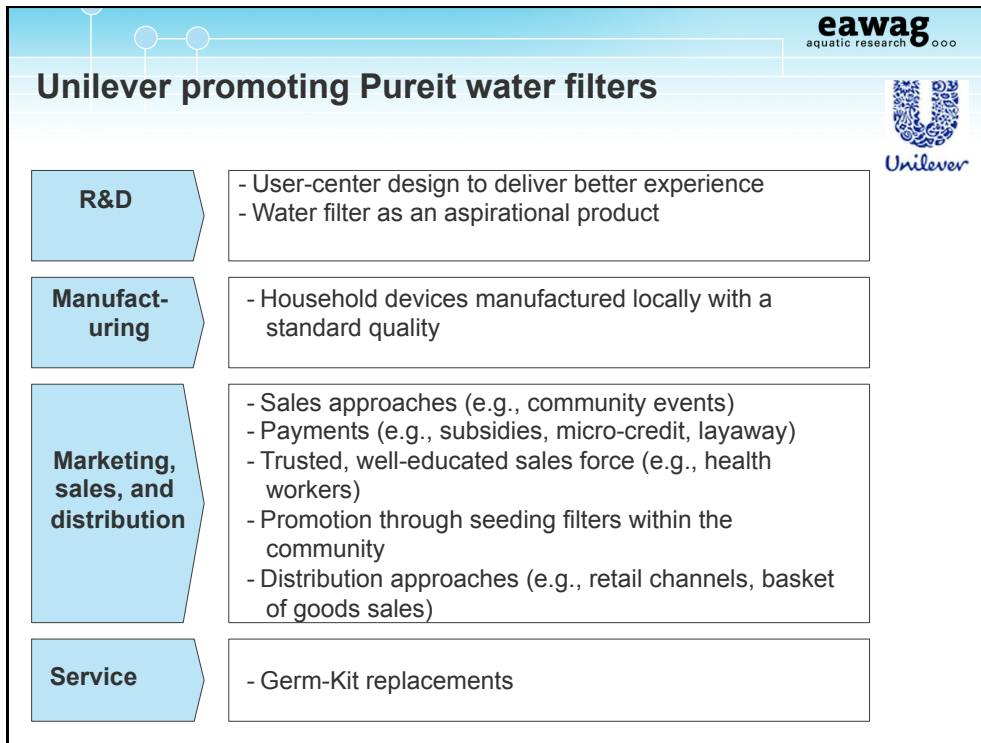
**B) Selling high-value devices to the financially more viable customers**

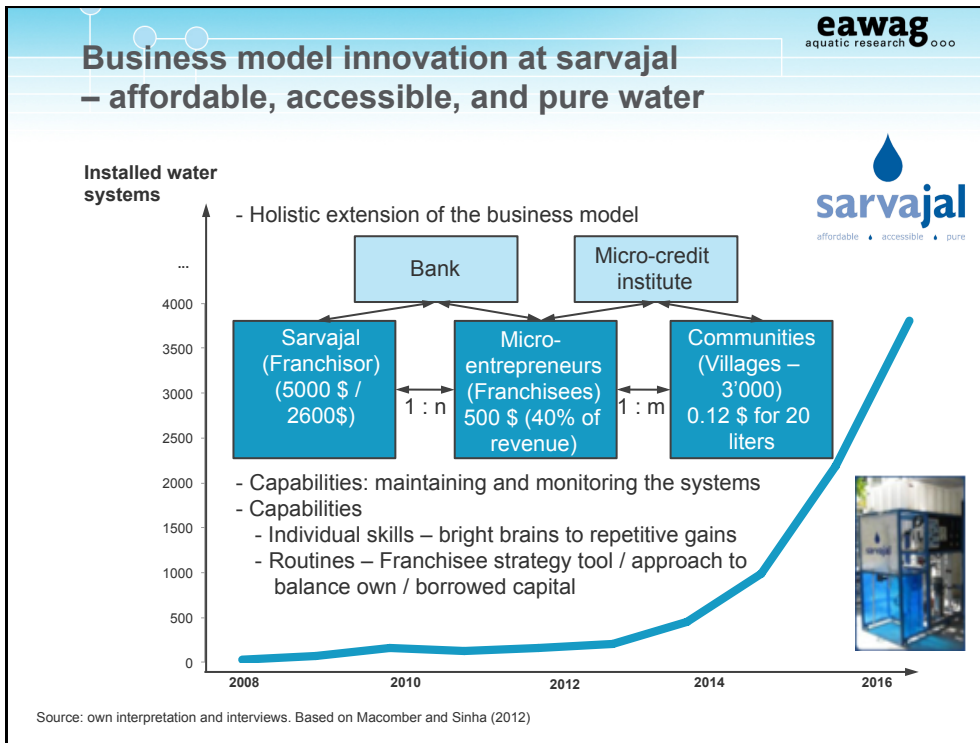
Non-profit | Profit-oriented







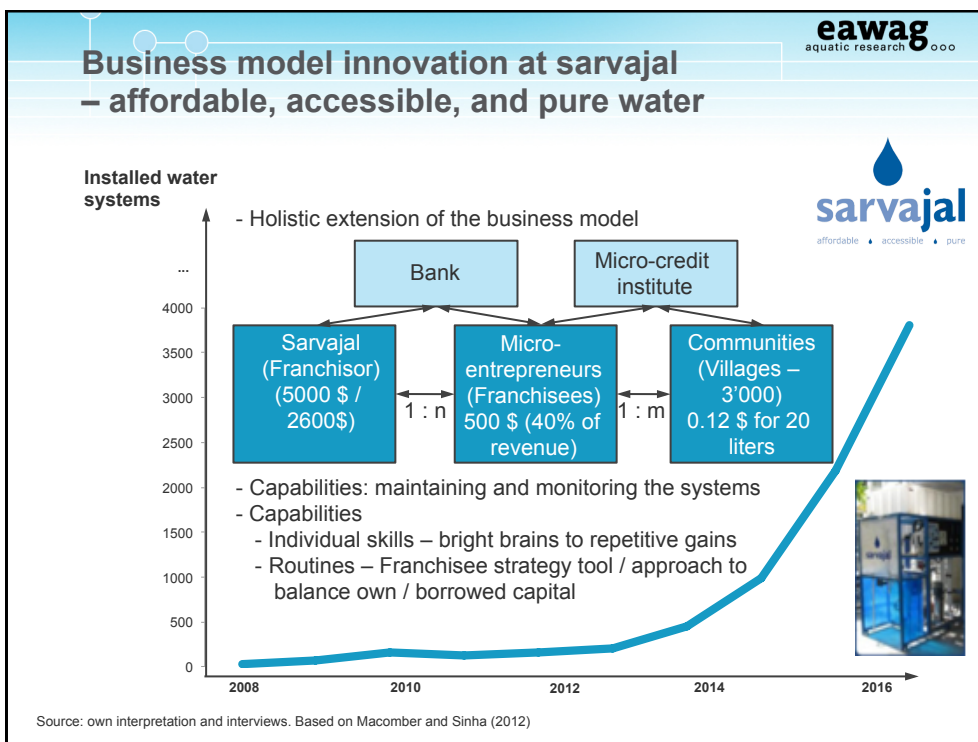








## Transporting the water



Conclusion

**“Experimenting with  
business models is a small  
step, one giant leap to make  
water markets works”**

