Embedding people & culture in off-grid WaSH TA

Abstract title: urban decentralised water, sanitation and hygiene interventions in technology assessment – when states and markets collide in the provision of alternative systems of provision

4th European Technology Assessment Conference
Session: International TA Perspectives

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Outline

• Technology Assessment in the context of the Sustainable Development Goals (SDGs)
• Where water TA sits in the water STS domain
• Recognising a need for water TA
• Types of tech that might feature in water TA
• Where & why comparative water TA might be needed:
  • Mexico
  • Jamaica
• Points of provocation – values, power, futures
Strengthening the participation of local communities in improving water and sanitation management (UN SDG 6.b)

Starts with recognition of a *need* for water TA – everyone’s confused

- Alternative Water Supply Systems e.g. rainwater harvesting (RWH)
- Green Infrastructure, Blue-Green Infra etc
- Water, Sanitation & Hygiene (WaSH)
- Traditional & emerging
  - Recognising that *social and cultural value* is not fully included – needs connecting with economic and environmental value
Mexico’s Need

• **SACMEX**, the city’s water operator says they can only guarantee water supply until 2019
• By 2030 it is not known where water supply for quarter of the 21m population will come from
Earlier this year, Contreras found out about a government program to install rainwater-collecting systems in the houses of Iztapalapa and Xochimilco, another poor district with chronic water problems. The new mayor, Claudia Sheinbaum, an environmental scientist, promised to install 100,000 of these rainwater harvesting systems in the rooftops of Iztapalapa by the end of her six-year-tenure.
Inviting citizens to become part of the city’s water management process
Jamaica’s Need

Monday, November 04, 2019

“Mr Prime Minister, please do better by the people of this country who pay your salary. I believe the power of the position has now gone to your head! Water IS life! I wonder what plans the prime minister and public bodies are putting in place to alleviate this water crisis. Every year it’s the same lame excuses. I am so fed up of getting home from work and wishing to take a shower, only to find that there is no water coming from the pipes. I spoke with a lady recently who shared that her community has not had water now for over one month. That is insane!” 08-10-19

KINGSTON, Jamaica — The National Water Commission (NWC) has officially lifted the prohibition order that was imposed on water usage in May.

In a statement today, the NWC said with the recent rainfall, storage facilities particularly in eastern and southern parishes have seen a marked increase.

"We look forward to what the National Water Sector Policy and Implementation Plan 2019 will achieve, for there is great need for a coordinated approach to how we manage the island's water resources."

- Aims to provide 50 litres of water within 500m of every home

[Link to article](http://www.jamaicaobserver.com/editorial/commendable-rainwater-harvesting-programmes_177771?profile=1100)
Jamaica 4H Clubs (agri-focus) – UNDP and Japan Caribbean Climate Change Partnership

https://undpjamaica.exposure.co/harvesting-water-cultivating-hope
Values, ethics, social justice – who holds the power?

**Mexico**
- Poorest people spend ~20% of income on accessing water
- Supply heavily subsidized-major consumers waste irresponsibly
- Top down policy, community-centred tech design – Isla Urbana
- Water conservation & Gender equality - promote empowerment of women via RWH system installation & maintenance training

**Jamaica**
- Even affluent experience rota cuts
- Significant international investment – local companies?
- Top down policy, top down technology design & provision – JCCCP (supply RWH equipment)
- Water conservation & agriculture locally tailored training scheme - UNDPJ-Ministry of Economic Growth & Job Creation
Making judgements about future impacts

• What are the ‘right’ directions for Mexico and Jamaica?

• What can Jamaica & Mexico learn from each other’s trajectories?

• Can water TA help?

• Can off-grid water techs compete with gridded water tech when the former has not undergone TA?

• Are communities, their beliefs, values, behaviours, preferences and cultures on the WaSH TA agenda?
Towards WaSH TA guidelines?

• WaSH TA needs to be:
  • Legislative advisor, to ensure the public good in relation to social needs
  • Market assessor, to determine how each privately developed intervention will be received by people who will use and rely on them in their daily lives
  • Cultural steward, to ensure local connections to water & materials are not lost - has happened already in so many contexts & where reversals are being attempted:
    • Risk of this happening in Mexico & Jamaica?
Joint discussion key question

• What can we learn in a comparative perspective about the influence of cultural factors and the importance of ethical guidelines for the development of (new) technologies?

  o This is highly applicable to WaSH tech – water finds itself in a diversity of everyday social practices; by it’s nature it is culturally situated, with symbolisms, spiritualisms and preconceptions about rights, access, power, which make ethical guidelines for its exploitation through technologies absolutely essential.