Water systems in a multi-species environment: the case of pigs and water access in Kiribati

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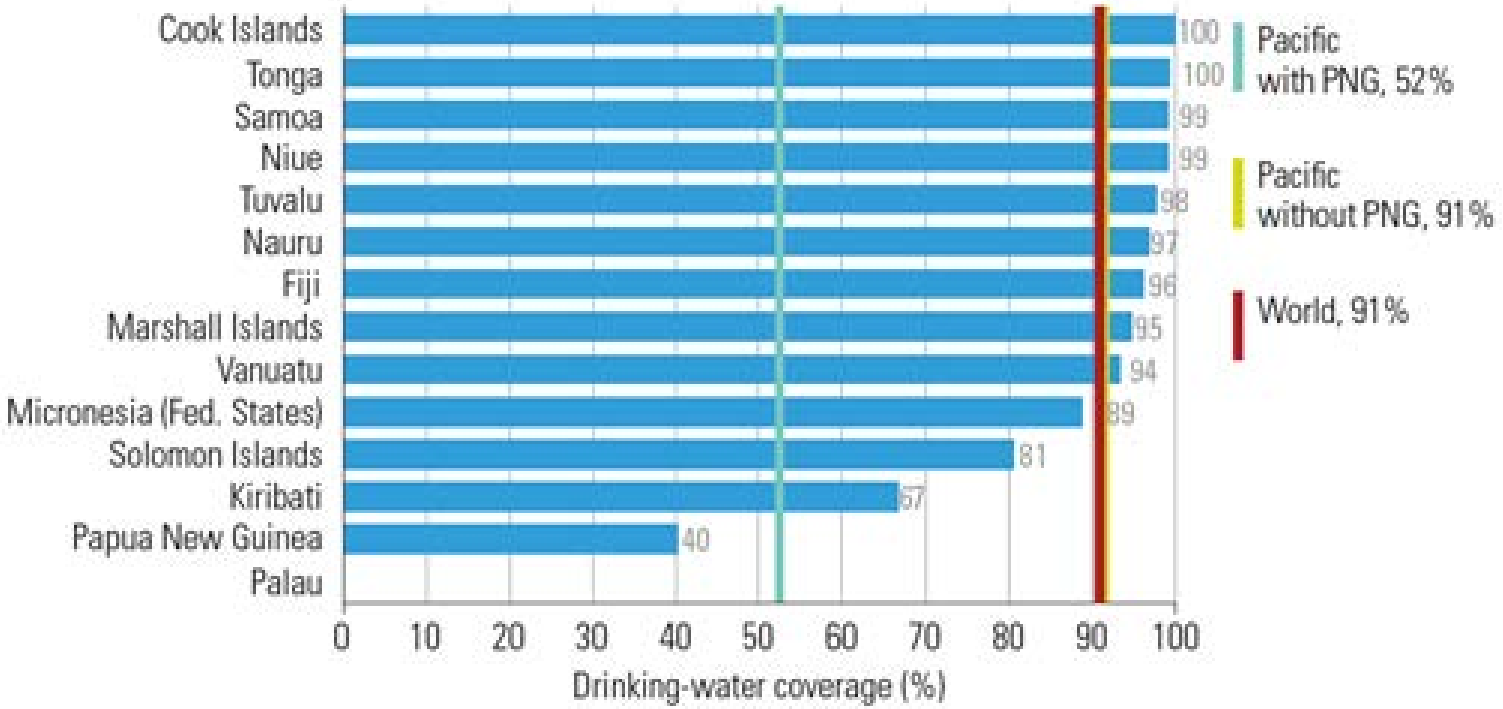
INTRODUCTION (1) – the situation

Proportion of population using improved drinking-water in Pacific island countries and averages for region – with and without Papua New Guinea – and the world, 2015



Source: country statistics from UNICEF and WHO (2015)

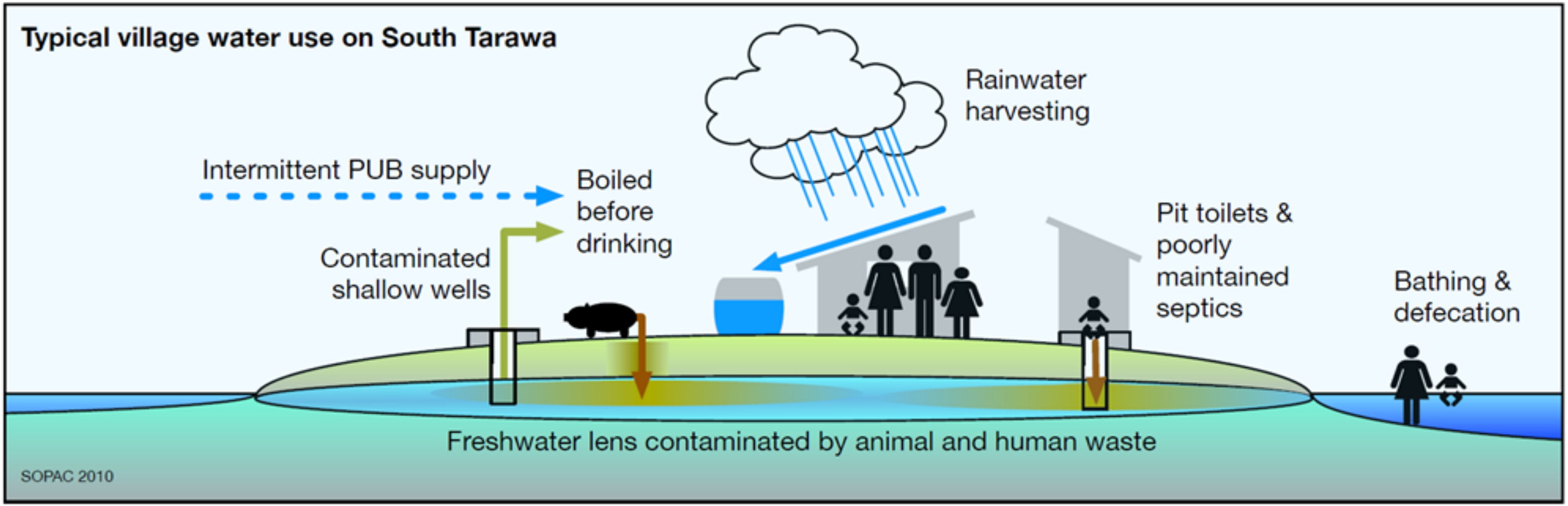
- One of the lowest improved drinking-water coverage in the Pacific region

INTRODUCTION (2) -
A multispecies approach to water security

- Approach: Explicitly link water access to relations with other species.

- Objective: a more nuanced and fuller understanding of water security for more sustainable water solutions.

PART 1 – Living with livestock - a wastewater issue (1)

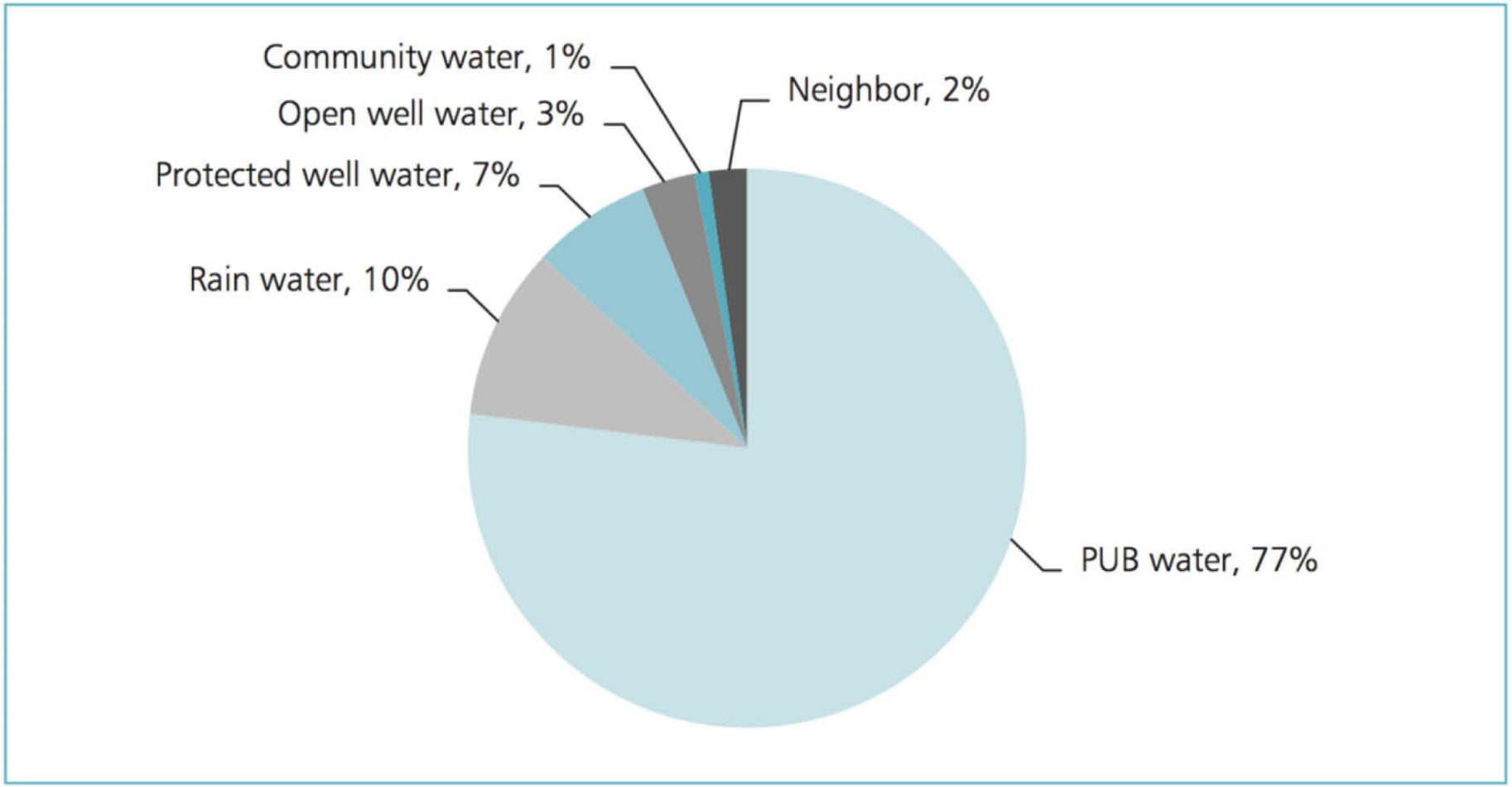


High permeability of the unconsolidated upper sediments: surface contaminants are transported in less than an hour into the groundwater

PART 1 – Living with livestock - a wastewater issue (2)

- A multispecies community
  - Over 16,000 pigs for 56,388 humans i.e. almost 1 pig per 4 inhabitants
  - 12 km2 (source: SOPAC Land Cover Type Mapping, 2010)
  - 72,6% of household own local pigs

Living with contamination



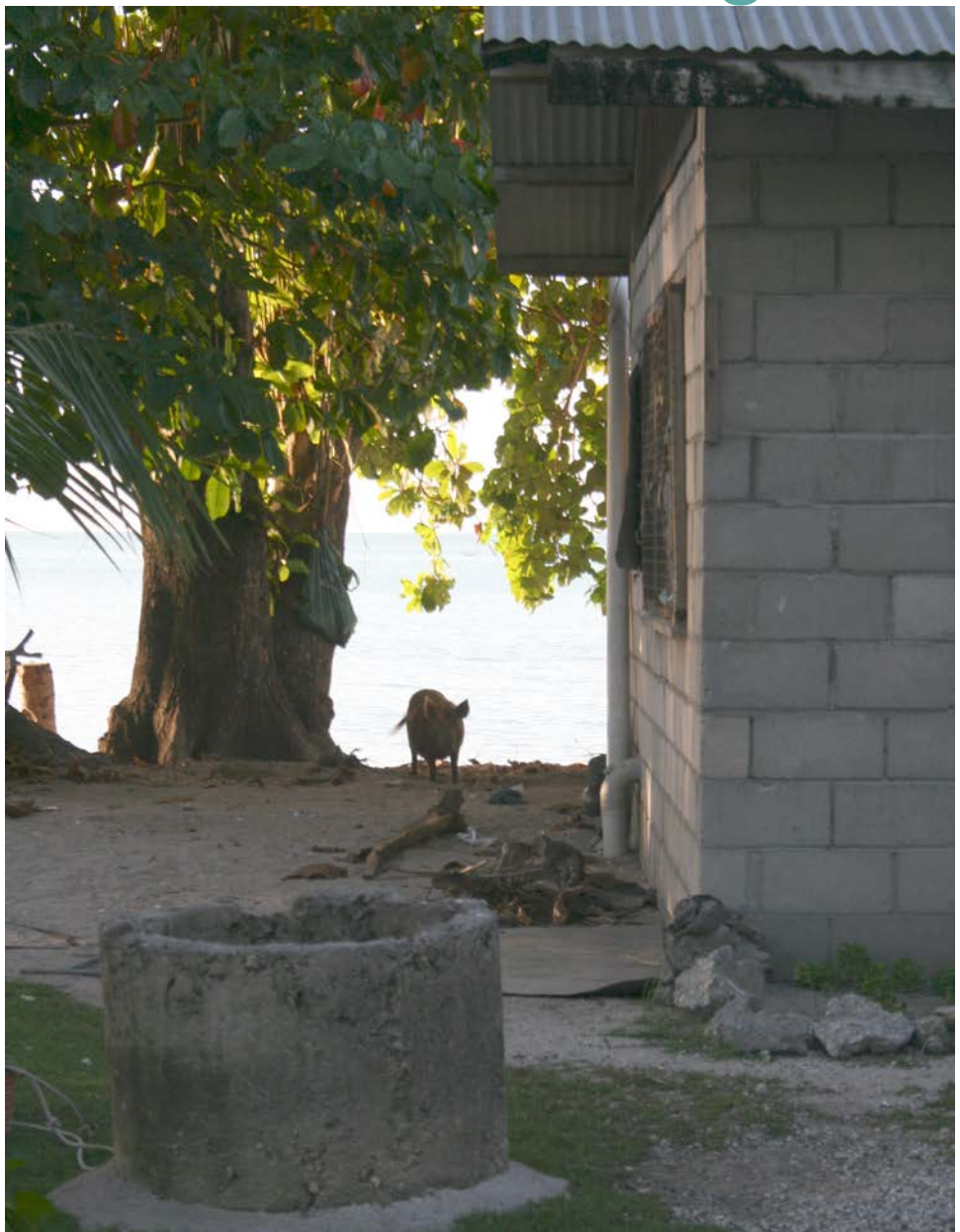
PUB = Kiribati Public Utilities Board.
Source: Household survey, July 2013.

Sources of Water Used in South Tarawa, July 2013 (%)
ADB, 2014

PART 2 - Living with livestock – water demand (1)

- Beyond drinking-water: pigs are part of household daily water uses
- Better information is needed on pigs' water intake
- Pigs' consumption of traditional water sources is culturally significant
- Interplay of sameness and difference in water uses: people, pigs and their water

PART 2 - Living with livestock – water demand (2)



- Pigs possess “various cognitive, social, and experiential capacities” (van Dooren and Rose, 2012) through which they meet their water environment

- Pigs remain largely invisible in water discussions

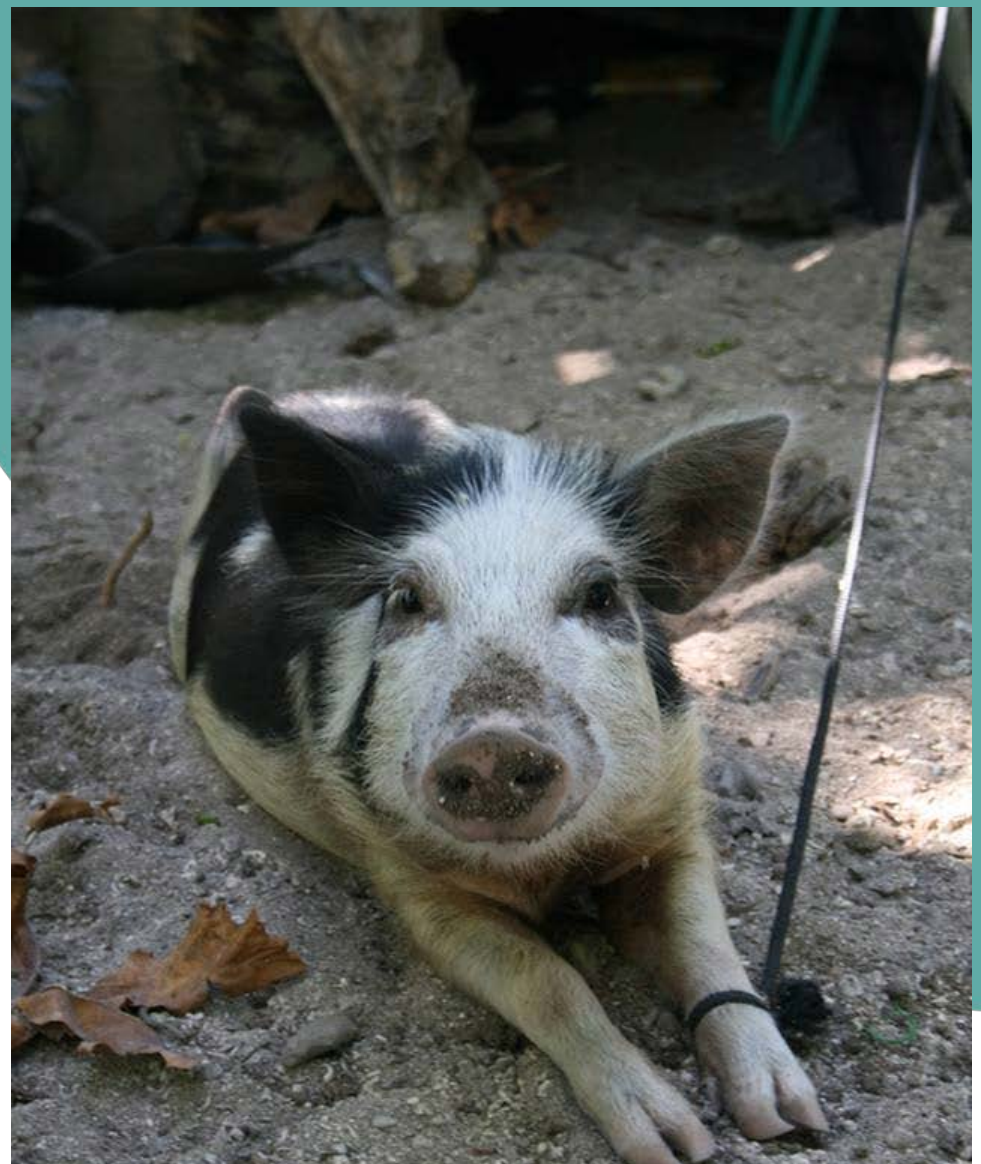
Conclusion: Accounting for pigs in water services (1)

- Significance of understanding biological and social connectivity with other species in understanding water security in South Tarawa
- Decoupling the presence of pigs from the water debate risks silencing dimensions that are crucial for water security

Conclusion: Accounting for pigs in water services (2)

- Securing people-pig-water relationships to achieve sustainable water access
  - Acknowledge the importance of pig rearing for people's wellbeing, dignity and identity.
  - Include pig water use as a variable in water policy, practice and governance.

Thank you



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