

**ADB–Gates Foundation
Learning Week**
1–4 December 2020

PNG: Assessment of Political Economy of FSM

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Sanitation in PNG

PNG	Sanitation		
	National*	Rural*	Urban
	2017		
Safely managed	-	-	-
Basic service	13	8	48
Limited service	2	1	8
Unimproved	70	74	44
No service	14	17	1

* 87% of PNG's population lives in rural areas

- 12th highest proportion internationally of people using unimproved sanitation
- 4th highest rate of child stunting at 49% – (diarrhea, worms → malnutrition)
- Population growth rate in Port Moresby informal settlements: 5-8%

Development impacts: Labor productivity, employment, health expenses → poverty

ADB Support to PNG Urban/Water Sector



TA: Support for Water and Sanitation Sector Management
• 2017 - 2022



Direct Charge: Political Economy of FSM in PNG
• 2018-19



Project: Water Supply Scheme for Tete Settlement
• 2019-2021



TA Support to NCDC for urban investment planning
• 2020 -



(Proposed) Urban Water Supply and Sanitation Project
• 2021 -

Highlights of SFPF Support



- Stakeholder Workshops – FSM Awareness & Capacity Building:
 - Port Moresby (Oct 2018 & Feb 2019)
 - Pacific Water and Wastewater Association Annual Regional Conference in Noumea (Aug 2018)
- Review of onsite & networked sanitation systems in Goroka and Kokopo, PNG
- Political Economy Analysis of FSM in PNG

Highlights of SFPF Support

FAECAL SLUDGE MANAGEMENT IN PORT MORESBY

Half of the population in Port Moresby dispose of their faecal waste via networked wastewater systems (sewerage or storm water drains) of which only 10% is safely transported and treated. The networked wastewater system failures are caused by the congestion of the sewers with foreign objects and overloading with water. Almost all the other half of the population reside in non-networked or informal settlements using on-site sanitation systems with only 4% safely transported and treated. The on-site sanitation system failures are primarily caused by the failure to manage the effluent (liquid) rather than the sludge (solids). For dry pit toilets, excessive moisture in the pits destroys the aerobic digestion process rendering the pit contents unsafe. Limiting the intrusion of water, improving air flow and reducing their use for just urination will greatly improve the efficiency of dry pit toilets. For the water borne toilets, the high density of the soil in Port Moresby means that all the effluent cannot be absorbed by the leach drains leading to either the discharge of effluent to the storm water or the premature filling of septic tanks with effluent (not sludge). Separating the grey water from the black water will improve the efficiency of leach pits dramatically increasing the time between empties for septic tanks. Separating the grey water from the black water appears to be practical given that most households already appear to have separate grey and black water plumbing. Separating the grey water from black water also appears to be prudent, given that the efficiency of the water borne sanitation systems is compromised by excessive volumes of water and the effectiveness plagued by foreign objects (i.e. fats, oil, grease, soap, detergent) that often enter via the grey water.

A Technical, Social & political Economy Assessment of the Status of Faecal Sludge Management in Port Moresby

Recommendations from 35-page report on FSM in Port Moresby:

- Reducing non-biodegradable solids (e.g. kitchen waste, grease) into septic tanks and sewers
- Reducing wastewater volumes (e.g. through water demand management, separation of black water & grey water)
- Preventing overflows of sewerage and septic tank systems into stormwater networks
- Though legislation exists, clarifying responsibilities for FSM and strengthening regulatory system are critical next steps
- Available at <https://www.adb.org/sites/default/files/project-documents//tacr-en.pdf>

Highlights of SFPF Support



Assessment has contributed to:

1. The design of proposed interventions through:

- Ongoing PNG TA and Pacific WASH Regional TA
- Proposed Urban Water Supply and Sanitation Project

2. Events and knowledge products:

- Exposure visit to Thailand for key PNG counterparts (Apr 2019)
- FSM Blue Bag via ADB Water SG (Apr 2020)
- Upcoming publication “Making Urban Sanitation more Inclusive in PNG”

Challenges & Next Steps

- Very few (or none!) consultants with FSM expertise in PNG or available to deploy there
 - Prioritize training a pool of national specialists?
- Significant time & resources to build ownership & gain political buy-in
 - Long-term investment in advocacy & capacity building?
- Concessional financing is critical to encourage governments to invest, especially where competing investments may generate stronger financial returns
 - Grants for investment projects (noting TA has constraints on financing works)

