

APPENDIX 1

Rainwater Harvesting Practises, Photograph Inventory

APPENDIX 1. RAINWATER HARVESTING PRACTISES, PHOTOGRAPH INVENTORY

A1.1 Guttering and transmission



A1.1.1 Well supported galvanized steel maneaba guttering, fairly clear of debris, Infrequent downpipes to underground transmission.



A1.1.2 Split PVC pipe guttering. Well supported and with a fall towards the downpipe. Good clean roof catchment for collection with no overhanging vegetation.



A1.1.3 New zinalume[®] guttering and stainless steel downpipe to underground PVC transmission pipes to multiple 25KL polytanks being constructed. Downpipes are well supported.



A1.1.4 V-shaped galvanised steel guttering. Government owned hotel. Inadequate for large roof area, makeshift unsupported downpipe to polytank.



A1.1.5 Guttering missing, poor maintenance. Overhanging trees.



A1.1.6 Small cross-section PVC guttering at a primary school, not suitable for this large roof catchment with inadequate downpipes



A1.1.7 Large cross-section makeshift guttering. Made from folded galvanised iron sheet. Unsupported downpipe, liable to fail.



A1.1.8 Small cross-section PVC gutter suitable for small roof area, single unsupported downpipe (liable to failing) to ferro-cement tank.



A1.1.9 Split PVC guttering, well supported. Unsupported downpipe to new polytank.



A1.1.10 Poor makeshift guttering and makeshift transmission to brand new polytank.



A1.1.11 Good sized gutter (with high outer wall to reduce splash losses) with adequate downpipes to underground transmission. This system is old (*c.* 15 years) but well maintained.



A1.1.12 Leaves in gutter.



A1.1.13 Good fall on gutter.



A1.1.14 Large roof catchment area with inadequate gutter or downpipe size. Limited fall on gutter.



A1.1.15 Good gutter to downpipe connection using a gutter outlet.



A1.1.16 Newly fitted gutter already broken, and inadequate fall. Poor materials and installation technique.



A1.1.17 Newly installed gutter, downpipe and tank. Well fitted but downpipe not secured so liable to failure



A1.1.18 Newly fitted very large cross-section gutters and large diameter downpipes to accept water from a large roof catchment. Water routed underground to large reinforced concrete cistern.



A1.1.19 Split PVC gutter half way up maneaba roof. Unsupported downpipe liable to fail.



A1.1.20 Large cross-section gutters and well supported downpipe to underground transmission. System in place for *c.* 20 years but well maintained.



A1.1.21 Incomplete, poorly maintained gutter system unconnected to downpipe. Unsupported downpipe. Thatch roof in foreground unsuitable for rainwater collection.



A1.1.22 Large cross-section gutters, missing downpipe.

A1.2 First flush devices and screens



A1.2.1 Simple downpipe first flush device to divert a small quantity of water. Manually operated.



A1.2.2 Makeshift entry screen on ferro-cement tank.



A1.2.3 Makeshift screen using mosquito mesh on tank entry.

A1.3 Tanks



A1.3.1 Large imported 25KL polytank on flat reinforced concrete slab



A1.3.2 Good tank connection, 50mm pipe with ball valves to isolate tanks



A1.3.3 Unconnected old ferro-cement tanks



A1.3.4 Large semi-submerged block work cistern, with pumped elevated storage in 2 No. 10KL Poly tanks.



A1.3.5 Two piece fibreglass tank.



A1.3.6 Squat polytanks utilised where maneaba roof eaves are low.



A1.3.7 Large semi-submerged reinforced concrete cistern.



A1.3.7 Neglected 10KL ferro-cement tank



A1.3.8 Elevated 10KL polytank to utilise potential energy provided by high roof eaves.

A1.4 Other



A1.4.1 Well constructed guttering system with adequate downpipes, underground transmission and significant storage in connected polytanks.



A1.4.2 Well designed and constructed collection, transmission and storage system. Overflows routed to a soakaway. Unfortunately, collected water is not fully utilised. There is no ownership of the water at Government buildings.



A1.4.3 well designed collection system with no storage.