

Catholic Diocese Daru-Kiunga

In Kiunga, Western Province, Papua New Guinea

Western Province, the largest province in Papua New Guinea by area has several large rivers, including the Fly River, which is polluted with sediments and chemicals by the OK-Tedi mine. In the rural areas of the Western Province as well as in the settlements of larger villages and towns, people have no access to clean drinking water. In the Western Province, swamps and alluvial land (sago swamps) often serve as access to drinking water (and for washing). It is often a long way to get drinking water, formerly in hollowed-out pumpkins, today in plastic containers.

To provide clean, potable water for staff, communities and institutions, the Diocese systematically integrated rainwater collection to building and infrastructure projects.

IMPACTS

- Staff of church, hospital and the diocese have constant supply of clean water for consumption and washing.
- Communities surrounding these buildings have access to clean water.

Experience description

For all new buildings for which the Diocese has secured financing (staff houses, church, hospital or carpenter's workshop), the project office, composed of one architect and one project officer, is integrating and planning saddle roofs or single pitch roofs, water tanks (to collect rainwater) and foundations for these tanks. Based on these building plans as well as on donors and local authorities' criteria, offers are being collected and a building company selected. For waste-water, septic tanks are foreseen. Constant communication with the community, building company and donor is crucial. Water from these tanks serve the institution itself (hospital, church, etc.), employees and also the surrounding communities. Tanks from a few specific buildings (like carpenters' workshop) are dedicated to communities' consumption only. The currently built Bosset Health Centre will e.g. offer 24 rainwater tanks for 5.000 – 9.000 litres.



Other characteristics



FURTHER IMPACTS

- Access to clean water as a preventive measure to improve people's health.
- Increased resilience of communities for drought periods.



CHALLENGES

- General maintenance of rainwater tanks.
- Logistics: water transport of building material dependent on water level of river.
- Waste water goes into septic tanks which run over during flooding period.



LESSONS LEARNED

- Community collaboration is crucial (transport, logistics).
- Integration of community during the whole building process.
- It needs good cooperation and communication between different units of the implementing organisation.