

## Limban Resort, Tadoba Phytorid - a Natural, Integrated System for Cleaning Wastewater



*Phytorid water treatment....*

An organic Phytorid sewage treatment plant is installed at Limban Resort to clean black (sewage) water and wastewater from bathrooms and the kitchen and to maximise water recycling. A treatment bed made of mixed materials such as bricks, stones and sand in which aquatic and semi aquatic plants are grown, is used to remove effluent through a series of natural biological processes. Treated water is pumped into nearby water bodies created by the resort to provide water for wildlife.



*...with aquatic and semi aquatic plants ...*



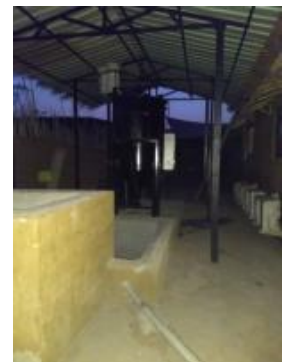
*...for safe release of used treated water into water bodies.*

A grease-trap skims off grease and oil from kitchen and utility areas before treatment.



*Grease trap behind the kitchen.*

Toiletries provided in guest rooms are non-polluting and biodegradable. Laundry wastewater is treated using an effluent treatment plant (ETP). Water is collected in a primary tank and pumped into a reaction tank where the water is treated with lime to bring the pH value down to 11. This is further treated with alum to balance the pH value to 7. The mixture is allowed to settle, separating the sludge. The treated water is then fed through the phytorid system for further purification. Treated water is used for irrigation at the resort and on the adjacent farm.



*ETP Unit for laundry wastewater.*



*Encouraging the reuse of towels.*

Notices in guest rooms encourage water conservation and re-use of towels and sheets. Water efficient taps and showerheads and dual flush toilets are in place to reduce water use. A swimming pool filtration system is in place to enable water to be recycled.

Water from a bore well and an existing well is softened and filtered to the highest standards using reverse osmosis. Bottled mineral water is discouraged to reduce plastic.



*Filtering water to the highest standards for use.*



*One of several waterbodies created to harvest rain and provide water for wildlife.*

Indigenous trees, shrubs and grasses planted in the resort help to recharge ground water. Land adjacent to the property has been leased and converted from farmland to wild pasture. Fencing has been removed adding to the forest and allowing the free movement of herbivores and carnivores.