

WASTEWATER



70% of wastewater from high income countries is treated, 38% in middle-income. 28% in lower middle-income with only 8% from low-income countries receiving any form of treatment.¹

The reuse of wastewater can ease the demand on limited fresh water supplies and improve the quality of streams and lakes by reducing discharged effluent. Wastewater can be a resource – as a source of reclaimed water, biogas and useful biosolids.²

Globally 2,000,000 tonnes of sewage agricultural and industrial wastes enters waterways daily.³

85-90% of all Wastewater or sewage enters the Caribbean Sea untreated with implications for human health, environment quality and productive activities. Farmers and labourers exposed to domestic wastewater have reported fevers, diarrhea and sores on their hands and legs as a case in point.⁴

The 330 km³ of municipal wastewater produced globally each year is enough to irrigate 40,000,000 hectares (equivalent to 15% of all currently irrigated land) or to power 130,000,000 households through biogas generation.⁵

Approximately 15% of the Caribbean's coral reefs are currently threatened by marine sources of pollution such as wastewater discharge from ships.

Sewage runoff causes serious damage to coral reefs because it stimulates the growth of aquatic plants and algae which threatens marine life.

Diarrhoeal diseases kill about 2,000,000 children and cause about 900,000,000 episodes of illness each year. Over half of the world's hospital beds are occupied by people suffering from water-related diseases.

Only 17% of households in the Caribbean are connected to an acceptable sewage treatment system.⁶ Some countries depend on poorly functioning septic tanks and pit latrines.⁷

It is estimated that each individual in a hotel produces 40-100 US gallons of wastewater each day, significantly more than local persons.⁸

Greater levels of wastewater reuse or recycling will create a climate-independent water source that is dependable, locally controlled and generally beneficial to the environment.

¹ United Nations University, Institute for Water, Environment and Health (UNU-IWEH), World lacks data on water re-use. Accessed 2016-08-11. <http://inweh.unu.edu/rising-reuse-wastewater/>
² GEF CReW, 2013. Wastewater as a Resource. Accessed 2016-08-11 <http://www.gefcrew.org/index.php/world-water-day-2016-water-and-jobs>
³ UNEP 2008, Marine Litter in the Wider Caribbean Region: A Regional Overview and Action plan, United Nations Environment Programme, Kingston, Jamaica.
⁴ UNEP, 2015. Economic Valuation of Wastewater: The cost of Action and the cost of No-Action. The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).
⁵ UNEP/SEI 2015 Sanitation, Wastewater Management and Sustainability: From Waste Disposal to Resource Recovery.
⁶ GEF/CReW, 2013. Wastewater and Tourism. Accessed 2016-08-11 <http://www.gefcrew.org/index.php/multimedia>
⁷ World Resources Institute, 2016. Accessed 2016-08-11. <http://www.wri.org/blog/2016/06/beneath-caribbean-sea-wastewater-problem-lurks-unnoticed>
⁸ UNEP, 2010. Sick Water: The Central Role of Wastewater Management in Sustainable Development.