

The United Nations World Water Development Report 2017

# WASTEWATER

# THE UNTAPPED RESOURCE



# WWDR 2017



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THE UNTAPPED RESOURCE

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# FOREWORD

by Irina Bokova  
Director-General of UNESCO

*In a world where demands for freshwater are ever growing, and where limited water resources are increasingly stressed by over-abstraction, pollution and climate change, neglecting the opportunities arising from improved wastewater management is nothing less than unthinkable.*

This is how the *2017 World Water Development Report* concludes, highlighting the vital importance of improving the management of wastewater for our common future.

Continuing 'business as usual' means allowing overwhelming neglect to worsen. It is estimated that well over 80 per cent of wastewater worldwide (over 95 per cent in some developing countries) is released into the environment without treatment. The consequences are alarming. Water pollution is worsening in most rivers across Africa, Asia and Latin America. In 2012, over 800,000 deaths worldwide were caused by contaminated drinking water, inadequate handwashing facilities and inappropriate sanitation services. In the seas and ocean, de-oxygenated dead zones caused by the discharge of untreated wastewater are growing rapidly, affecting an estimated 245,000 km<sup>2</sup> of marine ecosystems, impacting on fisheries, livelihoods and food chains.

When not ignored, used water has long been seen as simply a burden for disposal. With rising water scarcity in many regions, this is changing, and we see increasing recognition of the importance of wastewater collection, treatment and reuse. Infrastructure is a central issue in all countries. Data availability remains a persisting challenge, particularly in developing countries. Recent analysis shows that out of 181 countries, only 55 had information on the generation, treatment and use of wastewater, and the remaining ones had no or only partial data. In the majority of countries where data were available, it was outdated. This information bottleneck impedes the research and development necessary to craft innovative technologies and adapt existing ones to local specificities and needs.

The *2017 World Water Development Report* shows that improved wastewater management is as much about reducing pollution at the source, as removing contaminants from wastewater flows, reusing reclaimed water and recovering useful by-products. Together, these

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