IMPROVED WASTEWATER MANAGEMENT GENERATES SOCIAL, ENVIRONMENTAL AND ECONOMIC BENEFITS ESSENTIAL TO ACHIEVING SUSTAINABLE DEVELOPMENT

Benno Böer
Chief, Natural Sciences, UNESCO Bangkok

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PART 1
THE STATE OF
THE WORLD’S WATER RESOURCES
INCREASING WATER SCARCITY

Two thirds of the world’s population currently live in areas that experience water scarcity for at least one month a year.

Source: Mekonnen and Hoekstra (2016)
Severe pathogen pollution affects around one-third of all river stretches in Latin America, Africa and Asia, putting the health of millions of people at risk.
OVER 80% OF THE WORLD’S WASTEWATER IS RELEASED TO THE ENVIRONMENT WITHOUT TREATMENT
PART 2
HUMAN HEALTH, SANITATION AND THE SUSTAINABLE DEVELOPMENT AGENDA
HUMAN HEALTH AND IMPROVED SANITATION

2.4 billion do not have access to improved sanitation

Nearly 1 billion people worldwide still practice open defecation

Access to improved sanitation

Source: UNICEF and WHO 2015
The 2030 Agenda for Sustainable Development

SDG Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
PART 3
MEETING THE CHALLENGE OF IMPROVING WASTEWATER MANAGEMENT
Healthy ecosystems can also complement engineered solutions to wastewater treatment in a cost-effective manner.
Wastewater’s vast potential as a source of recoverable resources remains largely underexploited.

The recovery of nutrients and energy can add significant revenue streams to help cover the investment and operational costs of wastewater treatment and sanitation.
PART 4
CREATING AN ENABLING ENVIRONMENT FOR CHANGE
At least 11 out of 22 Arab States have adopted legislation permitting the use of treated wastewater.
Capacity building, research and development aimed at improving wastewater management generate employment opportunities and promote green growth.
Water reuse schemes can fail if planners do not account for the dynamics of social acceptance.
1. Wastewater increasing worldwide
2. Vast majority released without treatment
3. Affordable (‘low-cost’) treatment options are available
4. Reliable and sustainable source of water
5. Sustainable source of energy, nutrients and other recoverable by-products
6. In a circular economy, wastewater use and by-product recovery can generate new business opportunities while helping finance sanitation services
7. The costs of improved wastewater management are outweighed by benefits in terms of human health, socioeconomic development and environmental sustainability
8. Essential for achieving the 2030 Agenda for Sustainable Development
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