Recycling wastewater yields multiple benefits

Birguy Lamizana-Diallo  
UNEP-GPA, Kenya

Worldwide, the new environmental paradigm is to eliminate the concept of throwing away waste and replace it with the concept of considering waste as a resource focusing on “Reduce, Reuse, Recycle” paradigm which considers both solid waste and wastewater. Recycling wastewater for peri-urban agriculture already happens around many cities across the developing world. It is clearly one of the options to address the increasing urban food demand, complement rural supply and for poverty reduction. It can further serve the inherent function of agriculture while recycling urban waste products. As such, reuse of wastewater in agriculture means making a productive asset out of a waste product, while contributing to natural purification. This has however, to be done cautiously to minimize both health and environmental risks by applying existing guidelines and multi-barrier approach. There are several advantages for wastewater reuse. First of all, it is a reliable source of water. It contents nutrient which reduce the demand for chemical fertilizers. The economic gain is not negligible as it yields benefits to local communities and to the society by providing a source of income to farmers and can help recycle local water and nutrients sources while cleaning the receiving environment. Wastewater sludge can also be used as soil conditioner, fertilizer and as construction materials. Further, the utilization of organic materials found in wastewater to produce biogas for energy and heat generation clear exhibited climate change related benefits. Wastewater reuse, when appropriately applied, is considered as an example of Environmentally Sound Technology (EST) applications.

Biography

Birguy Lamizana-Diallo is a broad based development professional with more than 20 years working experience, including extensive knowledge in ecosystem and water resource management and a capacity building skills as a Training of Trainers (ToT) for decision makers on IWRM. She possesses a strong record of accomplishments in developing actions plans in Integrated Water Resource Management for West and Eastern Africa's countries. She holds an Engineer degree in Water resources management and a Doctorate in Freshwater Ecology in relation to environmental flows requirement. She is a Programme Officer at UNEP, in charge of the wastewater portfolio.

Notes: