INTERNATIONAL ENVIRONMENTAL

IETC's main role is to promote the transfer and use of Environmentally Sound Technologies (ESTs) to address urban environmental problems, such as construction, sanitation, sewage, air pollution, solid waste and energy-efficiency, and the management of freshwater to developing countries and countries with economies in transition. The Centre serves as a conduit for the acquisition and dissemination of information and knowledge for the promotion and transfer of ESTs.

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Integrated Urban Water Management (IUWM)







Integrated Urban Water Management (IUWM)

What is it?



The Integrated Urban Water Management (IUWM) refers to the practice of managing freshwater, wastewater, and storm water as links within the resource management structure, using an urban area as the unit of management. Activities under the IUWM umbrella are extensive and include the following:

- Improve water supply and consumption efficiency
- Ensure adequate water quality for drinking water as well as wastewater treatment through the use of ESTs and preventive management practices
- Improve economic efficiency of services to sustain operations and investments for water, wastewater, and stormwater management
- Utilise alternative water sources, including rainwater, and reclaimed and treated water
- Engage communities to reflect their needs and knowledge for water management
- Establish and implement policies and strategies to facilitate the above activities
- Support capacity development of personnel and institutions that are engaged in IUWM

The IUWM approach has emerged from the growing recognition that an integrated approach to water management at the urban level offers a relevant framework for decision-making and concrete action. Urban areas are appropriate as units of management, as specific problems and needs faced by cities may transcend the physical and scientific boundary embodied by more traditional units of management of catchments and watersheds. The concept encompasses various aspects of water management, including environmental, economic, technical, political, as well as social impacts and implications.

Why is IUWM important?

Access to safe water and adequate sanitation are the two fundamental requirements for human well being and dignity. However, these fundamental needs are not being met, particularly in urban areas throughout the developing world.

State of water and sanitation provision as of 2000

• People without adequate access to safe drinking water:

1.2 billion (1/6 of world population)

• People without adequate sanitation:

2.4 billion (1/3 of world population)

 Share of illnesses and deaths in developing countries caused by water contamination:

80 per cent

(Sources: WHO/UNICEF, 2000, UNEP, 2003)

The urban focus is necessary, as cities in developing countries will face the greatest challenge in meeting the needs for water and sanitation services, due to the projected increase in population and urbanisation.

Projections on population, urbanisation, and water stress

• Projected world population in 2030:

8.3 billion

 Projected urban population in developing countries in 2030:

4.0 billion

- Projected urban population growth in developing countries during 2000 - 2030:
 - 2.0 billion (91 per cent of projected growth in world population)
- Projected number of people living under water stress in 2025:

3.0 billion

(sources: UN Population Division, 2002, Engelman et al., 2002)

The IUWM approach is an important strategy in providing water services of adequate quality and quantity to as many people as possible, thereby moving towards the Millennium Development Goals (MDGs) of halving the number of people without access to water and sanitation by 2015. The MDGs are a part of the road map for implementing the Millennium Declaration of 2000, which the member states of the United Nations adopted unanimously.



Photo: "The Precious Rain, "K.Khianchuen, WED 2003 Photo

What can IETC do?

IETC's goal in the promotion of IUWM is to identify successful approaches and factors from real examples, so that guidance on their replication can be provided. To do so, IETC proposes to carry out the following activities in cooperation with both public and private sector partners:

- Assist in policy and strategy development to facilitate the IUWM implementation at the national and local level
- Assist in the implementation of local IUWM practices through the promotion of strategic financing opportunities
- Demonstrate how IUWM can be implemented at the local level through a select number of demonstration projects

- Develop tools and guidance for technology and policy assessments and decision making for IUWM
- Provide training and awareness raising programmes on IUWM to decision makers at the national and local levels, as well as communities as end-users

This IUWM focus complements IETC's past and ongoing activities in the field of water and urban management, and will be led by the Water for Cities Programme.



Photo: Damrong Juntawonsup/from UNEP photo competition

Where to go for further information?

The homepage of UNEP IETC contains extensive information related to IUWM, such as publications, programme descriptions, e-learning packages, as well as a searchable knowledge base.