

# Towards a New Water-use and Sanitation-friendly Ethic in Society



UN-HABITAT





“There is growing understanding that managing water demand cannot be accomplished by technical and regulatory measures alone. They have to be complemented by advocacy, awareness-raising and education initiatives.”

Dr. Anna Kajumulo Tibaijuka  
Executive Director  
UN-HABITAT

“Human Values and Ethics are directly relevant to the art of responsible public policy making. Human Values and Ethics can become a source of political mobilization and contribute to social change. These fundamental values should guide and inspire us in our efforts to promote development and combat poverty. The Millennium Development Goals can and must be met, but they won't be unless we all improve on our performance.”

Mr. Kjell Magne Bondevik  
The Prime Minister of Norway

“We need to bring about a positive and lasting change in attitude and behaviour towards water at all levels of society. Such behavioural and attitudinal changes can be brought about through values-based education.”

Mr. A. Raouf Bundhun  
Former Acting President of  
The Republic of Mauritius, at  
SIDS Conference.

UN Secretary-General Kofi Annan being briefed on Human Values based Water and Sanitation Education during his visit to UN-HABITAT in Nairobi. Mrs. Nane Annan, Dr. Anna Kajumulo Tibaijuka, Executive Director, UN-HABITAT and Dr. Klaus Toepfer, Executive Director UNEP also joined the briefing.



# Human Values in Water, Sanitation and Hygiene Education (HVWSHE) Programme

## The Need

There is a compelling case for creating a new water-use ethic in our cities. Rapid urbanization has put enormous pressure on water resources. The growing numbers of urban residents, especially the urban poor, pay an increasingly high price for the lack of safe water and adequate sanitation. They endure an increasing health burden from water related diseases, resulting from unsafe water, inadequate sanitation and hygiene. In addition to higher health burdens, the poor all too often pay much more for inferior water and sanitation services than their wealthier neighbours. There is a growing recognition that improvements in water management cannot be accomplished by technical or regulatory measures alone. These would have to be complemented by advocacy, awareness and education initiatives.

Water education is a strategic entry point for bringing about positive attitudinal changes among both service providers and users. There is a growing understanding that only a fundamental change in behaviour and personal attitudes, and the underlying values that prompt such inappropriate behaviour, can reverse this situation. Water, sanitation and hygiene education can play a strategic role in bringing about positive attitudinal changes, and in the longer term, can help develop a new water-use ethic in society. Children and youth could be the best ambassadors to bring about these attitudinal changes.

## What is Water, Sanitation and Hygiene Education?

Water, Sanitation and Hygiene Education is a process by which individuals gain awareness of their living environment and acquire knowledge, skills, experiences and values that will enable them to act – individually and collectively – to solve present and future water, sanitation and related hygiene problems.

It is a learning process that increases people's knowledge and awareness about water, sanitation and hygiene and associated challenges. It develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivation, and commitments to make informed decisions.

Properly understood, it should constitute a comprehensive lifelong education, one responsive to changes in a rapidly changing world. It should prepare the individual for life through understanding of the major problems of the contemporary world vis-à-vis water, sanitation and hygiene, and the provision of skills and attitudes needed to play a productive role towards improving living conditions and protecting the living environment with due regard given to ethical values.

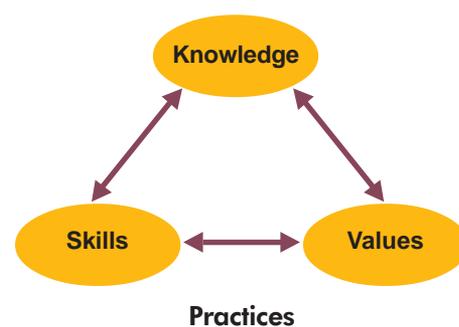
## Expert Group Meeting - Johannesburg

In May 2001, under the auspices of UN-HABITAT, an International Expert Group met in Johannesburg, South Africa, to share experiences of ongoing water education initiatives and develop a strategy for introducing water education in cities. An important outcome of the EGM was the consensus recommendation to pursue a values-based approach to introducing water education.

### HVWSHE Approach

HVWSHE seeks to impart information on water, sanitation and hygiene and also inspires and motivates learners to change their behaviour and adopt attitudes that promote hygienic living and wise and sustainable use of water. Its advantages include the following:

- it does not add further to the current overload of the curriculum, as it can be integrated with ease to the existing curriculum;
- it creates a lasting impact through character development, when understood, appreciated and practiced by children and young adults;
- it is a proven approach in current practice world-wide, well documented and evaluated by experts in different parts of the world.



## Concepts of HWWSHE

HWWSHE Concepts are developed from the perspectives of:

- **The Education Sector**
- **The Water and Sanitation Sector**
- **Human Values in Water and Sanitation Sector**

### The Education Sector

#### Values Education

Values education is an explicit attempt to teach about values and/or valuing. Values education approaches include inculcation, moral development and analysis with the purpose of instilling certain values in students and help them develop higher set of values.

Values-based education lays emphasis on those qualities of a human being which are desirable, respected, esteemed, dominant and help in making informed choices sanctioned by a given society. Realising the importance of values education many countries around the world have taken initiatives for developing sets of values for education. Thailand has incorporated Values in the national curriculum. Australia has just published a National Framework for Values Education in Australian Schools (2005) and New Zealand has been promoting values education in the curriculum. South Africa has embarked on an initiative on Values, Education and Democracy.

### The Water and Sanitation Sector

#### Values of Water and Sanitation

The Ministerial Forum at the second World Water Forum held in The Hague proclaimed that water needs to be managed in a way that it reflects its economic, social, environmental and cultural values for all its users.

#### Life-giving Value

Unfortunately millions of children die annually from preventable water and sanitation related diseases in developing countries. Reliable water and sanitation services are far from universally available despite water being a basic human right.

#### Social and Economic Value

Water and sanitation is central to socio-economic development and poverty alleviation. Water has an economic value due to its contributions to economic activities including agriculture, energy generation and industries. Water also receives and carries away waste.

#### Value to Ecosystem

Water gives irreplaceable services to the ecosystem like sustaining human and other life by way of producing food, decomposing organic waste, absorbing human and industrial wastes and converting them to beneficial uses.

#### Cultural and Spiritual Values

These values are integral to any society and are intertwined with the cultural and spiritual aspects of life.

### Human Values

Human values are fundamental to human existence and are integral to any society. They are universal and are inherent in all human beings and are intertwined with the cultural and spiritual aspects of life. Human values-based education, therefore, is complimentary to values-based education.

Bringing out and nurturing of the human values in children during the formative years will result in caring and responsible adults in the future. Bringing out human values in adults is an internal motivator that reinforces good character, morality and ethics, resulting in caring and responsible citizens.

There are a wide variety of human values found in varying degrees in all societies, religious traditions, and civilisations. Five basic themes of human values are: **Truth, Right Conduct, Peace, Love, and Non-Violence**. Different societies have different socio-cultural and value orientations. The water, sanitation, and hygiene education initiative has taken these into account through active participation of the countries involved.

Three main approaches are used for teaching human values-based water, sanitation and hygiene education. These include: the Direct Method; Integrated Method for the Curriculum (Formal Education); Integrated Method for Co-curricular activities (Non-Formal and Informal Education).

The Task Force on Water and Sanitation of the UN Millennium Development Project in its final report has identified human values and human rights as the basis for meeting the targets for water and sanitation development by 2015.



## Overall Objective

The creation of a new water-use ethic through values-based water education by imparting information on water, sanitation and hygiene and also inspiring and motivating learners to change their behaviour with a view to promote wise and sustainable use of water and sanitation.

UN-HABITAT is implementing the Human Values in Water, Sanitation and Hygiene Education Initiative as part of the Water for African and Asian Cities Programmes. The chart provides an overview of the activities conducted by the initiative.

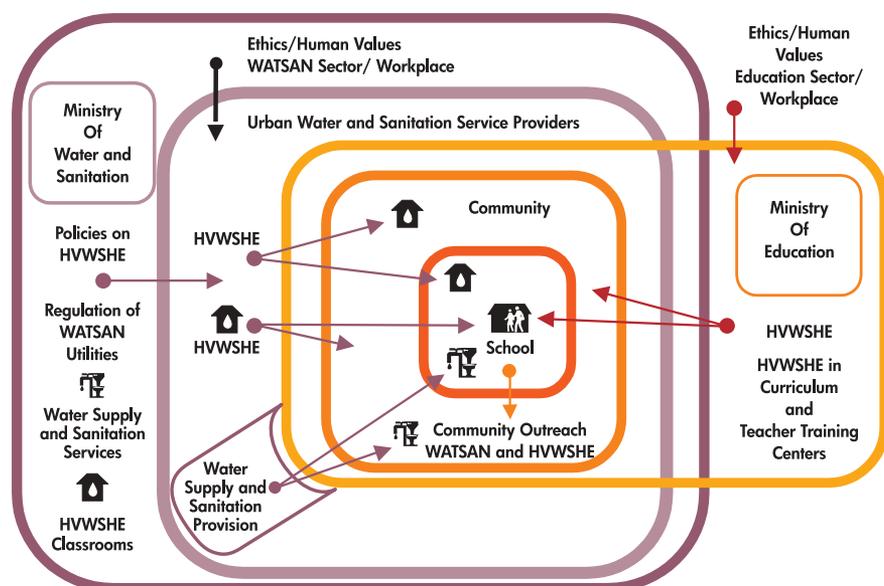
## Programme Priorities

- A Values-based Water Education Programme focuses on:
- Enhancing awareness and political will for HVWSHE in cities.
  - Building capacity to conduct HVWSHE in the formal and non-formal education sector.
  - Building partnerships between the education and water sector.
  - Twinning of schools within countries and among countries within the region and among schools in the North and the South.
  - Promoting investments for water and sanitation in schools.
  - Promoting ICT enhanced water education partnerships.

## Building Capacities for Human Values-based Classrooms in the Water and Sanitation Sector

A Human Values-based Classroom can be described as a place where an awareness and understanding of the water and sanitation can be discussed. As water, sanitation and hygiene education is a learning process, it is necessary to develop skills and expertise so as to bring about change in attitudes, motivation and commitment. There is a need for a comprehensive life long education responsive to changes in a rapidly changing world.

Keeping in view it is necessary to build the capacity of teachers/facilitators who are currently managing or is challenged with the task of establishing a water and sanitation classroom by conducting various programmes such as training of trainers. The awareness of the trainer's knowledge and understanding of current issues and the problem areas in water, sanitation and hygiene education and the capacity to deliver the expected. Hence, the importance of knowing what is available in terms of human resources is also important for designing a suitable programme.



Concept for Human Values in Water, Sanitation and Hygiene Education (HWWSHE)

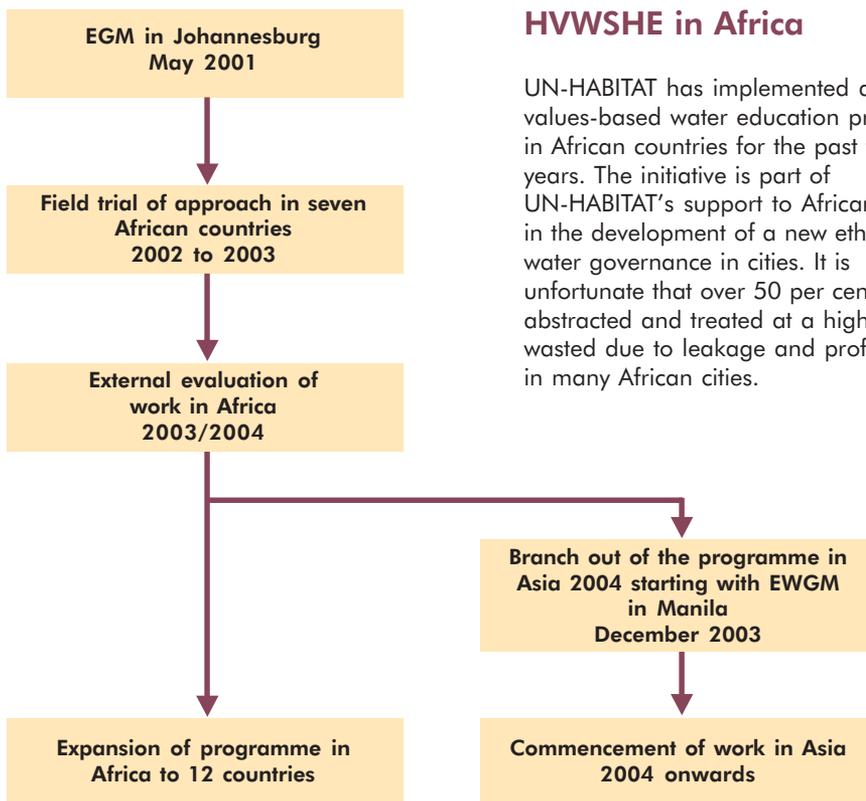
## Activities

The activities can be summarised as:

- Enhancing awareness and political will for Human Values in Water, Sanitation and Hygiene in African and Asian Cities.
- Building capacity to conduct Human Values-based Water, Sanitation and Hygiene Education in the formal and non-formal education sector through;
  - Promoting Human Values-based Water, Sanitation and Hygiene Education through the curriculum.
  - Developing Resource Materials for Curriculum.
  - Conducting training in Teacher’s Training Colleges and selected schools.
  - Developing Teacher Training Guides for use in Teacher Training Colleges and Schools.
  - Demonstrating Human Values-based Water, Sanitation and Hygiene Education in selected pilot schools and surrounding communities.
  - Developing resource material and pilot demonstration of Human Values-based Water, Sanitation and Hygiene for the non-formal Education Sector.
  - Developing partnerships with the Water and Sanitation Service Sector for increased and sustainable Water and Sanitation Service provision to schools.
  - Building capacity for promoting Human Values and Ethics in the workplace for policy makers, administrators and teachers.
- Building capacity in the Water and Sanitation Service Sector to conduct Human Values in Water, Sanitation and Hygiene promotion and providing sustainable access to Water and Sanitation Services for schools and surrounding communities.
  - Building capacity in Utilities for Human Values in Water, Sanitation and Hygiene Classroom.
    - Promoting Human Values in Water, Sanitation and Hygiene Classroom through Water and Sanitation utilities.
    - Developing Resource Guides for Human Values in Water, Sanitation and Hygiene Classroom for utilities.
    - Conducting training for utilities on Human Values-based Water, Sanitation and Hygiene Classroom.
    - Facilitate the establishment of Human Value-based Water, Sanitation and Hygiene Classroom.
  - Building capacity in Utilities to sustainably provide Water and Sanitation services to Schools.
    - Developing partnerships with the Education Sector and other relevant stake holders aimed at promoting Water and Sanitation Services to schools.
    - Assessing Water and Sanitation situation in both formal and non-formal schools.
    - Developing a strategy and investment programme for re-habilitation and/or provision of Water and Sanitation facilities to schools at risk.
  - Building capacity for promoting Human Values and Ethics in the workplace for leaders and workers in the utility sector.



## Genesis of the Programme



### HVWSHE in Africa

UN-HABITAT has implemented a values-based water education programme in African countries for the past three years. The initiative is part of UN-HABITAT's support to African countries in the development of a new ethic for water governance in cities. It is unfortunate that over 50 per cent of water abstracted and treated at a high cost is wasted due to leakage and profligate use in many African cities.

### Achievements in Phase I

- Consensus on water-related environmental education strategy for African cities. The approach is suited to Africa, as it does not demand heavy investments in infrastructure.
- Water utilities, in particular, have realised that water education is a valuable tool in improving both their service delivery and customer/public relations. In July 2001, Addis Ababa Water and Sewerage Authority (AAWSA) organised a water week with one segment dedicated to water education.
- Enhanced network of educational officials from the participating cities – useful in the exchange of ideas and experiences among the countries. This included visit of African Educationists to Thailand and the SEAMEO in May 2004.
- Better collaboration between education and water sector officials and creation of the required synergy in the implementation.
- Significant impact on Water for Asian Cities Programme launched during the WSSD in Johannesburg.

## Moving Ahead

This is a highly innovative project and one that has clearly captured the imagination not only of those participating in Phase I itself but also of those cities and countries that have since been informed about its inception and progress.

Prof. Norman Clarke, Programme Evaluator

## Activities in Phase II

The second phase of UN-HABITAT's Values-based Water and Sanitation Education programme started with the training of trainers workshops for West and Central Africa in Dakar, and East and Southern African countries in Ndola. Phase II involves consolidating the education programme in Phase I cities by promoting investments in water and sanitation facilities in schools and extending the programme to more cities.

Phase II includes:

- Expansion from seven to twelve countries.
- Up-scaling good work in the education sector not just focusing on curriculum but also teacher training colleges.
- More innovations for water classrooms.
- Increased investments for water and sanitation to schools.

By complementing the technical and regulatory measures put in place to address avoidable wastage, Values-based Water and Sanitation Education plays a strategic role in bringing about positive attitude changes, and in the longer term, helps develop a new water-use ethic in society. A HVWSHE capacity building programme includes:

- HVWSHE teacher training programmes in colleges of education.
- HVWSHE in-service refresher training programmes in schools.
- HVWSHE orientation programmes for new schools.
- Sanitation and hygiene education in schools and communities.
- Reinforce learning activities in water classrooms, through the provision of resource materials adapted to city-specific conditions and needs.
- Reinforce non-formal HVWSHE programmes in communities and informal schools, with a focus on pro-poor governance (for example, using the participatory approach).

HVWSHE resource materials preparation programme. This entails the review of existing national education curricula in schools and development of a new pedagogic guide, lesson plans, and supplementary materials (to be vetted by national education officials). Advocacy, awareness raising and information exchange component, to be co-ordinated in the greater programme. Advocacy through school study visits. Awareness raising in the community through HVWSHE TV and radio programmes, newspapers, water and sanitation festivals, etc. Information exchange through education competitions and twinning of schools.

Construction of water and sanitation facilities in schools, to be co-ordinated in the sanitation programme. This includes construction of the water classrooms. As with all components of the programme, there will be monitoring and evaluation of activities, including for programme evaluation purposes. Also, collaborative and partnership arrangements will be initiated with relevant institutions and stakeholders.

### Current Initiatives

UN-HABITAT and The African Institute of Sathya Sai Education (TAISSE)

Co-operation Agreement activities:

- Country training needs analysis.
- Curriculum review.
- Development of Action Plans for country training in HVWSHE.
- Centralized training for Anglophone and Francophone cities.
- Development of training guides for HVWSHE.
- Planning for country training in HVWSHE.

Based on the recommendations of Expert Group Meeting for HVWSHE Phase II WSIB of UN-HABITAT is co-operating with The African Institute of Sathya Sai Education (TAISSE) of Zambia with the objective of creating a new ethic among children and community through water, sanitation and hygiene education.

Twinning of cities and schools is also part of this second phase initiatives which primarily aims at building capacity in 12 countries of Africa, which includes Ethiopia, Kenya, Uganda, Niger, Ghana, Senegal, Mali, Burkina Faso, Cameroon, Côte d'Ivoire, Tanzania and Zambia on HVWSHE in schools through their curriculum.

### IRC Water and Sanitation Centre Focus

IRC International Water and Sanitation Centre is cooperating with UN-HABITAT with the objective of building capacity to conduct Human Values-based Water, Sanitation and Hygiene Education both in schools and water utilities in the participating cities of African Countries in the Water for African Cities Programme.

### Investments in Water and Sanitation

Discussions with the African Development Bank to facilitate follow up investments are ongoing. The agreed arrangements with the African Development Bank portends significant new investments in African cities which could be better targeted to the poor with support from UN-HABITAT's Water and Sanitation Trust Fund.



## HWWSHE in Asia

### Regional Consultations in Asia

Held in Manila, Philippines from 29 November to 2 December 2003, the forum was jointly organized by UN-HABITAT and South East Asian Ministers of Education Organization (SEAMEO) as part of the water education component of the Water for Asian Cities Programme.

### SEAMEO Declaration

The Ministers of Education of Southeast Asia, gathered in Brunei Darussalam for the 38th SEAMEO Council Conference to declare their willingness to promote and support regional cooperation on values-based water education.

### New Delhi Roundtable

A Roundtable on this topic was organized by UN-HABITAT in New Delhi on 22 March 2005. The participants included representatives of UNICEF India, Royal Netherlands Embassy, UNESCO-IHE the Netherlands, Environment and Public Health Organisation (ENPHO) Nepal, Values Based Education and Development Initiative (VBEDI) South Africa, University of Wollongong Australia, Centre for Science and Environment (CSE) New Delhi, Centre for Environment Education (CEE) Ahmedabad, CSEC University of Delhi, National Council for Education Research and Training (NCERT) and Sulabh International.

## Innovations in Water Education in Asian Cities

### SEAMEO

- Developing competencies of teachers in selected SEA schools in integrating HWWSHE in their lessons, effective use of resource materials and in assessing knowledge, skills, attitudes and behavior change among students;
- Developing a set of prototype teaching/ learning materials, lesson plans, activity guides on HWWSHE among others;
- Documenting experiences, lessons learnt and effective practices;
- Developing a common WATSAN facility and HWWSHE assessment protocol among the Southeast Asian Ministries of Education; and
- Developing a checklist/guidelines on HWWSHE for project officers of the Asian Development Bank.

### Centre for Environment Education (CEE)

- To optimise human potential by introducing, partnership with water and sanitation service providers, values-based water, sanitation and hygiene education in the school curriculum and extra-curricula activities in the selected schools of the four project cities in Madhya Pradesh and of underprivileged settlements in Savarkundla, Gujarat.
- To facilitate changes in attitudes and behavior among community members towards water, sanitation and hygiene issues.
- To promote better understanding of the environment in the context of water, sanitation and hygiene.

### Establishment of a Centre of Excellence

To develop a partnership towards the establishment of a Centre of Excellence on Values-based Water and Sanitation Education for the Asia-Pacific Region for undertaking research and training and building the capacity of the service providers of water and sanitation in the Asia-Pacific, Africa and Latin America & the Caribbean.

### Human Values and Ethics in the Workplace

Global Dharma Center (GDC) is finalizing a workshop and a series of three Guides focused on "Human Values and Ethics in the Workplace" for adults working in the water education and utilities sectors. GDC is also developing a strategy for mainstreaming capacity building programmes on Human Values and Ethics in these sectors.

## Overall Achievements with WATSAN

### Water Education in African Cities

Swedish Water Development (SWD) has significantly contributed to the programme “Water Education for African Cities” by contributing in the process of sharing Swedish experiences from Water Education.

SWD contributions:

- Participate in the research and development of water classrooms and educational resource material for such classrooms for the cities in the programme.
- Assist in facilitating twinning arrangements between cities and schools in Sweden and Africa.

SWD organised several Training of Trainers workshops in which participants were introduced to the educational material developed by SWD and were given opportunity to work. The material developed with SWD support consists of four parts:

- Guidelines on how to establish and run a water classroom
- The handbook: The World of Water – African Adventures of a Water Drop
- Water Audit – Quality and Quantity
- The Water Cycle Poster

A number of water experiments with the main purpose to encourage students to test ideas and to make discoveries about the World of Water were compiled as “Creative Water Activities for Young Water Scientists”.

### Other Programme Outcomes

- The Global Dharma Center has conducted stakeholder consultations with over 500 education, government and water and sanitation employees regarding the benefit and need of human values and ethics in their work environment. They have also conducted four pilot workshops on “Human Values and Ethics in the Workplace” for educators in 12 countries of Africa, utilities executives in Ethiopia and water supply and sanitation project and municipal staff in Madhya Pradesh, India. GDC is documenting their research into a Resource Guide that will be part of a series of three Guides focused on “Human Values and Ethics in the Workplace.”
- UN-HABITAT and Ministry of Public Utilities in collaboration with Ministry of Environment, Ministry of Arts and Culture, Ministry of Education and Scientific Research, Independent Corruption Commission of Mauritius and Central Water Authority organized a training and workshop on values-based water and sanitation education for creating a new water-use and Sanitation friendly ethic in Small Island Developing State Mauritius in January 2005. About 150 professionals from different agencies like Public Utilities, Universities, Education Departments, fresh graduates and non-governmental organisations participated in this programme.

#### HWWSHE Trainers Guide Book

Environment and Public Health Organisation (ENPHO-Nepal) and Values Based Education and Development Initiative (VBEDI-South Africa) have compiled a Teacher’s/Trainers’ Guidebook to Human Values-based Water and Sanitation Classrooms with the following objectives:

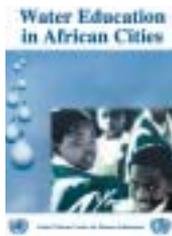
Providing guidance on:

- Establishing and managing a HWWSHE Classroom.
- Programme development and lesson creativity for HWWSHE Classrooms.
- The technique of Values Elicitation and relevant topics for HWWSHE Classroom lessons.
- Preparing lesson plans for HWWSHE with the inclusion of several example lesson plans for various levels of learners.

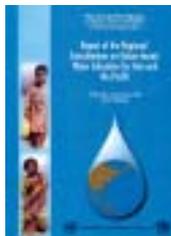


## Resource Materials

### General



**Johannesburg Report**  
Water Education in African Cities



**Manila Report**  
Water for Asian Cities Programme  
Report of the Regional Consultations on Values-based Water Education for Asia and the Pacific



**Human Values and Ethics in the Workplace**  
Book No. 1 – Individual Guide



**Human Values and Ethics in the Workplace**  
Book No. 2 – Facilitator Guide

### Education Sector



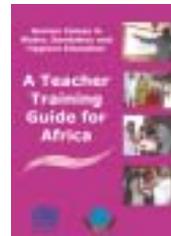
**Human Values in Water Education –**  
Creating a New Water-use Ethic in African Cities



**Direct Method Teacher Training Guide**

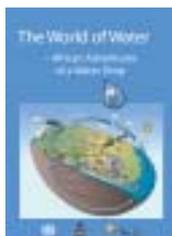


**Report on Arusha Training Workshop**



**Teacher Training Guide for Africa**

### Water Sector



**Journey of the African Water Drop**  
The World of Water – African Adventures of a Water Drop



**Water Audit – Quality and Quantity**



**Facilitators & Trainers Guide Book Vol 1 & 2**  
Human Values-based Water, Sanitation and Hygiene Classrooms



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