Human Values and Ethics in the Workplace

Improving Leadership and Performance in the Water Education, Supply and Sanitation Sectors

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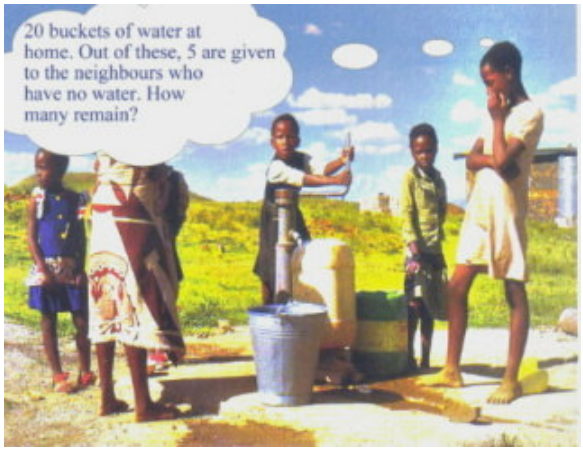

Values-Based Approaches to Community Water Education

UN-HABITAT

Global Dharma CENTER

“Human Values and Ethics in the Workplace” is a capacity-building initiative developed in a collaborative effort between the Global Dharma Center (GDC) and UN-HABITAT, within the framework of the Human Values Water, Sanitation and Hygiene Education (HVWSHE) Initiative of the Water for African/Asian Cities Programmes. The purpose of the capacity-building is to improve leadership and performance in every aspect of the water education and water supply and sanitation sectors, and to help bring about a new ethic in water use and management.

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Introduction

There are many compelling reasons why changing the way we view and interact with water can make a significant difference in African cities. These include growing water scarcity, increasing competition between various users, increasing number of deaths from water borne diseases and, continuing degradation of the ecosystem.

- *Water Scarcity*

As the population grows and becomes more urban, and as water use per capita increases, water available for human consumption, for social, economic and cultural needs and for environmental requirements is rapidly becoming scarcer. Already, over 200 million Africans live in water scarce countries (Population Reports, XXVIII,No.3 Fall 2000).

Globally, it is estimated that by 2025, another 2.5 billion humans will inhabit an Earth where a great many of the 6 billion already here lack safe drinking water, have inadequate sanitation, live in water-scarce or food-short countries, and are increasing water consumption and pollution at unsustainable rates (Stockholm Water Front, No.3 October 2000). In Africa, the number will rise to about 700 million, of whom half will live in countries that face severe shortages for most of the year.

- *Competition among Users*

Due to growing scarcity, competition between various users has intensified. In the recent years, withdrawals of fresh water have grown in all categories of demand - for irrigated agriculture, industrial use, and household purposes. In many African cities, freshwater demand for household use is expected to outpace the capacity to provide it.

- *Water Borne Diseases*

Currently, about 2.3 billion people suffer from diseases linked to water (Population Reports, XXVIII,No.3 Fall 2000). The

World Health Organization (WHO) estimates that diseases caused by unsafe drinking water and lack of water for sanitation and hygiene kill 5 million people yearly. These numbers include 3 million young children who die from mostly water-borne diarrhoeal diseases. Majority of the deaths are concentrated in the developing world (UNEP and World Bank, 1998). Water quality deterioration as a direct result of industrialization, urbanization and intensification of agriculture is already worsening the situation.

- *Degradation of the Ecosystem*

As people withdraw freshwater for direct use, less is available to maintain wetland ecosystems and the millions of species they shelter. Over 20 per cent of the approximately 10,000 freshwater fish species in the world are either endangered or are already going extinct because their habitats are being threatened (Population Reports, XXVIII, No.3 Fall 2000).

The challenge we face, as we reflect on these problems, is how to maintain sufficient supplies of freshwater for human uses (agriculture, household, and industrial uses) and natural ecosystems in the face of increasing scarcity and growing competition between various water users.

Current Patterns In Water Use

The current patterns in water use in various sectors do not reflect the above realities.

In the agricultural sector, irrigation consumes three quarters of the world's available freshwater; in the poorest countries, the proportion is 90 per cent. Much of that water is wasted and most is lost in the countries that can least afford it. In many African countries, for example, half of all irrigation water evaporates or seeps away through unlined ditches. (The Economist, 1992)

This consumption pattern also applies to the industrial sector. For instance, in the city of Nairobi, industrial water use currently accounts for close to 36 per cent of the total demand. Studies indicate that nearly 800!oof the industrial water demand comes from 17 major industries, with 1 industry consuming 6% of the total city's demand (UNCHS (Habitat), 2000). The introduction of recycling and re-use of wastewater in these industries could drastically reduce the water demand. The water thus saved could then be channeled to other areas of the city, particularly to the peri-urban settlements housing disadvantaged sections of the society.

At the household level, particularly in urban areas, consumption per capita is quite considerable in upper and middle class districts. In these districts, some

households use between 360-500 litres a day per person. In contrast, poor households in informal settlements have limited access to fresh water - often down to or even below 20 litres a day per person. This corresponds to the amount used in one or two toilet flushes in the better off districts. However, inadequate water tariff systems in many cities force the poor to pay more for the little they receive. In social terms, this means that poor people are subsidizing the better off.

Lastly, in many cities, over half of the water put into distribution pipes is lost through leakage, waste and illegal connections.

Past Approaches to Water Education and Development

The above examples show the urgent need for a fundamental reconsideration of the current water-use ethic in our cities. However, as Fruhling (996) notes, we still tend to think that increasing water demand is best solved by just delivering more; if existing sources do not yield what is needed, we simply drill new wells or build canals and pipelines to transfer water from where it can be found. We continue to use potable water in flush toilets and contaminate lakes and rivers. And we still think that water scarcity in Africa, for example, is caused by insufficient rain, perhaps related to changes in the climate.

Past approaches to water education have reflected the conventional ways of water development and use. The emphasis has been to develop appropriate policy, legislation and institutional framework to create an environment conducive to water resources development and management. Strategies and key priority areas for action are then identified based on the framework. Resources are then invested to translate strategies into actions geared to improve water supply and sanitary services (See Figure 1)

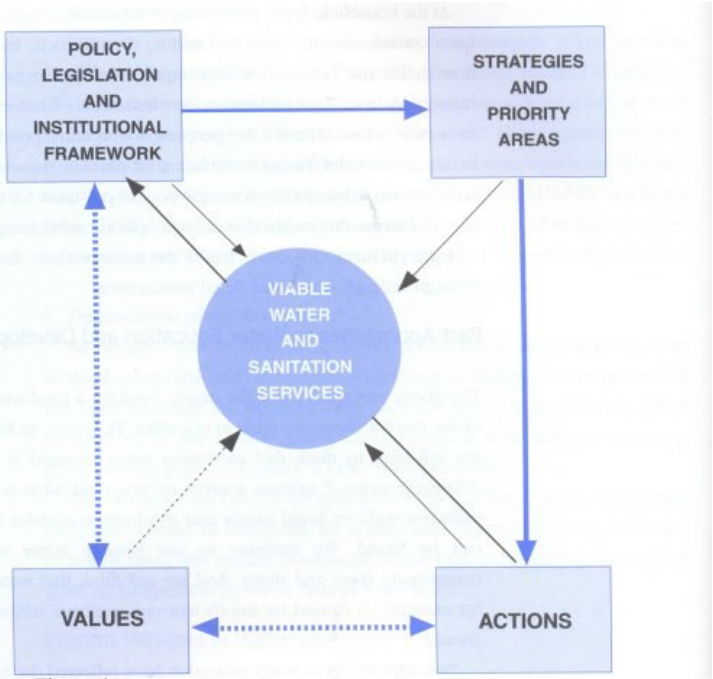

Figure 1:
Framework For Integrating Values Based Approach To Water Education

However, after many years of water development efforts, more than a billion people still lack drinking water and nearly three billion have no access to sanitary services.

Because much of the misuse and destruction of water resources is the

consequence of individual decisions based on the prevailing attitudes and values of water users, one cannot help but conclude that the consumer's values are decisive factors in creating a new water-use ethic.

This is the missing link in the current approaches to water education and development.

Values Based Approach to Water Education

- *The Context*

While technical knowledge and conventional approaches must obviously play a central role in solving the water problems mentioned above, experience shows that factors in the wastage and misuse of water are not limited to formal / knowledge about water. It is also obvious that imparting only formal knowledge on the physics and economics of water is unlikely to encourage a caring, sharing society with a responsible attitude to water usage.

A significant additional contribution is the attitude of the water user and the development of a personal value system, which would enable the user to understand and respond to the element of personal responsibility in individual water usage. This leads to awareness of the effects on the community at large of individual actions which in turn leads to positive national attitudes to water. In this sense, a change in the values of an individual water user provides the essential impetus that ensures genuine change in community and national attitudes. This is the basis of a values based approach.

- *Definition of Value*

In this context, it is pertinent to differentiate between two uses of the term value. First, value as it relates to qualitative notions and perceptions of social, economic, religious or utilitarian benefits attributed to certain things. For example, water is valued by people according to varying perceptions of its worth or usefulness. Such perceptions differ greatly from one region to another and from time to time depending on the extent of water availability and the socioeconomic conditions of the concerned region.

Where water is scarce, its necessity for sustaining basic life processes is more obvious, and hence its value is perceived to be very high. For example, among the pastoralist communities in North Eastern Kenya, the quantity of drinking water available for humans and animals takes top priority. On the contrary, in many formal settlements in Nairobi where water is readily available, supplies of drinking water are often taken for granted. In such

environments, some people do not even think of water until there is a crisis. This is often too late.

Second, and in the context in which value is used in this paper, the term connotes a principle, a standard or quality of anything that makes it desirable. Such values include honesty, integrity, tolerance, diligence, responsibility, compassion, altruism, justice and respect, among others

Categories of Values

Values can be categorized, among others, as follows:

- Cultural values
- Religious/spiritual values
- Experience-based values
- Scientific values.

- *Cultural Values*

Inherent in all cultures are values - ideals and shared beliefs that weld a community together. Such values include sharing and caring for one another, hospitality, self-respect and integrity, among others.

The role of culture in attitudes and values to water conservation and management is significant. In many traditional African societies, there was an intimate relationship between culture and values biased to the conservation of nature and the environment. Conservation and utilization of natural resources such as water, forests, land and wildlife were controlled by traditional management systems.

For example, among the Samburu and Borana communities of Kenya there were social controls enshrined in cultural norms and rules regarding access to and usage of natural resources. The norms and rules prohibited water pollution and activities that endangered the environment. To cut a tree from its trunk was like cutting off one's head. Only branches could be used for the construction of Manyattas (traditional houses) and for firewood. Such controls led to the careful utilization of the resources and ensured sustainability and peaceful co-existence of people and nature. To interfere with nature in any way, one needed permission from a committee of elders.

Values based approaches are therefore, not new to Africa. Regrettably, due to rural-urban migration, these traditional values are eroded, resulting in a more selfish approach to water usage in the urban areas, based on a perceived personal survival ethic. Values based approaches are likely to reawaken and stimulate such traditional values in the conservation and management of water resources.

- *Religious Values*

Most basic values are inherent in all religions. Such values are concerned with the transformation of the inner life and character of human beings as well as the organization of society.

Human nature has a spiritual dimension that finds expression in all spheres of life. The spiritual impulses set in motion by the world's religious systems have been the chief influence in the civilizing of human character. Through the teachings of religion, great segments of humanity have learnt to discipline their baser propensities and to develop qualities - such as compassion, trustworthiness, generosity, humility, courage and willingness to sacrifice for the common good – that conduce to social order and cultural advancement. Drawing on the spiritual inclinations of individuals provides the motivational impetus that begets and sustains positive action.

- *Experience-based Values*

These are values that originate from the experiences gained through interactions between individuals in society.

- *Scientific Values*

Methods of science allow people to become more objective and systematic in their approach to problem solving and in the understanding of social processes. They have allowed humanity to construct a coherent understanding of the laws and processes governing physical reality, and to a certain degree, the workings of society itself.

- **Basic Human Values**

There are basic and universal human values, which are inherent in all human beings irrespective of their race, ethnicity, culture or religion. These are Love, Peace, Truth, Right Conduct and Non-Violence. These values include in a balanced way the profound moral insights of the world's great enduring civilizations. They encompass a range of other values of practical importance in daily living. For example:

Love:	Caring for fellow human beings and nature; friendship and sympathy; tolerance; humanism.
Peace:	Awareness of dignity of individual; self-disciple; self-respect; integrity.
Truth:	Quest for knowledge; spirit of inquiry; discrimination of truth and false; respect for human diversity.
Right Conduct:	Cleanliness; hygienic living; self-reliance; honesty; equality and equity; conservation of nature and the environment.

All these values are not tangible but their importance in generating a unified approach to social change cannot be ignored. In water education, they can significantly contribute to a better understanding of water as a key social, economic and environmental resource and facilitate the development of a new water-use ethic in African cities.

Why Value-Based Approaches?

At the community level, when value-based principles are fully integrated into development activities, the ideas, insights, and practical measures that emerge are likely to be those that promote self-reliance and preserve human honor, thereby avoiding habits of dependency and progressively eliminating conditions of gross economic disparity. An approach to development that incorporates value-based approaches will also more likely lead to enduring changes in both individual and collective behaviour.

With regard to water education, value-based approaches are useful in:

- Putting the responsibility for water conservation and management where it belongs - into the hands of consumers. It highlights the fact that it is people who use/misuse water. People waste and pollute water, industry owners contaminate water; the wealthy monopolize available water at the expense of the poor and the less powerful; ignorance and misconceptions of the value of water on the part of the poor leads to wastage and results in unnecessary hardships.
- Getting better knowledge and gaining insight into why people view and use water in particular ways and modifying human attitudes, expectations and behaviour so that they are in better agreement with water realities.
- Changing social values and systems of governance on the use and management of water within the home, agriculture, commerce and industry. This is likely to significantly reduce the cost of institutional policing of water usage, which has also been ineffective in most cities.
- Developing a shared vision, collective action and common destiny on water conservation and management.

Suggestions on Integrating Value-based Approaches Into Non-Formal Education - Some Community Experiences In Kenya

Water management practices and experiences among Kenyan communities can provide an insight into the potential opportunities of introducing value-based approaches into non-formal water education.

Although these experiences are drawn from a rural setting, they demonstrate the

role values based approaches can play in developing a new water-use ethic in African Cities.

- *Consumers' Responsibility for Water Management and Conservation – Kinna Community Water Project*

Kinna Community Water Project is a gravity flow water supply system located in the arid district of Isiolo in North Eastern Kenya. The project was implemented with financial support from PLAN International at the cost of Kshs. 4 million. The community contributed about 25% of project finishing through labour and local materials. It involved laying of a 1 km pipeline from the source (a natural spring) to communal water standpoints.

The project serves about 2,700 households (approx. 12,000 people) within Kinna Market and outlying areas through seven water kiosks. It also serves four primary schools, one secondary school and an administration police camp. Instead of handing the management into the hands of the consumers, the donor established a Micro Planning Unit (MPU) to run the project. The community views the project as belonging to the donor because they feel left out in its management. Poor sense of ownership among the consumers led to vandalism of pipes and taps to divert water into individual farms at night. Due to this, many households at the lower ends of the pipeline were not served. There has also been allegations of corruption and embezzlement of project funds.

If the consumers had values of caring and sharing, integrity, and equity, there would be no vandalism of pipes and taps because they would be sensitive to the other households' needs. Likewise, honesty would rule out corruption in the management of project funds.

Due to lack of a values based approach, education has focused on improving security at night to reduce water theft and changing the previous management committee to avoid further corruption. These solutions may be viable in the short run, but a longer-term solution requires integrating values based approach into water education to reduce the cost of policing and turnover in management.

- *Lack of Community Participation in Project Planning – Oldonyiro Community Water Supply*

Oldonyiro Community Water Supply is a turbine driven gravity flow water supply system located in the arid district of Isiolo in North Eastern Province of Kenya. Italian donors through the local Catholic parish implemented the Project. It abstracts water from Ewaso Nyiro River. The Project serves Oldonyiro Parish and the surrounding communities. The water is

used for domestic as well as irrigation purposes.

The Project is a typical top-down approach, using food for work strategy to draw local labour. Due to lack of community participation in project planning, no provisions for livestock watering communal water points were provided for in a community that entirely depends on livestock for their livelihood. The community therefore breaks the pipes to water their livestock.

The supply line (rising main) also passes through an elephant track leading to destruction of pipes. Had there been consultations, this could have been avoided.

The local population does not identify with the project and see it as belonging to the local parish. They therefore, depend entirely on the local parish for maintenance and management of the water system.

Values such as humility and respect for others would make the project implementers to consult with the local community at all stages of project planning and development.

- *Lack of Community involvement in Catchment Protection – Manooni Earth Dam Water Project*

The dam is located in Matiliku Division of Makueni District, Eastern Province of Kenya. It was constructed by the Machakos Integrated Development Project (MIDP) in mid-1980s and is fed from runoff during the rainy season. It serves communities in the two divisions of Matiliku and Mulala.

The two divisions are served by two branch management committees which function independently of each other. Each branch has its own revenue collection and management system with no responsibility for catchment protection. The communities within the catchment area are not served by the water and feel left out. They therefore started to encroach into the catchment by grazing their livestock within the dam perimeters. This has created tensions between them and the beneficiary communities.

Values such as sharing and equity would make the project implementers to provide water services to communities within the catchment area to avoid such conflicts.

- *Upstream-Downstream Conflict Resolution through Clan Elders – Kithiomi Mukuyuni Water Project*

The Project is located in Mbooni Division of Makueni District, Eastern Province of Kenya. It is a gravity flow system consisting of a spring from Mbooni Hills boosted by a sand dam. The gravity main

component of the project was implemented with funding from the Catholic Diocese of Machakos. The sand dam project was recently constructed with funding provided by the Community Development Trust Fund (CDTF).

It supplies water to an estimated population of 10,000 people. Water is distributed to user communities through kiosks and individual connections.

Competition between upstream communities who control the catchment and use the water for irrigation and the downstream communities who use the water for domestic purposes led to a lot of tensions. At one point, the upstream communities destroyed the water supply intake when the provincial administration banned irrigation to allow downstream communities to receive enough water.

The intervention of the provincial administration did not solve the issue until the two communities called together respected elders to resolve the matter through traditional conflict resolution mechanisms.

Opportunities For Integrating Value-Based Approaches Into Non-Formal Water Education

How can we stimulate and transform values into practical water management and conservation tools in our cities? How can we promote cultural values beyond community boundaries into the development arena? What strategies can be used to integrate and reinforce basic human values in non-formal water education?

The following strategies can be used to integrate value-based approaches into non-formal water education:

- Mounting awareness campaigns to promote values based approaches in ongoing community group activities.
- Developing a range of channels to reach a wide variety of audiences/different segments of the community. These include launching promotion activities through printed T-shirts, stickers, flyers, and labels with water conservation tips and disseminating information on values based approaches to water education through print and audio-visual media.
- Collating, disseminating and sharing of 'best practice' and 'case studies' on values based approaches to water education.
- Introducing awards to celebrate and promote achievements in values based approaches.
- Supporting values based pilot projects e.g. water recycling, storm water harnessing for toilet flushing and washing cars

Challenges

Three main challenges face the integration of values based approaches into non-formal water education in our cities. These include:

- Presenting values based approaches to water education as an essential ingredient for long-term viability of business in commerce and industry.
- Presenting values based approaches as a means of survival in inadequately served informal settlements.
- Promoting water saving initiatives among the more affluent segments of the community who can afford to waste water. Why shouldn't they misuse it when they can afford it?

Conclusion

Values based approaches to water education are critical in changing peoples' understanding of water as a key social, economic and environmental resource and to facilitate the development of a new water use ethic in African cities. *Water supply does not run dry when it is drawn from the well of human values.*

References

The Economist, "The First Commodity", March 28th - April 3rd 1992, Pg.13.

Fruhling P., *A Liquid More Valuable than Gold: On the Water Crisis in Southern Africa, Future Risks and Solutions,* 1996.

UNEP and World Bank, *Protecting Our Planet: Securing Our Future - Linkages among Global Environmental Issues and Human Needs,* November, 1998.

UNCHS(Habitat), "Water for Thirsty Cities: Is Demand Management a Solution?" *Habitat Debate,* Vol. 6, No.3, 2000

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