

## Reviewed Paper

## 32nd WEDC International Conference, Colombo, Sri Lanka, 2006

## SUSTAINABLE DEVELOPMENT OF WATER RESOURCES, WATER SUPPLY AND ENVIRONMENTAL SANITATION

**Towards Achieving the Millennium Development Goals in Water Supply & Sanitation in Sri Lanka***K L L Premanath, Sri Lanka*

*The Millennium Development Goals (MDGs) were adopted by 189 countries at the Millennium Summit held in September 2000, in New York and embodies a political commitment to work together to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women.*

*The eight MDGs agreed for accelerating global and national level economic, social and environmental development towards eradication of poverty.*

*Access to water supply and sanitation was considered essential and necessary pre-requisites for the above goals and so the goals of reducing by half the proportion of people without access to safe drinking water and sanitation by 2015 were agreed with international consensus. This Paper identifies the issues and challenges to achieve the above targets by the Sri Lanka government in collaboration with multi and bilateral aid agencies, support organizations international and local NGOs, community groups and the private sector.*

**Introduction**

THE Millennium Development Goals (MDGs) were adopted by 189 countries at the Millennium Summit held in September 2000, in New York and embodies a political commitment to work together to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women.

The eight MDGs agreed for accelerating global and national level economic, social and environmental development towards eradication of poverty.

Access to water supply and sanitation was considered essential and necessary pre-requisites for the above goals and so the goals of reducing by half the proportion of people without access to safe drinking water and sanitation by 2015 were agreed with international consensus. Safe water supply includes any of pipe borne water, borehole wells, protected dug wells, protected spring systems and rainwater. Basic sanitation refers to facilities which hygienically separate human excreta from human, animal and insect contact. Facilities such as water borne sewerage, septic tanks, pour flush latrines and simple or ventilated improved pit latrines are considered to be adequate. Education towards good hygienic practices of necessity would be fundamental to derive the desired benefits.

A global activity was carried out in 1999 and 2000 with international consensus, by the Water Supply & Sanitation Collaborative Council (WSSCC) to develop a Vision for

Water Supply and Sanitation for the next millennium. The activity was carried through a participatory approach which resulted in VISION 21-WATER FOR PEOPLE, a people centred approach for sustainable development. Sri Lanka participated in this activity. In addition to defining, doable goals for water supply and sanitation which was accepted subsequently by the United Nations under the Millennium Development Goals it also enunciated principles and strategies for achievement of such goals.

This Paper identifies the issues and challenges to achieve the above targets by the Sri Lanka government in collaboration with multi and bilateral aid agencies, support organizations international and local NGOs, community groups and the private sector.

**The institutional set up:**

The Ministry of Plan Implementation is responsible for monitoring, planning and progress towards achieving the MDGs.

The Ministry of Urban Development & Water Supply (UD&WS) is responsible for the policy framework for the water supply and sanitation sector and monitors policy implementation.

The National Water Supply and Drainage Board (NWSDB) with technical and management know-how and capability is the lead agency for provision of safe drinking water and sanitation facilities. With due regard to the large rural popu-

lation in Sri Lanka (70%) a Rural Water Supply Division (RWSD) was established in 2001 with responsibility for development of the policy framework for the Rural Water Supply & Sanitation sub-sector. To ensure the needed coordination, it is placed in the same Ministry as the NWSDB, namely the Ministry of Urban Development & Water Supply. The Ministry of Health through its provincial authorities is responsible for health education and provides guidance on household sanitation.

It is envisaged that, with the development of local know-how and capability that such responsibilities will be decentralized to local government authorities and community based organizations. Where feasible and appropriate the support and involvement of the private sector will be sought. NWSDB will continue as a facilitator and technical support entity.

The government has promoted participatory decision making and management approaches through community beneficiary involvement. They include capital contributions by way of cash and labour while promoting responsibility for management of the water supply facility by Community Based Organizations (CBOs) including operation and maintenance of the facility. At present CBO strengthening programmes are being developed and implemented by the NWSDB and the RWSD with the help of key stakeholders. The CBOs are empowered to manage the water supply facilities through an Agreement signed with Local authorities.

A Public Utilities Commission (PUC) has been set-up by the parliament and it includes regulation of the water supply and waste water sector. Necessary legislation to be approved by the Parliament to have provision for regulation.

### **Present status, issues and challenges: Coverage**

The total number of families that do not have access to safe drinking water and adequate sanitation facilities is not accurately known. The best estimates available are about 74% for water supply and about 76% for sanitation. This level compares well with the status in the developing world including Asia. Further disaggregating is necessary into income groups and locations in order to better focus priorities. The absence of reliable up to date data and disaggregated information for planning and for impact monitoring is a major problem in developing effective strategies to improve the programmes and projects designed for meeting the MDGs and this issue requires early focused attention.

### **Coordination and Accountability**

There have been parallel development programmes implemented by NGOs, CBOs and the government agencies. However, there has been no coordination to derive optimum benefits of such efforts and resources. The result has been haphazard selection of priority areas, uncoordinated planning and execution, adoption of different policies and standards and poor accounting and monitoring. It is therefore imperative to develop strategies for better communication, collaboration and accountability.

### **Awareness Raising and Advocacy**

Many families may not consider sanitation as a priority subject due to limited knowledge of the adverse impacts of poor hygiene and long term undesirable habits. Educational programmes strategically focused on high impact groups require to be developed and carried out. A bench mark survey on both the water supply and sanitation status needs to be carried out as a matter of priority and the results analyzed. The Ministry of Health with its geographic presence in the country in addition to its interests has commenced on such an activity but needs further support. The survey needs to be repeated after well designed educational and awareness raising campaigns have been carried out addressing the attitudinal and behavioural changes required.

### **Financing Strategy**

The Financing model for water supply and sanitation currently in practice is as follows:

Loan/Grant ratios at present in Government financial support for capital expenditure, are a 50/50 sharing for municipal and urban councils and a 15/85 sharing for Pradeshiya Sabhas (PSs), respectively. However, pipe borne sewerage receives a 100 percent grant from the Government.

In the rural sector, a community contribution for water supply is at 20 percent for water supplies and 50 percent for sanitation. The balance capital cost is provided by the Government as a grant.

In recovering costs through tariffs, the following strategies are being followed:

- a. Urban Water Supply (Urban defined as communities with populations over 6000), tariffs are to cover operation and maintenance (O&M) costs including overheads plus the greater of debt service or depreciation.
- b. Rural Water Supply (Rural defined as communities with populations less than 6000), tariffs are to cover O&M costs including overheads.
- c. Pipe-borne sewerage tariffs are to meet O&M costs including overheads, charges being based on the volume of water consumed.

Local Authorities and CBOs adopt their own tariff structures for systems managed by them.

### **Investment Need**

Prioritizing and allocating of resources based on socio economic criteria to ensure the equitable distribution of investment across the country through developing an investment programme based on public and private investment.

Strategies that may be considered are:

- a. Investment in the sector shall be based on the factors such as population density, demand for water, per capita investment, health impacts, coverage levels, socio-economic factors, and the selection of appropriate technologies.
- b. Service Provider shall prioritize their investments with the investment program developed.
- c. Infrastructure development in water and sanitation sec-

tor shall be undertaken in an integrated and sustainable manner through coordination among all tiers of local government, NGO, private sector and other in secondary towns and rural areas.

- d. A demand driven approach shall be applied to ensure the investments are desired by the community and are affordable.

### **Source Protection and Water Conservation & Allocation**

Adopt a holistic approach for source protection and water conservation to ensure a concerted effort including required investments to regenerate, protect drinking water resources, prevent pollution, ensure adequate supply, encouraging the conservation, reclamation and reuse of water and minimize the impact of wastewater discharges on the environment.

#### **Strategies:**

- a. Water demand management programs shall be implemented by service providers including programs that educate consumers and make them aware about water conservation and water saving techniques and ensure application of these techniques.
- b. In times of water scarcity, drinking water allocation will have priority over other uses.
- c. The reuse and re-processing of water and use of alternative water sources for non-consumptive purposes shall be encouraged
- d. Government agencies, service providers, and any person shall cooperate and participate in programs to protect drinking water sources and reduce the impact of wastewater discharges to inland and coastal waters.
- e. Promotion of various technology options specifically targeting the needs of different areas and community groups.

### **Low Income Settlements & Marginalized Groups**

The marginalized groups mostly the poor, are present both in rural and urban environments. Specific Strategies have to be developed to meet their needs.

There are wide variations in access to water supply and sanitation in specific locations particularly in urban low income settlements, remote rural villages and the estate settlements. Their needs have been met only partially.

The rural groups are scattered around the country. Low population densities make piped systems for such groups non-viable financially. The water quality and quantity variations create an additional issue. Therefore, provision of services to them needs special strategies.

Recently the government adopted a policy to develop public-private-community partnerships for water supply projects that extends to low income urban settlements. Pursuant on which, NWSDB activated suitable strategies to bring in small scale private sector firms to invest in water supply schemes under a UN-ESCAP funded pilot project. Depending on the success of the pilot project it is planned to replicate this

model elsewhere. The objective is to reduce non-revenue water while providing an adequate quantity of treated water at affordable rates for individual households.

### **Conflict Affected Areas**

The water supply and sanitation requirements of conflict affected areas in the North and Eastern provinces have not been met due to difficulties of access, shortage of manpower resources and difficulties in channelling funds as needed. Special programmes for the conflict affected areas are a necessity.

### **Gender Mainstreaming**

Gender analysis and gender equity must be embodied in the constitutions of CBOs in order to ensure demand responsiveness, rights of access and sustainability. Educational programmes on sanitation and hygiene targeted particularly to women and children may produce greater results. School sanitation with separate toilets for girls and boys should be conscientiously pursued to ensure adequate education of girls.

### **Capacity Building & Training**

Capacity building of communities both in the urban and rural sectors to meet enhanced empowerment in addition to extension and regulatory agencies of the government have become a priority need. Technical assistance and technology transfer, research and training, education on hygiene, accounting and accountability, cost saving, credit support arrangements, awareness raising and advocacy all require review and strengthening. Their capacity to help would be further strengthened through networking, locally, regionally and globally, with similar resource centres.

### **Sustainability Issues**

Facilities installed and services provided need to retain their economic value and quality over a sustained period of time determined at the time of planning and design. Regrettably the experience is that many of the systems installed have not met that criteria of sustainability due to a host of reasons. These have been one or many of the following:

- Planning without adequate consultation with the recipients and key stakeholders
- Inadequate attention to water resource adequacy and protection
- Selection of size and technology not locally manageable or affordable
- Institutional and management weaknesses
- Inadequate consideration to financial viability
- Social issues not adequately considered

Future planning and management of water supplies and sanitation demand high priority to consideration of sustainability in all its ramifications.

### **The proposed action plan**

The global scenario and global targets for MDGs have to be translated to the Sri Lankan situation. To facilitate this exercise, it is recommended to initially prepare an Inter-Agency Plan to implement MDGs in Sri Lanka. Involvement of all relevant actors and stakeholders is necessary for this planning activity.

The Government of Sri Lanka has a commitment to report progress to the UN on a periodic basis on activities related to the different MDGs.

---

### **Contact address**

K L L Premanath,  
Additional General Manager, National Water Supply &  
Drainage Board, P O Box 14, Mt. Lavinia, Sri Lanka.

---