Title: Sustainability of Community Managed Water Supply schemes
Towards Achieving MDG in Water Supply in Sri Lanka

Authors
W. B. G. Fernando, Deputy General Manager, National Water Supply and Drainage Board, Sri Lanka, agmrural@gmail.com, +94777489660
www.waterboard.lk

Abstract/Summary
Sri Lanka has safe drinking water coverage of about 80% by year 2010 as per latest statistics. While 32% of people have access to pipe born water from large and medium scale water supply schemes, about 8% of population depend on community managed small scale rural water supply schemes (RWSS) for their water needs. At present there are more than 3600 such schemes in the country. At the initial stages attention was only paid to the construction of schemes. Sustainability was not a matter of concern. As a result many RWSS are facing severe problems which may finally lead to a total collapse of them. As the country is heading for achieving millennium development goals in water supply, the contribution from RWSS is very remarkable. Hence ensuring the sustainability of them has become a great need. This paper describes challenges faced by RWSS and remedial measures already been adopted in order to mitigate them.

Introduction
Sri Lanka is a tropical country in the Indian Ocean extending about 64000 Square Kilometres. Its current population is about 19.6 million and there are four main ethnic groups in the country namely Sinhahalese, Tamils, Muslims and Burghers. Sri Lanka got independence from Great Britain in 1948 and became a republic in 1972. The constitution was again changed in 1978 and since then the country is governed by an executive president with a parliament elected through a proportional system of voting. Administratively country has been divided into 9 provinces and 25 districts. Second largest ethnic group, the Tamils are 22% of the population and majority of them live in Northern and Eastern provinces of the country. Sri Lanka was undergoing an unsettled situation during the last two decades due to prolong fighting between Sri Lanka Armed forces and Tamil rebels and the situation became normal only in year 2009. Sri Lanka is a developing country having a per capita income of about us $ 1980. It has a high literacy rate (92%) and better health services compared with other countries in the South Asian region.

Present Status of Water Supply
As per the WHO-UNICEF JMP Sri Lanka has safe water supply coverage of 80% including 40% of the population who have access to water through piped schemes. These schemes are basically of three types. There is about 315 large and medium scale water supply schemes (WSS) managed by National Water Supply & Drainage Board (NWSDB), the leading government organization for supply of pipe born water. There are about 20 water schemes managed by respective local authorities. In addition to them there are about 3600 small scale rural water supply schemes (RWSS), which predominantly managed by used communities through Community Based Organizations (CBO). These schemes have been constructed by governmental and non governmental organization with or without the contribution of users through a period of more than four decades.

Challenges faced by RWSS
Many CBO are facing a series of difficulties today due to the problems spread within a large range. Their major problems may be summarized as follows.
1. Increasing cost of operation
2. Inadequate income to operate the RWSS effectively and efficiently
3. Supply issues related with quality and quantity of water  
4. Poor management, specially in the areas of financial management  
5. Deteriorating interest from the users  
6. Threats from near by large scale WSS  
7. Labour issues  
8. Inadequate assistance from governmental organization  
9. Lack of acceptance in the society  
10. Difficulty in dealing with for urgent financial needs

Many CBO are facing one or few problems of above. As a result they are running RWSS with many hardships and some CBO have already collapsed disrupting the facilities enjoyed by user communities. Hence the sustainability of RWSS is at a threat.

**Significance of sustainability**
Long term sustainability of RWSS is of paramount important due to a series of reasons as follows.

1. People will loose facilities enjoyed at present.
2. The government or non governmental organizations have invested a large sum of money for facilities constructed. This investment has to be secured.
3. In many cases users have contributed for construction by cash or labour. That also has to be protected.
4. If facilities are collapsed, government will have to spend again large sum of money for new constructions.
5. Financial burden on NWSDB will be further intensified which at present runs many small WSS at a loss, if more new schemes are to be constructed.
6. People will loose the confidence on community managed systems, which will affect similar future projects as well.

**Steps taken for sustainability**
NWSDB, being the leading government body responsible for providing safe drinking water for the people of Sri Lanka, has clearly understood this situation. NWSDB has proposed a series of steps to be taken in order to ensure the sustainability. While some of these steps have already been taken, actions have been initiated to launch the other steps. In this process the assistance and participation of many sector players have been requested and obtained.

Major steps proposed by NWSDB are as follows.

1. Establishment of Rural Water Supply units
2. Upgrading of laboratory facilities
3. Amending the act of NWSDB
4. Enactment of By laws
5. Establishment of Community Development fund
6. Establishment of water quality surveillance system
7. Strengthening of coordination mechanism

**Establishment of Rural Water Supply Units**
NWSDB presently manages a large number of WSS throughout the island. It has a well established office and administrative system for this purpose. Generally one or few districts come under a Manager, who is a well qualified and experienced water Engineer. He is assisted by professionals of various disciplines for the smooth operations of various functions. NWSDB has already decided in year 2009 to establish small units known as “Rural water Supply Unit (RWSU) for each district under the respective Manager. This unit will function as the resource centre for CBO who runs RWSS in the district. Major functions of RWSU will include but not limited to,

1. Visit CBOS regularly and provide guidance and assistance
2. Arrange assistance for major brake downs
3. Provide technical assistance
4. Train the employees of CBOS
5. Aware and ensure that CBOS will have regular annual general meetings and annual audits
6. Provide facilities for water quality testing

Cadre and budget for RWSU have been provided by NWSDB. Their services will generally be free except for certain instances where a minimal charge is levied. NWSDB had already established 17 units out of 25 districts in Sri Lanka and expects to establish balance units before the end of year 2011.

Upgrading of Laboratory facilities
Not like in older days, concern about water quality is high even in rural communities now. Therefore there is a need to test water quality of RWSS regularly. Generally CBOS have been instructed to test bacteriological quality at least once a month and chemical quality at least once in six months. However unavailability of adequate laboratory facilities hinders this objective. Therefore Board has taken steps to strengthen the existing laboratories while new laboratories will be set up in required districts. Having understood the importance of this issue UNICEF has agreed to provide financial assistance for this task.

Amending the NWSDB Act
At present CBOS manage RWSS constructed by governmental and non governmental organization with or without their assistance. These facilities then have been handed over to CBOS to operate and manage. However the legality of this process is not clear. In 1974, NWSDB has been established by an act passed by the parliament of Sri Lanka. The authority of CBOS to supply water for the public is not clearly mentioned in the act. Hence there is a requirement to amend the act of Board so that other parties including CBOS can provide water and charge for same.

Enactment of by laws
According to the constitution of Sri Lanka, Pradesiya Sabha (PS- Village Council) is the lowest level administration unit in Sri Lanka and they have the responsibility of providing water and sanitation facilities. However major WSS could be implemented by NWSDB. Many RWSS run by CBOS are in areas coming under the purview of PS. Hence it has been felt that a certain level of authority should be provided to PS, so that they can monitor and assist CBOS. On the other hand this will enhance the legal footing of CBOS. Therefore actions are being taken to introduce by laws through PS to address this issue.

Establishment of Community Development fund
As many CBOS charge their consumers mainly to cover their operation and maintenance cost, they do not have sufficient funds to face an emergency. As the assets are also not owned by them, they cannot get financial assistance from banking sector. In order to address this issue Board has taken steps to establish a Community Development Fund (CDF) in each province. A methodology to raise the initial capital for the fund has also been worked out. Then CBOS can get a loan at very concessionary rates in an emergency.

Establishment of water quality surveillance system
Board is in the process of establishing a water quality surveillance system for the entire island with the help of Ministry of Health. Under this programme water quality of RWSS will also be monitored. This will help CBOS to more aware about the quality aspects and take appropriate actions if necessary.

Strengthening of coordination mechanism
The Board has understood that a better coordination of all agencies in village level is required for smooth operation of RWSS. Therefore a provincial level coordinating mechanism will be established
in each province. Problems of CBOS will be discussed and solutions could be found at this forum. This coordination mechanism is already in operation in certain province and will be established in all other provinces by end of this year.

**Progress achieved so far**
NWSDB has already established RWS units in 17 districts up to now. Board intends to establish the balance before the end of this year. Enactment of necessary legal procedures for passing of by laws, establishment of Community development fund and amendments to the Board act are also going ahead but the progress is low due to the inherent delays in legal systems. Staff attached to units is very keen about their mission and hence encouraging results can be expected very early.

**Challenges encountered in the process**
Despite the interest taken by parties involved there are several challenges to be faced. Very low political commitment has become a major challenge. Low acceptance in the society including sector holders is a also major challenge. Several awareness programmes were conducted to address this issue. CBOS, who are facing quality and quantity issues with respect to their RWSS, expects quick relief for their problems. However units are not in a position to help them immediately. Non availability of data is also become a challenge. As tangible results cannot be seen, CBOS are reluctance to accept the need of RWS units

**Conclusions and Recommendations**
RWSS plays a major role in providing safe drinking water especially to the people living in rural areas. As provision of water by large or medium scale WSS is limited due to number of reasons, contribution from RWSS is very valuable. In this context sustainability of RWSS is very important. NWSDB with its extensive experience in the rural water sector has clearly understood the needs of RWSS for sustainability. It is expected that steps described above will ensure the sustainability of RWSS towards achieving Millennium Development Goals in Sri Lanka on time.

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**Contact Details**
Name of Lead Author: W. B. G. Fernando
Email: agmrural@gmail.com
Name of Second Author: 
Email: