# SUSTAINABLE ENVIRONMENTAL SANITATION AND WATER SERVICES

## Water Tariff Regulatory Commission a Need of the Hour

Shrinivas Prasad, India



#### Introduction

Any discussion on Water Tariff Management is always questionable as with this the policy/ decision makers are bound to take certain decisions which will be having direct impact on the consumers.

For many years it has been a belief that the consumers from the Countries like India are for the free distribution of this essential commodity. However in reality it is not the case. If any consumer is supplied water having adequate quality and quantity then he will happily contribute towards the sustainability of the system. But due to constraints of resources or lack of foresightedness among the policy makers this sector is highly neglected, or in terms of the speech of the former Hon. Minister of Government of India for Rural Development, "Many water supply systems installed are either not functioning properly or defunct and people are not satisfied with overall ground realities in the drinking water supply sector. Why this is happing? Reasons could be (i) Increase in population (ii) Increase in number of habitations (iii) Systems having outlived their life span (iv) Sources going dry due to depletion of ground water level and (v) The sources becoming quality affected.

But the main reason is that till recent past we have been laying more stress on mere coverage of habitations and paying little attention to the Ownership, Operation and Maintenance (OO&M) of the assets already created."(1).

## Historical background

If we go back to ancient history and study the role of the rulers of erstwhile states like Bhopal (now the capital of Madhya Pradesh state in India) in the augmentation of the drinking water facilities in Bhopal is quite well known as her Highness Nawab Qudsia Begum built a waterworks under European superintendence at a cost of six lakh Rupees and that was the first water tank which distributed water in every part of the city in Bhopal. (2)

In her Taj-ud-iqbal, Nawab Shah Jahan Begum had written that the inhabitants of the Northern suburb of Bhopal had to go a great distance to fetch water. Therefore in the year 1286 AH (1896 AD) a long and massive dam of stone was built near Idgah, to the north of Bhopal, where the rain water collected form the

neighboring hills, and the reservoir thus formed, received the name of Shah Jahan. (3)

Under the head of public works, the extension of the water supply was also included and the Regent Nawab Qudsia Begum at her own cost cited the original waterworks, they were still in use during the reign of Nawab Sultan Jahan Begum. But owing to the growth of the population in the city much more water supply was needed; to fulfill the need, Her Highness installed two new pumping engines; one for supply water to Ahmedabad, and the other at Karbala to supply that portion of the city which laid without the Imami gate, and the adjacent parts of Shahjanabad. (4)

# Accounting to her account.

A new boiler was urgently required for the engine at the waterworks, and my officials were almost unanimously of the opinion that a water tax should be levied to defray the cost. Mr. Cook, the engineer, who had spent nearly forty years in the service of the State, and well knew of my financial difficulties, had also urged the imposition of a water tax on the ground that similar taxes were levied elsewhere in the country. I could not see my way to accept the proposal and gave orders for the State funds to bear the cost, which amounted to thirty five thousand Rupees (5).

The above paragraph clearly narrates the thinking of our society towards the conservation and management and ownership of water resources with due emphasis towards the contribution of user in the society and concern towards the tariff realization and the subsidy thereof provided by State due to one or other compulsion during those days too. Similarly the story of a Bhisti (water man) being awarded by King Babar with a Gold Coin during his transit across the desert is well known to everybody. The role of Bhisti and consumer paying towards the door-to-door delivery of water was a regular feature of our Society.

## Current scenario

Then why now the consumers are blamed towards the non co-operative attitude for water tariff? As stated above the main reasons are:

- (1) Inadequate water supply
- (2) Water supply of poor quality

- (3) Poor infrastructure planning
- (4) Bad tariff management
- (5) Political compulsions
- (6) Monopolistic attitude of service provider
- (7) Lack of regulatory authority

If the projects are not conceived in the right earnest way, then the future deliveryof benefits will be definitely having problems or even it may abort.

For any good water tariff management a comprehensive study has to be made towards the cost of production of potable water, cost towards the sustainability of the system and cost towards the recovery of capital investment in a comprehensively phased manner.

S. No	Year	Cost inflation indices Base 1981-82 as 100	Per unit electrical charges in Rupees		½ inch Domestic connection Water tariff per month in Rupees
1	1990-1991	182	0.48	2500	12
2	1991-1992	199	0.48	2700	12
3	1992-1993	223	0.66	2700	12
3 4 5	1993-1994	244	0.66	3000	15
5	1994-1995	259	1.10	3000	15
6	1995-1996	281	1.19	8000	15
7	1996-1997	305	1.19	8000	30
8	1997-1998	331	1.19	8000	60
9	1998-1999	351	1.31	5000	60
10	1999-2000	389	1.38	7500	60
11	2000-2001	406	1.69	7500	150
12	2001-2002	426	1.74	7500	150

#### Case study

If we analyze the typical revision of water tariff of a city like Bhopal we can see from the following table that The revision of water tariff was not there for a long period and suddenly the tariff were revised/raised by five times in the year 1997-1998 and once again during a short span of three years the tariff was once again raised to Rupees 150/- per month per 1/2" domestic connection. In comparison to this we can see the escalation in the price index, power tariff and rise in cost of chemicals for water treatment, we can see that they have increased steadily during the successive years and we have miserably failed to co-relate the things, which has resulted in a wide gap between the water production cost and water tariff realized which was approximately 500% subsidized during 1990-1991 and this gap existed for quite a long period, and in spite of revising it manifold in successive years still a big gap between resources spent and revenue realized continues. Due to this no logical

expansion of the city water supply arrangement could be made for want of financial resources and realistic forecasted Water tariff that appears to be quite high now.

## Implementation of logically justified water tariff

(1) For many years it is being debated that, for having a price based system in water supply sector, the system needs a thorough revision, the water tariff realized should not only be sufficient to cover the operation and maintenance cost but should compel the user to think about this economic good and value based commodity.

The implementation of flat tariff has given more stress on the number of users and due to this the water managers and users have become quite careless towards the volume of water generated and consumed. Therefore the realization of water tariff shall have to be implemented in terms of its quantitative consumption by the user.

(2) At present the drinking water supply system is giving a huge subsidy towards the tariff, and if the production cost is considered then the water tariff will have to be revised manifold and this will have high impact on the economically weaker sections of the society.

Therefore instead of revising the tariff flatly across the entire system area it will be better to rationalize the water tariff according to the standards of living or annual income of the consumer. By doing this, we should ensure that the society is contributing something for the sustainability of the system. The consumer may be encouraged to have his own role in the management of day to day operation of the public stand posts, collection of a minimum tariff (instead of supplying free) keeping the area clean and ensuring that no unwanted loss to the system is there. The sanitation aspect will not only keep the environment clean but will also encourage others to follow the lead role.

- (3) The water tariff should be such that it should convey the importance and value of the commodity and should encourage user towards its saving while consuming. The tariff available should not only contribute towards operation and maintenance of the system but a part of capital invested should also be recovered.
- (4) The water supply projects are to be self-financed. At present the cost benefit ratio is based on indirect benefit and generally these benefits are rarely passed

on directly to the projects. Therefore the word Self-Financing needs to be defined. As the overall economic condition of the society is a vital indicator for the water tariff management therefore it divides the water tariff and economic benefits.

Therefore to have a value based assessment of the water tariff during successive period the creation of "Water Tariff Regulatory Commission (WTRC)" is a must. To achieve this goal in reality a sincere and earnest approach is to be made. Simultaneously the user's satisfaction in terms of quantity and quality must be ensured. A proper co-relation of water tariff through surface and sub surface source will have to be ensured simultaneously.

(5) Our main object should remain as sustainability of the systems and services, and proper satisfaction with peoples participation, ownership and operation and maintenance of the system

# Objectives of WTRC

The objectives of the WTRC for water supply sector would be

- (1) To protect consumers from likely abuse by the service providers due to the monopolistic character of the sector.
- (2) To bring transparency, accountability and consumer orientation among the sectoral institutions.
- (3) To promote economic efficiency in this sector.
- (4) To regulate existing local bodies and new service providers.
- (5) To determine responsibility of tariff or range of tariffs.
- (6) To crate a conducive environment for attracting viable investments.

# Level and Jurisdiction of the WTRC

Considering the existing scenario in the country, state level regulation appears to be most effective. The same has been recommended by Rekesh Mohan committee on commercialization of Infrastructure Projects (1996), the Eleventh Central Finance Commission (2000) and the Sukthankar Committee Report on Operation, Maintenance and Management of water Supply Schemes in Maharastra (2001).

# Functions and Responsibilities of the Regulatory Commission

WTRC can coordinate all these, as they will be acting as bridge in between the water managers and water users. The role of this "WTRC" will be multi-dimensional in nature, as they have to interact with the Water Resources Department for proper water resource allocation for drinking water system, State

Electricity Regulatory Commission (ERC) (as revision of Electrical Energy Charges are to play a major role), Water Treatment Chemical producing Industries, with the officials of State Public Health Engineering Department for formulation and implementation and management of water supply projects and with Local Bodies for whom the schemes are to be implemented and finally with the water user of the society.

This is really amazing that why our policy makers have still not taken a constructive decision towards this, as for the electricity sector the constitution of ERC and for Telecom sector Telecom Regulatory Commission (TRC) is already working and the benefits of these are multi-dimensional in overall prosperity of the society.

The "WTRC" will ensure that irrespective of change in Political Leadership the water tariff management will remain aloof of any consequences due to such change and will ensure that the revision of water tariff takes place Judiciously and according to need of the system.

## Conclusion

The water supply projects are gradually being opened to private investment and public participation under the sectoral reforms for implementation and future running and maintenance of water supply schemes. However, there is no regulatory framework protecting the interests of private sector investors and consumers and in particular safeguarding the interests of future generations to come as non implementation of any regulation will land society in trouble as they will say that they are to suffer due to our ancestors bad planning and lack of foresightedness for protection of consumers interests.

#### References

- (1) Author's interpretation of Speech of former Honorable Minister for Rural Development Government of India Mr. M. Venkaiah Naidu, while launching sector reforms project in Hoshangabad, Madhya Pradesh India, 27th December 2001.
- (2) History of Bhopal State by Kamla Mittal (p20-p21)
- (3) Taj –Ul-Iqbal, Pt III p 142
- (4) According to An Account of My Life by Nawab Sultan Jahan Begum, III, p131.
- (5) Taj-Ul-Iqbal, p184.
- (6) For cost indices Hand Book for tax-payers Income Tax Department assessment year 2002-2003. For Electrical tariff, cost of chemicals and water tariff from Project Division Bhopal Municipal Corporation.
- (7) Journal of Indian Water Works Association Vol. XXXIII No. 4, Oct-Dec 2001, p328.

Shrinivas Prasad Assistant Engineer in Public Health Engineering Department, Bhopal, Madhya Pradesh