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<i>Designation</i>	:	
<i>Title</i>	:	<i>Water budgeting and gender issues in drinking water supply in Chennai city</i>
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#### Background:

Potable water becomes scarce due to many factors, including population explosion, industrial development, erratic or failure of monsoon, uneven distribution of water resources and release of pollutants into river systems. The per capita requirement of water is 135 lpcd in a metropolitan city like Chennai. However it is not always met for so many reasons. Access to safe drinking water and meeting the required quantity is a problem in parts of Chennai city. The role of women becomes more crucial, as they spend more of their resources and time in collecting water for domestic uses. The Metrowater, Chennai, implements many water supply projects and initiatives to meet the demand, yet many of the people are affected by water supply issues. This generally affects the middle, lower middle and poor people of the society as they are more vulnerable in times of scarcity. In times of inadequate water supply to homes, women are more likely affected as they have to face sanitation problems, water borne diseases and even morbidity.

A study on the availability, access and gender role dimension on the status of drinking water problem, both the technical and social issues, the role of gender questions / issues in part of the Chennai city was planned. The study area chosen was the Triplicane area, in the Central part of the city adjoining the Coast.

#### Objectives:

The objectives of the study are:

- To understand the present public water distribution by Chennai Metrowater in Triplicane zone of the Chennai city.
- To assess the per capita water availability and assess the share of different uses of water in the household situation.
- To analyse if gender roles are significant in this aspect in the study area

#### Study Area:

The study area is the Triplicane area in Chennai city. The Chennai city has five divisions as regards water supply, and the Triplicane comes under the Mylapore-Triplicane division. The Triplicane has 17 sub divisions and has three sub zones where water is supplied through underground pipe lines. The division has an over head tank of 2.4 Mm<sup>3</sup> and supply an average of 12.02 mld. There are a number of transmission lines from the overhead tank in different directions and each main supplies different parts of the division. It was decided that one of the transmission main in the system, at its head, middle and tail reaches would be studied. In the selected study line, the Adam market area is in the head reach, the Triplicane high road is in the middle and the Pycrofts Road in the tail reach.

#### Research Methodology:

A stratified field sampling frame work was used for collection of data for the study. The sample size was taken as 10% and 45 households were chosen from the three reaches. The stratification considered was the economic classes of lower, middle and high earning groups. Both primary and secondary sources of data were used in the study. The primary data was obtained through field visits, visits to households, discussion with officials and administering a structured questionnaire survey. The demographic data, distribution and lay out of the water supply lines and water supply details for three years (2005 to 2007) were obtained from Metrowater and other sources.

#### Research findings:

In 2005, the average supply was 7 MLD while in 2007 it increased to 12 MLD. There were seasonal changes in the quantum of water supplied and more water was available during October – December period. The mode of supply as well as the access varied, mainly depending on the water supply situation. Water supply was comparatively more in the head reaches of the system whereas in the tail reaches, there was scarcity. Drinking water needs got the highest priority while sanitation needs were of low priority. All income groups used the public sources, especially in the normal periods of water supply and during scarce period the packaged water supply was used more by the middle and high income groups. The low income group depended more on bore wells during periods of scarce supply.

The high income group had a per capita of 300 liters in periods of normal supply and 210 during scarce periods. But the lowest realization was the low income group which got 150 liters during normal and 105 during scarce periods.

Regarding the role of gender in the drinking water, it was about 60 percent are women who fetch water for the house. The problems faced by women in getting water are mainly standing in long queue to get tanker water, walking long distance to fetch water, time spent in collecting water and the conflicts faced in times of scarce periods. The men constituted 37% while women constituted 56% who were actually involved in fetching water for the house.