

Water Crisis

If we were to fight water crisis, what should be our next step?

Step 1: Protect all water catchment areas and potential future water catchment areas. If we plan to discharge toxic material to a river, we cannot reverse this if there is an emergency. Future planning of water resources is vital. Economically planning of land-use becomes important, this falls under the state government through local councils.

Step 2: Emergency drill should be carried out in stages to all consumers. This will help to streamline information dissemination, communication barriers and consumers' preparedness. During crisis, sudden practice will be a shock and created uneasiness.

Step 3: Cross channeling of treated water in between piping network must be developed. Stand alone piping network is not a viable solution. This also falls back to planning of treatment plant. Water treatment plants should not run on full capacity, there should be reserves to accommodate fluctuation during crisis.

Step 4: Non-Revenue Water (NRW) in average for 2008 is close to 37% and 36.6% in 2009. While domestic use of treated water is high, stress from industrial water use must be catered as well. Reduction of NRW should be placed as the main Key Performance Index to Water Operators and regulator.

Step 5: Reduction of treated water wastage is another important component. Water saving gadgets such as low flow tabs, as well as dual flush system are some solutions. In addition to that, reuse of grey water (water previously used for washing vegetable or clothes) can reduce dependency towards treated water for flushing and other basic cleaning processes.

Step 6: Industries must play a vital role in reducing water consumption by adopting green technologies to reuse and recycle water. This will assist the industry to reduce its water bill as well as increase its environmental performance. Industries that move towards this must be encouraged via the green technology funding established by Ministry of Energy, Green Technology and Water.

Step 7: Utilization of hydroelectric dams as source of raw water for irrigation and water treatment must be considered. In fact, the lower level of water in a dam is not suitable for treatment. Flooding of dam causes the water quality in such areas to deteriorate due to high nutrient content. Aeration (mixing of air bubbles) has been a successful method to improve the raw water quality. This process also allows water treatment cost to be kept low.