**Water Shortage In Chennai**

Paturi Jayanth Varun

AP19110010533

Cse-H

**#rightproblem**  
**Initial State:** Chennai water crisis is associate within the progress water crisis occurring in Republic of India, most notably within the town of a town in Madras. As a result, water has stopped running, some families are attempting forward to varied water sources like distant, unreliable public water pumps, and private water tankers.  
**Goal state:** Now, our goal is to cut back the water crisis in Chennai. So, that each person in Chennai get sufficient water for his or her daily needs.  
**Key Obstacles:** After experiencing poor rainfall in last autumn’s monsoon season, Chennai’s four main reservoirs ran completely dry. The acute water shortage in one in every of the India's largest cities has been building for several years through a combination of growth, poor designing and progressively erratic monsoon rains, Over consumption, Inaction of presidency bodies.  
**Scale of the problem:** The scale of the problem is state level.  
 **#breakitdown**  
1.Over Consumption:  
 a. Increase in consumption by industries.  
 b. Increase in consumption by wealthy.  
2.Inaction of presidency bodies:  
 a. Lack of awareness.  
 b. Lack of public responsibility.  
3.Deforestation:  
 a. Leads to Drought.

**#gapanalysis**  
Gap analysis means evaluating an existing solution to the given problem and determining that whether it's sufficient or it must be modified.  
According to my research I came to know that the Chennai government spent huge sums to desalinate sea water and convey water by trains from many kilometres away and deploy an army of water trucks to people whose household taps have suddenly dry out.  
By this existing solution, we are going to bring water to Chennai but cannot reduce the consumption. So, to cut back the consumption of water government must point out some new rules until the crisis stops. The principles are:  
1. Closing all the water-based theme parks until the crisis stops.  
2. Cleaning all the encircling water sources and keeping them the most amount clean as possible.  
3. Closing a minimum of some liquor factories. Not all because it is the most source of revenue to the government.

**#constraints**  
Constraints are the requirements on the solutions; they do not determine it, but do place boundaries on what's possible. If the constraints are well defined, problems often is also solved by devising ways to satisfy all of the constraints at the identical time.  
  
Constraints faced in Chennai water crisis is that the government found a solution that to spent huge sums to desalinate sea water and convey water by trains from many kilometres away which is simply too expensive. This may be the constraint that I found.  
  
**#analogies**  
Analogies means solving a target problem by viewing the similarities or differences of the source problem.  
**Target problem-** Water crisis in Chennai, which became a main problem for the people living there.  
**Source problem-** Israel is additionally facing water crisis like Chennai. Successive years of drought from 1998–2002 had dramatically lowered water levels in all of the foremost reservoirs.

To overcome this problem Israel government came up with various solutions. They're fertigation, conservation education, leak-detection, drought-resistant seeds, waste water treatment and reuse, sea water desalination etc. Following the above solutions also, Israel continues to be facing water crisis due to successive years of drought. Compared to earlier years, now Israel is facing less water crisis.

In the target problem, government used to desalinate seawater and convey water to the people. The similarities to the target problem and source problem are desalinating sea water and bringing it to the people.  
At the present scenario Chennai is at initial stage of water crisis. By following the techniques applied by Israel government, Chennai can reduce the water crisis.

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