

Example of literature review on us water crisis and possible solutions

[Environment](#), [Water](#)



Sociology

Abstract

Keeping recent water shortages in mind, it is clear that our water resources and supply cannot be taken granted for the future. The population is expanding faster than ever and the access of clean, drinking water to the masses hasn't been this much of a problem to the authorities. If drastic action is not taken to address this impending disaster, it will soon create an acute shortage of the most basic necessity for the continuation of life, we might be facing the kind of catastrophe that the lesser fortunate parts of the worlds like Africa are facing now.

Literature Review

There has been considerable research done on this topic. Different researchers have given their views of the situation and what to do. I have selected five credible sources and one by one each will be discussed.

Jessica Yu

We all know that that water is an abundant chemical compound in the biosphere with more than two thirds of the planet covered with it. However, the consumable water is only a fraction of the total water available at 3 percent, so it is this 3 percent that has to be utilized and consumed by a growing population of 7 billion in total. The United States, though having a steady supply of water has been facing water shortages to the level of drought in over 14 states according to Yu (2012). Yu also argues that the main cause of water shortage is the violation of water laws and not being

able to replenish the water supply and storage effectively. According to Yu, there is a need to build up more water resources and plan long term to avoid potential catastrophes.

Yet, we know that there are many other problems relating to the acute water shortage in the fourteen states. Some reasons are geographical as certain terrains don't support life and are naturally short of drinking water like deserts and permanent snowy tundra. Since the water shortage is there permanently, different methods must be applied to increase the availability of water and to store it for future usage. In the deserts and coastal areas, saline water can be purified and in the tundra, the ice and snow can be melted into water. But here is where more sinister problems start to surface. The scarcity of water will definitely mean that great changes in our lifestyles is needed.

Global Warming

The climate of the world is rapidly changing due to global warming and other forms of environment degradation. The wide ranging effects of this global phenomenon is already upon us as visible changes in the temperature can be witnessed and change in the atmospheric composition can be measured. Due to this, the poles are becoming warmer and their ice caps are becoming warmer and global cycle of rain has changed significantly. The boundaries of deserts are spreading and they are becoming drier, the rivers are changing course and are in increasing danger of floods. These developments have further increased the risk of water shortage in for years to come. The fragile natural supply chain has become vulnerable than ever before.

Robert Glennon

Robert Glennon (2009) believes that when it comes to water, we throw our common sense out of the window. We consume and waste water like air and not once do we stop and think about the fragility of the water supply as mentioned earlier. Glennon further goes on to say that the water crisis is as serious as the much investigated issues of the current era like global warming and pollution. The first step to solve a problem is realization. We are short of awareness in this regard. A global awareness drive similar to that of deadly diseases must be undertaken by the WHO and other organizations in case of water as well as we all are in a particular mindset that water shortage will not become serious for another century or so. It is a fool's paradise that we are living in as experts believe that multiple unforeseen elements have increased the likeliness of water shortage and we might be facing acute global shortage in the next decade or so.

Ron Smith

We also need to realize that water shortage will have direct effect on our food supply as well. The crops and livestock that we depend on will be directly affected by the shortage of water. Ron Smith (2013) argues that the farmers have begun to grow crops that demand less quantity of water. If we can shift to water efficient crops, we might be well prepared to take on the water shortage that can result in food shortage as well. Smith further goes on to say that the

“ Plight of Southern Plains farmers — from Kansas down through Oklahoma, and into the Texas Panhandle. Some have switched crops — from a more

moisture dependent corn to a more drought tolerant milo, for instance.

Others have reduced irrigated acreage, watering half-pivot circles instead of entire spans. Some changed to operations that do not require irrigation”

(Smith, 2013, page 20, CRISIS)

Susan J. Marks

According to Susan J. Marks, the problem of US is easily visible on the map.

The amount of irrigated and cultivated land has decreased in the recent years, thus attributing to water shortage in the rest of the area. She also points out that in the short term, the main focus of our attention should be on making the supply and disposal system to be efficient and effective. She points out that more than half of the water is wasted in homes and industrial pipelines due to leakage and other reasons. We also waste water by the cusecs when we are using the valuable commodity in our lives. This needs to stop if we are to find an effective solution to the impending crisis of water shortage. In her words:

“. The governments of 36 out of 50 states told the U. S. General Accounting Office in 2003 that they are facing water shortages and expect them to continue through 2013” (Marks, 2009, Page 60, Paragraph 7)

Solutions Suggested by Researchers

Now we have to look at the solutions proposed by different people for the eradication and control of this problem. Jessica Yu believes that new filtration systems and awareness campaigns are of paramount importance in the fight water shortage in US. Although we believe that we are we are rational and object oriented people but we are not. The people need to be more aware of

this crisis and the more they know, the more they will tend to understand the gravity of the situation. As discussed before, Ron Smith says that different sectors need to start preparing plans for the immediate survival with less amount of water. The agriculture industry needs to come first as the demands of this industry are far more important and have direct link with the water availability. As water shortage increases, we need to adapt. This is what Mr. Smith believes in.

Susan J. Marks also believes in the up gradation of the water supply system and increasing the availability of fresh water. She says that the 97% water of the oceans can easily be used for consumption purposes if a suitable purification process can be made.

Discussion

There are different ways in which the water crisis can be understood and handled. The US is facing this crisis in numerous Southern States where acres of farming land has been subjected to water shortage. So the problem is widespread and will affect other fields of our interest in the coming times. The factories, human life, the flora and fauna, etc. all depend heavily on water. We need to be prepared and adapt to these challenges for the coming days. The US needs to create awareness among the public regarding the importance of water conservation and introduce tough laws to prevent it, it also needs improve the water efficiency of the distribution and storage units. The government also needs to introduce new varieties of crops that don't require too much water in order to save the farming industry. It also needs to develop ways to purify sea and waste water.

References

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