

Chinese water scarcity



**ASSIGN
BUSTER**

Abstract In my opinion, China is threatened by the fresh water scarcity problem right now. According to this, I will try to design a best way which is suitable for China to solve this issue by comparing and contrasting different countries' methods. I have collected some background information from the internet and extracted the main idea into a form. After analyzing it, I have reached a conclusion that reducing the factories which are creating pollutant into the rivers or lakes by establishing a special legal system is the most suitable way for China. This is a convenient and long-lasting project. 1.

Introduction

Table 1. 0 Solution to solve water scarcity | | Water supply | Water demand |
| Increase water supply | ^ | Same | | Decrease water demand | Same | v | |
both | ^ | v | The purpose of the research is to find the information about water scarcity and to improve the water scarcity problem in China. I choose to increase the water supply as my original solution, and I have developed a creative solution based on the original one.

As a result, the thesis of my research is to reduce the polluted water which comes from the factories is a effective way to improve the fresh water scarcity. Aquatic ecosystems cover about 70 percent of the Earth's surface. There are many kinds of animal life in the aquatic systems including microscopic zooplankton and all sizes of marine mammals. (eHow ND) 2. 0 Methodology China is now facing increasingly severe water scarcity problem, especially in the northern part of China. The character of China's water scarcity is the insufficiency of local water resources and the water quality which is decreasing because of the water pollution. Jiang 2009) Due to the increasing population and the developing of many big cities in China,

Chinese government must take action as soon as possible to improve the situation although it is a long-term task. In my opinion, the easiest way to improve this problem in a relatively short time is to establish a certain policy system so that the factories which create a lot of pollution can be reduced. This method can also save a lot of time and money. All that Chinese government has to do is just check if the local government is following the rules.

There are several data sources such as the internet, textbooks of science from last semester, and I will also collect some information and experience from other countries' methods so that I can compare them in different situation to find the most effective way. The data that I have collected has helped me a lot to analyze the problem. This includes other countries' methods to solve the issue. Then I compare them all to try to figure out which way is the most suitable for the situation in China. To sum up, the information that I got from several ways is really useful for me.

3. Findings

Table 2. Three main fresh water issues in China	
Description	Current plans
Issue #1 Wastewater pollution	Wastewater improvement project
Issue #2 Pollution of fresh water lakes	Get help from Asian Development Bank
Issue #3 Uneven distribution of fresh water	South-to-north water diversion project

Here are three main fresh water issues in China. First is about the wastewater pollution in China.

For example, Tianjin is the third largest industrial city in China. However, the whole city's drainage system and its wastewater treatment are far behind its industrial development. In order to deal with the problem, Tianjin Municipal Government has introduced a waste water improvement project, the World

Bank also provide some help for them. Also, Chao Lake is one of the five largest lakes in China which locates in Shanghai, is also damaged because of the rapid development of industry and urban areas. The Shanghai government is also try to get help from the Asian Development Bank. Min ND) Second issue is the uneven distribution of fresh water. South areas in China is facing the threaten of floods, however, there is not enough rainfall in north areas. The Chinese government has started a great project called south-to-north water diversion project since 2004. For more information about this project, see This project is still lasting until now. I believe that it will works very well to solve this problem. The third issue is about water pollution. Even in the places where the fresh water is rich, water pollution is also decreasing the fresh water supply.

So the environmentalists are trying to reduce the factories which produce a lot of wastewater into the freshwater lakes. This work would be a long-lasting project for the whole country. In my opinion, globalization has both positive and negative impacts for the water scarcity in China. First, Chinese government can get a lot of help from other countries after globalization. As I said, Tianjin and Shanghai have already got financial help from some global banks. We can also absorb other countries' experiences and methods to improve the water scarcity issues. However, there are also several disadvantages.

Some international companies would start their municipal companies in other countries. Such small companies are usually factories which would create a lot of pollution into the seas or lakes. This kind of factories harms the environment a lot. Also, globalization may have bad impacts on the

developing countries such as China. This is because that we are not strong enough to prevent the risks from happening. 4. 0 Discussion America also has water scarcity problem. For example, the Lake Mead, which supplies water for about 22 million people, will be dry by 2021.

Also, the water from Colorado River may soon be compelled to cease pumping water to other places because of its water scarcity. The main reason for this is the global warming is fastening the speed of water evaporation. The American environmentalists suggest that they can dig ponds or underwater receptacles. Fortunately, this low-tech method has already helped the farmers in China. (Snyder, ND) India is also a typical country which has very drastic water scarcity problem. This issue even has a negative impact on the whole country's food security because the farmers do not have enough water to irrigate the farmland.

India is a developing country; however, the water scarcity limits the development of agriculture. The geological environment of India includes desert, plain, and tundra, so the climate changes very fast, this situation only makes the problem worse. So the Indian government starts to use a kind of special irrigation method, drip irrigation, and it is trying to improve the water management system. (Chatterjee ND) According to the findings, I have got a conclusion that the methods to solve fresh water issues depend on different situations in different countries.

So, because China is a developing country, the industry and agriculture needs to be improved, reducing the factories which are producing pollutant can not only improve the environment, but also provide more space for other companies to develop. As I have mentioned, Chinese government has

already made a plan to solve those issues above. In my opinion, in spite of getting help from the big banks, the government can also hire some environmentalists who have a lot of experiences to design a new drainage system for the factories.

This can prevent the wastewater from flowing to the lakes or seas from its origin. I think that this research is really helpful to solve the fresh water issue. I have compared and contrast several countries which are really typical for this problem. Then I find the best way that is very suitable for China. If this plan can be adopted, I believe that it will be really effective. As I have mentioned in the introduction part, my original solution to solve the water scarcity problem is to increase water supply. Then I developed a creative solution according to the research I have done on the internet.

So I think that to reduce the factories which produce a lot of wastewater is an effective way to increase water supply. However, there are also several factors that can influence the findings. For example, the situations are different in different parts of China. Also, the geological environment is different. These are the aspects that I think may interfere with the findings.

5. 0 Conclusions and Recommendations There are some advantages that I think for my solution. First, this solution is the conclusion I have got after compare and contrast several different countries.

It is suitable for China's situation. Second, this method is easy to do, it will not cost a lot of money or need a lot of people to do it. These are the reasons that I think Chinese government would adopt this solution. If the solution can be adopted, the government should make some special policies or laws to restrict the factories to prevent them from creating much pollution. Second,

the government should let some people to go to all the industrial cities to check if the factories are following the rules.

Then they should check the quality of water once a month so the environmentalists can know if the situation is improving. Reference Jiang, Y (2010), Water Scarcity - China, the encyclopedia of Earth , [online] Available at: http://www.eoearth.org/article/Water_scarcity_-_China [Accessed 10 March, 2013] Gast, C (ND), Definition of an aquatic ecosystem, [online] Available at: http://www.ehow.com/about_6307480_definition-aquatic-ecosystem.html [Accessed 10 March, 2013] Min, K (ND), Water Pollution in China, ScienceCentral.com, [online] Available at: <http://darwin.bio.ci.edu/~sustain/suscoasts/krismin.html> [Accessed 10 March, 2013] Chatterjee, S, (ND), The battle of water - India's food insecurity compounded by water scarcity, [online] Available at: <http://www.trust.org/alertnet/blogs/the-battle-for-water/indias-food-insecurity-compounded-by-water-scarcity> [Accessed 10 March, 2013] Snyder, S, (ND), Water Scarcity - The U. S. connection, the Water Project, [online] Available at: http://thewaterproject.org/water_scarcity_in_us.asp [Accessed 10 March, 2013] Appendices Picture 3.0 South-to-north water diversion project in China