China Might not be in Short of Water

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I Guarantee the Water Supply for Beijing, Ensure Success for the Olympics Bidding

- In 1999, guided by new concept of human beings in harmony with nature, prof. Wu Jisong presided *The 21st Century Forepart Beijing Water Resources Sustainable Utilization Programming* for Beijing and the upriver system. The plan was stated to International Olympic Committee (IOC), and the guarantee for Beijing’s water supply was approved internationally, which made contributions to success for the Olympics bidding.

The exciting moment after members of Chinese Olympics bidding committee heard the news of success for 2008 Olympics bidding
II China might not be in shortage of water

Current situation:

- The water shortage volume in normal year for China is near 40 billion m³. 23 million people have difficult to approach drinking water in rural area, and the water shortage volume for agriculture irrigation is about 30 trillion m³;
- More than 400 out of 600 cities are short of water, among them, nearly 110 cities are seriously short, the whole volume for city’s water short per year is 6 trillion m³;
- The industrial water shortage is 4 trillion m³;

The way to solve these problems: bearing new concept of human beings in harmony with nature, implement recycle economy, and build the resource-saving oriented society
China might not be in shortage of water

1. *To resolve the agriculture water shortage by increasing irrigation efficiency*

- The effective utility coefficient of irrigation is 0.43 in China. If we can increase the coefficient to 0.6, we can save 49.4 billion ton of water every year.
- The coefficient is schemed to reach 0.5 in 2010, and 0.6 in 2020. If we increase the input, it is possible for the coefficient to reach 0.6 in 2015. Then the saving water can supply the demand.
2. To resolve the industrial water shortage by increasing reuse efficiency and saving technology

- If the rate of water re-utilization increases from 50% to 70%, 22 billion m³ of water can be saved every year.

- The development and application of industrial water saving technology can save 5 billion m³ of water every year, and the total water saving capability can reach 27 billion m³ of water every year, which will meet water demand by the end of 2015.

3. To resolve the life water shortage by decreasing the pipe loss rate and raising the water price

- **decreasing the pipe loss rate** - The pipe loss rate is more than 16% in China. The life water consumption is 32 billion m³, and the pipe loss is 5.1 billion m³. Especially it is fine quality water. If the loss rate can be controlled below 10%, 2 billion m³ of water can be saved.

- **raising the water price** - The average domestic water consumption volume in Chinese cities decrease from 60 m³/per•year to 50 m³/per•year
4. To resolve the city environment water shortage by the middle water reuse

- The industrial and life sewage was 40 billion tons in 2002. The schemed rate of treatment of sewage is more than 40% and the rate of water re-usage is 30%, nearly 4 billion m$^3$ of water can be re-used in 2010. It completely meets the increase water demand in environment.

5. The other measures

- Saving food
- seawater desalination

11th Five-year Plan for National Economic and Social Development has make the scientific indexes for water resources utilization.
III Restore the ecosystem of China

- Construct the ecosystem of China under the concept of new recycle economics, and create nature fortune.

1. Re-dispatching of the Yellow River
   - Prof. Wu Jisong has put forward the concept of “ecological water”, and presided the project of the re-dispatching of the Yellow River, which has made the Yellow River not run dry from 1999 after it had been dry for 20 years.
2. “A green tune”

➢ Prof. Wu Jisong presided to make the plans of *The 21st Century Forepart Beijing Water Resources Sustainable Utilization Programming (2001-2005)*, *Short Term Improvement Planning the Hei River Basin, Programming of the Tarim River*, which has restored the ecosystem of these regions, and the above three plans and re-dispatching of the Yellow River was praised as “a green tune” by the former Premier Zhu Rongji.
Thank you!