

The Country's Most Strict Groundwater Management System

中国の最も制限された地下水管理システム

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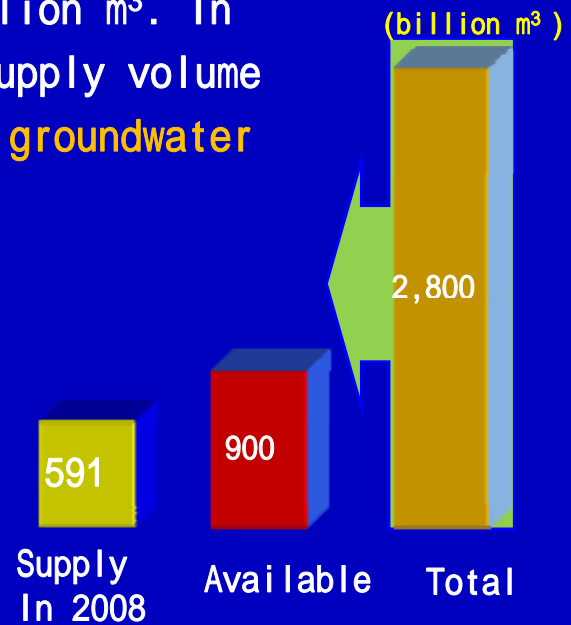
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Groundwater resources in China

中国の地下水資源

China enjoys the total volume of water resources at about 2,800 billion m³. In year 2008, the total water supply volume reached 591 billion m³, where **groundwater contributes about 18.3%**.



➤ about 40% of agricultural land relies on groundwater for irrigation

➤ nearly 60% cities relies on groundwater being the sources of water supply

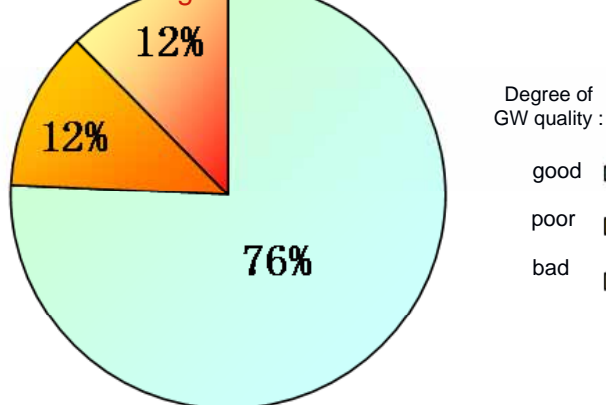


Critical issue induced by the continuous large groundwater extraction:

継続的かつ大規模な地下水くみ上げに起因する深刻な問題

- ◆ continuous regional decreasing of groundwater level
- ◆ pollution to groundwater, etc

Percentage area of GW contamination

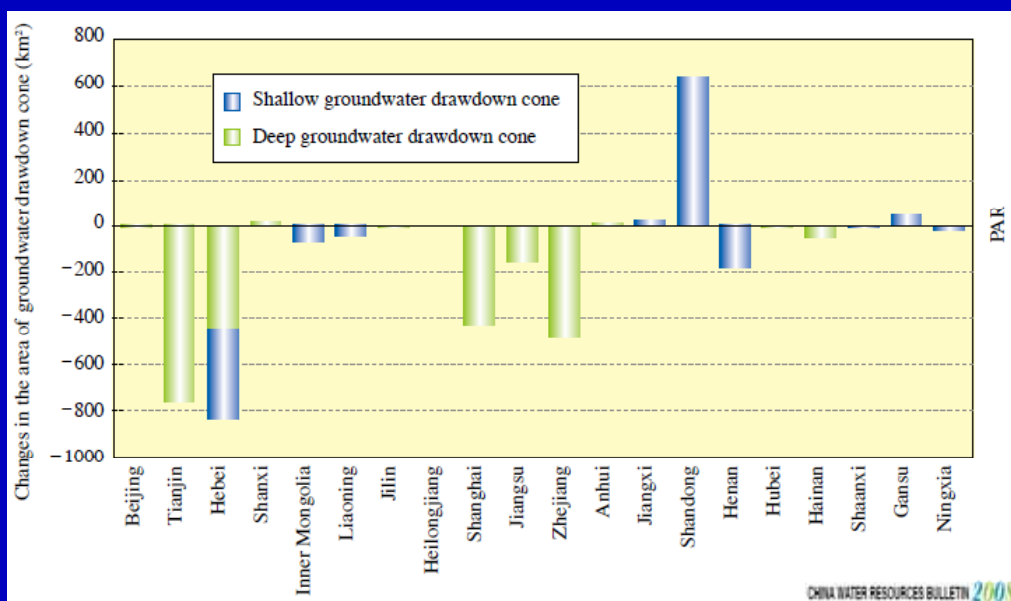


Pollution from Agricultural activities



Changes in the area of groundwater drawdown cones in part of PARs, 2008

地下水位の低下（2008年）



2. The most strict GW management

最も制限された地下水管理

- Establishment of “the most strict water resources management system” was initiated in 2009 by the Ministry of Water Resources.

It is the country's interests to implement the most strict water resources management system. --- vice premier

It is necessary to specify water consumption bottom lines of quantity, quality & pollution. --- water minister

实行最严格水资源管理制度
工作方案
The most strict water resources management system work plan
水利部水资源司
二〇一〇年三月
Ministry of Water Resources

- The system outlined the key indices of water consumption “bottom lines” of volume, efficiency and pollution.



Quantity Control
(max. volume consumption)



Quality Control
(prohibited external contamination)



Efficiency Control
(recycle and water-saving)

➤ Key points for groundwater 地下水の重要ポイント

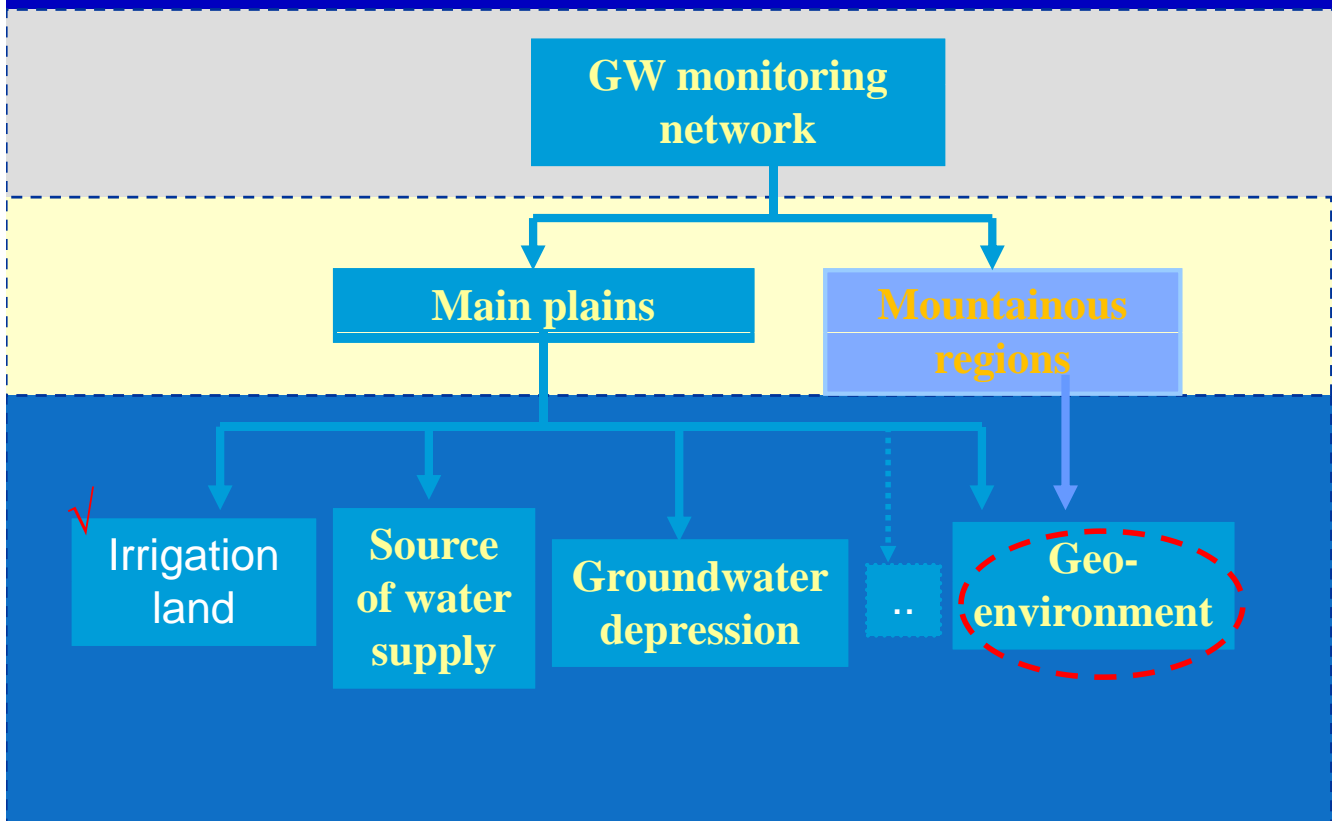
Based on groundwater availability, regions are divided as different function areas of exploitation, reservation & protection

Groundwater extraction is limited to those bottom lines for different regions divided

For those areas where groundwater are heavily overexploited, pumping wells are closed down to stop further extraction of groundwater

Government's performance is evaluated annually on whether the bottom lines (e.g. min water level) are broken

The system is implemented based on monitoring モニタリングに基づき実施される管理システム



3. Expectations 期待される成果

- Restoration of groundwater levels
- Reduced contamination to groundwater
- Improved water utilization efficiency
- Rational water allocation by integrating surface water and groundwater

To achieve above goals, more need to do on policy, management technique, education & advocacy, public participation...

Thank you for your attention

Arigato gozaimasu !