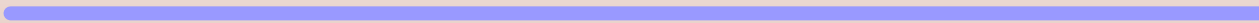




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The status of standardization of water resource utilization in China

Jin Minghong Ph. D.

China National Institute of Standardization

2004.8



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MAIN POINTS

- **Current status of utilization of water resource in China**
- **Current status of standardization of water resource utilization in China**
- **Suggestions on promoting the standardization of water resource utilization**

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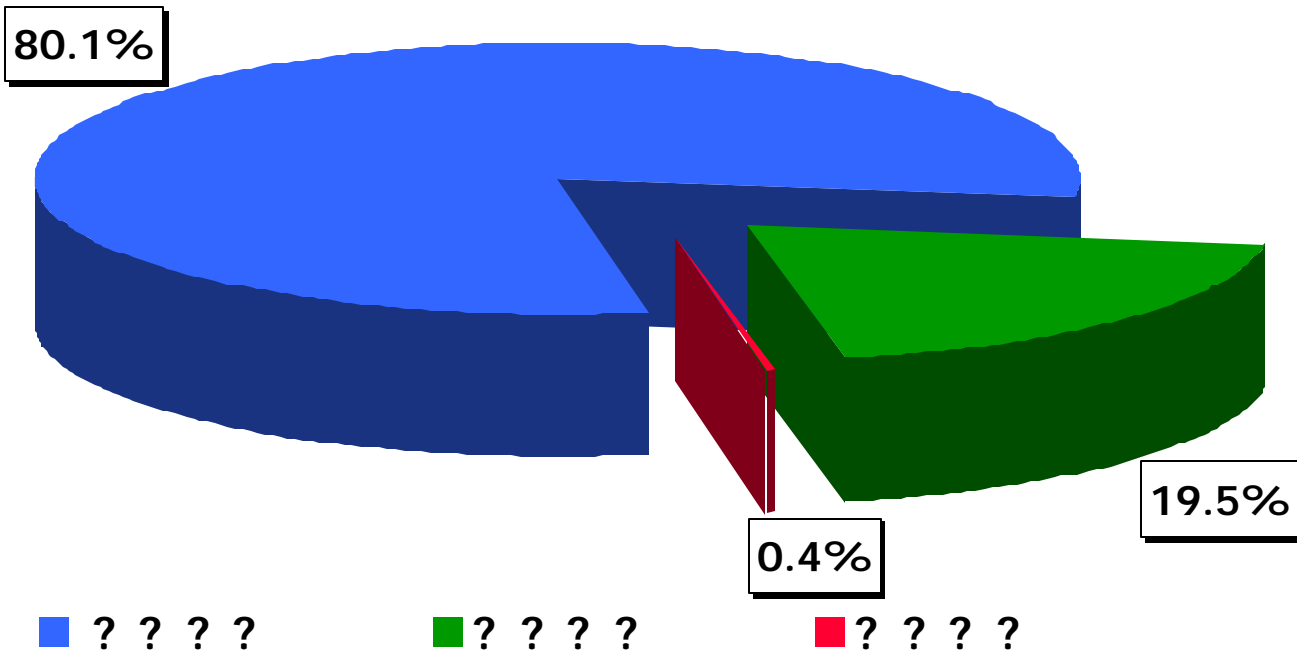
- ? ? ? ? ? ? ? ? 2.8? ? ? ? ? ;
- ? ? ? ? ? ? ? ? 2220? ? ? ;
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water resource in China

- **China's total water resource is about 2800 billion m³;**
- **Water resource per capita is about 2220 m³, only 1/4 of the international level.**

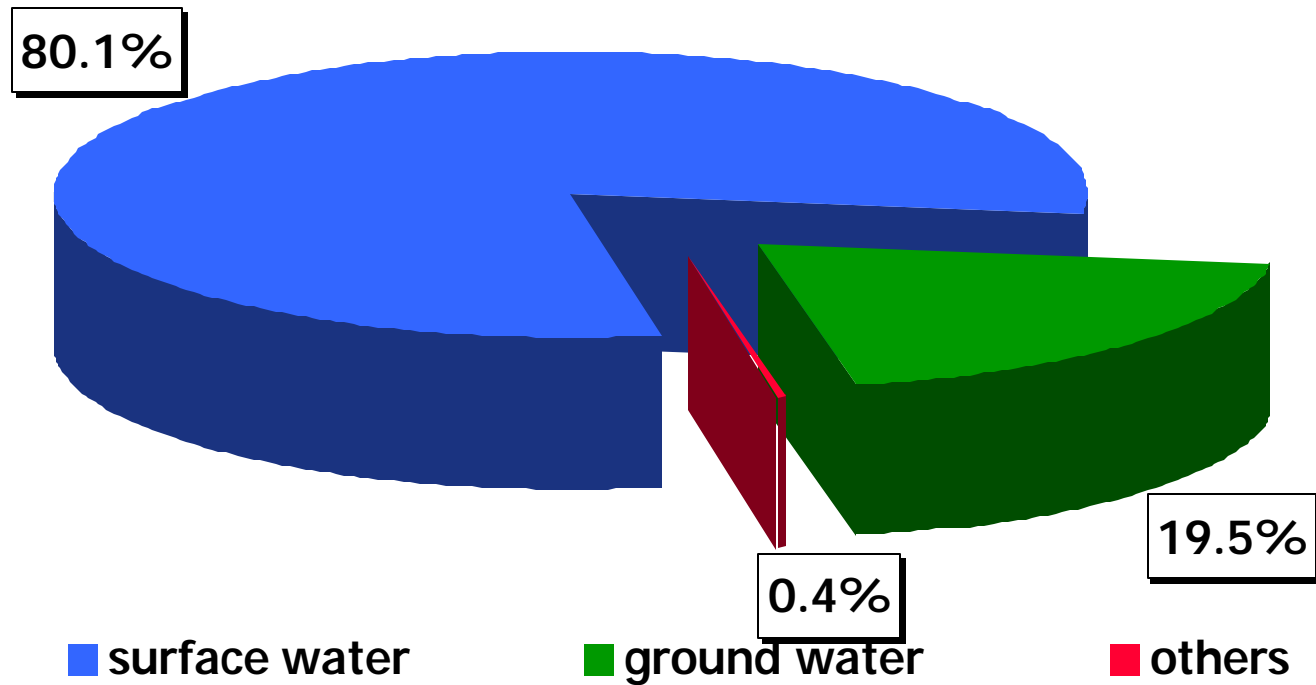
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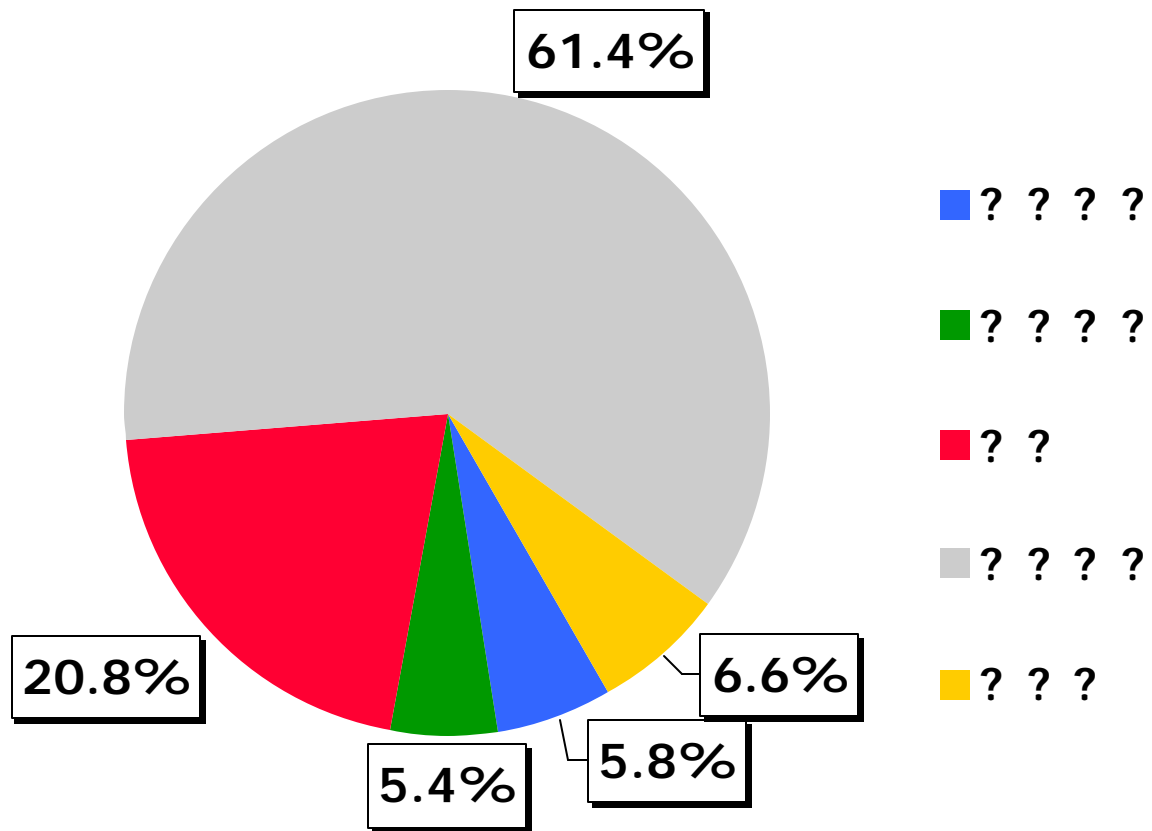
Water supply

In 2002, total water supply is about 550 billion tons.



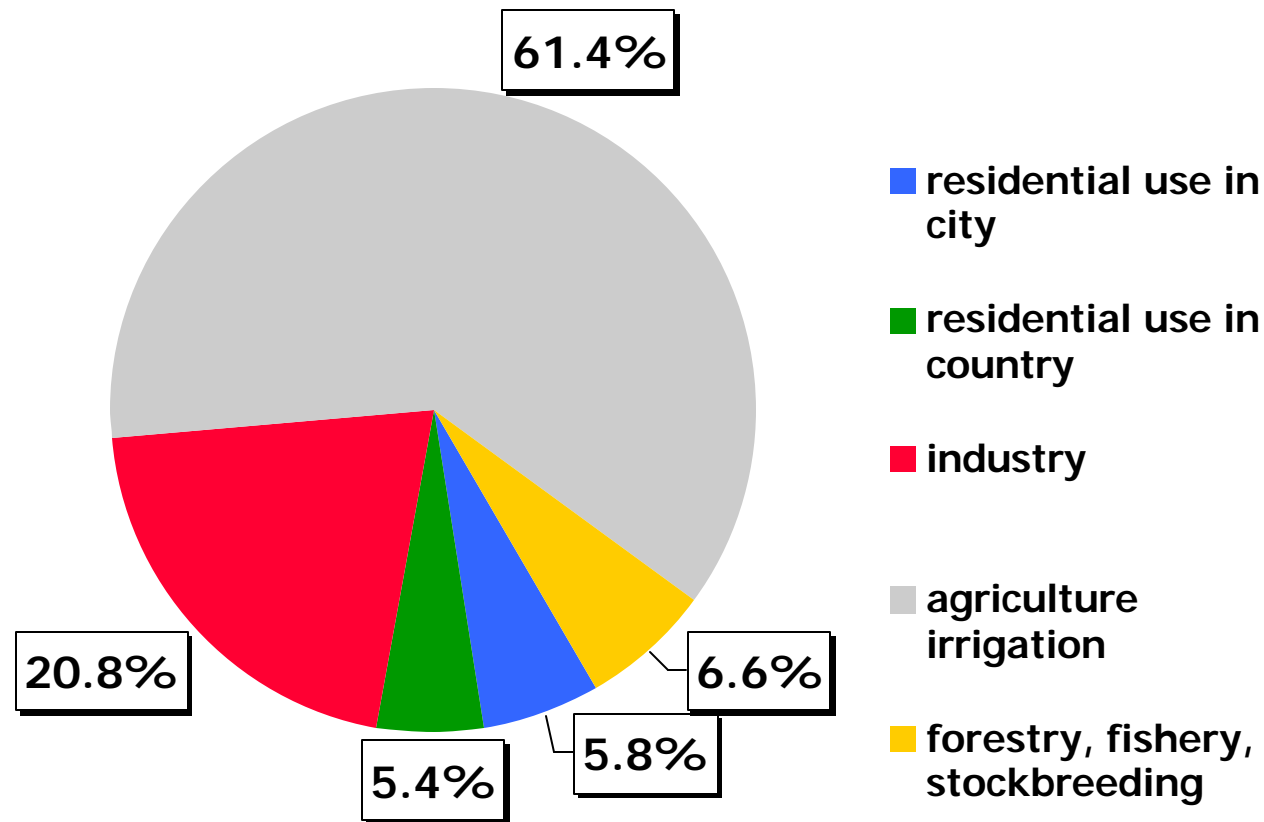
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Water utilization

In 2002, total water utilization is about 550 billion tons



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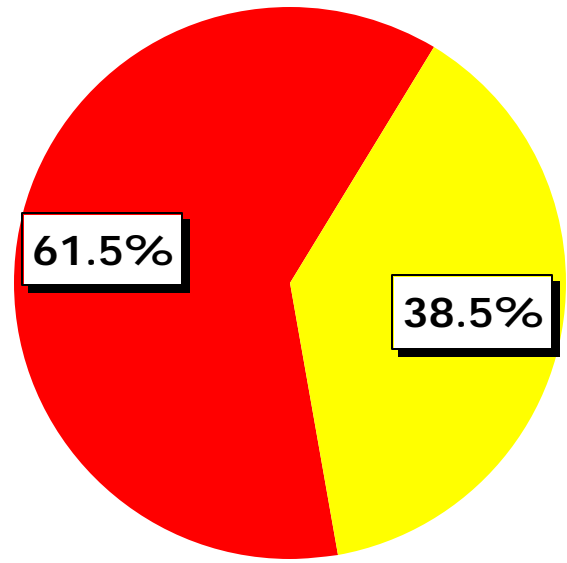
water quantity per capita

In 2002

- **Gross water use per capita is 428 m³;**
- **Water use per 10000RMB GDP is 37 m³ ;**
- **City's residential use volume per day is 219L;**
- **Country's residential use volume per day is 94L;**
- **Water use per 10000RMB industrial added value is 241 m³ ;**
- **Agricultural irrigation volume per "MU" is 465 m³
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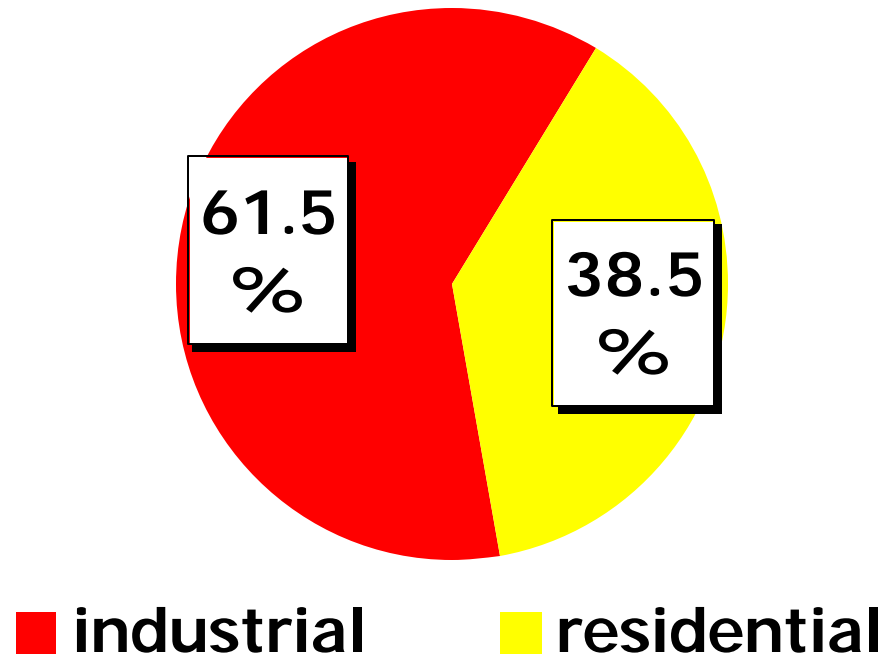


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Waster water

In 2002, the amount of waster water is about 63 billion tons



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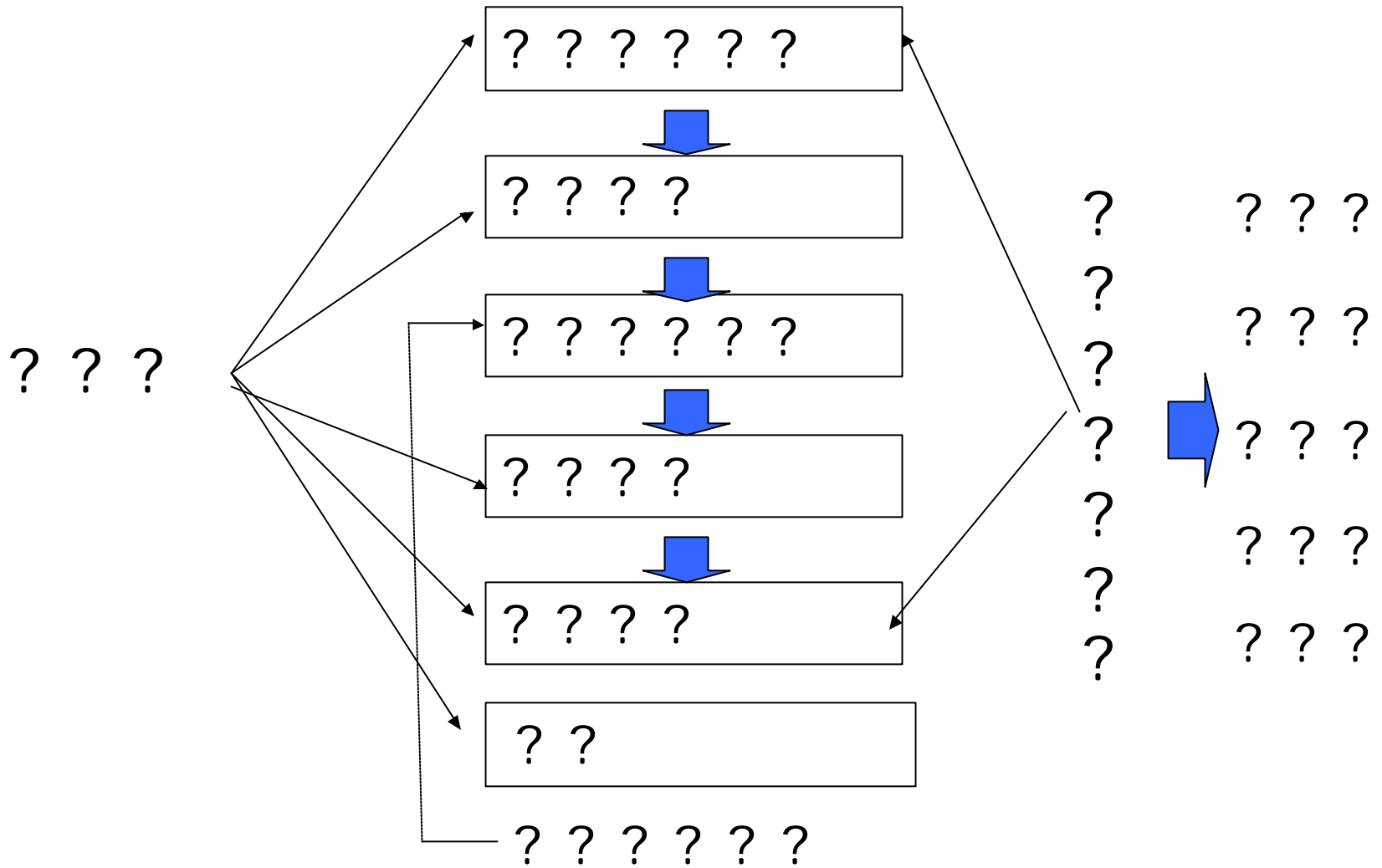
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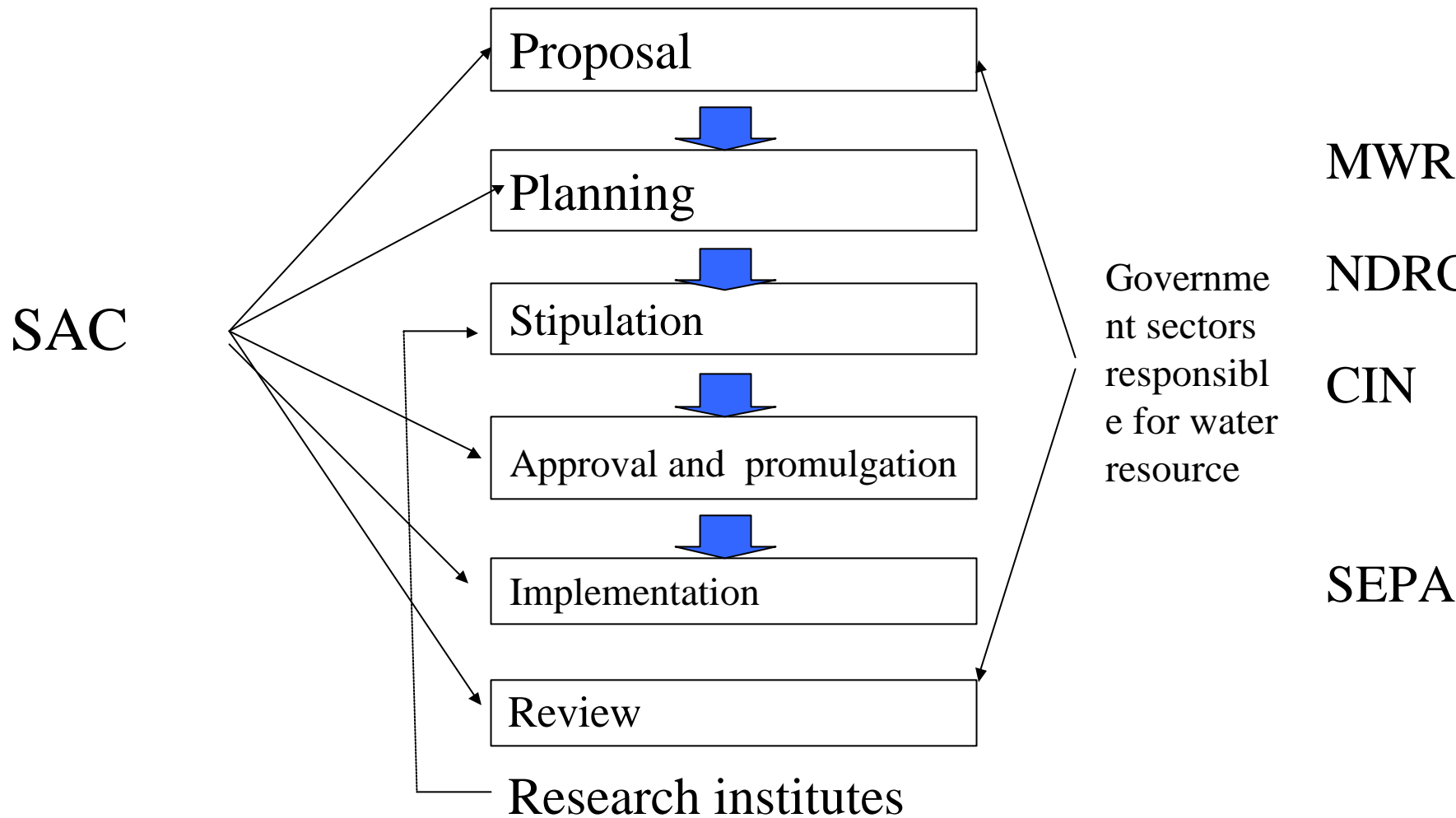
Legislations concerning the standardization of water resource utilization

- « standardization Law »
- « water Law »
- « Law for promoting of cleaner production »
- « Law for prevention of water pollution »

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Administration scheme of standardization of water resource utilization



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Standard system of water resource utilization

Standards on water resource

Basic standards, such as terminology

Water saving products

Water saving enterprises

Norm of water intake for industries

Residential use

Recycle and reuse

Sea water, salt water

others

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????????????????	GB/T 18870-2002
????????	GB/T18092-2000

standards lists

Water saving products

Standards names	Standards No.
Technical conditions for water saving products and general regulation for management	GB/T 18870-2002
Water-free sanitary toilet	GB/T18092-2000

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????????????????	GB/T 7119-1993
????????????????	GB/T 17367-1998
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standards lists

Enterprises

Standards names	Standards No.
General principles for evaluating the rational utilization of water in enterprises	GB/T 7119-1993
General regulation on technical assessment and management for water licensing	GB/T 17367-1998
Evaluating guides of water saving enterprises	Under development

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????? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	GB/T 18820-2002
????? ? 1? ? : ? ? ? ? ?	GB/T 18916.1-2002
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????? ? 3? ? : ? ? ? ? ?	GB/T 18916.3-2002
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????? ? 5? ? : ? ? ? ? ?	GB/T 18916.5-2002
????? ? 6? ? : ? ? ? ? ?	GB/T 18916.6-2004
????? ? 7? ? : ? ? ? ? ?	GB/T 18916.7-2004

standards lists

Norm of water intake for industries

Standards names	Standards No.
General principles of stipulation of water intake norm for industrial product	GB/T 18820-2002
Norm of water intake--Part 1: electric power production	GB/T 18916.1-2002
Norm of water intake--Part 2: Iron and steel complex	GB/T 18916.2-2002
Norm of water intake--Part 3: Petroleum refining	GB/T 18916.3-2002
Norm of water intake--Part 4: Dyeing and finishing of cotton production	GB/T 18916.4-2002
Norm of water intake--Part 5: Pulp, paper and paper board production	GB/T 18916.5-2002
Norm of water intake- Part6:Brewing industry	GB/T 18916.6-2004
Norm of water intake- Part7:alcohol production	GB/T 18916.7-2004

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standards lists

Residential use

Standards names	Standards No.
The Standard of Water Quantity for City's Residential Use	GB/T50331-2002

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?????? ??	GB/T18919-2002
?????? ?? ?? ??	GB/T18920-2002
?????? ?? ?? ?? ??	GB/T18921-2002
?????? ?? ??	GB12941-1991
?????? ?? ??	GB50335-2002
?????? ??	GB50336-2002
?????? ?? ??	GB/T50102-2003
?????? ??	GB/T19223-2003

standards lists

Recycle and Reuse

Standards names	Standards No.
The reuse of urban recycling water--Classified standard	GB/T18919-2002
The reuse of urban recycling water--Water quality standard for urban miscellaneous water consumption	GB/T18920-2002
The reuse of urban recycling water--Water quality standard for scenic environment use	GB/T18921-2002
Water quality standard for scenery and recreation area	GB12941-1991
Code for design of wastewater reclamation and reuse	GB50335-2002
Code of design for building reclaimed water system	GB50336-2002
Code for design of cooling for industrial recycling water	GB/T50102-2003
Classification of coal mine water	GB/T19223-2003

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????????????????	GB 18918-2002
????????????????	GB50334-2002
?? ???? ???? ?	GB/T 11686-2002
????????????	GB5749-85

standards lists

others

Standards names	Standards No.
Discharge standard of pollutants for municipal wastewater treatment plant	GB 18918-2002
Quality acceptance code for municipal sewage treatment plant engineering	GB50334-2002
Small craft Toilet waste retention systems	GB/T 11686-2002
Sanitary standard for drinking water	GB5749-85

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Suggestions on next steps

- To facilitate research and development of standards urgently needed.
- To strengthen promotion and training of standards
- To Broaden products list of water saving certification and strengthen market promotion of water saving label.
- To conduct and regulate formulation of norm water intake for industries and regions.
- To promote evaluation of water saving enterprises and communities.
- To explore incentives for effective implementation of standards

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Priorities of standard programs

- Basic standards such as water measure, terminology.
- Norm of water intake for industries which is huge water consuming.
- Norm of water intake for service industries.
- Utilization of sea water and salt water.
- Evaluation of water saving products, enterprises, communities.

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Thank for listening