



# **Ministry of Construction and Urban Development**

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## **Current Situation of Water Supply and Sanitation Services and Future Goals**

**Presenter: Ts. Gankhuu**

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## **POLICIES AND PROJECTS BEING IMPLEMENTED IN THE SECTOR BY THE GOVERNMENT OF MONGOLIA**

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- Determine the state of water supply and sewage system within the framework of the Millennium Challenge project and plan and implement necessary steps
  - Implement provisions stated in the action plan of the government:
    - To ensure normal and reliable operation of water supply and sewage systems.
    - To provide good quality water consistent with the required standards to urban and rural population
    - To introduce advanced and efficient technology to urban fresh and waste water systems.
    - To connect ger districts to the central fresh and waste water systems.
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# Current Situation of Water Supply and Sanitation Services

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	Distribution of improved water supply system , %	Distribution of water sanitation system, %
City	30.5	21.3
Rural areas	8.7	5.3
Nationwide	39.2	26.6

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# Current Situation of Water Supply and Sanitation Services

	Nationwide %	Urban Areas %	Rural Areas %
<b>Water Supply</b>			
<b>Apartments connected to the water supply system</b>	22	22	0
<b>Water Distribution Facilities connected to the system</b>	8.54	8.54	0
<b>Protected wells</b>			8.6
<b>Protected springs</b>			0.1
<b>Total</b>	39.2	30.5	8.7
<b>Water Sanitation System</b>			
<b>Waste Water Treatment Facility</b>	16.2	16.2	0
<b>Sewer</b>	2.1	2.1	0
<b>Wooden lavatory</b>	8.3	3	5.3
<b>Total</b>	26.6	21.3	5.3

# Capacity of Water Supply and Sanitation Facilities

Number of people serviced by the central water supply system	<b>Thou.people</b>	572000
Number of people supplied by water tankers	<b>Thou.people</b>	222040
Number of Water Distribution Centers	<b>pc</b>	725
Deep wells	<b>pc</b>	327
Fresh Water Pumping Stations	<b>pc</b>	53
Length of pipes	<b>km</b>	1913
Fresh water	<b>km</b>	1221
Waste water	<b>km</b>	692
Capacity of water treatment system	<b>thou.cubic meters/ per day</b>	291.0

# Water Supply System Should Ensure

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1. Adequate resources
  2. Quality consistent with required standards
  3. Adequate distribution of services
  4. Reasonable price
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# Water Source

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- Total of Mongolia's water source is 599 km<sup>3</sup>. Out of this, 79 km<sup>3</sup> is deep water.
    - Deep water provides 80% of total demand.
    - Surface water 20%.
  
  - Water availability in Mongolia is 13,739m<sup>3</sup> per capita annually and Mongolia ranks 56 out of 182 countries in this regard.
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# Water Quality

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- ❑ Out of 345 soums:
    - o 110 soums have water hardness problem
    - o 99 soums have high level of magnesium
    - o 49 soums have high level of minerals
    - o 27 soums have high level of saline in their water
  
  - ❑ Water quality monitoring labs examine drinking water in terms of 15-17 out of 35 standard parameters.
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# WATER USE

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Inequality in use:

- o Daily use of water by apartment residents is 240-350 liters
  - o Daily use of ger district residents is 5-9 liters
    - ❖ To increase this number to 20-40 liters in accordance with the international standard
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# WATER METER AND WATER WASTE

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- Water meter installation process nationwide is slow /28700 pieces/.
  - In UB:
    - 100% in new apartment buildings
    - Apartments- 85% (shared water meters)
    - Offices-95%
    - Private businesses-85%
    - Factories-100%
  - Ratio between the amount of water supplied and sold: 75%
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## Water prices and tariffs

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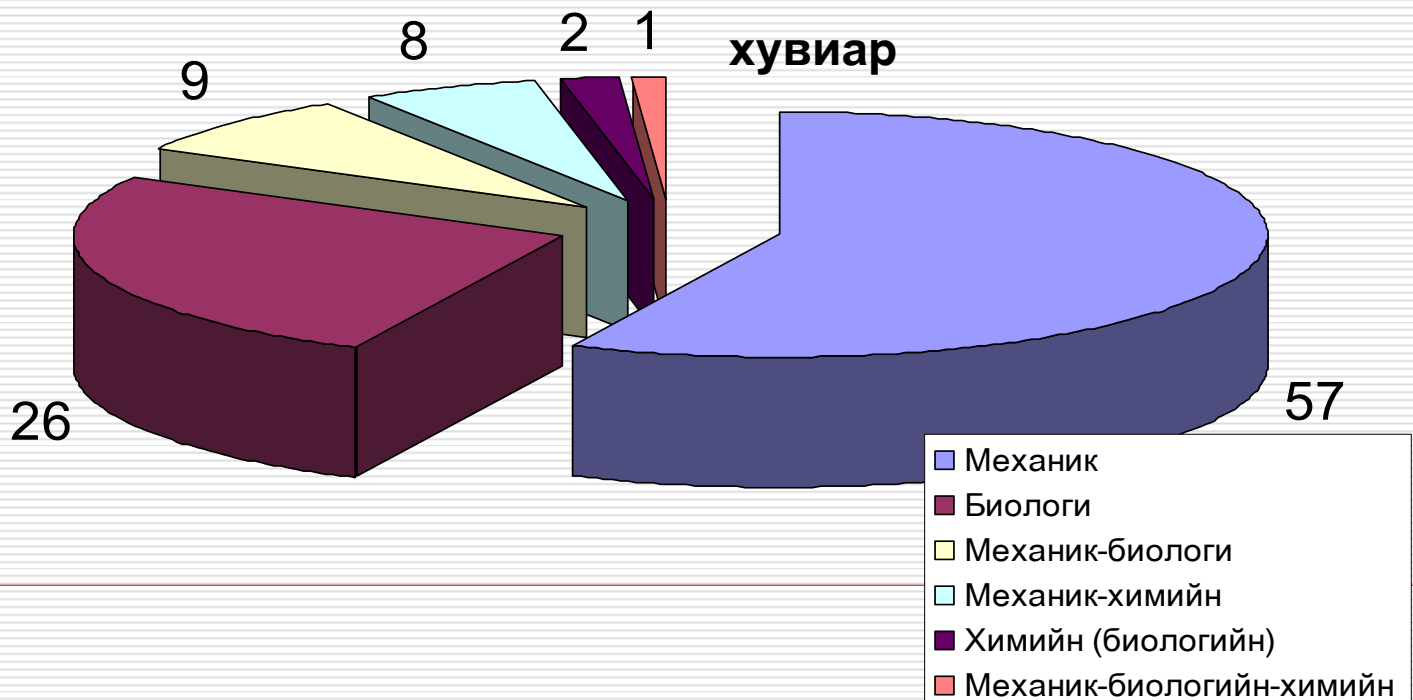
Apartments in Ulaanbaatar	With water meter	1m <sup>3</sup>	319 Tug
	Without water meter	1m <sup>3</sup>	371 Tug
Ger Districts	Ulaanbaatar	1m <sup>3</sup>	500 Tug
	Rural Areas	1m <sup>3</sup>	1000 Tug 2000 Tug

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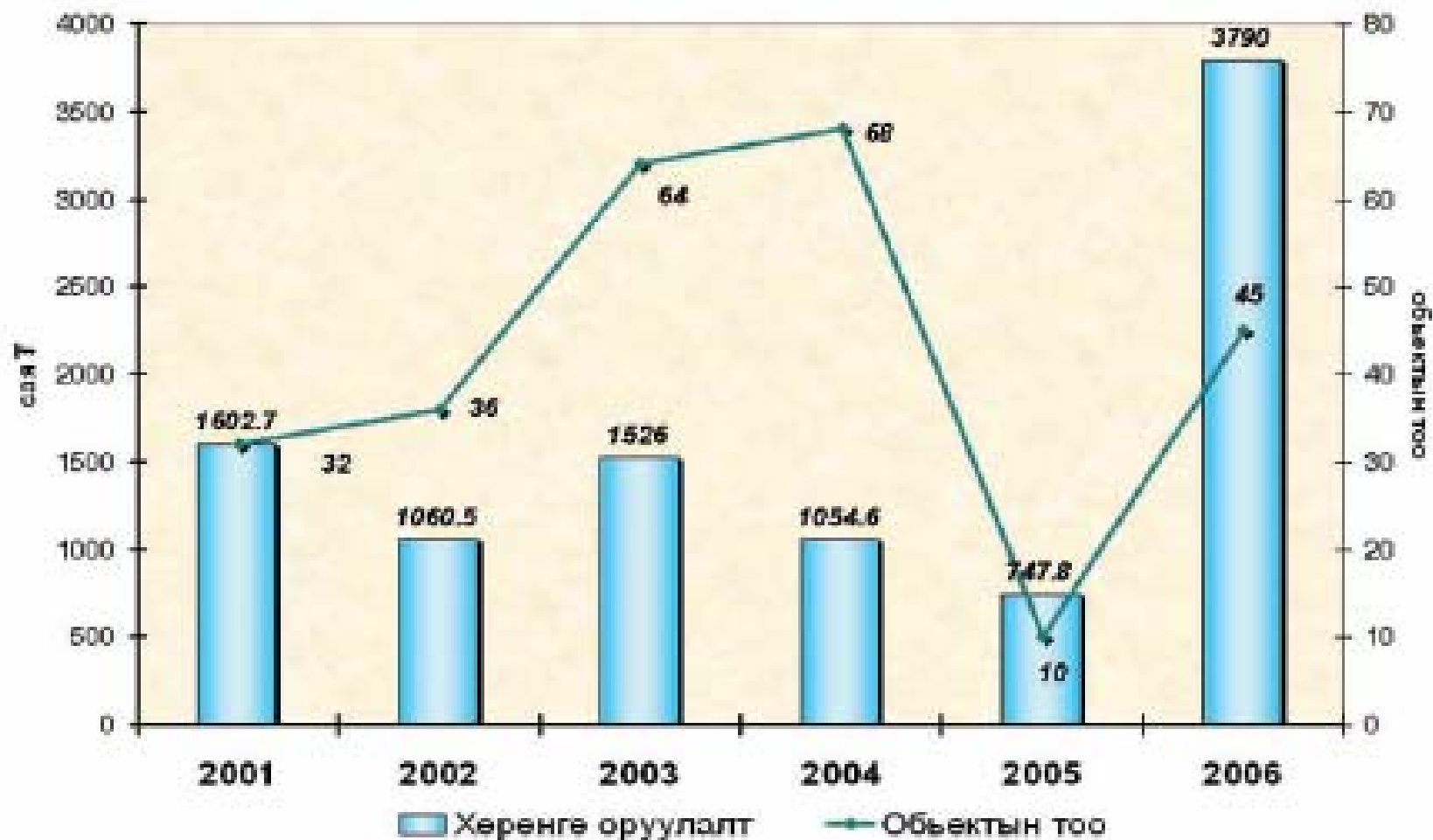
# WATER TREATMENT SYSTEM

Number of water treatment facilities 103

- In normal operation -41
- With operational problems -27
- Out of operation -35



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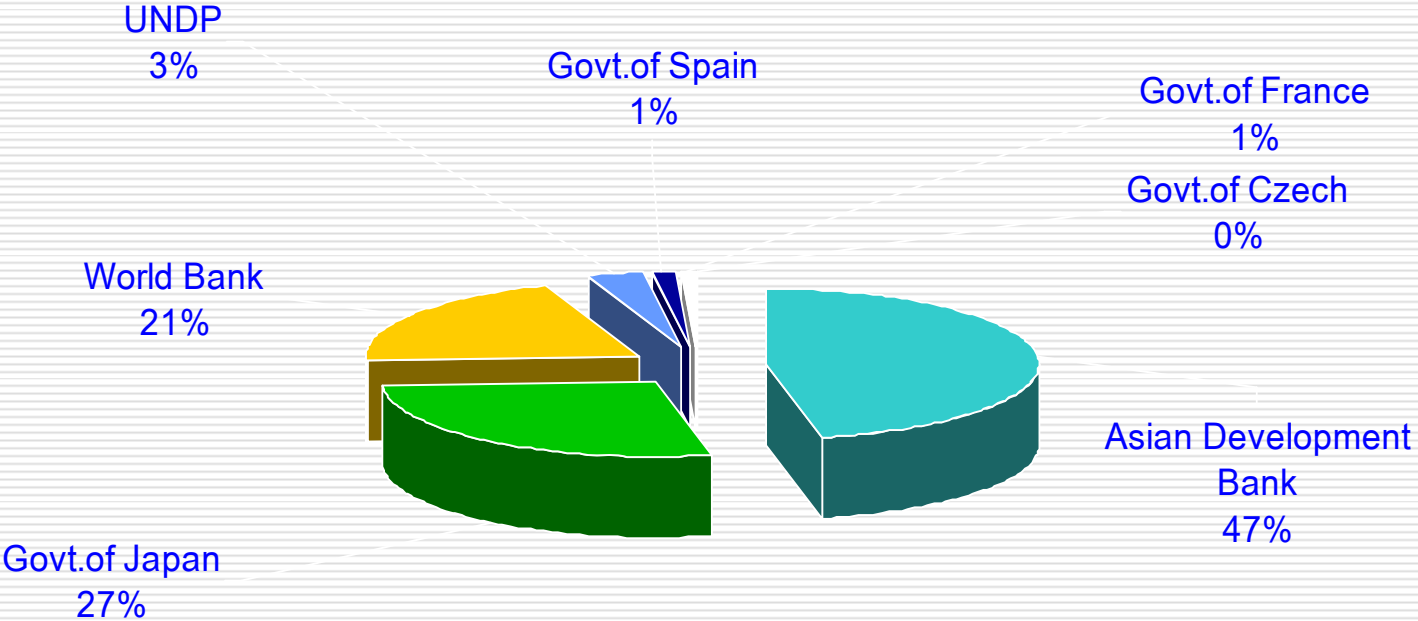
# PROJECTS UNDER IMPLEMENTATION

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1. 2<sup>nd</sup> stage of the project to develop public utilities sector in rural cities- 26.5 million USD
  2. 2<sup>nd</sup> stage of the project to develop public utilities sector in UB-23.6 million USD
  3. Project to improve living environment in ger districts- 2.2 million USD
  4. Project to improve UB' s initial water source supply equipments- 14.4 million USD
  5. Funding for housing -15.0 million USD
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# FUNDING FROM DONOR COUNTRIES /million USD/

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## Millennium Challenge Goals

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	Year 2005		Year 2015	
	Water Supply, %	Treatment Facility, %	Water Supply, %	Treatment Facility, %
Urban areas	30.5	21.3	50.2	60.2
Rural areas	8.7	5.3	19.3	3.1
Total	39.2	26.6	69.6	63.3

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# FUNDING NEEDED TO ACHIEVE Millenniums Challenge Goals /million USD/

Water Supply	Sewage System	Treatment Facility	Total Expense
336.5	365.2	172.0	873.7
285km pipes, 50pc water reservoirs	531 km waste water pipes, pumping stations	35 pc treatment facilities, 590 boreholes, 65000 improved wooden lavatories	

# PROBLEMS TO BE SOLVED

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- ❑ In order to achieve the Millennium Challenge goals, it is needed to determine the funding resources required for renovation and building of water sanitation and supply systems.
  - ❑ Accelerate the implementation process of connecting private housing units and ger districts to the water supply and waste water systems within the framework of the “40000 housing units” project.
  - ❑ Introduce new and advanced technologies in the fresh and waste water systems of urban areas, such as small water treatment facilities, PE and PVC pipes.
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## PROBLEMS TO BE SOLVED

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- ❑ Decrease the amount of wasted water, accelerate the installation process of water meters in order to encourage efficient water use, installing water meters in each household.
  - ❑ Pay special attention to the quality of drinking water, encourage wide use of small water purification and softening facilities and introduce new technologies.
  - ❑ Supply good quality drinking water to people in the Gobi region.
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Thanks for your attention

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