Introduction

- The Jordan views the water sector among the highest priorities forming the backbone of integrated social and economic development
- Water scarcity is the single most important natural constraint to Jordan's economic growth and development.
- Current water demands are not being met and the costs of developing new water resources are rising rapidly.
- Jordan faces a future of very limited water supplies, among the worlds lowest on a per capita basis.
- Current estimated water use of 800 Million M^3/year already exceeds renewable water supplies.

Main Contributors to the Water Crisis

- High population growth rate including the influx of displaced persons.
- Expansion of cities and demand for water and sanitation services.
- Limited renewable water resources.
- Degrading water quality.
- Less than expected efficiency of water delivery services.
- Less than expected cost recovery for services provided.

- Insufficient tariffs to cover costs particularly in the irrigation sector.
- Excessive groundwater pumping and increased pollution.
- Competing sectoral and economic interests for limited water, particularly between domestic and irrigated agricultural use.
- General social, economic and environmental impacts of water scarcity.

Water Strategy

- Development of water sources including reclaiming wastewater, use of brackish water, and consideration of non conventional sources such as declination.
- Enhanced integrated management of sustainable sources.
- Improved institutional organization and legislation.
- Pursuit of shared water resources within the region.

- Enhanced public awareness to promote conservation and recycling.
- Improved performance efficiency in utilities and human resources.
- Increased participation of private sector in water resources management.
- Recognition of health standards for water quality.
- Research and development of improved technologies and data analysis

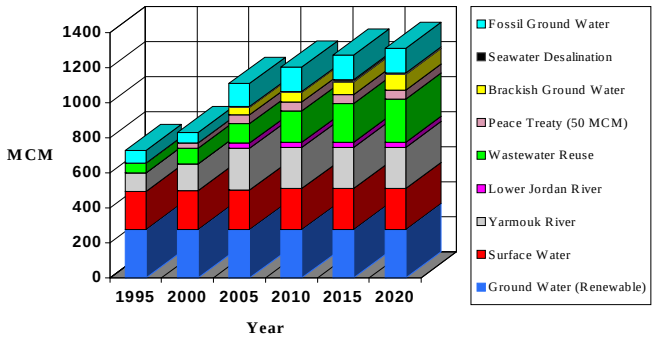
Water Resources

- **RENEWABLE**
  - **Surface Water Sources** **505MCM/yr.**
  - **Groundwater Sources** **275 MCM/yr.**
- **NONRENEWABLE**
  - **Fossil Water** **140 MCM/yr.**
  - **Brackish Water** **50 MCM/yr.**
  - **Treated Wastewater** **75 MCM (2005)**

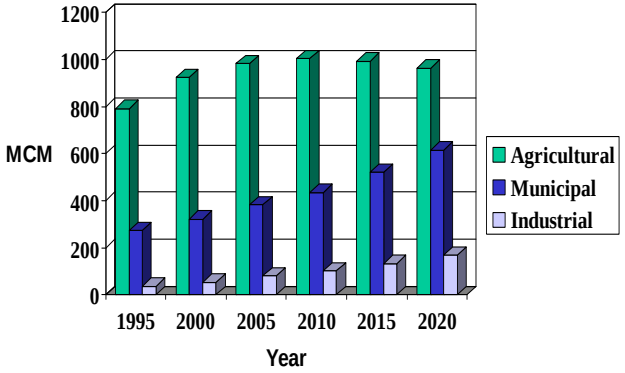
Projection Water Demand, Supply and Deficit until 2020 (Million M^3)

Year		1999	2000	2005	2010	2015	2020
Population (Million)		4.7	5.1	5.98	6.97	8.04	9.18
Water Demand	Municipal	297	321	382	435	520	615
	Industrial	45	54	80	102	134	168
	Agriculture	863	922	949	1001	991	963
	Total	1205	1297	1411	1538	1645	1746
Water Supply	Municipal	236	239	281	380	463	517
	Industrial	39	37	76	93	112	130
	Agriculture	565	541	750	746	704	665
	Total	840	817	1107	1219	1279	1312
Total Deficit		365	480	304	319	366	434

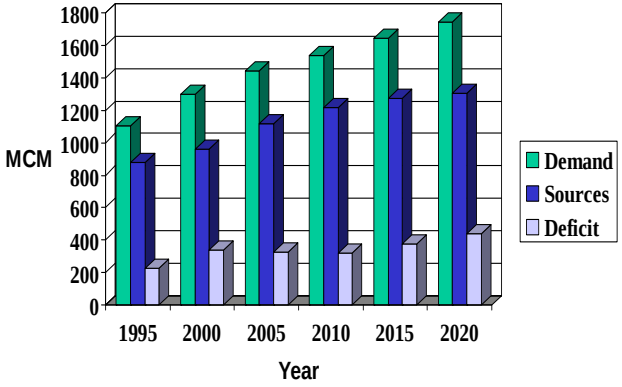
Water Supply 1995-2020



Projected Water Demand of Various Sectors



Total Demand, Available Sources and Deficit in MCM



Strategic Planning to Close the Gap between Demand and Supply

The total traditional water sources which can be made available will not exceed (1000) MCM. Certain measures have therefore been taken to balance the demand which has been far exceeded this value in the year 2005. These measures can be grouped around the following four areas:

A- Reduce unaccounted for water

- Rehabilitation of water network
- Enhance the performance of irrigation network
- Improve technical and administration
- limit un-planned expansion of networks

B- Reduce Water Consumption:

- Public Awareness and reuse of treated water
- Upgrade irrigation systems
- Adjust Cropping pattern

C- Secure new water resources:

Traditional Sources

- Disi Water
- Dams and Ditches
- Investigation wells(Discover new wells)

Non Traditional Sources

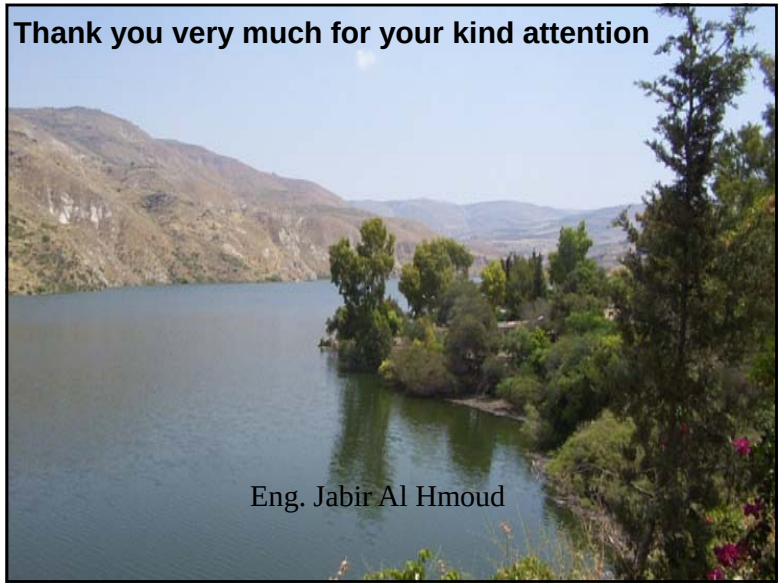
- Desalination of brackish water
- Desalination of Sea water
- Import water

D- Measure on the National level

- Regulate population growth
- Organize land use
- Preservation of groundwater
- Water uses policies

A Vision for the Future

- Water pricing closer to economic cost
- Private sector active partners
- Institutions restructured, integrated water management
- Wastewater fully reclaimed for economic uses
- Strong environmental regulation
- Sustainable groundwater use
- Regional Cooperation


Thank you very much for your kind attention
Eng. Jabir Al Hmoud