



معهد قطر لبحوث
البيئة والطاقة
Qatar Environment & Energy
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Towards a sustainable water resources management for Qatar

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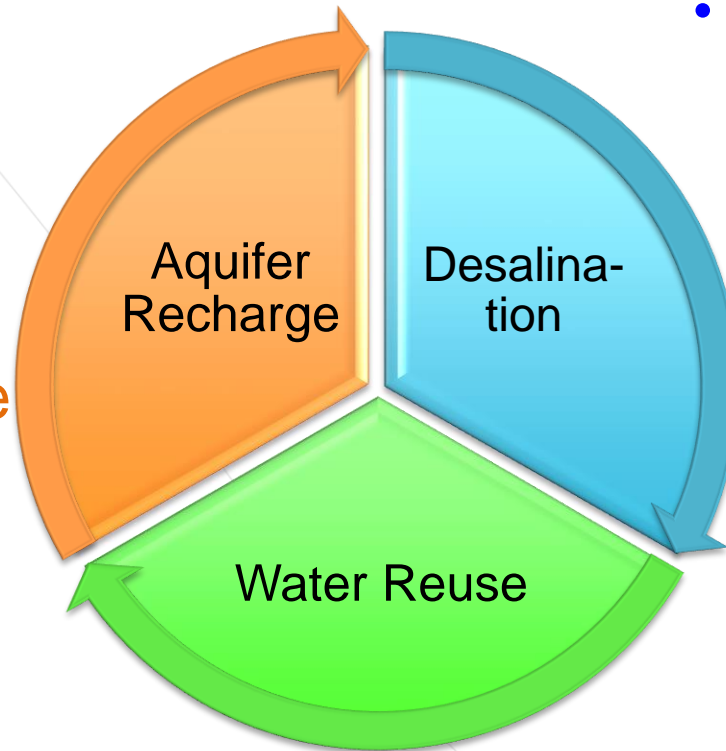
Water Situation in Qatar

- Population: 2.5 million (July. 2016)
- Average daily water consumption: 500 litre per capita
- Average annual rainfall is 80 mm.
- Desalination (1.49 MCM/day) meets 99% of domestic needs
- Water demand annual increase 10-12% Average annual
- Current GW abstraction: 250 MCM/yr
- Annual domestic WW production: 110 MCM/yr
- Treated domestic wastewater (tertiary treatment): 98% (108 MCM/yr)



Water Strategy –Goals

- Identifying & assess aquifers that could be used in case of emergencies as a strategic alternative reserve.
- Elevating GW level in these aquifers



- Reducing specific energy consumption and cost by 40% by 2020, and minimize environmental impacts and enhance Social sustainability.

- Increasing water reuse by 80% by 2020; minimizing health risks, reducing environmental impacts and enhancing social responsibility.



Conclusion

- Natural recharge is too little-Abstraction not sustainable
- Losses in water network need to be reduced (currently 92 MCM)
- Treated wastewater should be utilized (currently 89 MCM not used)
- The northern aquifer is most suitable for MAR
- Karst geology needs special consideration.



Thank You



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