

Sustainable management of Water supply and demand

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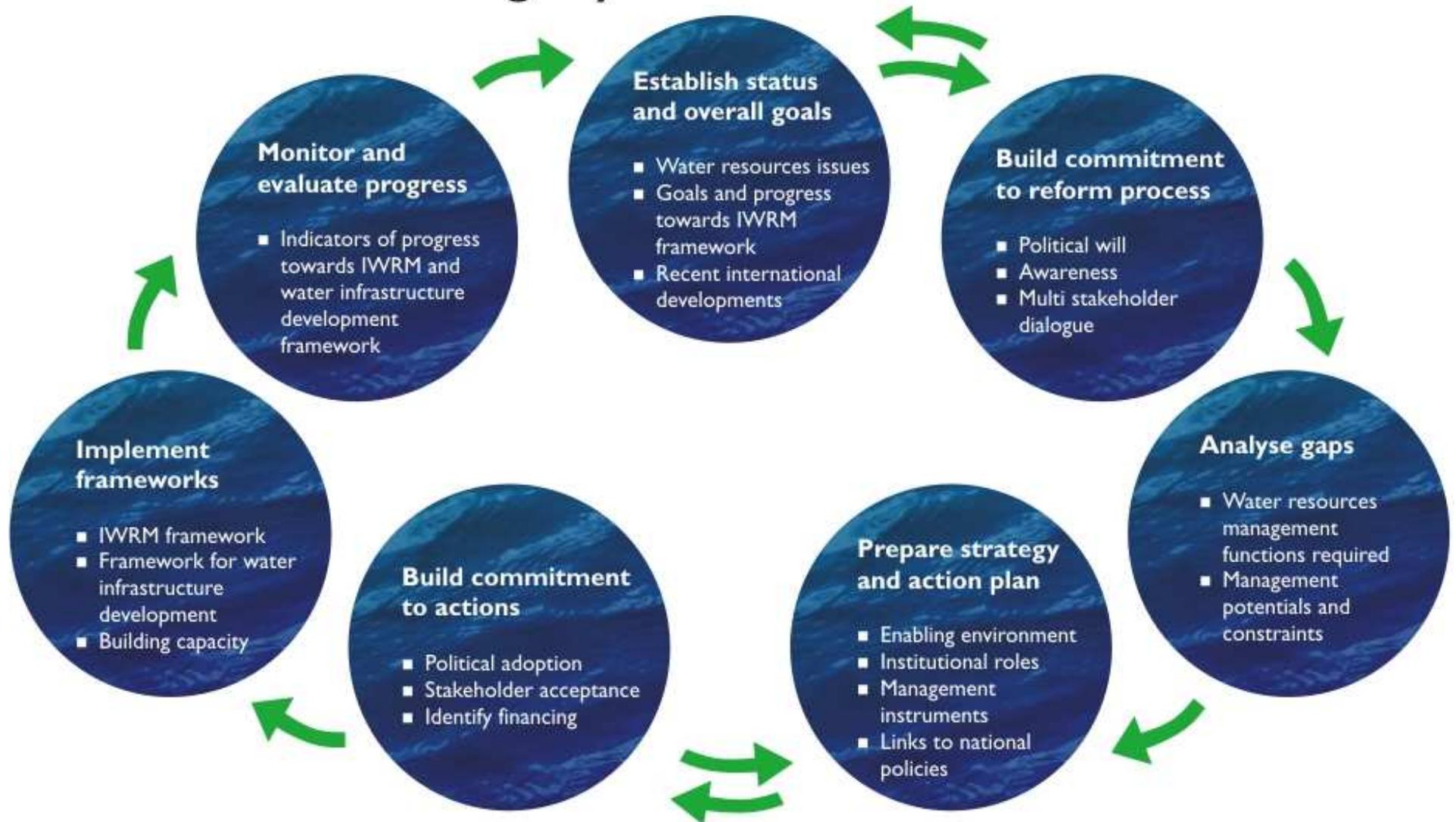
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Integrated water resources management

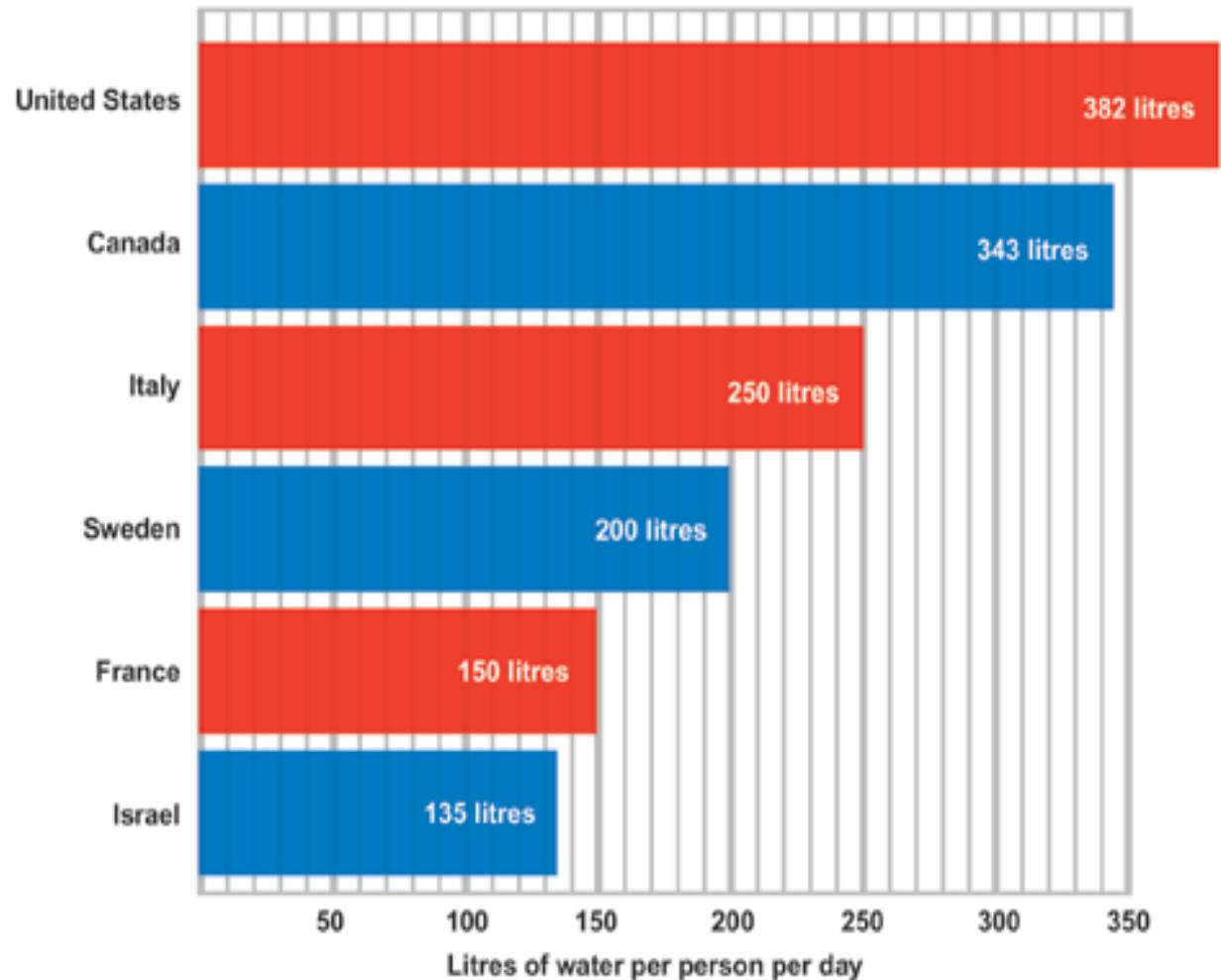
The IWRM Planning Cycle



Calculating demand

- Establishing demand on the basis of the recommendations of the WHO
- Establishing demand for all productive sectors, taking in the consideration the adoption of high efficiency standards and the sustainability of economic sectors

Average daily domestic water use
(per capita)



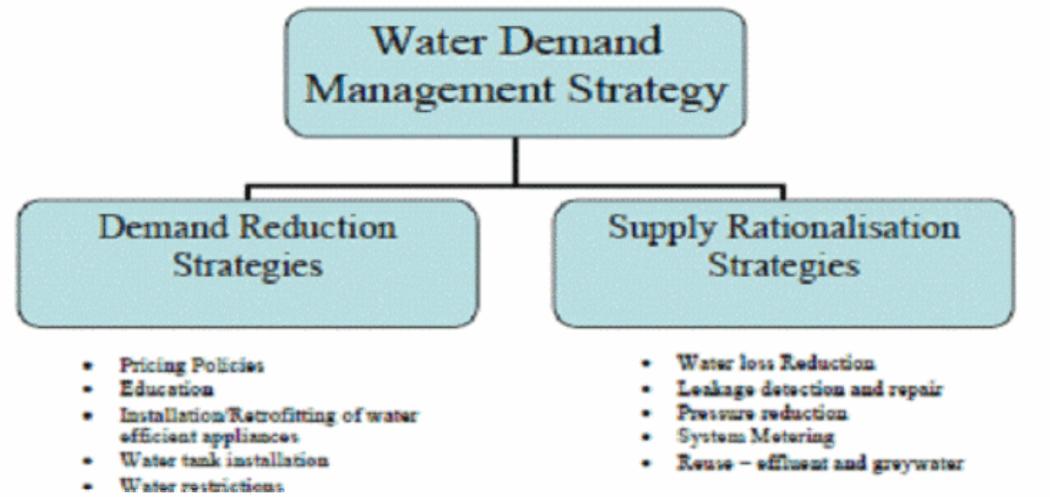
Calculating supply potentials

- Calculation of supply potentials take in consideration:
 - Renewable water resources;
 - Sustainable exploitation of ground water resources;
 - The potential of using retreated waste water;
 - The potential of recycling water;
 - Reducing evaporation, seepage losses, drainage; and,
 - Protection of water quality.



Managing demand

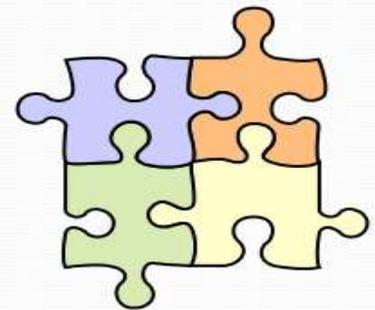
- Improve efficiency of water usage;
- Establish tariffs that encourage for more rationalization of water usage;
- Raise awareness and educate for more respect of water as a vital resource for life.



Water Demand Management in context

What are the links?

- Sustainable development
- Integrated Water Resources Management
- Water resources (stress and scarcity)
- Water demand
- Millennium Development Goals



Water supply and demand; filling the gaps

- Develop conventional and non-conventional water resources;
- Establish PPP in the water sector with a sovereign independent regulator;
- Promote regional and international cooperation in the water sector;
- Economic losses from inadequate delivery of water and sanitation amounts to 1.5% of gross domestic product of the countries included in a WHO study on meeting the MDGs. Therefore, the improvement of the infrastructures for water delivery would eventually contribute in reducing the gap between demand and supply potential.

Water allocations

The IWRM consist in moving from a sectorial approach towards a holistic one, which captures interconnections between food, energy, health, trade, the environment and water ;



Water allocations: Agriculture

- Improving efficiency in the use of resources; Direct action to conserve, protect and enhance natural resources;
- Protect and improve rural livelihoods and social well-being;
- Enhance the resilience of people, communities and ecosystems, especially to withstand climate change and market volatility;
- Good governance is essential for the sustainability of both natural and human systems.



Water allocations: industry

- Water use in industry should adopt sustainability measures that might include command-and-control methods of policy, regulation, enforcement and incentives;
- Industry is a source of pollution for water resources and mandatory measures should be adopted in order to eradicate this issue.



Water allocations: energy

- Improving the efficiency and sustainability with which water and energy are used and finding win–win options that create savings of both, which can become mutually reinforcing (creating synergy);
- A coherent policy – that is, an adequate public response to the interconnectedness of the water, energy and related domains – is needed.



Water allocations: domestic use

- Raising awareness for more water use efficiency;
- Establishing adequate incentives to rationalize the use of water;
- Promoting the harvest of rain water and its use for irrigating gardens...etc.



THANK YOU!

