

“Water Demand Management: A Study on Prospects and Challenges of Water Supply at Domestic Levels in the Kingdom of Bahrain”

OVERVIEW

One of the most concerning subjects in the Kingdom of Bahrain is the necessity of pure drinking water and water for domestic purposes. This issue is being turned into an immense threat against all ongoing socioeconomic development in the Kingdom of Bahrain. The research illustrates the challenges and prospects of water supply as well as water demand management at the domestic levels in the Kingdom of Bahrain.

PROBLEM

Bahrain has been listed among the top ten countries that suffering from rising water supplying prices as well as a shortage of fresh and clean water. The water sector continues to face immense challenges due to physical or socioeconomic factors.

Moreover, as the water sector costs are likely to continue to escalate over time due to the current water supply policies and management strategies. Therefore, the research will assess the current water supply management at the domestic level in the Kingdom of Bahrain regarding water governance issues, challenges, and prospect.

METHODOLOGY

This research will be exploratory in nature while mixed method approach will be employed which incorporates both qualitative and quantitative tools. The qualitative approach seeks build a detail and deep analysis of the empirical situation and at the same time, quantitative approach (survey) will be used to draw the gross view of current scenario based on people’s perception regarding the research topic.

FINDINGS

Economical

- Cost Recovery Policy of Water Supply service.
- Expansion in desalination to meet municipal water demands; associated with increasing financial.
- Lack of national and regional partnerships.

Technological

- The water distribution network of EWA is old.
- Limited investment in Ecosystems services.
- Insufficient water storage capacity
- Low water efficiency in the municipal sector (supply, use, recycling and reuse)., stakeholders’ participation, financial sustainability.

Societal

- High consumption of domestic water (level of Public awareness)
- High population growth.
- Lack of public involvement in decision making.

RECOMMENDATIONS

- Revising water tariff for the 3rd block (<100m³) subsidized users will improve the municipal water sector's water use efficiency and cost recovery, as well as contribute to social equity.
- Adopting an integrated supply and demand-driven approach in all water-using sectors, with a focus on water efficiency, demand management, and conservation.
- Strengthening national and regional cooperation in the water sector to promote R&D and innovative technology solutions.
- Improving legal framework and capacities of water sector by enactment of comprehensive water laws and legislation.
- Using treated water in municipal sector, consistent evaluation and monitor

Key Facts

- Bahrain is in one of the most water-stressed regions in the world, due to its arid climate and limited freshwater resources.
- Bahrain has one of the lowest per capita renewable freshwater resources in the world.
- Bahrain is densely inhabited, with an annual population growth rate of 4.7% and a high population density of 1,760 inhabitants per square kilometer.
- Significant economic and social transformations in Bahrain have led to an ever-increasing demand for water in all sectors.

Interest of Research

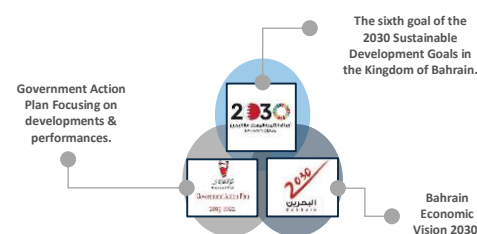


Figure 6: The process of Research Methodology.

