

***CHAPTER 07 – SWOT MATRIX of DWASA, CONCLUSION and RECOMMENDATIONS***



SWOT matrix is a vital strategic planning tool that can be used by managers to present a situational analysis of the organization. It is a simple technique to map out the present Strengths (S), Weaknesses (W), Opportunities (O) & Threats (T) Dhaka WASA is facing in its current business environment. SWOT Matrix of Dhaka WASA:

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| **Strengths:**  •Stable, experienced & dynamic staff & Senior Management Team.  •Capable & experienced employees supported by a Training Centre established in 1980.  •50+ years successful record in providing water & wastewater services for Dhaka.  •Progress of “Turnaround Program” is continuing & trust & support of GoB & Development Partners.  •Customer-oriented corporate culture and using technology for efficiency & cost saving.  •Long-term master plans for development of water & sewerage are in place & current major projects to substitute groundwater by surface water, rehabilitate water networks, reduce Non Revenue Water & expand sewerage service- are ongoing or in advanced planning stage.  •A monopoly position in piped water supply & wastewater service for Dhaka City with assured revenue with very satisfactory Operating Ratio  •Water production capacity is more than water demand. | **Weaknesses:**  •Customer complaints about the quality of supplied water are too frequent.  •There are many weaknesses in current water quality monitoring, including: 1) Frequency of water quality monitoring in the networks vis-à-vis international norms;  2) Equipment, protocols & Water Quality Management equipment at water treatment plants;  3) Control of Drinking Water Treatment Chemicals;  •Monitoring of quality of surface water sources.  •Terms of employment for contract-based employees is leading to high employee turnover and loss of skills (e.g. DMA Management Staff).  •Sewerage coverage, 20% of Dhaka WASA Service Area, lags far behind water supply coverage.  •Although Dhaka WASA is striving to provide Quality service to the public, little is being done to publicize this.  •Water tariff is lower than the production cost.  • Less Coordination between different wings.  • Cost benefit financial lifecycle analysis is not used |
| **Opportunities:**  •Exploring potential for increasing efficiency and cost saving through outsourcing & PPP (Public Private Partnership).  •Expanding Dhaka WASA’s service area into surrounding urban, or urbanizing, areas to bring in new customers & revenue.  •Increasing sewerage coverage from the present 20% has potential for a very large increase in revenue.  •Delegation of responsibilities to local Zone Offices for closer ties to local communities.  •Taking advantage of Dhaka WASA’s internal expertise and facilities to supply services to other parties on a commercial basis.  •Automation, Digitization & Computerization.  •Investment into big & modern water/sewer projects with international best practices & modernizations Increased training by DWASA & GoB. | **Threats:**  •Population migration to Dhaka, rapid economic development & increasing water demands outstrip ability to increase & distribute water supply.  •Project delays, due to external factors (road cutting, land acquisition, public & legal protests, etc.), lead to increased costs and protracted Government approval process for budget increases. Lack of inter-agency coordination between the organizations disrupts project success.  •Delay of surface water supply projects and network rehabilitation projects, extends reliance on a diminishing groundwater resource & may result in deteriorating groundwater quality & water shortages and declining ground water table.  •Increasing surface water pollution of Dhaka’s surrounding rivers & increase in the cost of water supply, climate change & increased possibility for droughts, dropping of water layer and flooding. |

**8.2 Recommendations:**

1. To build a staff awareness and Consensus about automation, digitization and its use to bring benefit and ease of work to the employees.

2. All staff, from senior management to the field crew, should understand the basics of Computerization, SCADA and MIS, GIS, AIS - Automation systems at various levels as required by their works.

3. Building the understanding at top-level management on Automation at every possible place to maximize profit cut down unnecessary expenses.

4. Middle management must understand their roles and responsibilities on implementing automation technology, since it requires hard effort by them to create awareness about new technology.

5. Field level SCADA, MIS, GIS, AIS and related work should follow the International standards guideline and supervised by Internal and/or External Automation Expert team.

6. Automation experts, MIS, GIS, AIS and SCADA working teams should supervise, advice and update the technology as required. Team should be checking technological change regularly and after 5 years should upgrade the DWASA Automation masterplan.

7. All project, working divisions, DWASAS Administration, Revenue division, Accounts divisions, Field offices and all stockholder should try to follow the guideline of Government and DWASA Automation Masterplan for smart water management and MIS, AIS, GIS best practices for administrative purposes.

8. Different and relevant intensive training should be organized on Automation for various levels of staffs and managers.

9. Cost benefit analysis of capital investment and maintenance cost should be formulated and used before taking any large investment decisions.

10. Only investment which adds values to products or services or saves expenditure- should be considered.

11. DWASA's sustainable & modern technology based managerial capacity also technical & financial capacity management should be strengthened and better coordinated to keep Smart-Water systems profitable.

**8.3 Conclusion:**

Dhaka Water Supply and Sewerage Authority (DWASA) as an autonomous government institution is working very hard for providing water supply, sewerage service to almost 20 million people of the Dhaka mega city. Dhaka WASA is investing heavily to increased number of modern water purification plants & surface water collection from city Side Rivers, investing to establish modern and safe sewerage treatment plants, operating regular mobile court against bill defaulters and cut illegal connections etc. Dhaka WASA also achieved success in water production and supply by using various digital or other modern technology. However, its activities are not faultless because of challenges like - regular increase of Dhaka WASA geographical area, increase of water supply network size, weak sewer network and other related activities. Various initiatives including strong monitoring by use of automation have been taken to ensure rapid improvement of its functions. Automation and SCADA is not only a brand-new concept using ICT but also is a tool for technology-based management concept in Bangladesh public sector. Integrated Water operation control and command platform is a future oriented water management strategy. So, it is managing the entire process of the water production source as well as water cycle scientifically and systematically. The outcome will be sustainable provision of a more reliable, improved and climate-resilient sustainable water supply in Dhaka city.

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