

FINANCIAL MANAGEMENT ASSESSMENT

A. Introduction

1. This Financial Management Assessment (FMA) has been prepared in accordance with ADB's Guidelines for the *Financial Management and Analysis of Projects*¹ (the Guidelines) and the publication *Financial Due Diligence A Methodology Note*² and focuses on fund flows, staffing, accounting policies and procedures, internal controls, financial reporting and monitoring and internal and external audit. A detailed institutional assessment was prepared by the project preparatory technical assistance (PPTA) consultants, and relevant extracts have been summarized below.

2. The assessment is based on the results of a financial management assessment questionnaire, discussions with senior officials of Dhaka Water Supply and Sewerage Authority (DWASA), and information made available by the presently ongoing ADB funded Financial Capacity Building component of the Dhaka Water Supply Sector Development Program (DWSSDP).

3. DWASA is embarking on a major investment to increase water supply to a growing population of Dhaka and to ensure sustainable sourcing of water. This FMA has been conducted to assess DWASA's capacity to undertake these and if required propose ways and means to strengthen the capacity of DWASA and related agencies. Specifically, the objective is to enhance competence levels; i.e., the skills and ability to cope with the required practices and technology that will allow the sectoral achievement of the government's goal, which is improved access to more reliable and sustainable water supply for greater Dhaka City. A financial assessment of DWASA has been also carried out with a forecasted operational performance over the next 20 years. The assessment together with the forecast outlines the financial environment of DWASA and risks that may impact the loan payment position.

4. A key aspect of the FMA is evaluating the risks associated with project financial management arrangements. ADB's principal concern is to ensure that project funds are used economically and efficiently for the purpose intended. In support of this, it seeks assurance that the DWASA financial management system can report on the source and use of the project funds.

B. Executive Summary

5. The FMA has considered two types of risks; (i) inherent risks; i.e., risks outside the direct control of the DWASA financial management, and (ii) control risks; i.e., risks concerning the internal functioning and control of the DWASA Finance and Accounting division.

6. Clearly the biggest inherent risk that DWASA will be facing in the coming years is the increasing unstable political future situation, which may result in seriously hampering economic development and possibly reduced investments in water supply and sanitation (WSS) infrastructure projects. This risk may affect the on-going organizational reforms, given that DWASA may still not operate as a financially autonomous entity, that top management is still via

¹ *Financial Management and Analysis of Projects*. ADB. 2005.

² *Financial Due Diligence A Methodology Note*. ADB. 2009.

political appointment, and last but not least, that tariff setting beyond 5% per annum is still dependent on political approvals.

7. The results of the FMA of the internal (control) risks indicate that the existing financial management capabilities and performances of DWASA Finance and Accounting division may be considered acceptable; however, with several medium to significant risks involved. These risks are acknowledged by the DWASA management and programs are on-going and further developed to mitigate these risks.

8. The double entry accounting system has been implemented some years ago and is currently operated without major problems. Improvement of the accounting software has been started under the Financial and Capacity Building (FCB) consultancy support but is not yet completed. The existing hardware needs to be replaced to fulfil the requirements of the proposed new, custom-designed and interlinked DWASA accounting software system.

9. In addition to the replacement of proper IT infrastructures, the DWASA Finance and Accounting staff needs to be trained in new IT systems to effectively operate the new accounting systems. This may be considered at least as a medium risk, since this lack of adequate competencies is a dominant and crucial issue. With these targeted measures, the FM system is expected to have proper capacity for improving the procedures and to achieve significant results or impacts.

10. The project will be financed by ADB, European Investment Bank (EIB), Agence Francaise de Developpement (AFD), and Government of Bangladesh (GOB). DWASA has a sound record of experience with ADB and donor lending procedures and projects and in the past handled several projects and programs. DWASA has implemented 3 ADB funded Projects and a number of Projects by other donors.³ DWASA has no experience with public-private partnership (PPP), specifically with private sector equity investments.

11. Other identified medium DWASA FM risks are:

- (i) **Internal auditing unit.** An internal auditing unit does exist, but is mainly addressing queries from the Government and other stakeholders, concerning DWASA's annual report. It does not sufficiently address the internal auditing issues for which it was established.
- (ii) **Management information system (MIS).** MIS development and implementation and further development seems to have high interest of senior DWASA management, insufficient budgets are presently being made available. The DWASA Information Communication Technology (ICT)/MIS unit consists of two staff collecting and processing all required MIS information. As noted, there is a lack of proper ICT hardware and software infrastructure, with inadequate hardware and slow (2G) internet connections, using mostly pirated software and no virus protection. The result is that no actual assessment or analyses of the collected data is being conducted.

³ IDA Projects include 1st, 2nd, 3rd and 4th Dhaka Water Supply Projects totaling \$ 143.5 million from 1979 to 2004. ADB funded projects include Dhaka Urban Infrastructure Improvement Project (1989-1997), Dhaka Integrated Flood Protection Project (1991-1996), and Dhaka Water Supply Sector Development Program (2008 – 2013) totaling \$ 327 million. DWASA has also had projects funded by SIDA and DANIDA

12. As part of the implementing arrangements for this Project, the project management unit (PMU) will include an accountant along with other staff. Capacity related issues identified are being addressed by DWASA as well as by development partners.

13. The immediate risk may also involve delays with the internal bureaucratic procedure of the GOB with respect of the project. Lessons from development projects inform delays ranging from anywhere between 9 to 12 months. Delays of such length will jeopardize the implementation schedule for the Gandharbpur WTP construction and operation resulting in cost overruns and further delays. It is highly recommended that DWASA is assisted by ADB to ensure the preparation of DPP is carried out on schedule. Frequent monitoring of the DPP approval process is also recommended.

14. FMA indicates there are no significant FM risks. Nevertheless, given the on-going and planned major investments and expected large increases of the DWASA annual operating and loan/DSL costs in the coming years, DWASA's top management should give more and serious attention to the identified financial management risks, and make the necessary budgets available to mitigate these risks. They should effectively direct and guide the DWASA middle management and staff about the difficult operational and financial tasks which are expected to be encountered in the coming 5 to 10 years.

C. Reforms – In Progress and Planned

15. The following achievements outline the progress of ongoing capacity development programs:

- (i) DWASA has prepared an organogram and is implementing its organization structure by recruiting new staff and personnel;
- (ii) The accounts have been fully computerized and currently up-to-date accounts are produced. However, they remain incomplete because of the late processing of revenue details from the Zonal sites. The audited accounts of FY2012 have been made available in December 2012 and the annual report in June 2013;
- (iii) DWASA financial performance has considerably improved and with ongoing programs for computerization and efficiency improvements further strengthening of financial management are expected to occur;
- (iv) The 5-year Business Plan is being annually updated. The FCB team is carrying out training and workshops to strengthen staff skills in order to enable preparation of corporate plans without outside assistance;
- (v) To strengthen the existing financial control systems, a Finance and Accounts Manual comprising 13 relevant sections has been prepared. Once the manual is approved by the management, intensive training on operation flow, computerization, and accounting systems will be carried out;
- (vi) Although the billing and collection process and accounts have been computerized, the two processes are being integrated through the development of computer networking systems;
- (vii) Public education and citizens' awareness campaigns are being carried out to involve citizens in the activities of DWASA for more transparency and to spread important messages such as water conservation. Since January 2012, several

NGOs⁴ have been contracted to carry out consumer perception studies and report on consumer satisfactions. They are also engaged in carrying out campaigns for water conservation, meter reading, and water supply features/facilities for better maintenance especially among low-income communities; and

- (viii) Under the DWSSDP, around 46 training courses have been provided. The majority of the training has been provided through the DWASA training center, while a few have been conducted in other specialized institutions⁵. Only one course has been provided internationally⁶. So far, around 800 DWASA employees have received training. In order to build the capacity of the DWASA training center and help facilitate to be sufficient, external trainers are sometimes brought in. DWASA established a Training Center in 1980 with two branches: (i) engineering and (ii) administration and finance. These branches provide training to DWASA employees in their respective fields. In FY2010-11, the Training Center carried out most of the organized training for over 400 DWASA personnel. Aside from the training provided by the Training Center external institutions such as Bangladesh Public Administration Training Center, Planning and Development Academy, Bangladesh Computer Council, Institute of Diploma Engineers, Institute of Personnel management, BUET etc. are also engaged to train DWASA staff.

16. DWASA has at various forums stated that its operational efficiency has improved in the last few years. Reportedly, non-revenue-water is down to 29% from a high of 40%, and collection rate has improved to bring about a 25% increase in revenue income in FY2011-2012 compared to the previous fiscal year. Notwithstanding the validity and accuracy of these figures, it is commendable that serious attempts are being made to improve operational efficiency and hence performances of DWASA by the incumbent management. Many challenges remain and addressing the water need of a growing population of Dhaka will require a strong DWASA willing to meet those challenges.

17. Although DWASA has been able to recently increase its tariff by 5%, there is a need for higher rate increases to meet its costs. Under the WASA Act 1996, WASAs have the authority to increase tariff by 5% annually and with approval of the government, they can increase tariff by more than 5%. DWASA has taken advantage of the provision in the Act and has increased tariff rates by 5% per year since 2007. The Tariff Adjustment Plan prepared together with the 5-year Business Plan recommended a base tariff increase of 59% and thereafter a 10% increase. This recommendation has been endorsed by the DWASA Board and not yet been accepted by the government. Tariff setting and adjustments will remain a key issue in the near future and will be required to be addressed by WASA and the government for full cost recovery, including capital costs.

18. Tariff setting processes and other regulatory issues such as water quality, service quality, water resource allocation and protection, etc. will be addressed in a technical assistance (TA) "Establishing Regulatory Framework for Urban Water Supply and Sanitation Sector"

⁴ DWASA has partnered with 19 NGOs. They are DSK, WSUP, Water Aid, Plan International, UNICEF, Desh Bidesh International, Resource Integration Center, Shobar Jonno Pani, Prodipon, FULKI, ASD, BASA, NDIBUS, PSTC, CUP, Shelter for the Poor and Nogar Seba

⁵ Bangladesh Public Administration Training center, Planning and Development Academy, Bangladesh Computer Council, Institute of Diploma Engineers, Institute of Personnel management, BUET

⁶ Bangkok, Thailand (unspecified institution)

funded by ADB. The TA intends to assist the government in making the water cell in the Policy Support Unit (PSU) of the Local Government Division (LGD) fully functional by developing necessary rules and standards for regulating water utilities operating in the urban sector and starting performance monitoring of major water utilities. Specific outputs will include: (i) drafting adequate rules and standards for regulating water utilities, including financial management regulations, tariff setting and review methodologies, service standards and key performance indicators, and customer service regulations; (ii) preparing monitoring reports on the performance of major water utilities by using the approved rules and standards by reviewing the reports submitted by water utilities; (iii) initiating preparation for the establishment of a water economic regulatory commission (WERC), including preparation of a road map; and (iv) capacity building of the government officers, particularly those of the water cell, to meet their obligations.

19. As noted, DWASA is currently undergoing substantial capacity strengthening from the DWSSDP within the financial and capacity building component. Capacity building processes mainly deliver formal training with developed course modules and preparation of operating manuals such as operations and maintenance (O&M) manual. Training has focused particularly on technical and financial aspects. There is a need for further training of staff since the FCB component will be ending in December 2013 and delivery of planned training could not be fully completed due to constraints noted. Training needs to focus on financial management and IT systems and applications.

20. Although DWASA has embarked on preparing corporate plan and budget with support of the FCB team, there is little capacity within its own staff to ensure continued updating and preparation of such plans and budgets. We understand that the IT hardware is only being revamped but it still is a long way for the field offices to digitize operations and establishing fully connected networking with the central unit in DWASA. Very few of the staff are computer literate and capacity for both computer literacy and use of computers needs to be increased.

21. DWASA needs to strengthen its capacity for PPP management as well as skills/knowledge of its staff with respect to procurement and regulatory areas of PPP projects. Although specific transaction advisory services from external parties can be sought, it is clear that a strong PPP unit staffed with a few knowledgeable and skilled senior professionals is necessary if the PPP is pursued in the future. Strengthening of the capacity in this area could entail several new recruitments as well as training cum study tours for staff responsible for various aspects of the PPP project during the pre-tender and tender phases.

D. Country Level Issues

22. The country-level issues are based on current analytical work, amongst other the Diagnostic Studies of Accounting and Auditing (DSAA), the World Bank Country Financial Accountability Assessments (CFAA), Reports on the Observance of Standards and Codes (ROSC) or any other country analytic work. Most of these issues are common to all ADB assessments for Bangladesh.

E. Risk Assessment

23. The following key risks have been identified:

Table 1: Risk Summary

Risk	Risk Assessment	Risk-Mitigation Measures
Inherent Risks		
1. Country-Specific Risks	M	Increasing political unstable future situation, resulting in serious hampering of economic development and possible investments in WSS infrastructure projects. ADB, or other IFI (/Government of Bangladesh), may put funding of DWASA's projects on hold.
2. Entity-Specific Risks	S	Lack of a National Water Regulatory Authority; no benchmarks or KPIs for assessment of DWASA performances. The government is committed to establishing an independent regulatory authority. Reforms are ongoing, but DWASA still cannot operate as an (financial) autonomous entity. Top management is still appointed by politics for a limited number of years, so continuity of the ongoing (reform) programs is not ensured. Tariff setting –a crucial issue for sustainable DWASA operations– still needs political approval at several levels. The present low tariff is significantly hampering sustainable development of DWASA. Present DWASA proposals, based on the DWASA 5 year Business plan, to increase the fee more than the authorized 5%/year has not been accepted.
3. Project-Specific Risks	H	Total costs/m ³ of treated water Gandharbpur WTP are significantly higher than present fee/m ³ . Financial absorption capacity of DWASA for the higher Gandharbpur WTP I (production) costs, as well as the higher production costs for recently commissioned Saidabad WTP II, seems questionable if significant adjustments in the tariff levels do not materialize. The government has assured to increase the tariff beyond 5%. Moreover, the government may pass on concessionary lending terms to DWASA, lower than the standard 5% relending rate. The competences and experience of DWASA financial (/ICT) staff in automatic accounting and reporting systems are limited. Intensified continuation of ongoing FM training program is clearly required. Same applies for related MIS & Control systems
4. Overall Inherent Risk	M	Concerning the Overall Inherent Risks the present political unrest and violence seems the biggest risk to destabilize Bangladesh in the coming years, and thus may hamper DWASA's development and financial situation

Control Risks

1. Executing Entity/ DWASA	M	<p>DWASA is still a more or less 'traditionally' organized organization, in which each department and/or unit is executing their own tasks, with little coordination or a joint overall approach.</p> <p>Discussion is initiated for necessary changes in DWASA 'mission'/strategy and organization structure. Participants will have mixed background; DWASA top management, government representatives, knowledgeable local experts, consultants.</p> <p>DWASA is also a rather centralized organization; no. of staff at HQ exceeds the total number of staff/employees in all in the respective 11 zones together.</p>
2. Flow of Funds	L	<p>DWASA has handled in the past years several ADB and other IFI loans, apparently without major problems</p>
3. Staffing	M	<p>The staffing of the financial management division may be considered as weak in terms of qualifications and competences, and not really up to date with modern automated accounting and /MIS systems.</p> <p>This is considered a result of DWASA's low salary levels and lack of attractive work environment.</p> <p>Most DWASA staff have a civil engineering background, and little affinity with non-technical, or organizational - FM issues. Therefore FM issues and problems do not get the proper attention at top-middle management level. Clearly the capacity building program as being initiated and executed by the DCBP project should be continued on an intensified scale.</p>
4. Accounting Policies and Procedures	L	<p>DWASA follows closely the respective Bangladesh and international accounting requirements, including involving qualified external Chartered Accounting firm for conducting the external audits.</p>
5. Internal audit	L	<p>An internal auditing unit exists, but is mainly addressing queries from the Government of Bangladesh, and other external stakeholders on DWASA's annual report. The internal auditing capacity will be improved.</p>
6. External Audit	L	<p>External audits are conducted annually by a qualified Auditing company, with clear and adequate assignment. The Project is also subject to annual statutory auditing conducted by Foreign Aided Projects Audit Directorate (FAPAD) under the Comptroller and Auditor General (OCAG) of Bangladesh.</p>
7. Reporting & Monitoring	L	<p>Reporting of the monthly performances (I. Operations, II. Finance, III Planning & Administration) is slow and mostly 4-5 months after the respective month. As a result these figures are not very useful for responsive and adequate management actions.</p> <p>There are no electronic data exchange linkage of financial/ accounting systems between the zones and</p>

		Headquarters. FCB team advised on computerized accounting system, but not yet (fully) implemented and the billing & payment system not functioning at optimal level yet.
8. Information Systems	M	Further development of the MIS seems to have much interest from senior DWASA management, however presently sufficient budgets are not yet made available. Serious efforts are made (for several years now) to link the electronic billing system to the DWASA accounting system, which prove rather cumbersome. Even the involved bank affiliated offices do not always have adequate IT infrastructure for online transferring of billing payments data DWASA IT unit consists only of 2 staff, which has to collect and process all required MIS information. No actual assessment or analyses of the data is being conducted In the DWSSDP, efforts are made to monitor NRW losses through a GPS monitoring.
9. Overall Control Risk	M	Generally it can be stated that the financial management risks, flaws and imperfections are recognized by DWASA, and programs are ongoing to mitigate, or to improve that. However more effective attention and involvement by the DWASA top management should be given concerning the various risks – and the regular internal (MIS) reporting of their impacts-, in order to be able to effectively direct and guide the DWASA middle management and staff through the difficult tasks and financial years which lay ahead of the DWASA organization in the coming 5-10 years.
H=High, S= Substantial, M=Moderate, L = Low		

F. Organizational Structure

24. **Organization and Management.** The DWASA is a service oriented autonomous commercial organization in the public sector, entrusted with the responsibility of providing water supply, sewerage, storm water drainage services, and environmental health management. Its jurisdiction covers Dhaka and Narayanganj cities encompassing about 400 sq. km service area. The service area of WASA is divided into 11 Maintenance, Operations and Distribution Services (MODS) and Revenue zones. The total number of staff positions is 4,375 of which 3,294 are currently employed.

25. The DWASA Board consists of 13 members from various disciplines including its chairman. The Board is the Governing Body of DWASA. The DWASA board is comprised of a mix of different professional organizations and government officials. In the spirit of the WASA Act 1996 the Board should perform its functions in full autonomy. However, political interference is not uncommon. The Managing Director and Deputy Managing Director (DMD) are recruited from outside and employed on a contractual basis on commercial terms and conditions with a term of four years. It appears that recent reforms and “turn around program” introduced by the current Managing Director are gradually turning DWASA into a more laudable and effective

organization. Achievements include, (i) considerable improvement in financial performance and computerization of financial management systems, (ii) annual updating of the 5-year Business Plan, (iii) strengthening of the financial control systems, (iv) integrating billing and collection process and accounts through computer networking systems, and (v) public education and citizen's awareness campaigns is bringing more transparency and spreading water conservation messages.

26. The rest of the employees other than the Managing Director and DMDs are sourced internally. The salaries and the benefits of the staff at other levels are fixed as per the standard public service salary benefit structure with no incentive packages for better performance. In the past 5 years the total number of employees has decreased from 3735 to 3294, a decrease of about 15%. About 87% of the employees are 3rd and 4th class employees, and 13% 1st and 2nd class employees.

27. As per the WASA Act, 1996 coupled with the Financial Regulations⁷, DWASA has the power to exercise financial autonomy to manage its affairs. Under section 4 of the WASA Act 1996, the Share Capital of DWASA will be fixed as determined by the government and all share capital will be assumed by the government. The capital may be increased by the government from time to time for its necessity. DWASA Board⁸ approves investments funded from its own sources. For investments by the government, the Executive Committee of National Economic Council (ECNEC) approves large investments. The Prime Minister is the chairperson of the committee and the finance minister is the alternative chairperson.

28. There is a lack of coordination between the O&M and other departments within DWASA. Functions performed by other departments directly impact efficient operation of the O&M department. Under the current Financial Capacity Building (a component of the DWSSDP project of ADB) O&M manual and training has been developed and provided to a number of the staff. However, the training will remain limited since it is impossible to provide training to over 3,000 personnel. It appears that the current training program should continue even when DWSSDP implementation is completed.

29. DWASA complies with both government and IFI and donor procurement rules and regulations. The majority of large-scale procurement occurs under projects financed by the ADB and the World Bank. The procurement rules and guidelines in case the procurement is financed by ADB/ World Bank are the particular procurement guidelines of the funding agency. These general procurement rules are applicable for all types of procurements; procurement of goods, works, and services. DWASA does not have experience with PPP procurement/agreements. PPP procurement includes review, analysis, and negotiations of commercial and technical details that require knowledge and skills not available within the organization.

30. DWASA has taken advantage of the provision in the WASA Act 1996 whereby authority is provided for autonomous increases in tariff by 5%, which DWASA has implemented from 2007 such that the current tariff for domestic consumers stands at BDT7.34/m³.

⁷ Dhaka Water Supply & Sewerage Authority (Financial) Regulations, 2009 were published in gazette on 27 July 2010.

⁸ Under section 34 of the WASA Act 1996

31. Bill collection in several zones is outsourced to an employees' cooperative, The Employees' Consumers Supplies Cooperative Society Ltd (ECSCSL), under contract with DWASA.

G. 20 Year Financial Forecast

32. The latest available Audit Report ⁹ of DWASA is for the fiscal year (FY) 2011/2012. An overview of the present financial position of DWASA and some key financial ratios derived from the annual reports are given in the PPTA Report.

33. The starting year of the 20-year forecast of the financial performance of DWASA is based on the financial position in the FY12. Other relevant data were used from the 5-year DWASA business plan and multi-annual financial forecasts which were developed under the on-going FCB support.

34. The forecasting of the 20-year DWASA financial results was carried out under various assumptions that are included in the data input sheet in the PPTA Report.

35. The following main observations are made:

- DWASA's annual net profits (after tax and interests) will remain positive in the coming 3-4 years, but will turn negative in and after 2017/18, with increase in interest payments, if tariff increase remains only 5% per annum.
- DWASA's annual expenditures include presently a major (incidental) provision for additional contributions to the pension fund to close the existing pension 'gap'. For the FY 2011/12 this concerned about 2.0 billion BDT (i.e. 30% of total costs). This incidental provision may end in the coming 2 years, thus leaving significant financial 'room' to compensate for the expected increases in the annual O&M and Debt Service Liabilities (DSL) costs.
- The debt service cover ratio (DSCR) may become as low as 0.7 in 2018/19, even though the annual revenues are expected to increase significantly, due to the following factors:
 - increase of population to be covered, and thus more connections and consumption
 - increased water supply resources and capacity
 - reduction in NRW, thus less production losses
 - annual increase of the water/sewerage fee (5% increase per year)
 - increase billing collection rate

36. Future cost reductions may be expected:

- from some lower O&M costs for Saidabad WTP II operations, when the 3 year O&M contract ends.
- if DWASA will be able to re-negotiate the various on-going or future loan/DSL agreements with the GOB.

37. Besides the above mentioned possible cost reductions, clearly the most logical and preferred option to improve the DWASA's expected negative annual financial results, is an

⁹ DWASA Auditor's report and financial statements for year ending 30 June 2012, submitted 26 December 2012.

annual increase of the water-sewerage fee/m³ to be charged to the households and commercial/industrial users. It is generally acknowledged that the present water tariff of BDT 7.34/m³ for domestic users is too low to enable DWASA to deliver adequate water supply and sewerage services at the required quality level and on a sustainable basis.

38. Unfortunately the local financial FCB expert, responsible for the set up and drafting of the DWASA financial model had left the FCB project earlier and therefore no clarifications on the many, sometimes different and inconsistent figures, could be obtained. In drafting the DWASA 20-year financial forecasts, also Gandharbpur PPTA cost reference data were used, such as investment cost components and O&M cost figures.

39. It may be concluded that with serious DWASA management efforts and actions to improve the revenues, increase tariff rates beyond 5% per annum, and to control the expenditure levels, DWASA does have the financial capacity to absorb the expected strong O&M and financial cost increases, which will result from the necessary change from ground water sources to surface water sources in the coming 20 years.

H. Staff Capacity

40. Currently, DWASA is implementing water and sanitation sector development programs with separate consultancy services addressing FCB and project performance monitoring. This program has addressed several key reform and organizational issues impacting DWASA operation.

41. The FCB team undertook a comprehensive review and assessment of the human resources of DWASA. A training needs assessment (TNA) was carried out for all the Class 1, 2, and 3 employees. Following the TNA, a detailed 5-year Human Development Plan (HDP) has been prepared. The Board of DWASA approved the HDP and implementation started in 2010. This plan provides systematic strategies for human resource development and proposes comprehensive trainings on relevant areas in order to strengthen management and staff skills and institutional capacity for managing and operating DWASA.

42. DWASA's Finance Accounts and Revenue functions, including the 11 zones, are under the responsibility of Deputy Managing Director (Finance). The total manpower is 462. In order to operate the billing and collection function DWASA engages a Revenue Inspector (for every 400 connections), an Inspector analyst (for 2,000 consumers), and an Assistant Revenue Officer (for 5,000 consumers). The approved number of Revenue Inspectors is around 310 and will be increased further to 450 as of 30th June 2012.

43. Given the existing number of connections (about 300,000) it seems that the ratio for the number of Revenue Inspectors should be reconsidered.

I. Disbursement and Fund Flow Mechanisms

44. In general, the government receives loans from the ADB and other donors at soft rate and conditions; however, DWASA receives the respective re-lending at stricter conditions and higher rates from the government. The tenure of subsidiary lending is usually shorter while the interest rate is higher than the one government will be paying to ADB (i.e., 5% vs. 1-2% for ADB resources).

45. The Foreign Loan (e.g. ADB, World Bank, Danida) and government funds will be allocated in the Annual Development Program (ADP) with regards to the budget estimates prepared by the DWASA based on the annual work plan of the project.

46. The loan fund is kept at the imprest account of Bangladesh Bank. The accounts are operated by the designated officials of DWASA. From the Bangladesh Bank accounts, the respective funds are transferred to the designated accounts opened at the scheduled commercial bank of the project. Further, the counterpart funds will be transferred from the Ministry of Finance (MoF) to DWASA to meet the costs and counterpart funding requirements for implementing the objective of the project.

47. Based on an agreement of the re-lending conditions between the MoF to DWASA (total amount, tenure, rate, grace period) the respective loan amount will be transferred (in tranches) to the respective DWASA project account, and disbursed based on the implementation contract(s) with the contractor(s) and suppliers.

48. Within DWASA, every project is managed by an officially designated staff/unit called Project Director and PMU. The Project Director (PD) of the PMU is the authorized signatory to withdraw ADB loan proceeds and is also the Drawing and Disbursement Officer (DDO) to draw the government funds. The allocated Government funds will be released quarterly and the PMU will present the bills to the Chief Accounts Officer (CAO) for actual disbursement.

49. The assigned PMU for a project, usually technically assisted by a Construction Supervision consultant as being the 'Employer's Representative' will be responsible for the control and review of invoices and payments.

50. All disbursements are made as per the DWASA Financial Rules 2009 and Generally Accepted Accounting Principles. DWASA's own funds are used as per budget approved by the Board of DWASA under section 34 of the WASA Act 1996.

51. The ADP Funds are disbursed as per Project Accounts Manual, and Delegation of Financial Powers for Development Project, approved by the Ministry of Finance. Borrowed funds from foreign development partners are disbursed as per loan agreement. The loan proceeds will be used to finance the foreign exchange cost (excluding local duties and taxes) of items produced and procured.

J. Accounting Policies and Procedures

52. DWASA keeps all its financial transactions records like a commercial organization. It follows the accrual accounting procedure, in accordance with the International Accounting Standard, and International Financial Reporting Standard which are similar as the Bangladesh Accounting Standard Standards, or the Bangladesh Financial Reporting Standards.

53. It is the responsibility of the Managing Director to submit final accounts of DWASA to the Board after the fiscal year, with a copy sent to the government for its monitoring role.

54. The DWASA annual financial statements consist of three sets of documents:

- (i) the Balance Sheet containing information about the assets and liabilities;
- (ii) the Income & Expenditure Statements, containing information about the operating revenues and expenditures of DWASA; and

- (iii) the Cash Flow Statements comprising information from the Balance Sheet and the Income and Expenditure Statements, including information about the cash flow generated from operating activities, investments and financing, as per Bangladesh Accounting Standards and Bangladesh Financial Reporting Standards.

55. Allocation of costs and expenditures is done in accordance with respective cost components.

56. There exists in total 9 Rules for the DWASA Accounting System, under the Dhaka WASA Financial Regulation 2009. As per the Regulations 68 to 76 the DWASA must keep its accounts as per IAS and IFRS. Capital Accounts and Revenue Accounts must be separated. Formation and the deposits at the capital accounts are also mentioned in Regulations 70 to 72 of 2009. The formation of Revenue Accounts is mentioned in Regulation 73. Preparation of accounts and maintenance are also described in the sub rules 74 and 75 of the Dhaka WASA Financial Regulation 2009. The store accounts are also maintained by the DWASA. The Chart of Accounts prepared by the consultants is being followed by the DWASA.

57. The main sources of income of DWASA are collection of tariffs from the various user groups (households, commercial and industrial users). DWASA has about 300,000 customers, each representing multiple users (on average 30 people per connection). This is why blocked tariff structure is difficult to apply. The Revenue Division manager and staff ensure that the billing is based on consumption of water on a monthly basis. After receiving a bill, the consumer may pay its bill through designated banks and or by cell phone. DWASA has agreements with almost all banks and two cell phone operators (Robi and City Cell) for that purpose.

58. The DWASA staff of Finance and Accounts department is responsible to ensure reconciliation with accounting records and bank statements on monthly basis. If there is any variance, the Office of the Chief Accounts Officer and the concerned bank will take necessary action to resolve the matter expeditiously.

59. Several significant shortcomings have been observed (amongst others in the annual Audit Report) in the financial management and budgeting of DWASA, many of which are being addressed by the presently ongoing FCB support.

60. To strengthening the financial management capacity, DWASA is presently implementing DWSSDP. The DWSSDP aims to improve DWASA's financial sustainability and strengthening DWASA's governance and organizational structure and financial management capacity (through FCB project).

61. Since May 2011 computerized billing systems operate in all DWASA Zones. However, this has not yet been linked to the revenue or accounts department but only to the IT department. Work is ongoing to rectify this situation. The billing system was designed by persons without sufficient knowledge of utility billing but essentially designed by the IT department to provide basic data for the Management Information System. The FCB team is reviewing the data but because the data is very raw, there have been issues in linking the system to the accounts package.

62. About 200 branches in 9 banks are under real-time on-line billing system receiving DWASA water & sewer bill. The billing database is instantly updated when bills are paid at these branches. Few more banks including Janata Bank Ltd., a state owned bank, will come under

this system soon. Billing is computerized and payments are made only through bank accounts from customers.

K. Internal Audit

63. Internal controls related to the DWASA FM system are to ensure that:

- (i) transactions are executed in accordance with management's authorization;
- (ii) transactions and other events are promptly recorded in the correct amount, in the appropriate accounts, and in the proper accounting period;
- (iii) access to assets is permitted only in accordance with management's authorization; and
- (iv) recorded assets are compared with the existing assets at reasonable intervals and appropriate action is taken regarding any differences.

64. The internal audit division of DWASA is to conduct pre-audits and post-audits on pre-audit of payments over BDT 500,000 and post-audit of payments up to BDT 500,000. To ensure the transparency and independence the internal audit unit works under the direct supervision of the Managing Director of DWASA. There is a provision for 18 officers for this unit. Presently the Internal audit division comprises 2 Audit Officers and 12 auditors, headed by a Sr. Audit Officer.

65. DWASA has in the past introduced methods and procedures to ensure the integrity of financial and accounting information to meet operational and profitability targets, and to distribute management policies throughout the organizational goal and objectives set out by the Board under the WASA Act 1996, amongst others that:

- (i) all payments are done after following the Public Procurement Rules 2008 and Public Procurement Act 2006.
- (ii) all payments are done through crossed cheque and all receipts are taken through bank which ensure the internal control of fund of the DWASA;
- (iii) payrolls, overtime allowances, conveyances are to be transferred to the concern employees accounts directly from DWASA's designated bank accounts; and
- (iv) all bank accounts are to be operated jointly as per delegation of financial power approved by the DWASA Board as well as DWASA Finance Rules 2009.

66. In practice, however, it is observed that the personnel of the Internal Audit department have no clear job assignment. Instead of carrying the required routine internal audit activities, they are busy in preparing the audit replies on request of the government and other stakeholders' audit teams.

67. In a future computerized finance and accounting environment the functions of Internal Audit should be subject to significant changes, including:

- (i) Application controls through (electronic) documentation
- (ii) Segregation of duties and security
- (iii) Control over systems software, specifically control over on line program changes
- (iv) Control over operations & processing & distributed processing to control the transfer of data between integrated accounting system
- (v) Control over application system development
- (vi) Regular compliance testing procedures & audit trail of individual items entered for processing using on line terminal.

68. This would require substantial changes in required staff background and job competences. However, ADB is not relying on the work of the Internal Auditor substantially.

L. External Audit

69. The DWASA accounts must be audited by an auditor appointed by the Board of DWASA on an annual basis. The remuneration of the auditor will be fixed by the Board. The authority must ensure that after the accounts preparation the audit and Board approval shall be completed within two months after the end of a financial year. Ref: Section 40 of the WASA Act 1996.

70. The scope of the external audit includes

- (i) adequacy of the accounting and internal control systems;
- (ii) ability to maintain adequate documentation for transactions;
- (iii) eligibility of incurred expenditures;
- (iv) basis of estimates; and
- (v) an opinion concerning the fairness of the accounts, as maintained and provided by the DWASA management

71. As DWASA is a state entity, the Office of the Comptroller and Auditor General of Bangladesh will review and comment on DWASA's financial reporting and records.

72. The accounts of DWASA are regularly audited by the Government Commercial Auditors (CAG) Office as well. These auditors mainly focus on observance of the applicable government rules and regulations concerning salary fixation, overtime, pension scheme, procurements, and budget provisions.

73. For development projects, an audit is also performed by the FAPAD unit of the CAG. This unit is specifically trained on loan procedures and loan negotiation documents. This unit also reviews if the project is being implemented according to the approved loan agreements, and reviews as well the tax payments, deviations from the loan agreements, authorizations, and disbursements.

74. The Board of Dhaka WASA approved a policy for appointing auditor in 2010 (CA firm) and under that policy the auditor of 2009 was appointed. Since 2009-10 M/s Rahman Rahman Huq Chartered Accounts a Member Representative of KPMG (One of the Big Four audit firms of the world) was appointed. The auditor already audited the accounts of Dhaka WASA for successively three years from FY2009-10 to FY 2011-12.

75. The external statutory Audit Report is required be submitted within 2 months from the end of the FY. DWASA, however, has until now not been able to submit the audit report on time.

76. The Audit report for FY2010-2011 was finalized on 25 November 2011. The draft accounts for the FY ending 30 June 2012 were finalized in December 2012.

77. Critical accountability issues brought up by the auditors in their audits for the fiscal years 2010/11 and 2011/12 concern:

- (i) Accounting for Government Grants & Funds is not maintained as per IAS 20.
- (ii) Maintenance of proper Fixed Assets Register is lacking.

- (iii) Physical verification of fixed assets is lacking.
- (iv) Pension Fund provisions not yet increased as per requirements as per IAS 19.
- (v) Significant differences in Accounts Receivables of DWASA and its related 12 revenue zones.
- (vi) Taxes on profit not totally according to 'Income Tax Ordinance 1984
- (vii) No provisions made for disputed claim of NBR VAT authority

78. For the Project, one set of audited project financial statements shall be submitted for all donors.

M. Reporting and Management Information Systems

79. The DWASA MD has to submit the annual budget to the Board 3 months before the ending of the financial year, as per section 34 of the WASA Act 1996.

80. The annual budget is prepared by the Budget Committee consisting of:

- (i) Managing Director- Convener.
- (ii) All Deputy Managing Directors- Member.
- (iii) Chief Engineer- Member.
- (iv) Secretary- Member and
- (v) Commercial Manager- Member Secretary

81. As a government entity, DWASA is required to submit the revised budget of DWASA to the Ministry of Finance by December. The Minister of Finance is required to submit the revised budget in March as per section 12 of the Government Finance and Budget Management Act 2009 (40th Act of 2009). To facilitate the approval procedures, the DWASA Board approves the budget for the next year together with the revised budget of the current year by December.

82. Following important aspects are considered when preparing DWASA Budget

- (i) All possible receipts and payments must be included.
- (ii) All expenditures should be kept in minimal figures.
- (iii) All receipts and total payments should be included.
- (iv) All outstanding revenues should be included.
- (v) Cash Flow Statements are to be prepared on monthly basis reporting all figures.
- (vi) As per art.26 of the DWASA (Finance) 2009 act, the departmental Head will be responsible to control the cost of each department.

83. The reporting is done in accordance with accounting standards; i.e., the GAAP and the Bangladesh Accounting Standards.

84. Separate Financial Statements are prepared for each project independently. The financial reports are partly prepared by an automated accounting system, using Tally Software ERP 9.5. In the framework of the FCB project, ongoing support is given to extend the automation of the accounting system, in particular concerning the computerization of the billing system, starting in 2010.

85. The respective financial reports are intended to compare actual expenditures with budgeted and programmed allocations. Variance analyses are undertaken for proper implementation of budgetary control system at the DWASA.

86. Presently the DWASA financial reporting system has no electronic link with the financial information systems of individual projects progress; therefore, no financial controls are in place to reduce the risk that the physical and financial project progress data may not always synchronize with the reported financial data¹⁰.

87. In 2009 the billing collection rate was 80 % and currently it has increased to about 90% . The rate for outstanding debts (age) has come down from 16 months to about 7.5 months by end of 2012.

N. Procurement

88. DWASA being a public utility follows rules and regulations framed by the government. Many procurement initiatives are financed by international financial institutions (IFIs) and donor resources and it is mandatory to follow the rules and guidelines of IFIs and donors. Therefore, DWASA complies with both government and IFIs and donors. The majority of large-scale procurement occurs under projects financed by ADB and the World Bank (WB) under their respective procurement rules and guidelines that are applicable for all procurements of goods, works, and services.

89. Procurement of goods and services under government financing and internal funds of DWASA is conducted under the guidelines of the Public Procurement Rules 2008 following a competitive bidding process. Tenders for works and services follow a two-stage process of shortlisting by evaluating qualifications and capacity of interested bidders and with review of technical and financial positions of bids. Over 90% of all bids are for goods conducted by reviewing quotations and selecting the least cost products.

90. Concerning the financial impact of procurement issues on the DWASA Finance Division relates mainly to reviewing and/or approving, amongst others, the following issues:

- (i) whether the PPR has been followed
- (ii) suppliers bills
- (iii) material receiving reports (MMR) from store keeper
- (iv) quantity/quality of materials in relation to specifications
- (v) whether quality has been certified by concerned experts
- (vi) whether any earlier payments already have been made
- (vii) security deposits
- (viii) whether deductions at sources have been made (VAT-Taxes-IT)

O. PPP

91. Presently DWASA has little to no experience with PPP/PSP procurement or contracting arrangements. In principle PPP contractual arrangements do include extensive review and analysis preparations, as well as detailed negotiations with potential/selected private sector partners and ultimately the contracting specifications of commercial and technical/O&M details. This all requires up to date technical, financial and operating/supervising knowledge and skills, which presently are not sufficiently available within the DWASA organization

¹⁰ Detailed information on the DWASA reporting/MIS may be obtained from the ongoing ADB - FCB Project.