

## FINANCIAL ANALYSIS

1. The project will be financed by a sector loan to enable the executing agency, the Local Water Utilities Administration (LWUA), to onlend to less-established water districts to fund high-priority investments including water supply (e.g. rehabilitating distribution networks including nonrevenue water reduction, developing additional raw water sources, and expanding water supply systems) and improved sanitation. It will also fund capacity development in key planning, project, and technical areas.
2. Under the project preparatory TA, a financial analysis was undertaken for LWUA and the two pilot water districts, City of Koronadal Water District (CKWD) and Metro San Fernando Water District (MSFWD). The proposed water investments of CKWD and MSFWD are designed to increase the coverage of piped water services (which is at 70% for CKWD and 42% for MSFWD), and CKWD's septage management investment will promote the use of septic tanks and proper disposal of human waste to reduce the incidence of waterborne diseases.
3. The financial analysis of LWUA covered (i) a review of recent historical and current financial performance of LWUA, and the two pilot water districts; and (ii) an evaluation of the financial viability by considering the impact of the project on LWUA's future operations, and of the subprojects on each water district's operations. It assessed LWUA along the following financial performance indicators: (i) ratio of current assets to current liabilities, to ensure that LWUA has enough cash to service its debt when due; and (ii) ratio of debt to equity, to determine how much of its assets LWUA can finance through debt.
4. It is LWUA's standard practice as a lender to prepare a feasibility report for each investment it is considering financing. LWUA has committed to ensure that for each subproject to be financed under the sector loan, the WD meets LWUA's credit criteria, the WD is ready to implement the proposed subproject based on their assessment of a formal request for a loan from the WD to LWUA as evidenced by a board resolution, and the WD offers a minimum monthly charge that complies with LWUA's affordability guidelines and initiatives to provide poor households with affordable access to piped water supply.<sup>1</sup> In addition, LWUA's feasibility report will confirm that the proposed subproject: (i) meets LWUA's and ADB's technical, economic, financial, institutional requirements and social development requirements for the project; and (ii) has a financial rate of return (FIRR) greater than the weighted average cost of capital (WACC).
5. For the two pilot water districts, in accordance with LWUA's guidelines, the following were evaluated: (i) FIRR which should at least equal the WACC; and (ii) tariff affordability.<sup>2</sup> For the purpose of this analysis, based on indications from LWUA, the onlending terms of ADB's loan from LWUA to the water districts are assumed to be: a fixed interest rate of 7.9% per annum, a maximum term of 25 years and foreign exchange risk to be borne by the borrowing water district.

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<sup>1</sup> As stated in LWUA's Water Rates Manual, it is LWUA's standing policy that water tariffs must be kept affordable to low-income families connected to the system. LWUA has ascertained that 10 cubic meters water consumption per month will provide for the basic requirements of those low-income households. For this purpose, the minimum charge for a 1/2" residential connection should not exceed 5% of the average income of low-income families in the WD's service area. [http://www.lwua.gov.ph/downloads/10/LWUA\\_water\\_rates\\_manual.pdf](http://www.lwua.gov.ph/downloads/10/LWUA_water_rates_manual.pdf) (accessed February 2016).

<sup>2</sup> See footnote 1.

## **A. Local Water Utilities Administration**

### **1. Historical Financial Performance**

6. As part of due diligence, LWUA's financial management systems and capacity were assessed. During 2008–2012, LWUA's profitability declined due to a drop in interest income when loan receivables declined (as some water districts borrowed from banks to pay off their loans from LWUA) and lower interest rates charged to water districts. LWUA's financial situation stabilized by year-end 2012 due to lower leverage and closer monitoring of asset quality. In 2013 and 2014, profitability and leverage continued to improve. The stronger and more creditworthy water districts have been repaying their loans from LWUA and refinancing with banks, leaving LWUA with fewer creditworthy borrowers, which will result in more defaults and losses. LWUA is very aware that it must intensify efforts to improve collection efficiency and ensure its financial viability. LWUA is undertaking several internal reviews to increase the competitiveness of its loans to deter current sub-borrowing water districts from prepaying their outstanding loans, and to attract new borrowers.

### **2. Financial Projections and Financial Viability Indicators**

7. LWUA expects to operate viably and profitably in the next 5 years by rationalizing its costs, rebuilding its loan portfolio including making new loans and improving collection performance, and working with the government to serve as a funding conduit for grants to less-established water districts. The inclusion of loan covenants is proposed (in consultation with the Office of the General Counsel) to encourage LWUA's financial viability, LWUA shall notify ADB if (i) it incurs any debt, where if after the incurrence of such debt, the ratio of consolidated debt to consolidated equity is greater than 2.5 to 1; and (ii) the ratio of its total available cash assets to current liabilities is less of greater than or equal to 1 to 1.

8. LWUA's cash position is highly dependent on its collection rate. LWUA has committed to ensure that its non-performing loans as a percentage of its total outstanding receivables portfolio is less than 30% by financial year-end 2016. LWUA's historical and projected financial statements are summarized in Table 3 below.

## **B. City of Koronadal Water District**

9. **Historical Financial Performance.** The operations of the City of Koronadal Water District (CKWD) have improved steadily since 2008.<sup>3</sup> In 2012, CKWD's revenues reached P62 million, with a net income ratio of 30%. This trend reflects the benefits of its water tariff increase in February 2011 and expanding coverage. Revenues rose further in 2013 to P68 million, with a slightly lower net income ratio of 28%, due to higher O&M expenses.

10. **Subproject Information.** The water supply and sanitation components aim to provide better services to customers up to the year 2025. CKWD's existing water supply system serves 15 *barangays*.<sup>4</sup> The water supply investment is expected to generate an additional 2,700 service connections in the five unserved *barangays* by 2017. The total cost for the water supply and sanitation subprojects is about \$3.43 million, which includes price and physical contingencies for local and foreign cost components, and financing charges during construction.

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<sup>3</sup> LWUA had assumed management of CKWD on an interim basis from 2008–2011, triggered by a management crisis in 2007. CKWD resumed management in 2011.

<sup>4</sup> A *barangay* is the smallest administrative division in the Philippines and the native term for village, district, or ward.

Of the total project cost, ADB is expected to finance \$2.94 million as follows: (i) \$2.77 million through onlending by LWUA, and (ii) \$0.17 million through an investment grant from Water Financing Partnership Facility for CKWD’s septage treatment plant. The government is expected to fund \$0.49 million (i.e., the water district, LWUA and/or the local government, for taxes and the cost of land acquisition and resettlement). Implementation of the subprojects is scheduled to start in 2016, with completion targeted in 2017 for the water supply component and in 2018 for the sanitation component.

11. **Financial internal rate of return.** The Koronadal subproject’s base-case FIRR is 22.1%, significantly higher than their WACC of 5.7%.<sup>5</sup> The FIRR exceeds the WACC in all the scenarios shown in Table 1 below.

**Table 1: FIRR and Sensitivity Test Results – Koronadal**

<b>Scenario</b>	<b>FIRR (%)</b>
Base case	22.1
1-year delay in operation	18.8
Capital cost increases by 10%	20.2
O&M cost increases by 10%	21.4
Revenues decrease by 10%	19.3
All costs up 10%, revenues down 10%	17.3

FIRR = financial internal rate of return, O&M = operation and maintenance.

12. **Sustainability and Tariff affordability.** Projected financial statements were prepared through 2035. With the subproject, additional tariff increases of 5% are projected every 3 years. Income statement projections show that the water district will generate net income for all years of the projection period. Cash-flow projections show that annual cash inflows will be sufficient to cover all annual cash outflows of the water district. A key risk is CKWD’s ability to raise tariffs; sensitivity analysis was undertaken using increases equal to 50% of the base-case assumptions. Financial projections show that the debt service coverage ratio (DSCR) remains above 1.3 times and the operating ratio remains below 80% until 2034. The 2009 socioeconomic survey found that 73% of unconnected households indicated interest in getting connected to CKWD’s water supply system and were willing to pay an average of P333/month.<sup>6</sup> The demand for better sanitation was relatively low at 30.4%, of which only 27.5% cited de-sludging. Of those who chose de-sludging, 31% were poor and willing to pay for the service. CKWD last increased its water tariffs in February 2011. The current minimum monthly water tariff is P161<sup>7</sup> (2.3% of P6,935,<sup>8</sup> the monthly income of a low-income family in the City of Koronadal estimated for 2013). Through 2035, the projected minimum combined water supply and sanitation tariffs range from 1.3% to 2.4% of the projected average monthly household income.

### **C. Metro San Fernando Water District**

13. **Historical Financial Performance.** All performance parameters of Metro San Fernando Water District are better than the key viability indicators tracked by LWUA’s Management Services Office, except for its nonrevenue (NRW) level, which is quite high. In 2012, revenues and net income declined slightly due to water supply problems, a high NRW level, and low

<sup>5</sup> WACC = 5.7%, assuming 83% loan financing from LWUA at 7.9%, and the balance funded by the government at 9% (based on a 3.9% yield of the government’s 10-year bond as of 29 December 2015).

<sup>6</sup> About \$7.09 at P46.995/1\$ as of 29 December 2015.

<sup>7</sup> About \$3.43 at P46.995/1\$ as of 29 December 2015.

<sup>8</sup> About \$147.57 at P46.995/1\$ as of 29 December 2015.

coverage. MSFWD last raised its minimum tariffs by 8% in March 2010, a much-needed increase. Source development, rehabilitation of pumping facilities, and NRW reduction are MSFWD’s priorities to stabilize its operations. It availed of loans from LWUA and Land Bank of the Philippines in 2010 for source development to expand coverage. Additional debt is required for large-scale investment in source development, NRW reduction, and network expansion.

14. **Subproject Information.** The present water supply facilities of MSFWD consist of two systems covering five of the 20 municipalities in La Union, with raw water from a combination of surface water, deep wells, and shallow wells. Service coverage remains low (20%–25%). The water supply subproject is expected to generate an additional 7,500 service connections by 2020, and to reduce NRW levels (54% at year-end 2012). The total cost for the subproject is about \$13 million, which includes price and physical contingencies for local and foreign cost components, and interest during construction. Of the total project cost, ADB is expected to finance \$11.5 million (through onlending by LWUA), and the government \$1.6 million (i.e., the MSFWD, LWUA and/or the local government, for taxes and the cost of land acquisition and resettlement). Implementation of the subproject is scheduled to start in 2016, with completion targeted for 2017.

15. **Financial internal rate of return.** The subproject’s base-case FIRR is 7.1%, higher than the WACC of 5.7%.<sup>9</sup> The FIRR exceeds the WACC in all the scenarios in Table 2 below. To ensure MSFWD’s sustainability, regular tariff increases of 10%–15% have been assumed.

**Table 2: FIRR and Sensitivity Test Results – Metro San Fernando**

Scenario	FIRR (%)
Base case	10.6
1-year delay in operation	9.4
Capital cost increases by 10%	9.5
O&M cost increases by 10%	9.4
Revenues decrease by 10%	8.1
All costs up 10%, revenues down 10%	5.8

FIRR = financial internal rate of return, O&M = operation and maintenance.

16. **Sustainability and Tariff affordability.** Projected financial statements were prepared through 2035. A 15% tariff increase is proposed in 2016, and another 10% rise in 2018. Thereafter, additional tariff increases of 10%–15% every 2 years are recommended until 2035. Income statement and cash-flow projections show that MSFWD will generate net income and sufficient cash flow for all years of the projection period. A key risk is MSFWD’s ability to raise tariffs; sensitivity analysis was undertaken, using increases equal to 50% of the base-case assumptions from 2015 onward. Projections show that the DSCR falls below 1.3 times only in 2019 (to 1.2 times) and that the operating ratio remains below 80% until 2034. The monthly income in La Union is estimated at P10,852<sup>10</sup> for 2014. The projected minimum monthly bill of P303<sup>11</sup> when the system starts to operate in 2018 is only 2.8% of the estimated monthly income. In 2009, unconnected households who indicated willingness to get connected were willing to pay a tariff of P261<sup>12</sup> per month (although only 42% of total unconnected households indicated willingness to get connected). The leading cause of unwillingness to get connected is contentment with their existing water source. The projected monthly minimum tariff remains below 5% during the projection period.

<sup>9</sup> WACC = 5.7%, assuming 88% loan financing from LWUA at 7.9%, and the balance funded by the government at 9% (based on a 3.9% yield the government’s 10-year bond as of 29 December 2015).

<sup>10</sup> About \$230.92 at P46.995/\$ as of 29 December 2015.

<sup>11</sup> About \$6.45 at P46.995/\$ as of 29 December 2015.

<sup>12</sup> About \$5.55 at P46.995/\$ as of 29 December 2015.

**Table 3: Historical and Projected Financial Statements – Local Water Utilities Administration**

(In Million Pesos)	ACTUAL (Based on Audited FS)				PROJECTED					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b><u>BALANCE SHEET</u></b>										
<b>ASSETS</b>										
Cash & S-T Investments	1,598	1,862	1,731	2,143	2,057	1,974	2,022	2,019	2,510	2,280
Receivables due from Water Districts - Current	1,193	843	442	2,378	2,670	2,951	3,232	3,597	3,819	3,699
Receivables due from Water Districts - Long-Term	8,778	8,522	10,031	7,461	8,413	8,983	9,403	9,673	9,812	11,020
Other Assets	4,380	4,327	3,576	3,355	1,484	1,429	1,401	1,369	1,333	1,299
<b>Total Assets</b>	<b>15,949</b>	<b>15,555</b>	<b>15,780</b>	<b>15,337</b>	<b>14,624</b>	<b>15,337</b>	<b>16,057</b>	<b>16,657</b>	<b>17,475</b>	<b>18,298</b>
<b>LIABILITIES &amp; CAPITAL</b>										
Current Liabilities, excluding Loans Payable - Current	3,428	2,968	2,210	2,313	2,353	2,185	2,106	1,943	1,991	2,037
Loans Payable - Current	654	647	531	526	526	526	526	526	526	526
Loans Payable - Long Term	6,372	5,481	6,412	4,581	4,983	5,212	5,319	5,370	5,402	5,418
Total Capital	5,494	6,459	6,628	7,918	6,761	7,414	8,106	8,818	9,555	10,317
<b>Total Liabilities &amp; Capital</b>	<b>15,949</b>	<b>15,555</b>	<b>15,780</b>	<b>15,337</b>	<b>14,624</b>	<b>15,337</b>	<b>16,057</b>	<b>16,657</b>	<b>17,475</b>	<b>18,298</b>
<b><u>INCOME STATEMENT</u></b>										
<b>INCOME</b>										
Operating Revenues - Interest from Loans to WDs	1,148	1,033	874	807	1,258	1,220	1,210	1,282	1,350	1,404
Other Income	92	79	120	167	182	132	194	166	150	149
<b>Total Income</b>	<b>1,241</b>	<b>1,111</b>	<b>994</b>	<b>975</b>	<b>1,440</b>	<b>1,352</b>	<b>1,404</b>	<b>1,448</b>	<b>1,501</b>	<b>1,553</b>
<b>EXPENSES</b>										
Personnel, O&M, Bad Debt Allowance, etc.	2,089	520	675	499	757	757	757	757	757	757
Interest Expense and Debt Service Charges	379	287	225	200	167	129	109	91	72	58
Other Expenses	0	0	0	0	13	12	11	10	10	9
<b>Total Expenses</b>	<b>2,468</b>	<b>807</b>	<b>900</b>	<b>699</b>	<b>937</b>	<b>897</b>	<b>878</b>	<b>858</b>	<b>838</b>	<b>824</b>
Gain (Loss) on Foreign Currency Valuation	(134)	640	61	342	138	118	110	97	76	78
Provision for Income Tax	409	(77)	27	113	140	131	164	181	203	224
<b>Net Income</b>	<b>(952)</b>	<b>868</b>	<b>127</b>	<b>505</b>	<b>163</b>	<b>153</b>	<b>191</b>	<b>212</b>	<b>237</b>	<b>262</b>
<b>Financial Performance Indicators</b>										
Current Ratio	0.7	0.7	0.8	1.6	1.6	1.8	2.0	2.3	2.5	2.3
Debt-to-Equity Ratio	1.3	0.9	1.0	0.6	0.8	0.8	0.7	0.7	0.6	0.6
Operating Ratio	199%	73%	91%	72%	65%	66%	63%	59%	56%	53%
Net Income Ratio	-77%	78%	13%	52%	11%	11%	14%	15%	16%	17%