

## CHAPTER 7

### CURRENT FINANCIAL SITUATION

#### 7.1 GENERAL

Information presented in this section is primarily based on information and reports collected from (a) DR Ministry of Finance and Budget (b) local government of Santiago, (c) the World Bank (d) Inter American Development Bank, and (e) CORAASAN). Effort has been made to cross check the information to the extent possible. CORAASAN data is based on actual unaudited figures for 1998, 1999 and 2000. National data is largely based on actual 1998 and some preliminary 1999. Local government data includes 1999 and some data for 2000.

#### 7.2 SANTIAGO CITY AND MUNICIPALITIES IN THE STUDY AREA

##### 7.2.1 SANTIAGO

Own income of Santiago Municipality is derived from Solid Waste Commission, Planning Office, taxes, mortgages, rent incomes, markets, car licenses, slaughterhouses and cock-fighting rings, loan repayments and public functions. The total income increased for RD\$ 35.4 million 1996 to RD\$ 40.1 million or 13% in 1997. It increased to RD\$ 43.3 million or by 8% in 1998; and to RD\$ 51.3 million or by 18% in 1999.

The largest sources of income have been Solid Waste Commission, which constituted 34% of income in 1999; planning Office 15%; taxes 23%; and mortgages 12%. Over the years, Solid Waste Commission has contributed more or less the same share. Planning Office's contribution has varied between 8 and 17%. Similarly, share of taxes has varied between 23 and 33%; while mortgages have varies between 10 and 12%.

The incomes of Santiago mainly come from own sources plus central government subsidies. The subsidy is provided on population, under law 17-97. Relatively small loans were RD\$ 3.5 million in 1997; 5.6 million in 1998; and 5.3 million in 1999. It can be summarized as shown below:

Santiago Income (RD\$ Million)				
Year	Own Income	Subsidy	Loan	Total (% increase)
1997	40.1	97.8	3.5	141.4
1998	43.3	101.0	5.6	149.9 (6%)
1999	51.3	97.6	5.3	154.2 (3%)

During 1999, Santiago's own income constituted only 33% of its total sources of income. 3% came from loans, while the rest of about 64% came from subsidies.

During 1999, Santiago incurred total expenditure of RD\$ 169 million which was as follows: (a) personnel 78 million or about 46% of the total; (b) current operating expenditure 10 million or 6%; (c) municipal service 11 million or 6%; (d) construction program 14 million 8%; (e) acquisition of fixed assets 18 million 11%; and (f) misc. expenses 40 million or 23%.

It can be concluded that:

- Santiago is heavily dependent on the central government subsidy;
- The subsidy provides a bulk of the receipts;
- Without the subsidy, Santiago would have been able to provide less than half of its budget;

- Santiago would not have been able to meet even the personnel costs; and
- Under current situation, it would be unlikely for Santiago to be able to contribute significantly to any major project of CORAASAN.

### 7.2.2 LICEY AND TAMBORIL

During 1999, Lacey had a total income of DR\$ 3.7 million while Tamboril had RD\$ 7.6 million. Like Santiago, both towns suffer from inadequate local revenue and heavy reliance on central government subsidy.

## 7.3 CORAASAN

### 7.3.1 FINANCIAL STATEMENTS

CORAASAN keeps fairly detailed Income Statement and Balance Sheet. Unaudited accounts for years ending December 31, 1997, 1998, 1999, and 2000 were available. An estimated Cash Flow Statement has been prepared.

Summarized income statements are shown below. Income is separated for water and sewage services. However, there is common “other income”. Expenses are separated for operations, maintenance, depreciation, maintenance, and finance charges. Operating, maintenance and depreciation expenses are separated by water and sewage. However, there are several common expenses.

#### Income Statements

(RD\$ Million)			
Year	1998	1999	2000
Income			
Water	134	169	184
Sewage	31	38	41
Others	3	3	4
Total	169	210	229
Expenses			
Water operation	78	42	46
Sewage operation	10	15	17
Administrative (operation)	74	96	110
Water maintenance	4	6	4
Sewage maintenance	3	2	1
Administrative (maintenance)	19	25	21
Depreciation	24	30	33
Total	213	216	233
Net loss	(45)	(6)	(4)

Summarized balance sheets are shown below. The balance sheet separates water and sewage fixed assets. However, there are common assets. Accounts receivables, inventories, accounts payable, equity etc are all maintained jointly for water and sewage.

**Balance Sheets**

(RD\$ Million)

Year	1998	1999	2000
<b>Assets</b>			
Water assets	79	101	109
(Accumulated depreciation)	(40)	(56)	(56)
Sewage	139	176	192
(Accumulated depreciation)	(40)	(56)	(56)
Common properties	82	90	100
(Accumulated depreciation)	(33)	(40)	(40)
Construction in process	8	3	23
Cash	25	44	24
Account receivables	135	166	209
Inventory	12	9	25
Others	1	0	0
<b>Total assets</b>	<b>367</b>	<b>446</b>	<b>504</b>
<b>Equity</b>			
Contribution	188	244	284
Retained earnings	(67)	179	168
<b>Total equity</b>	<b>121</b>	<b>423</b>	<b>451</b>
<b>Liability</b>			
Long term obligations	1	1	1
Current liabilities	243	19	50
Deferred credits	3	3	3
<b>Total liability</b>	<b>246</b>	<b>22</b>	<b>53</b>
<b>Total liability and equity</b>	<b>367</b>	<b>446</b>	<b>504</b>

**7.3.2 OPERATING RESULTS****(1) General**

Balance Sheet details were reviewed starting 1997. However, accounting system including breakdown of expenses for CORAASAN was changed in 1998. Accordingly, only total expenses by major categories are available for 1997. Detailed breakdown of expenses including partial separation by water and sewage is available for 1998, 1999 and 2000.

Since CORAASAN and the local electricity company Compania Dominicana de Electricidad (CDE) are both owned by the government, they do not pay each other's bills. Their formal accounts include the charges but they do not expect payments. Starting 2001, CORAASAN may be asked to pay. However, as of this writing in July 2001, no payment has been made by either side.

Based on CORAASAN cash flow, it received RD\$ 15 million in 1998, RD\$ 9 million for water, and RD\$ 6 million for sewage. In 1999, CORAASAN received RD\$ 27 million, RD\$ 5 million for water, RD\$ 20 million for sewage, and RD\$ 2 million for other construction. In the same year, the government wrote off electricity bills of CORAASAN amounting to RD\$ 286 million. In 2000, CORAASAN received RD\$ 54 million, RD\$ 38 million for water, RD\$ 13 million for sewage and RD\$ 3 million for other construction. In practice, it appears that once the government is convinced about priority of a project, a way is found to provide the required funding.

**(2) Financial Ratios**

Key financial indicators and their method of calculation are shown in the table below. It may be noted that whether CORAASAN pays electricity bill or not, has very significant effect on its financial position. Accordingly, the indicators and ratios have been calculated with and without electricity. It may be noted that:

With outstanding electricity bills, CORAASAN working capital was negative in 1997 and 1998. With cancellation of the bills, it became healthy RD\$ 200 million in 1999. It was 208 million (US\$ 12.2 million) at the end of 2000.

The current ratio was unhealthy at less than one with electricity in 1997 and 1998. It was very healthy over 11 in 1999 and over 5 as of end of 2000.

The acid test, which excludes inventory from the current assets, was less than one with electricity in 1997 and 1998. It was very good without electricity, in 1999 and over 4 in 2000.

The liquidity ratio, which relates cash and bank deposits to the current liabilities, was very healthy at over 2 in 1999 and still reasonable at 0.47 in 2000.

CORAASAN has virtually no debt. Accordingly, the liabilities as a percentage of total assets equaled only about 5% in 1999 and about 10% in 2000.

CORAASAN operating ratio that relates total operating and maintenance expenses to total income was high at over 1.1 in 1998. However, with the exclusion of electricity, it became 0.73 in 1999 and 0.75 for 2000.

#### Financial Ratios

Year	1997	1998	1999	2000
Working Capital (RD \$ Million) (without electricity)	157.9	170.7	199.8	208.3
Working Capital (RD \$ million) (with electricity)	-17.2	-70.7		
Current Ratio (without electricity)	15.1	112.6	11.5	5.2
Current Ratio (with electricity)	0.9	0.7		
Acid Test (without)(current Asst-Invent)/curr. Liab	14.5	104.5	11.1	4.7
Acid Test (with electricity)	0.9	0.7		
Liquidity Ratio (Cash+Bank)/Curr Liab	4.2	16.1	2.3	0.47
Liquidity Ratio (with elect)	0.26	0.10		
Liab/Total Asset (without elect)	0.03	0.01	0.05	0.1
Liab/Total Asset (with elect)	0.44	0.51		
Security Margin (Working cap/current Liab)	14.1	111.6	10.5	4.20
Security Margin (with elect)	-0.09	-0.29		
Operating Ratio (O&M/total income)	0.8	1.1	0.88	0.75
Total Income/O&M	1.19	0.9	1.14	1.32

Source: CORAASAN

### (3) Summary of Current Financial Position

In summary, it must be noted that:

- CORAASAN data is unaudited. Accordingly, the numbers must be viewed only as broadly indicative of the financial situation;
- CORAASAN made a large operating loss of RD\$ 45 million in 1998 despite a tariff increase March. CORAASAN loss was significantly reduced in 1999 to RD\$ 6 million due to elimination of electricity charges. It made a loss of RD\$ 4 million in 2000. However, with about 50% tariff increase in 2001, it expects to make profit in 2001;
- CORAASAN received a major concession in 1999 through cancellation of the existing electricity charges and continued subsidy. There is some discussion that CORAASAN may be required to start paying full electricity charges estimated at about RD\$ 3 to 4 million per month starting in 2001 or 2002. Recently, it has started paying nominal charges;
- CORAASAN expense for maintenance, particularly for sewage, appears to be very low. In 2000, it became even lower;

- Sewage assets have been increasing at a faster rate and directly account for more than those of water. But revenue contribution of sewage is significantly less than that of water. In year 2000, water accounted for 26% of gross fixed assets and accounted for 80% of revenue. Sewage accounted for 45% of fixed assets but generated only 18% of revenue. It is recognized that sewage assets are expensive because of the nature of the business and more recent acquisition date. However, the revenue contribution is so disproportional that it warrants more in depth study to ensure more effective use of sewerage facilities;
- Based on unaudited 2000 data, CORAASAN total accounts receivables equal more than 10 months of billing. Despite large amount of outstanding from the government, CORAASAN is confident about making collection from them. It is currently collecting an amount equal to about 82 % of the current billing from private consumers. It implies that in addition to the current outstanding amounts, 18% of the current bills are not collected. Accordingly, total outstanding from private consumers will keep increasing. Similar data for the government is not available;
- CORAASAN carries out only routine investments from own resources. It relies on the central government financing for all major investment projects;
- CORAASAN is currently free of any debt;
- In view of (a) virtual exemption from payment of electricity charges, (a) grant financing of all major investment projects by the central government, (c) virtually debt free capital structure, CORAASAN is presently in a satisfactory financial position; and
- Financial indicators and ratios confirm that current financial position of CORAASAN is satisfactory.

## **7.4 USER CHARGES (TARIFFS)**

### **7.4.1 OBJECTIVE OF TARIFF SETTING**

Under Article 10 of Law Number 582 that created CORAASAN, the Board of Directors is “to resolve all matters related to the job of the funds and the resources of the corporation, conforming to the existing regulations.” It is also authorized to accept “donations and contributions that are given to the corporation.

Under Article 13, CORAASAN “will set the tariffs and charges that must be collected for services or facilities rendered by the corporation, subject to approval of the Board of directors”.

Under Article 15, CORAASAN is exempted from payment of taxes and duties.

The law does not state the financial objectives of CORAASAN.

In practice CORAASAN is responsible for meeting its day-to-day operating needs and to carry out routine expenditure for distribution expansion. Capital investment costs are directly contributed by the central government. Accordingly, tariffs are set at a level, which will be sufficient to meet cash operating needs. Currently, to “break even” is the basic objective.

### **7.4.2 TARIFF SETTING PROCESS**

The tariff setting process works as follows:

- Whenever CORAASAN management feels the cash shortage, the Director General initiates an internal study to determine tariff options;
- The finance, commercial and information technology departments work out several possible options under which user charges can be adjusted to provide the required cash;

- The Director General selects one or more options to be presented to the Board of Directors for discussion and decision;
- The Board of Directors makes a decision; and
- The decision is implemented.

No further formal approvals are needed. However, since the President of Dominican Republic directly appoints the Director General, he makes informal consultation with him and the provincial governor prior to any financial decision.

The existing tariffs were established on 25<sup>th</sup> April 2001. Based on CORAASAN estimate, they are about 50% higher than the earlier ones and will result in about 37% increase in average revenue during 2001. The previous tariffs were established in March 1998 i.e. about 3 years earlier and had resulted in about 10% increase in level.

### **7.4.3 CURRENT TARIFFS**

CORAASAN user charges have been summarized below.

#### **(1) Water**

##### **1) Metered Water Consumers**

- Domestic charges vary from a minimum charge of RD\$ 53/month for consumption up to 20M3 or RD\$ 2.65 per M3, to RD\$ 6.16/M3 for consumption of 181 M3/month or more.
- Commercial, Government and Social institutions pay same charges. These vary from a minimum charge of RD\$ 70.5/month for consumption up to 20M3 or RD\$ 3.53 per M3 to RD\$ 6.6/M3 for consumption of 241 M3/month or more.
- Industrial vary from a minimum charge of RD\$ 330/month for consumption up to 40 M3 or RD\$ 8.25 per M3 to RD\$ 8.58/M3 for consumption of 41 M3/month or more.

##### **2) Unmetered Watered Consumers**

- Domestic charge for unmetered water consumers is set in three categories (A, B, and C) according to neighborhood and type of housing. It varies from fixed monthly charge of RD\$ 49.5 for Class C (relatively smaller dwellings in poorer areas) to RD\$115.5 for Class B, to RD\$ 165 for Class A (relatively larger dwellings in more affluent areas). Individual classifications are decided by the Commercial department.
- Commercial, Government and Social institutional charge for unmetered consumers is similarly based on the type of neighborhood and nature of the small business. It varies from RD 231/month for Class B (smaller in poorer areas) to RD\$ 330 for Class A (larger in more affluent areas).

#### **(2) Sewage**

Sewage volume to be billed is based on average of 75% of water consumption by various groups of consumers. This means that about 75% of water volume billed is billed for sewage.

Current sewage tariffs are as follows:

- Domestic metered charges vary from a minimum charge of RD\$ 35.5/month for discharge up to 45M3 or RD\$ 0.79 per M3 to RD\$ 1.12/M3 for consumption of 181 M3/month or more;
- Commercial, Government, and Social institutional charges are fixed at RD\$ 33/ month or US\$ 1.94. Industrial charges vary from a minimum charge of RD\$ 550/month for discharge up to 100 M3 or 5.5 per M3 to RD\$ 2.32/M3 for consumption of 241

M3/month or more; and

- All unmetered commercial consumers are charged RD\$ 66 per month.

#### 7.4.4 CONSUMER DISTRIBUTION

Based on the Commercial department's data for 2000, the distribution of consumers, water volume, water revenue, sewage volume, and sewage revenue is given below:

**Consumer Distribution (%)**

	Domestic	Commercial	Industrial	Government	Social/ Inst	Total
% of Consumers	93.76%	5.58%	0.24%	0.22%	0.20%	100%
% Volume water	69.93%	14.56%	9.65%	5.52%	0.35%	100%
%Revenue Water	53.33%	20.59%	19.06%	6.61%	0.40%	100%
% Volume Sewage	69.93%	14.56%	9.65%	5.52%	0.35%	100%
%Revenue Sewage	55.24%	19.73%	17.15%	7.41%	0.46%	100%

Source: CORAASAN

Because of higher tariffs/ M3 for commercial and industrial consumers, it may be noted that they account for much higher percentage of revenue than their volumes. Similarly, domestic consumers account for much lower share of revenue than their volume indicates. Based on the block tariff system, analysis indicates that wealthier domestic consumers who consume large volumes pay much more per M3 than those who consume less.

Among the domestic consumers for water, 46% paid minimum tariff in June 2001 and accounted for 21% of domestic water revenue. For sewage, 40% of domestic consumers paid minimum tariff and provided 30% of domestic sewage revenue.

#### 7.4.5 AVERAGE TARIFF

Based on data of water sold in million M3, from the commercial department average revenue per M3 for was estimated.

**Average Water Tariff**

Year	Volume in million m <sup>3</sup>	Revenue RD\$ million	Average Water RD\$/m <sup>3</sup>	US\$ equivalent
1998	48.96	134.4	2.75	0.16
1999	51.79	169.3	3.27	0.19
2000	58.25	183.5	3.15	0.19

As mentioned above, the Commercial departments billing data indicates that on average, about 75% of the water sold are billed for sewage. Using that information, average revenue per M3 for sewage was estimated.

**Average Sewage Tariff**

Year	Volume in million m <sup>3</sup>	Revenue RD\$ million	Average Sewage RD\$/ m <sup>3</sup>	US\$ equivalent
1998	36.72	31.23	0.85	0.05
1999	38.84	37.57	0.97	0.06
2000	43.68	41.4	0.95	0.06

#### 7.4.6 AFFORDABILITY OF TARIFFS

CORAASAN does not make any formal survey of consumers' willingness to pay. However, CORAASAN makes sure that poor can afford a minimum quantity of water by setting low

minimum for the first 20 M3/month. Based on the average household size of 4.5 as shown in the People's awareness survey, 20 M3/ months translate into 148 liters/capita/day. Currently, the charge is RD\$ 53/month. The survey found average monthly income per month for the low-income households to be RD\$ 3225/month. This is consistent with national minimum wage of RD\$ 2400/ month with typically more than one earner. CORAASAN has a minimum-starting wage of 2700. Based on the survey income, the minimum charge will amount to 1.6% of monthly income.

The minimum charge for sewage is RD\$ 35.5/ month (which will cover up to 45 M3/ month). It amounts to 1.1% of a minimum wage family. Together, water and sewage account for about 2.7% of the income. This is well below internationally accepted 5 to 6% maximum percentage of a household's affordability for water and sewage service, the current tariff level appears to have a reasonable level of affordability.

### **(1) Market price for alternative water**

If a household is not connected to CORAASAN, the options are (a) get water from the river, which is extremely polluted and is not used for direct human use in Santiago area; (b) buy water from private water trucks; and (c) buy bottled water.

Various private trucks purchase water from CORAASAN at a highly subsidized price ranging from RD\$40 – RD\$50 and sell it to houses that are not connected to CORAASAN. The water is usually sold as a whole tank. The selling price varies depending on location and amounts to RD\$ 200 upwards. The sold water is injected into ground or overhead tank of the house. Those water vendors are not required to be licensed.

Considerable number of houses purchases bottled waters for drinking. It is said that there are 4 or 5 companies nationally. Consumers initially pay about RD\$ 120 for the 5 gallon bottle. Consumers go to small shops or supermarket, return empty containers and buy filled containers. The price is around RD\$15-17 per container. For smaller size bottles, it can cost about RD\$ 10-13 for one gallon bottle. One USA gallon is 3.785 liters. Accordingly, there are 264.2 gallons in a M3. This translates into over RD\$ 2000 per M3.

### **(2) Next tariff increase**

CORAASAN has recently increased its tariffs after 3 years. Next increase is not expected for some time. However, it can be considered if financial imperatives warrant it.

## **7.4.7 BILL COLLECTION SYSTEM**

CORAASAN is currently using its meter readers to deliver bills to its consumers every month. The consumers are given 15 days from the date of preparation of the bill to make the payment.

Payment can be made at several locations:

- CORAASAN central office;
- 7 regional offices; or
- any of about 60 other authorized locations, which include several banks, super markets and drug stores.

Payment can be made in cash, by check or credit card. CORAASAN has recently initiated payment by phone with credit card.

Compared to many other developing countries, CORAASAN appears to have a relatively customer friendly approach to payment of bills. Rising accounts receivables cannot be attributed to lack of a suitable collection system.