

## **2. PLANNING APPROACH FOR FUTURE SECTOR DEVELOPMENT**

### **2.6 Planning Principles and Data Management**

#### **2.6.2 Data Management**

##### **(1) Computer-based System**

The data management system was established to support the Provincial Sector Planning Team (PSPT) in the preparation of the Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP). An essential task of data management is to organize various kind of data into an effective and efficient information base.

A computer-based system was applied as a viable solution to process large amount of data and to minimize the human-error in calculation. For this particular project, a dynamic system is designed to allow the planner to adjust planning factors and update the information when further data becomes available.

It is viable and economical to choose the microcomputer with software suitable for the average skills of the common user. In this connection, of the two types of software package available, database and spreadsheet, the latter method was selected. Among the available spreadsheet-type software, EXCEL was used. Excel support file conversion (opening and saving), multiple file opening, graphic presentation of data, What-You-See-Is-What-You-Get (WYSIWYG) formatting, scaleable font and view, etc. The following are the advantage and disadvantages of the spreadsheet method with reference to database method.

Advantage	Disadvantage
1. Minimum programming skills	1. Repeated entry of same formula
2. Friendly environment to users	2. Sorting or indexing is done manually
3. Graphics presentation of data at user's option.	3. All data are loaded in memory, which require huge amount of memory.
4. Execution of data linkages at formula level entry	4. Limited to static data linkages
5. Guided formula creation using function wizard	

Data management task starts from the collection of data using the questionnaire forms. The existence and accuracy of data are major concern at this stage to prepare main information bases. Using the microcomputer provided with EXCEL spreadsheet, data in the questionnaire forms are transferred into the forms constructed in EXCEL. Applicable policy, criteria and assumption are entered into key parameter tables. These data are then processed and finally consolidated into target forms. These final provide a map of provincial profile, service coverage, future requirements, cost estimates for future sector development, and funding requirements.

Table 2.6.1 Key Parameter

No.	Description of Key Parameter		Unit	Values
1.	Service Level	<b>Water Supply</b>		
		Number of household to be served by Level I Facility	HH/Source	
		Number of household to be served by Level II System	HH/Public Faucet	
		Water Consumption Rate for Level III System	Liter/capita/day	
		<b>Sanitation</b>		
		Std. number of student to be served by a unit of Sanitary toilet	Student/Toilet	
		Standard number of toilets for a public utility	Toilet/Public Facility	
2.	Provincial Sector Target	<b>Water Supply</b>		
		Urban Water Supply	% of Population	
		Rural Water Supply	% of Population	
		<b>Sanitation</b>		
		Household Toilet		
		Urban Household Toilet	% of Household	
		Flush	% of Household	
		Pour Flush	% of Household	
		VIP Latrine	% of Household	
		Rural Household Toilet	% of Household	
		Flush	% of Household	
		Pour Flush	% of Household	
		VIP Latrine	% of Household	
		School Toilet	% of Public Student	
		Public Toilet	% of Public Utility	
		Solid Waste	% of Population	
		<b>Water Supply</b>		
		Urban Water Supply	% of Population	
		Rural Water Supply	% of Population	
		<b>Sanitation</b>		
		Household Toilet		
		Urban Household Toilet	% of Household	
		Flush	% of Household	
		Pour Flush	% of Household	
		VIP Latrine	% of Household	
		Rural Household Toilet	% of Household	
		Flush	% of Household	
		Pour Flush	% of Household	
		VIP Latrine	% of Household	
		School Toilet	% of Public Student	
		Public Toilet	% of Public Utility	
		Urban Sewerage	% of Urban Population	
3.	Percentage of Level I Deep Wells to be Rehabilitated		%	
4.	Percentage of Sector Management Cost to Construction Cost			
	Feasibility and Detail Design		% of Construction Cost	
	Construction Supervision		% of Construction Cost	
5.	Community Development and Training Cost			
	Level III		% of Construction Cost	
	Level I, II and Public Toilet		% of Construction Cost	
6.	Recurrent Cost	Level III System (Operating Cost)	Pesos/HH/year	
		Level III System (Spare Parts/Equipment)	% of Construction Cost	
		Level II System (Spare Parts/Equipment)	Pesos/HH/year	
		Level I System (Spare Parts/Equipment)	Pesos/HH/year	
		Public School Toilet Maintenance Cost	Pesos/Toilet/year	
		Public Utility Toilet Maintenance Cost	Pesos/Toilet/year	
7.	Allocation Factors/Percentages of IRA			
	From Provincial		%	
	From Municipality and Brgy.		%	
8.	Funding Levels/Percentages for Different Financing Scenarios			
	1st Scenario		% Funding Available	
	2nd Scenario		% Funding Available	
	3rd Scenario		% Funding Available	
	4th Scenario		% Funding Available	
	5th Scenario		% Funding Available	

Table 2.6.2 Composition of Well Sources and Specific Capacity

Name of Municipality	Type	Type Water Source	Proportion (%)	Standard Specification		
				Depth (m)	SWL (m)	Specific Capacity (liter/sec/m)
	Urban	Shallow Well				
		Deep Well				
		Spring				
	Rural	Shallow Well				
		Deep Well				
		Spring				
	Urban	Shallow Well				
		Deep Well				
		Spring				
	Rural	Shallow Well				
		Deep Well				
		Spring				
	Urban	Shallow Well				
		Deep Well				
		Spring				
	Rural	Shallow Well				
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	Urban	Shallow Well				
		Deep Well				
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	Rural	Shallow Well				
		Deep Well				
		Spring				
	Urban	Shallow Well				
		Deep Well				
		Spring				
	Rural	Shallow Well				
		Deep Well				
		Spring				
	Urban	Shallow Well				
		Deep Well				
		Spring				
	Rural	Shallow Well				
		Deep Well				
		Spring				

Table 2.6.3 Annual Investment

Sub-Sector	Component	1999	2000	2001	2002	2003	Total
Urban Water Supply	Level III System Feasibility Study and Detail Design Construction & Supervision Community Development & Training						
Rural Water Supply	Level II Facility Detail Design Construction & Supervision Community Development & Training						
	Level III System Detail Design Construction & Supervision Community Development & Training						
Sanitation	Urban Household Toilet Rural Household Toilet Public School Toilet Public Toilet Disinfection of Level I Wells						
	Detail Design Construction & Supervision Community Development & Training						

**Table 2.6.4 Level I Safe & Unsafe Percentage**

[illegible]

Table 2.6.5 Unit Construction Cost of Different Facilities

Description	Unit Construction Cost (Pesos)	Service Coverage		Unit Cost	
		Served Population	Served Household	Pesos/ Person	Pesos/ Household
<b>Water Supply</b>					
<i>Level III - New System</i>					
For 5000 Population					
For 10000 Population					
For 15000 Population					
<i>Level III - Expansion</i>					
For 5000 Population					
For 10000 Population					
For 15000 Population					
<i>Level II</i>					
<i>Level I</i>					
Deep Well - 40 meter depth					
Deep Well - 80 meter depth					
Deep Well - 120 meter depth					
Shallow Well - 18 meter depth					
Spring Development					
<i>Rehabilitation Cost for Level I Deep Well</i>					
<i>Disinfection of Level I Wells</i>					
<b>Sanitation</b>					
Flush					
Pour Flush					
VIP / Dry					
School Toilet					
Public Toilet					
Urban Sewerage					

Table 2.6.6 Scoring Factor for Municipal Investment Ranking for Urban Water Supply

Score	Underserved and Underserved Population in Base Year	Underserved and Underserved Population in Phase I	Population Underserved by Level III Systems in Base Year
1.0	< %	< %	< %
0.8	< % < 40	< % <	< % <
0.6	< % < 30	< % <	< % <
0.4	< % < 20	< % <	< % <
0.2	% < 10	% <	% <
Weight Allocation Score (%)			

Table 2.6.7 Scoring Factor for Municipal Comprehensive Investment Ranking

Score	Urban Water Supply	Rural Water Supply	Urban Sanitation	Rural Sanitation
1.0	N.A.	< %	< %	< %
0.8	N.A.	< % <	< % <	< % <
0.6	N.A.	< % <	< % <	< % <
0.4	N.A.	< % <	< % <	< % <
0.2	N.A.	% <	% <	% <
Weight Allocation Score (%)				

### 3. PROVINCIAL PROFILE

#### 3.3 Socio-economic Conditions

##### 3.3.1 Economic Activities and Family Income

Table 3.3.1 Distribution of Families by Income Class

Income Class	Antique				Region VI	
	Total Number of Families		Annual Income		Total Number of Families	Annual Income Average (Pesos)
	Number	Share	Total (P '000.00)	Average (Pesos)		
Under 15,000	6,713	7	84,166	12,538	38,620	12,865
15,000 - 19,999	4,923	5	88,068	17,890	50,543	19,828
20,000 - 29,999	24,166	26	596,801	24,695	209,138	27,662
30,000 - 39,999	23,496	26	833,211	35,463	224,397	37,336
40,000 - 59,999	14,992	16	649,203	43,304	280,436	51,099
60,000 - 99,999	12,083	13	913,814	75,627	199,449	86,842
100,000 - 249,999	4,923	5	705,034	143,221	112,990	161,051
250,000 and over		0			17,827	399,169

Source: 1994 Family Income and Expenditures Survey by NSO

Notes:

- (1) Derived from Region VI FIES
- (2) Based on NEDA and other agencies, poverty threshold in Region VI was estimated at P 47,133 (P 8,197 annual per capita poverty threshold).
- (3) For purposes of the survey, a family is defined as a group of persons usually living together and composed of the head and other persons related by blood, marriage and adoption. A single person living alone is considered as a separate family. A household is composed of 1 or more families in the same housing unit and has a common arrangement of food preparation and consumption.

Table 3.3.2 Employment by Major Industry Group and Class of Worker, 1994

Major Industry Group	Household Population 15 years and Over Who Worked	Class of Worker							
		Worked for Private Household (Domestic Services)	Worked for Private Business/ Enterprise/ Farm	Worked for Government/ Government Corporation	Self-employed Without Any Paid Employee	Employer In Own Farm or Business	Work With Pay in Own Family Operated Farm or Business	Work Without Pay in Own Family Operated Farm or Business	Not Reported
Agriculture, Hunting and Forestry	117,878	153	21,772	130	51,807	530	106	43,333	47
Fishing	13,120	20	1,601	5	7,696	129	26	3,622	21
Mining and Quarrying	700		645	1	26			27	1
Manufacturing	6,039	69	1,381	10	3,515	58	5	981	20
Electricity, Gas and Water	308	2	254	16	35			1	
Construction	3,343	155	2,549	83	532	2		18	4
Trade	12,338	35	1,601	7	8,473	283	30	1,899	10
Services	40,326	12,727	10,295	14,050	2,581	177	12	456	28
Not Stated	234	12	96	11	28			12	75
<b>Provincial Total</b>	<b>194,286</b>	<b>13,173</b>	<b>40,194</b>	<b>14,313</b>	<b>74,693</b>	<b>1,179</b>	<b>179</b>	<b>50,349</b>	<b>206</b>

Source: 1995 NSO Socioeconomic and Demographic Characteristics

### 3.3.3 Education

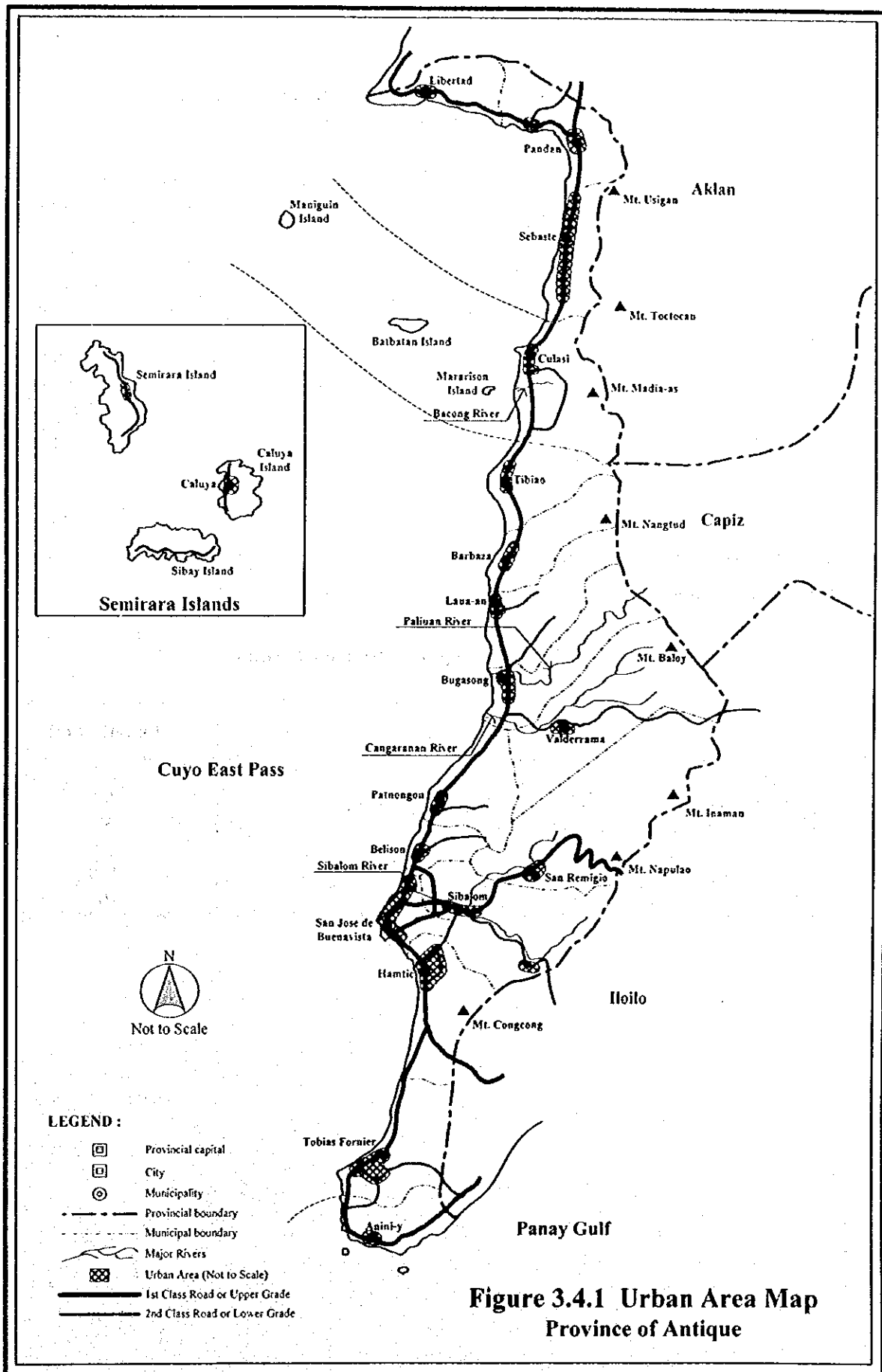
**Table 3.3.3 Household Population by Highest Educational Attainment**

Highest Educational Attainment	Household Population 5 years Old and Over	Age Group				
		Below 20	20 - 24	25 - 29	30 - 34	35 and Over
No Grade Completed	29,954	18,829	566	617	650	9,292
Pre-school	16,681	16,025	58	55	58	485
Elementary						
1st - 4th Grade	100,812	54,810	3,670	3,670	3,831	34,831
5th - 7th Grade	86,770	25,519	5,397	6,239	6,621	42,994
High School						
Undergraduate	47,162	26,510	4,622	3,815	2,943	9,272
Graduate	37,370	6,682	6,659	6,375	5,505	12,149
Post Secondary						
Undergraduate	2,401	480	653	425	310	533
Graduate	8,935	491	2,324	1,968	1,495	2,657
College Undergraduate	16,222	4,017	4,065	2,171	1,810	4,159
Academic Degree Holder	19,787	154	2,970	3,544	3,467	9,652
Post-Baccalaureate	1,050	1	68	125	141	715
Not Stated	5,053	3,238	231	200	193	1,191
<b>Total</b>	<b>372,197</b>	<b>156,756</b>	<b>31,283</b>	<b>29,204</b>	<b>27,024</b>	<b>127,930</b>

Source: 1995 NSO Socioeconomic and Demographic Characteristics

### 3.4 Population

#### 3.4.1 Classification of Urban and Rural Area



### 3.5 Health Status

**Table 3.5.1 Number and Ratio of Population to Health Facilities and/or Medical Practitioners**

Health Facilities and Practitioners	Antique		Philippines	
	Number	Ratio	Number	Ratio
<b>Health Facilities</b>				
Hospital	9	1/50,561	1,700	1/40,206
Rural Health Units	18	1/25,281	2,335	1/29,272
Barangay Health Station	134	1/3,396	11,646	1/5,869
<b>Practitioners</b>				
Doctors	86	1/5,291	6,913	1/9,887
Nurses	112	1/4,063	8,849	1/7,724
Midwives	141	1/3,227	10,831	1/6,311
Dentists	39	1/11,668	1,895	1/36,068

Source: PSPT and 1997 Philippine Statistical Yearbook.

### 3.6 Environmental Conditions

#### 3.6.2 Water Pollution

**Table 3.6.1 Types of Drainage Facilities**

Type	Length (km)
Drainage Main	57
Open Channel (with Concrete & rubble masonry)	57
Open Ditches & Unlined Laterals	59
Reinforced Concrete Circular Pipes	22
Street Gutters	169
Outfalls to rivers from drainage mains (number)	0

Source: PSPT

**Table 3.6.2 DENR Water Quality Criteria/Water Usage and Classification for Fresh Water**

Parameter	Unit	Class AA	Class A	Class B	Class C	Class D
Color	PCU	15	50	(C)	(C)	(C)
Temperature (max. rise in deg. Celsius)	°C rise	--	3	3	3	3
pH (range)		6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6.0-9.0
Dissolve Oxygen (Minimum)	%satn	70	70	70	60	40
	mg/L	5.0	5.0	5.0	5.0	3.0
5-Day 20°C BOD	mg/L	1	5	5	7(10)	10(15)
Total Suspended Solids	mg/L	25	50			
Total Dissolved Solids	mg/L	500	1,000	--	--	1,000
Surfactants (MBAS)	mg/L	nil	0.2(0.5)	0.3(0.5)	0.5	--
Oil/Grease (Petroleum Ether Extract)	mg/L	nil	1	1	2	5
Nitrate as Nitrogen	mg/L	1	10	NR	10	--
Phosphate as Phosphorous	mg/L	nil	0.1	0.2	0.4	--
Phenolic Substances as Phenols	mg/L	nil	0.002	0.005	0.02	--
Total Coliforms	MPN/100mL	50	1,000	1,000	5,000	--
or Fecal Coliforms	MPN/100mL	20	100	200	--	--
Chloride as Cl	mg/l	250	250	--	350	--
Copper	mg/L	1	1	--	0.05	--

**Notes:**

Class AA - Public Water Supply Class I. Intended for waters having watersheds that are uninhabited and otherwise protected and which require only approved disinfection in order to meet the national standards for drinking water.

Class A - Public Water Supply Class II. Sources of water supply that will require complete treatment (coagulation, sedimentation, filtration and disinfection) in order to meet drinking water standards.

Class B - Recreational Water Class I. For primary contact recreation such as bathing, swimming skin diving, etc. (particularly for tourism purposes).

Class C - Fishery Water for the propagation and growth of fish and other aquatic resources; recreational (for boating, etc.); industrial water supply class I for manufacturing processes after treatment.

Class D - For agriculture, irrigation, livestock watering, etc.; for industrial water supply class II (cooling, etc.); other inland waters by their quality, belong to this specification.



#### 4. EXISTING FACILITIES AND SERVICE COVERAGE

##### 4.1 Water Supply

##### 4.1.3 Level III Systems

Table 4.1.1 Details on Existing Level III Systems

Sheet 1 of 4

Name of Municipality	Name of Operating Body	Level III Service								
		Number of Barangays Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Barbaza	Barbaza WD	2	8	10	130	337	467	770	2,002	2,772
Bugasong	Bagasong WD	3	4	7	582	140	722	4,866	4,078	8,944
Culasi	Culasi - LGU WWS		3	3		153	153		735	735
	Culasi WD	3	6	9	691	246	937	4,455	1,439	5,894
	Municipal Total	3	9	12	691	399	1,090	4,455	2,174	6,629
Hamtic	Hamtic WD	5		5	333		333	1,575		1,575
	Malandog LGU		1	1		124	124		617	617
	Municipal Total	5	1	6	333	124	457	1,575	617	2,192
Pandan	Pandan WD	3	14	17	389	585	974	2,883	21,160	24,043
Patnongon	Patnongon WD	1	3	4	445	33	478	1,835	165	2,000
San Jose de	San Jose - LGU	9		9	1,992		1,992	9,960		9,960
Sebaste	Sebaste - LGU	1		1	519		519	2,885		2,885
Sibalom	Sibalom WD	4	2	6	1,146	266	1,412	4,614	486	5,100
Tibiao	Tibiao - LGU WWS	1	2	3	305	372	677	1,228	1,318	2,546
Tobias Fornier	Tobias Fornier WD	3	1	4	692	78	770	3,683	394	4,077
Provincial Total		35	44	79	7,224	2,334	9,558	38,754	32,394	71,148

Table 4.1.1 Details on Existing Level III Systems

Sheet 2 of 4

Name of Municipality	Name of Operating Body	Level II Service								
		Number of Public Faucets			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Barbaza	Barbaza WD									
Bugasong	Bagasong WD									
Culasi	Culasi - LGU WWS									
	Culasi WD									
	Municipal Total									
Hamtic	Hamtic WD									
	Malandog LGU									
	Municipal Total									
Pandan	Pandan WD									
Patnongon	Patnongon WD									
San Jose de	San Jose - LGU									
Sebaste	Sebaste - LGU	4		4	20		20	100		100
Sibalom	Sibalom WD									
Tibiao	Tibiao - LGU WWS									
Tobias Fornier	Tobias Fornier WD									
Provincial Total		4		4	20		20	100		100

Table 4.1.1 Details on Existing Level III Systems

Sheet 3 of 4

Name of Municipality	Name of Operating Body	Water Sources			Consumption			
		Type <sup>1</sup>	Number	Production (cu.m/day)	Domestic	Institutional	Commercial	Industrial
					(cu.m/day)			
Barbaza	Barbaza WD	SP	2	3,024	187			
Bugasong	Bagasong WD	DW	1	396	385		106	
Culasi	Culasi - LGU WWS							
	Culasi WD	SP	1	605				
	Municipal Total	SP	1	605				
Hamtic	Hamtic WD	DW	1	269				
	Malandog LGU	DW	1	996				
	Municipal Total	DW	2	1,265				
Pandan	Pandan WD	SP	1	2,484				
Patnongon	Patnongon WD	DW	1	888				
San Jose de	San Jose - LGU	SP	3	15,200				
Sebaste	Sebaste - LGU	Surf	1	86	1,020			
Sibalom	Sibalom WD	DW	1	486	547			
Tibiao	Tibiao - LGU WWS	SP	1					
Tobias Fornier	Tobias Fornier WD	SP	1	240				
Provincial Total			15	24,674	2,138		106	

Note: 1. Type of Water Source; DW - Deep Well, DgW - Dug Well, Surf - Surface Water (River), SP - Spring, and IG - Infiltration Gallery

Table 4.1.1 Details on Existing Level III Systems

Sheet 4 of 4

Name of Municipality	Name of Operating Body	Consumers											
		Domestic House Connections			Domestic Public Faucets			Institutional Consumers			Commercial Consumers		
		Connection		Consumption (m <sup>3</sup> /day)	Connection		Consumption (m <sup>3</sup> /day)	Connection		Consumption (m <sup>3</sup> /day)	Connection		Consumption (m <sup>3</sup> /day)
		Metered	Unmetered		Metered	Unmetered		Metered	Unmetered		Metered	Unmetered	
Barbaza	Barbaza WD	467		186.80									
Bugasong	Bagasong WD	722		385.00							80		106.00
Culasi	Culasi - LGU			153									
	Culasi WD	829			1			33			5		
	Municipal Total												
Hamtic	Hamtic WD	333						6					
	Malandog LGU	122				2							
	Municipal Total												
Pandan	Pandan WD	974						13			7		
Patnongon	Patnongon WD	476	2										
San Jose de	San Jose - LGU	1,992						26			26		
Sebaste	Sebaste - LGU	510		1,020.00		4		4			1		
Sibalom	Sibalom WD	850		546.67									8
Tibiao	Tibiao - LGU	677											
Tobias Fornier	Tobias Fornier	770											
Provincial Total		8,722	155	2,138	1	6		88	4		118	1	106.00

# 4.1.4 Level II Systems

Table 4.1.2 Details on Existing Level II Systems  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities				
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir Number	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Anini-y	Bayo Grande	SP	1	21.6	900	1	24.0		6
	Bayo Pequeño	SP	1	21.6	500	1	8.0		5
	Casay	SP	1	21.6	1,200	1	8.0	2,000	4
	Iba	SP	1	21.6	500	1	12.0	100	4
	Igtumarom	SP	1	21.6	1,000			20	3
	Lisub B	SP	1	21.6	400	1	6.0		4
	Mabuyong	SP	1		1,000				3
	Salvacion	SP	1	21.6	1,200	1	12.0	50	2
	San Ramon	SP	1	21.6		1	6.0		3
	Tagaytay	SP	1	21.6	600	1	12.0		4
Belison	<b>Municipal Total</b>	SP	10	194.4	7,300	8	88.0	2,170	38
	Boroboroc BWSA	DW	1	10.0	1,000	1	10.0	2,000	4
	Buнавista BWSA	SP	1	14.5	290	1	14.5	300	12
	Mojon BWSA	DW	1	14.5	75	1	14.5	120	10
	<b>Municipal Total</b>	DW/SP	2/1	39.0	1,365	3	39.0	2,420	26
	Camangahan WWS	SP	1	10.0	500	2	20.0	1,000	13
Bugasong	Guija-Sabang West WWS	SP	1	10.0	500	1	4.0	1,750	46
	Ilaures Spring System	SP	1						20
	Zaragoza	SP	1					400	16
	<b>Municipal Total</b>	SP	4	20.0	1,000	3	24.0	3,150	95
	Batbatan Island	SP	1	8.6	1,000	2	4.0	500	4
Culasi	Bitadton Norte	SP	1	259.2	1,000	2	4.0	500	4
	Flores	SP	1	604.8	1,000	2	3.0	400	8
	Magsaysay	SP	1	345.6	1,000	1	2.5	200	5
	Malalison Island	SP	1	64.8	200	2	3.3	105	2

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source		Existing Facilities					
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir Number	Reservoir Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Culasi	Osorio	SP	1	259.2	1,000	1	1.0	200	4
	San Pascual	SP	1	345.6	1,000	1	3.0	300	6
	Simbola	SP	1	518.4	1,000	1	6.0	250	8
	Tigbobo	SP	1	432.0	1,000	1	4.0	300	8
	Municipal Total	SP	9	2,838.2	8,200	13	30.8	2,755	49
	Apdo	SP	1	216.0	500	1	72.0	500	4
Hamtic	Banawon	SP	1	216.0	500	1	72.0	500	9
	Bongbongan III	SP	1	216.0	1,200	1	72.0	1,500	6
	Botbot	SP	1	216.0	200	1	72.0	500	6
	Bubudan	SP	1	172.8	300	1	51.2	3,000	4
	Calacja I	SP	1	216.0	2,100	1	72.0	1,300	5
	Calacja II	SP	1	172.8	2,100	1	40.0	1,300	4
	Caromangay	SP	1	172.8	200	1	28.0	400	4
	Casalangan	SP	1	216.0	100	1	40.0	400	5
	Dangcalan	SP	1	57.6		1	40.0	200	5
	Evelio B. Javier	SP	1	172.8	100	1	40.0	300	4
	Fabrica	SP	1	216.0	1,300	1	40.0	1,800	6
	General Fullon	SP	1	172.8	1,200	1	28.8	300	3
	Igbucagay	SP	1	216.0	200	1	40.0	500	4
	Linaban	SP	1	216.0	1,200	1	40.0	1,500	13
	Mapatag	SP	1	172.8	1,200	1	40.0	400	3
Poblacion 5	SP	1	172.8	1,200	1	40.0	1,500	8	
Municipal Total	SP	17	3,211.2	13,600	17	828.0	15,900	93	
Laua-an	Banban	SP	1		2,000	1			10
	Capnayan	SP	1		2,000	1	3.0	1,000	4
	Casit-an	SP	1		3,000	1	3.0	1,000	10
	Guamon	SP	1		2,000	1	2.0	1,000	4

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities			
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir	Length of Distribution Line (meter)	Number of Public Faucets
Laua-an	Intao	SP	1		3,000	1	3.0	1,000
	Jaguibican	SP	1		3,000	1	3.0	1,000
	Jinalnan	SP	1		3,000	1	2.0	1,000
	Leon	SP	1		3,000	1	4.0	1,000
	Liberato	SP	1		1,000	1	2.0	500
	Lindero	SP	1		2,000	1	3.0	400
	Liya-liya	SP	1		2,000	1	2.0	1,000
	Maria	SP	1		2,000	2	4.0	1,000
	Mauno	SP	1		3,000	1	4.0	
	Maybunga	SP	1		2,000	1	3.0	1,000
	Pandan	SP	1		2,000	1	3.0	250
	Panatan	SP	1		2,000	1	2.0	6,500
	Panigayan	SP	1		4,000	1	4.0	1,000
	San Ramon	SP	1		2,000	1	2.0	1,000
	Santiago	SP	1		3,000	1	3.0	400
	Virginia	SP	1		2,000	1	2.0	300
	<b>Municipal Total</b>	SP	20		48,000	21	54.0	20,350
Libertad	Codiong WWS	SP	1	86.4	1,000	1	2.0	800
	Igcagay WWS	SP	1	129.6	500	1	1.5	1,000
	Inyawan WWS	SP	1	432.0	600	1	3.6	400
	Lindero BWSA	SP	1	259.2	500	1	3.6	1,200
	Paz	SP	1	86.4	800	1	3.0	1,500
	Pucio WS	SP	1	51.8	300	1	3.5	200
	San Roque	SP	1	43.2	1,500	1	2.0	1,000
	Tinigbas	SP	1		1,200	1	2.0	1,500
	Tinindugan	SP	1	86.4	700	1	1.5	500
	<b>Municipal Total</b>	SP	9	1,175.0	7,100	9	22.7	8,100
								79

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities				
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Pandan	Aracay	SP	1	25.9	200	1	2.0	150	4
	Badiangan	SP	1	43.2	500	1	2.0	200	4
	Listoga	SP	1	155.5	800	1	3.0	1,200	2
	Maadios	SP	1	34.6	600	2	1.0	150	5
	Perfecta	SP	1	25.9	300	1	1.0	200	6
	San Joaquin	SP	1	5,760.0	1,500	2	6.0	400	8
	Santa Ana	SP	1	25.9	600	2	6.0	300	6
	Municipal Total	SP	7	6,071.0	4,500	10	21.0	2,600	35
	Alvaniz	SP	1	72.0		1	12.0	183	3
	Badiangan	SP	1	72.0		1	12.0	215	4
Patnongon	Bitas	SP	1	86.4		1	8.0	269	5
	Cuyapiao	SP	1	72.0		2	12.0	452	5
	Gella	SP	1	12.0		1	8.0	151	3
	Igarawan	SP	1	96.0		1	12.0	237	5
	Igburi	SP	1	72.0		2	12.0	366	10
	La Rioja	SP	1	48.0		2	12.0	485	14
	Mabasa	SP	1	72.0		1	12.0	151	6
	Macarina	SP	1	72.0		1	12.0	269	5
	Magarang	SP	1	12.0		1	8.0	129	3
	Pandan.	SP	1	72.0		1	12.0	86	4
	Patlabawon	SP	1	24.0		1	8.0	248	4
	Quezon	SP	1	48.0		1	8.0	183	4
	Salagnawan	SP	1	72.0		1	12.0	183	3
	San Rafael	SP	1	72.0		1	12.0	129	5
	Tamayoc	SP	1	72.0		1	12.0	215	5
	Tigbalogo	SP	1	12.0		1	7.0	205	5

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities				
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir Number	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Patnongon	Tobias Fornier	SP	1	72.0		1	12.0	162	4
	Villa Crespo	SP	1	72.0		1	12.0	269	20
	Villa Cruz	SP	1	72.0		1	12.0	237	5
	Villa Elio	SP	1	72.0		1	12.0	108	3
	Villa Flores	SP	1	72.0		1	12.0	97	5
	Villa Laua-an	SP	1	72.0		1	12.0	226	10
	Villa Sal	SP	1	48.0		1	12.0	312	13
	Villa Salomon	SP	1	24.0		1	8.0	162	10
	Vista Alegre	SP	1	72.0		1	12.0	237	15
	Municipal Total	SP	27	1,634.4		30	295.0	5,966	178
San Jose de Buenavista	Bariri	SP	1		500			500	2
	Pantao	SP	1		2,000	1		1,000	4
	San Angel	SP	1						6
	Municipal Total	SP	3		2,500	1		1,500	12
San Remigio	Aningalan	SP	1		1,500			500	12
	Iguirindon	SP	1		1,000			500	5
	La union	SP	1		4,000			500	25
	Nagbangi I	SP	1						17
	Nagbangi II	SP	1		1,000			500	13
	Osorio I	SP	1		1,000			1,000	15
	Osorio II	SP	1		1,500			500	5
	Pandanan I	SP	1	432.0	2,500			500	3
	Poblacion	SP	1		500			1,000	3
	Municipal Total	SP	9	432.0	13,000			5,000	98

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities			
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir	Length of Distribution Line (meter)	Number of Public Faucets
Sebasté	Abiera	SP	1	129.6	300	1	300	13
	Agula	SP	1	43.2	500	1	50.0	6
	Alegre	SP	1	86.4	500	1	8.0	3
	Bacalan	SP	1	43.2	500	1	8.0	3
	Brgy. Poblacion	SP	1	129.6	500	1	50.0	6
	<b>Municipal Total</b>	SP	5	432.0	2,300	5	116.0	31
	Bad-as	SP	1		2,000			4
Sibalom	Bongbongan I	SP	1			1	12.0	6
	Bongbongan II	SP	1			3		10
	Bulalacao	SP	1			1	12.0	3
	Cabarian	SP	1		2,000	1	12.0	5
	Cabladan	SP	1			1	12.0	2
	Calog	SP	1			1	12.0	2
	Calo-oy	SP	1			1	8.0	5
	Capoldolan	SP	1			1	12.0	5
	Cubay-Sermon	SP	1			1		4
	Esperanza II	SP	1			1	12.0	2
	Esperanza III	SP	1			1	12.0	4
	Igbanolong	SP	1					2
	Igcococ	SP	1			1	12.0	3
	Igdagmay	SP	1			1	12.0	6
	Imparayan	SP	1			1	12.0	3
	Inabasan	SP	1			1		3
	Initan	SP	1		2,000	1	8.0	3
	Lacaron	SP	1			3	12.0	6

Table 4.1.2 Details on Existing Level II Systems (Cont'd)

Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities				
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Number	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Sibalom	Lambayagan	SP	1		1,000	1	12.0		2
	Luyang	SP	1		1,000	1	12.0		3
	Nagdayao	SP	1			1	12.0		4
	Odiong	SP	1			1	12.0		4
	Panlagangan	SP	1		1,000	1	12.0		2
	Pasong	SP	1			1			3
	Solong	SP	1			1	12.0		9
	Tabong-tabong	SP	1			1	12.0		2
	Tigbalua I	SP	1			1	12.0		2
	Tigbalua II	SP	1			1			5
	Tula-tula	SP	1			1	8.0		7
	Villafont	SP	1			1	12.0		2
	Municipal Total	SP	31			33	276.0		123
Tibiao	Castillo	SP	1		4,000	1			5
	Esparagoza	SP	1	86.4	500	1	12.0	1,000	7
	Importante	SP	1	259.2		1	18.0		8
	La Paz	SP	1	172.8	3,000	2	20.0	5,000	9
	Martinez	SP	1		3,000	1			8
	Natividad	SP	1	86.4	500	1	12.0	1,000	5
	Pitac	SP	1		3,000	1			5
	San Francisco Norte	SP	1	86.4	500			1,500	8
	Santa Ana	SP	1		1,000	1			5
	Santa Justa	SP	1		4,000	1			19
	Tigbaboy	SP	1		4,000	1			12
	Tuno	SP	1		5,000	2			14
	Municipal Total	SP	12	691.2		24,500	13	62.0	8,500

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source		Existing Facilities					
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir Number	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Tobias Fornier	Abaca WS	SP	1		2,000	1		400	6
	Atiotes WS	SP	1	57.6		1		250	4
	Balloscas WSS	SP	1	86.4		1	7.8	270	8
	Barasanan A WSS	SP	1	86.4		1		420	5
	Barasanan B WWS	SP	1	57.6		1		410	7
	Barasanan C WWS	SP	1	86.4		1		2,300	3
	Bariri WWS	SP	1		180	1		125	5
	Camandagan WS	SP	1	259.2	1,000	1		400	5
	Cato-ogan WWS	SP	1	172.8	2,000	1		500	10
	Dielum WS	SP	1	86.4	1,500	1	69.3	500	4
	Fatima WS	SP	1	115.2	2,000	1		5,000	10
	Garnad WS	SP	1	86.4	2,000			500	10
	Igbangcal-A WS	SP	1	259.2	1,000			300	10
	Igbangcal-B WS	SP	1	86.4	3,000	1		300	8
	Igbangcal-C WWS	SP	1	36.0	1,000	1		400	3
	Igcadac WWS	SP	1	129.6	2,000			400	5
	Igcado WS	SP	1		2,000	1		400	5
	Igcasicad WS	SP	1	57.6	1,000	1		250	5
	Lawigan	SP	1	57.6		1		240	5
	Manaling WS	SP	1	115.2		1		400	4
	Nagsubuan WS	SP	1		1,800	1	7.7	250	6
	Nasuli-A WWS	SP	1		2,000	1		250	4
	Opsan WSS	SP	1	86.4		1		250	6
	Paciencia WS	SP	1	172.8	1,000	1		500	10
	Sto. Tomas WS	SP	1	86.4	1,000	1		400	6
	Ysulat WWS	SP	1	230.4	1,000	1		400	10
	Municipal Total	SP	26	2,412.0	27,480	23	84.8	15,815	164

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 1 of 6

Name of Municipality	Name of Operating Body	Water Source			Existing Facilities				
		Type	Number	Discharge (m <sup>3</sup> /day)	Length of Transmission Line (meter)	Reservoir Number	Volume (m <sup>3</sup> )	Length of Distribution Line (meter)	Number of Public Faucets
Valderama	Alon Spring Dev.	SP	1	648.0	1,500	1	4.0	500	2
	Baklang Spring Dev.	SP	1		700	1	9.0	250	3
	Binanongan WS	SP	1	648.0	2,000	1		400	8
	Boroboroc Spring Dev	SP	1		1,200	1	12.0	700	6
	Bugnay Spring Dev.	SP	1		1,600	1	6.0	800	3
	Buluangan I	SP	1		800	1	6.0	250	2
	Buluangan I (LGU)	SP	1		1,600	1	15.0	800	4
	Buluangan II	SP	1		2,000	1	27.0	2,000	6
	Bunsod	SP	1		260		144.0	580	28
	Buri, Brgy. Bugnay	SP	1		800	1	6.0	450	4
	Busog	SP	1		750	1		250	2
	Cananghan	SP	1	480.0	400	1		240	2
	Canipayan	SP	1	216.0	700	1	13.8	200	4
	Cansilayan	SP	1		1,200	2	6.0	300	2
	Culyat	SP	1		800	1	3.6	300	2
	Iginab Spring Dev.	SP	1	1,440.0	1,000	1	36.0	300	11
	Igmasandig	SP	1	259.2	4,500	2	0.5	1,500	4
	Lublub	SP	1		1,000	1	16.0	400	4
	Pandan	SP	1		1,300	2	32.0	350	13
	San Agustin	SP	1		800	1	10.4	300	5
	Tigmamale	SP	1	1,200.0	400	1	27.0	300	10
	Ubos-takas WWS	SP	1	6,400.0	3,500	3	1,400.0	2,500	230
	Municipal Total	SP	22	11,291.2	28,810	26	1,774.3	13,670	355
	Provincial Total			214	30,441.7	202,655	215	3,715.6	111,196

Note: 1. Type of Water Source: *DW* - Deep Well, *DgW* - Dug Well, *Surf* - Surface Water (River), *SP* - Spring, and *IG* - Infiltration Gallery

Table 4.1.2 Details on Existing Level II Systems  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Anini-y	Bayo Grande		1	1		30	30		150	150
	Bayo Pequeño		1	1		25	25		125	125
	Casay		1	1		20	20		100	100
	Iba		1	1		20	20		100	100
	Igtumarom		1	1		15	15		75	75
	Lisub B		1	1		20	20		100	100
	Mabuyong		1	1		15	15		75	75
	Salvacion		1	1		10	10		50	50
	San Ramon		1	1		15	15		75	75
	Tagaytay		1	1		20	20		100	100
Belison	<b>Municipal Total</b>		10	10		190	190		950	950
	Borocboroc BWSA		1	1		20	20		100	100
	Buenavista BWSA		1	1		60	60		300	300
	Mojon BWSA		1	1		50	50		250	250
	<b>Municipal Total</b>		3	3		130	130		650	650
	Camangahan WWS		1	1		65	65		325	325
Bugasong	Guja-Sabang West WWS		2	2		230	230		1,150	1,150
	Ilares Spring System		1	1		100	100		500	500
	Zaragoza		1	1		80	80		400	400
	<b>Municipal Total</b>		5	5		475	475		2,375	2,375
	Barbatan Island		1	1		20	20		100	100
Culasi	Bitadon Norte		1	1		20	20		100	100
	Flores		1	1		40	40		200	200
	Magsaysay		1	1		20	20		100	100
	Malalison Island		1	1		10	10		50	50

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Culasi	Osorio		1	1		20	20		100	100
	San Pascual		1	1		30	30		150	150
	Simbola		1	1		40	40		200	200
	Tigbobolo		1	1		40	40		200	200
	<b>Municipal Total</b>		9	9		240	240		1,200	1,200
Hamtic	Apdo		1	1		20	20		100	100
	Banawon		1	1		45	45		225	225
	Bongbongan III		1	1		30	30		150	150
	Borbot		1	1		30	30		150	150
	Bubudan		1	1		20	20		100	100
	Calacia I		1	1		25	25		125	125
	Calacia II		1	1		20	20		100	100
	Caromangay		1	1		20	20		100	100
	Casalngan		1	1		25	25		125	125
	Dangcalan		1	1		25	25		125	125
	Evelio B. Javier		1	1		20	20		100	100
	Fabrica		1	1		30	30		150	150
	General Fullon		1	1		15	15		75	75
	Igbucagay		1	1		20	20		100	100
	Linaban		1	1		65	65		325	325
Laua-an	Mapatag		1	1		15	15		75	75
	Poblacion 5	1		1	40		40	200		200
	<b>Municipal Total</b>	1	16	17	40	425	465	200	2,125	2,325
	Banban		1	1		50	50		250	250
	Capnayan		1	1		20	20		100	100
	Casit-an		1	1		50	50		250	250
	Guiamon		1	1		20	20		100	100

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Laua-an	Intao		1	1		75	75		375	375
	Jagukican		1	1		75	75		375	375
	Jinalinan		1	1		25	25		125	125
	Leon		1	1		40	40		200	200
	Liberato		1	1		20	20		100	100
	Lindero		1	1		75	75		375	375
	Liya-liya		1	1		25	25		125	125
	Maria		1	1		75	75		375	375
	Mauno		1	1		40	40		200	200
	Maybunga		1	1		20	20		100	100
	Pandanán		1	1		20	20		100	100
	Paniatan		1	1		25	25		125	125
	Panigayan		1	1		30	30		150	150
	San Ramon		1	1		15	15		75	75
	Santiago		1	1		30	30		150	150
	Virginia		1	1		25	25		125	125
	<b>Municipal Total</b>		20	20		755	755		3,775	3,775
Libertad	Codiong WWS		1	1		25	25		125	125
	Igcagay WWS		1	1		25	25		125	125
	Inyawan WWS		1	1		50	50		250	250
	Lindero BWSA		1	1		60	60		300	300
	Paz		1	1		50	50		250	250
	Pucio WS		1	1		70	70		350	350
	San Roque		1	1		25	25		125	125
	Tinigbas		1	1		75	75		375	375
	Timindugan		1	1		15	15		75	75
	<b>Municipal Total</b>		9	9		395	395		1,975	1,975

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Pandan	Aracay		1	1		20	20		100	100
	Badiangan		1	1		20	20		100	100
	Listoga		1	1		10	10		50	50
	Maadlos		1	1		25	25		125	125
	Perfecta		1	1		30	30		150	150
	San Joaquin		1	1		40	40		200	200
	Santa Ana		1	1		30	30		150	150
	<b>Municipal Total</b>		7	7		175	175		875	875
	Alvaniz		1	1		15	15		75	75
	Badiangan		1	1		20	20		100	100
Pamongon	Bitas		1	1		25	25		125	125
	Cuyapiao		1	1		25	25		125	125
	Gella		1	1		15	15		75	75
	Igarawan		1	1		25	25		125	125
	Igburi		1	1		50	50		250	250
	La Rioja		1	1		70	70		350	350
	Mabasa		1	1		30	30		150	150
	Macarina		1	1		25	25		125	125
	Magarang		1	1		15	15		75	75
	Pandanang		1	1		20	20		100	100
	Patlabawon		1	1		20	20		100	100
	Quezon		1	1		20	20		100	100
	Salaguawan		1	1		15	15		75	75
	San Rafael		1	1		25	25		125	125
	Tamayoc		1	1		25	25		125	125
	Tigbalogo		1	1		25	25		125	125

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Patmongon	Tobias Fornier		1	1		20	20		100	100
	Villa Crespo		1	1		100	100		500	500
	Villa Cruz		1	1		25	25		125	125
	Villa Elio		1	1		15	15		75	75
	Villa Flores		1	1		25	25		125	125
	Villa Laua-an		1	1		50	50		250	250
	Villa Sal		1	1		65	65		325	325
	Villa Salomon		1	1		50	50		250	250
	Vista Alegre		1	1		75	75		375	375
San Jose de Buenavista	<b>Municipal Total</b>		27	27		890	890		4,450	4,450
	Bariri		1	1		10	10		50	50
	Pantao		1	1		20	20		100	100
	San Angel	1		1	30		30	150		150
	<b>Municipal Total</b>	1	2	3	30	30	60	150	150	300
San Remigio	Anungalan		1	1		60	60		300	300
	Iguirindon		1	1		25	25		125	125
	La union		1	1		125	125		625	625
	Nagbangi I		1	1		85	85		425	425
	Nagbangi II		1	1		65	65		325	325
	Osorio I		1	1		75	75		375	375
	Osorio II		1	1		25	25		125	125
San Remigio	Pandanan I		1	1		15	15		75	75
	Poblacion		1	1		15	15		75	75
	<b>Municipal Total</b>		9	9		490	490		2,450	2,450

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Sebasté	Abiera	1		1	65		65	325		325
	Aguila	1		1	30		30	150		150
	Alegre		1	1		15	15		75	75
	Bacalan	1		1	15		15	75		75
	Brgy. Poblacion	1		1	30		30	150		150
	<b>Municipal Total</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>140</b>	<b>15</b>	<b>155</b>	<b>700</b>	<b>75</b>	<b>775</b>
	Bad-as					20	20		100	100
Sibalom	Bongbongan I		1	1		30	30		150	150
	Bongbongan II		1	1		50	50		250	250
	Bulalacao	1		1	15		15	75		75
	Cabarian		1	1		25	25		125	125
	Cabladan		1	1		10	10		50	50
	Calog		1	1		10	10		50	50
	Calo-oy		1	1		25	25		125	125
	Capoldolan		1	1		25	25		125	125
	Cubay-Sermon		1	1		20	20		100	100
	Esperanza II		1	1		10	10		50	50
	Esperanza III		1	1		20	20		100	100
	Igbanolong		1	1		10	10		50	50
	Igcococ		1	1		15	15		75	75
	Igdagmay		1	1		30	30		150	150
	Imparayan		1	1		15	15		75	75
	Inabasan		1	1		15	15		75	75
	Initan		1	1		15	15		75	75
	Lacaron		1	1		30	30		150	150
	Lambayagan		1	1		10	10		50	50

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Sibalom	Luyang		1	1		15	15		75	75
	Nagdayao		1	1		20	20		100	100
	Odiang		1	1		20	20		100	100
	Panlagangan		1	1		10	10		50	50
	Pasong		1	1		15	15		75	75
	Solong		1	1		45	45		225	225
	Tabong-tabong		1	1		10	10		50	50
	Tigbalua I		1	1		10	10		50	50
	Tigbalua II		1	1		25	25		125	125
	Tula-tula		1	1		35	35		175	175
	Villafont		1	1		10	10		50	50
	<b>Municipal Total</b>	1	29	30	15	600	615	75	3,000	3,075
Tibiao	Castillo		1	1		25	25		125	125
	Esparagoza		1	1		35	35		175	175
	Importante		1	1		40	40		200	200
	La Paz		1	1		45	45		225	225
	Martinez		1	1		40	40		200	200
	Natividad		1	1		25	25		125	125
	Pitac		1	1		25	25		125	125
	San Francisco Norte		1	1		40	40		200	200
	Santa Ana		1	1		25	25		125	125
	Santa Justa		1	1		95	95		475	475
	Tigbaboy		1	1		60	60		300	300
	Tuno		1	1		70	70		350	350
	<b>Municipal Total</b>		12	12		525	525		2,625	2,625

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Tobias Fornier	Abaca WS	1		1	30		30	150		150
	Atiotes WS		1	1		20	20		100	100
	Balloscas WSS		1	1		40	40		200	200
	Barasan A WSS		1	1		25	25		125	125
	Barasan B WWS		1	1		35	35		175	175
	Barasan C WWS		1	1		15	15		75	75
	Bariri WWS		1	1		25	25		125	125
	Camandagan WS		1	1		25	25		125	125
	Cato-ogan WWS		1	1		50	50		250	250
	Diclum WS		1	1		20	20		100	100
	Fatima WS		1	1		50	50		250	250
	Gamad WS		1	1		50	50		250	250
	Igbangcal-A WS		1	1		50	50		250	250
	Igbangcal-B WS		1	1		40	40		200	200
	Igbangcal-C WWS		1	1		15	15		75	75
	Igcadac WWS		1	1		25	25		125	125
	Igcado WS		1	1		25	25		125	125
	Igcasicad WS		1	1		25	25		125	125
	Lawigan		1	1		25	25		125	125
	Manaling WS		1	1		20	20		100	100
	Nagsubuan WS		1	1		30	30		150	150
	Nasuli-A WWS		1	1		20	20		100	100
	Opsan WSS		1	1		30	30		150	150
	Paciencia WS		1	1		50	50		250	250
	Sto. Tomas WS		1	1		30	30		150	150
	Ysulat WWS		1	1		50	50		250	250
	<b>Municipal Total</b>	<b>1</b>	<b>25</b>	<b>26</b>	<b>30</b>	<b>790</b>	<b>820</b>	<b>150</b>	<b>3,950</b>	<b>4,100</b>

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 2 of 6

Name of Municipality	Name of Operating Body	Number of Barangay Served			Number of Households Served			Number of Population Served		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Valderama	Alon Spring Dev.		1	1		10	10		50	50
	Bakiang Spring Dev.		1	1		15	15		75	75
	Binanongan WS		1	1		40	40		200	200
	Boroboroc Spring Dev		1	1		30	30		150	150
	Bugnay Spring Dev.		1	1		15	15		75	75
	Buluangan I		1	1		10	10		50	50
	Buluangan I (LGU)		1	1		20	20		100	100
	Buluangan II		1	1		30	30		150	150
	Bunsod		1	1		140	140		700	700
	Buri, Brgy. Bugnay		1	1		20	20		100	100
	Busog		1	1		10	10		50	50
	Cananghan		1	1		10	10		50	50
	Canipayan		1	1		20	20		100	100
	Cansilayan		1	1		10	10		50	50
	Culyat		1	1		10	10		50	50
	Iginab Spring Dev.		1	1		55	55		275	275
	Igmasandig		1	1		20	20		100	100
	Lublub		1	1		20	20		100	100
	Pandan		1	1		65	65		325	325
	San Agustin		1	1		25	25		125	125
	Tigmamale		1	1		50	50		250	250
	Ubos-takas WWS	2		2	1,150		1,150	5,750		5,750
	<b>Municipal Total</b>	<b>2</b>	<b>21</b>	<b>23</b>	<b>1,150</b>	<b>625</b>	<b>1,775</b>	<b>5,750</b>	<b>3,125</b>	<b>8,875</b>
<b>Provincial Total</b>		<b>8</b>	<b>184</b>	<b>192</b>	<b>255</b>	<b>6,125</b>	<b>6,380</b>	<b>1,275</b>	<b>30,625</b>	<b>31,900</b>

Table 4.1.2 Details on Existing Level II Systems

Sheet 3 of 6

Name of Municipality	Name of Operating Body	Service Conditions During Dry Season								
		Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Supply Interruption (number/month)			Supply Water Pressure (% of total)		
					Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate	Inadequate
Anini-y	Bayo Grande	24								
	Bayo Pequeño	24								
	Casay	24								
	Iba	24								
	Igtumarom	24								
	Lisub B	24								
	Mabuyong									
	Salvacion	24								
	San Ramon	24								
	Tagaytay	24								
Belison	Borocboroc BWSA									
	Buнавista BWSA									
	Mojon BWSA									
Bugasong	Camangahan WWS	18								
	Guja-Sabang West WWS	11								
	Ilaures Spring System	7								
	Zaragoza									
	Batbatan Island	12								
Culasi	Bitadton Norte	24								
	Flores	24								
	Magsaysay	24								
	Malalison Island	12								
	Osorio	24								
	San Pascual	24								
	Simbola	24								
	Tigbobo	24								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Service Conditions During Dry Season					Supply Water Pressure (% of total)	
					Supply Interruption (number/month)				Others	Adequate	Inadequate
					Power Failure	Pump Breakdown	Pipe Burst				
Hamtic	Apdo	24									
	Banawon	24									
	Bongbongan III	24									
	Botbot	24									
	Bubudan	24									
	Calacja I	24									
	Calacja II	24									
	Caromangay	24									
	Casalangan	24									
	Dangcalan	8									
	Evelio B. Javier	24									
	Fabrica	24									
	General Fullon	24									
	Igbucagay	24									
	Linaban	24									
Laua-an	Mapatag	24									
	Poblacion 5	24									
	Banban	24									
	Capnayan	24									
	Casit-an										
	Guiaonon	24									
	Intrao	24									
	Jaguikican	24									
	Jinalinan	24									
	Leon	24									
	Liberato	24									

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Service Conditions During Dry Season									
		Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Supply Interruption (number/month)			Supply Water Pressure (% of total)			
					Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate	Inadequate	
Laua-an	Lindero	10									
	Liya-liya	15									
	Maria	24									
	Mauno	24									
	Maybunga	24									
	Pandanan	24									
	Paniatan	24									
	Panigayan	14									
	San Ramon	24									
	Santiago	24									
	Virginia	24									
	Codiong WWS	24									
Libertad	Igcagay WWS										
	Inyawan WWS	24									
	Lindero BWSA	24									
	Paz	24									
	Pucio WS	24									
	San Roque	24									
	Tinigbas										
	Tinindugan	24									
	Aracay	24									
	Badiangan	24									
	Listoga	24									
	Maadlos	24									
Pandani	Perfecta	24									
	San Joaquin	24									
	Santa Ana	24									

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Service Conditions During Dry Season				Supply Water Pressure (% of total)	
					Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate	Inadequate
Pamongon	Alvaniz	24								
	Badiangan	24								
	Bitas	24								
	Cuyapiao	24								
	Gella	24								
	Igarawan	24								
	Igburi	24								
	La Rioja	24								
	Mabasa	24								
	Macarina	24								
	Magarang	24								
	Pandan.	24								
	Patlabawon	24								
	Quezon	24								
	Salaguaiwan	24								
	San Rafael	24								
	Tamayoc	24								
	Tigbalogo	24								
	Tobias Fornier	24								
	Villa Crespo	24								
	Villa Cruz	24								
	Villa Elio	24								
	Villa Flores	24								
	Villa Laua-an	24								
	Villa Sal	24								
	Villa Salomon	24								
	Vista Alegre	24								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Service Conditions During Dry Season									
		Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Supply Interruption (number/month)				Supply Water Pressure (% of total)		
					Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate	Inadequate	
San Jose de Buenavista	Barin	24									
	Pantao	24									
	San Angel	12									
San Remigio	Aningalan	24									
	Iguirindon	24									
	La union	24									
	Nagbangi I	24									
	Nagbangi II	24									
	Osonio I	24									
	Osonio II	24									
	Pandanan I	24									
	Poblacion	24									
	Abiera	24									
Sebaste	Agulla	24									
	Alegre	24									
	Bacalan	24									
	Brgy. Poblacion	24									
	Bad-as	24									
Sibalom	Bongbongan I	24									
	Bongbongan II	24									
	Bulalacao	24									
	Cabaruan	24									
	Cabladan	24									
	Calog	24									
	Calo-oy	24									
	Capoldolan	24									

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Service Conditions During Dry Season							
		Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Supply Interruption (number/month)				Supply Water Pressure (% of total)
					Power Failure	Pump Breakdown	Pipe Burst	Others	
Sibalom	Cubay-Sermon	24							
	Esperanza II	24							
	Esperanza III	24							
	Igbanolong	24							
	Igcococ	24							
	Igdagmay	24							
	Imparayan	24							
	Inabasan	24							
	Initan	24							
	Lacaron	24							
	Lambayagan	24							
	Luyang	24							
	Nagdayao	24							
	Odiong	24							
	Panlagangan	24							
	Pasong	24							
	Solong	24							
	Tibiao	Tabong-tabong	24						
Tigbalua I		24							
Tigbalua II		24							
Tula-tula		24							
Villafont		24							
Castillo		24							
Esparagoza		24							
Importante		24							
La Paz		24							
Martinez		24							

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Service Conditions During Dry Season				Supply Water Pressure (% of total)	
					Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate	Inadequate
Tibiao	Natividad	24								
	Pitac	24								
	San Francisco Norte	24								
	Santa Ana	24								
	Santa Justa									
	Tigbaboy	24								
	Tuno	24								
Tobias Fornier	Abaca WS	8								
	Atiotes WS	8								
	Balloscas WSS	24								
	Barasan A WWS	12								
	Barasan B WWS	8								
	Barasan C WWS	12								
	Bariri WWS	8								
	Camandagan WS	24								
	Cato-ogan WWS	12								
	Dichum WS	8								
	Fatima WS	8								
	Gamad WS	8								
	Igbangcal-A WS	24								
	Igbangcal-B WS	8								
	Igbangcal-C WWS	5								
	Igcadac WWS	12								
	Igcado WS	8								
	Igcasicad WS	8								
	Lawigan	8								
	Manaling WS	8								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 3 of 6

Name of Municipality	Name of Operating Body	Service Conditions During Dry Season							
		Supply (Hrs/day)	Dirty Water <sup>1</sup>	Taste or Smell <sup>2</sup>	Power Failure	Pump Breakdown	Pipe Burst	Others	Adequate Supply Water
Tobias Fornier	Nagsubuan WS	12							
	Nasuli-A WWS	8							
	Opsan WSS	22							
	Paciencia WS	12							
	Sto. Tomas WS	8							
	Ysulat WWS	8							
	Alon Spring Dev.	24							
Valderama	Bakiang Spring Dev.	24							
	Binanongan WS	24							
	Boroboroc Spring Dev	6							
	Bugnay Spring Dev.	24							
	Buhangan I	24							
	Buhangan I (LGU)	24							
	Buhangan II	24							
	Bunsod	24							
	Buri, Brgy. Bugnay	24							
	Busog	24							
	Cananghan	24							
	Canipayan	24							
	Cansilayan	24							
	Culyat	12							
	Iginab Spring Dev.	24							
	Igmasandig	24							
	Lublub	24							
Pandan	24								
San Agustin	24								
Tigmamale	24								
Ubos-takas WWS	8								

Table 4.1.2 Details on Existing Level II Systems  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Trademan	MEO/CEO	DEO/PEO	Others
Anini-y	Bayo Grande								
	Bayo Pequeño								
	Casay								
	Iba								
	Igtumarom								
	Lisub B								
	Mabuyong								
	Salvacion								
	San Ramon								
Belison	Tagaytay								
	Boroboroc BWSA								
	Buenavista BWSA								
	Mojon BWSA								
Bugasong	Camangahan WWS								
	Guija-Sabang West WWS	1	9	1	11				
	Ilares Spring System	1	9	7	17				
	Zaragoza		9	1	10				
Culasi	Batatan Island								
	Binadon Norte								Brgy. Off.
	Flores								Brgy. Off.
	Magsaysay								Brgy. Off.
	Malalison Island								Brgy. Off.
	Osorio								Brgy. Off.
	San Pascual								Brgy. Off.
	Simbola								Brgy. Off.
	Tigobolo								NGO

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Trademan	MEO/CEO	DEO/PEO	Others
Hambic	Apdo								Brgy. Off.
	Banawon								Brgy. Off.
	Bongbongan III								Brgy. Off.
	Botbot								Brgy. Off.
	Bubudan								Brgy. Off.
	Calacja I								Brgy. Off.
	Calacja II								Brgy. Off.
	Caromangay								Brgy. Off.
	Casalngan								Brgy. Off.
	Dangcalan								Brgy. Off.
	Evelio B. Javier								Brgy. Off.
	Fabrica								Brgy. Off.
	General Fullon								Brgy. Off.
	Igbucagay								Brgy. Off.
	Linaban								Brgy. Off.
	Mapatag								Brgy. Off.
	Poblacion 5								Brgy. Off.
	Banban								Brgy. Off.
	Capnayan								Brgy./Mun.
Laua-an	Casit-an								Brgy. Off.
	Guamon								Brgy. Off.
	Intao								
	Jagukican								Brgy. Off.
	Jinalnan								Brgy. Off.
	Leon								Brgy. Off.
	Liberato								Brgy. Off.
	Lindero								Brgy./Mun.

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Trademan	MEO/CEO	DEO/PEO	Others
Lana-an	Liya-liya								Brgy. Off.
	Maria								Brgy. Off.
	Mauno								Brgy. Off.
	Maybunga								Brgy. Off.
	Pandan								Brgy. Off.
	Panatan								Brgy. Off.
	Panagayan								Brgy. Off.
	San Ramon								Brgy. Off.
	Santiago								Brgy. Off.
	Virginia								Brgy. Off.
Libertad	Codiong WWS								
	Igcagay WWS								
	Inyawan WWS								BWSA
	Lindero BWSA								BWSA
	Paz								BWSA
	Pucio WS								BWSA
	San Roque								BWSA
	Tinigbas								BWSA
	Tinindugan								BWSA
	Aracay								
Pandan	Badiangan								
	Listoga								
	Maadlos								
	Perfecta								
	San Joaquin								
	Santa Ana								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Trademan	MEO/CEO	DEO/PEO	Others
Pamongo	Alvaniz								Brgy. Off.
	Badiangan								Brgy. Off.
	Bitas								Brgy. Off.
	Cuyapiao								Brgy. Off.
	Gella								Brgy. Off.
	Igarawan								Brgy. Off.
	Igburi								Brgy. Off.
	La Rioja								Brgy. Off.
	Mabasa								Brgy. Off.
	Macarina								Brgy. Off.
	Magarang								Brgy. Off.
	Pandanang								Brgy. Off.
	Patlabawon								Brgy. Off.
	Quezon								Brgy. Off.
	Salaguawan								Brgy. Off.
	San Rafael								Brgy. Off.
	Tamayoc								Brgy. Off.
	Tigbalogo								Brgy. Off.
	Tobias Fornier								Brgy. Off.
	Villa Crespo								Brgy. Off.
	Villa Cruz								Brgy. Off.
	Villa Elio								Brgy. Off.
	Villa Flores								Brgy. Off.
	Villa Laua-an								Brgy. Off.
	Villa Sal								Brgy. Off.
	Villa Salomon								Brgy. Off.
	Vista Alegre								Brgy. Off.

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff							
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Repair Work			
						Local Trademan	MEO/CEO	DEO/PEO	Others
San Jose de Buenavista	Bariri								Brgy. Off.
	Pantao								Brgy. Off.
San Remigio	San Angel		Barangay Official				✓		
	Aningalan							✓	BWSA
	Iguirindon							✓	BWSA
	La union							✓	BWSA
	Nagbangi I							✓	BWSA
	Nagbangi II							✓	BWSA
	Osonio I							✓	BWSA
	Osonio II							✓	BWSA
	Pandanan I							✓	BWSA
	Poblacion						✓	✓	BWSA
Sebasti	Abiera						✓		BWSA
	Aguila			2	2		✓		
	Alegre								
	Bacalan								
Sibalom	Brgy. Poblacion	4		2	6		✓	✓	
	Bad-as								BWSA
	Bongbongan I								BWSA
	Bongbongan II								BWSA
	Bulalacao								BWSA
	Cabarian								BWSA
	Cabladan								BWSA
	Calog								BWSA
	Calo-oy								BWSA
	Capoldolan								BWSA
Cubay-Sermon								BWSA	

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Trademan	MEO/CEO	DEO/PEO	Others
Sibalom	Esperanza II								BWSA
	Esperanza III								BWSA
	Igbanolong								BWSA
	Igcococ								BWSA
	Igdagmay								BWSA
	Imparayan								BWSA
	Inabasan								BWSA
	Initan								BWSA
	Lacaron								BWSA
	Lambayagan								BWSA
	Luyang								BWSA
	Nagdayao								BWSA
	Odiong								BWSA
	Panlagangan								BWSA
	Pasong								BWSA
	Solong								BWSA
	Tabong-tabong								BWSA
Tibiao	Tigbahua I								BWSA
	Tigbahua II								BWSA
	Tula-tula								BWSA
	Villafont								BWSA
	Castillo								Brgy. Off.
	Esparagoza								
	Importante					✓			
	La Paz								
	Martinez								Brgy. Off.
	Natividad								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Tradesman	MEO/CEO	DEO/PEO	Others
Tibiao	Pitac								Brgy. Off.
	San Francisco Norte								
	Santa Ana								Brgy. Off.
	Santa Justa								Brgy. Off.
	Tigbaboy								Brgy. Off.
	Tuno								Brgy. Off.
Tobias Fornier	Abaca WS								
	Aniotes WS								
	Balloscas WSS								
	Barasanan A WSS								
	Barasanan B WWS								
	Barasanan C WWS								
	Bariri WWS								
	Camandagan WS								
	Cato-ogan WWS								
	Diculum WS								
	Fatima WS								
	Gamad WS								
	Igbangcal-A WS								
	Igbangcal-B WS								
	Igbangcal-C WWS								
	Igcadac WWS								
	Igcado WS								
	Igcasicad WS								
	Lawigan								
	Manaling WS								
	Nagsubuan WS								

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 4 of 6

Name of Municipality	Name of Operating Body	Number of Staff					Repair Work		
		Technical Staff	Administrative Staff	Collector	Total Number of Staff	Local Tradedman	MEO/CEO	DEO/PEO	Others
Tobias Fornier	Nasuli-A WWS								
	Opsan WSS								
	Paciencia WS								
	Sto. Tomas WS								
	Ysular WWS								
Valderama	Alon Spring Dev.								Brgy. Off.
	Bakiang Spring Dev.								Brgy. Off.
	Binanongan WS								
	Boroboroc Spring Dev								Brgy. Off.
	Bugnay Spring Dev.								
	Buluangan I								Brgy. Off.
	Buluangan I (LGU)								Brgy. Off.
	Buluangan II								
	Bunsod	1	10	1	12	✓			
	Buri, Brgy. Bugnay								Brgy. Off.
	Busog						✓		
	Cananghan								
	Canipayon	1		6	7			✓	Brgy. Off.
	Cansilayan								Brgy. Off.
	Culyat								Brgy. Off.
	Iginab Spring Dev.	2	5	1	8				BWSA
	Igmasandig								BWSA
	Lublub								
	Pandanan								
	San Agustin		1	1	2				
	Tigmamale								
	Ubos-takas WWS	2		2	4				

Table 4.1.2 Details on Existing Level II Systems  
Sheet 5 of 6

Name of Municipality	Name of Operating Body	Expenditures					Tariff				Average Collection Efficiency (%)			
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)	Cost per Pail		Cost per Cu.	Cost per HH	Other
		(P '000.00 / year)												
Anini-y	Bayo Grande													
	Bayo Pequcho													
	Casay													
	Iba													
	Igtumarom													
	Lisub B.													
	Mabuyong													
	Salvacion													
	San Ramon													
	Tagaytay													
Belison	Borochoroc BWSA													
	Buнавista BWSA													
Bugasong	Mojon BWSA													
	Camangahan WWS													
	Guija-Sabang West WWS		1.45	2.14		3			4			10		
	Ilaures Spring System		4.8	4.86								3		
	Zaragoza													
Culasi	Batbatan Island													
	Bitadton Norte													
	Flores													
	Magsaysay													
	Malalison Island													
	Osoño													
	San Pascual													
	Simbola													
	Tigbobolo													
	Apdo													
Hamtic	Banawon													
	Bongbongan III													
	Borbot													
	Bubudan													
	Calacia I													
	Calacia II													
	Caromangay													
	Cusalangan													
	Dangcalan													

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 5 of 6

Name of Municipality	Name of Operating Body	Expenditures						Tariff				Average Collection Efficiency (%)		
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)	(Pesos)				
										Cost per Pail	Cost per Cu.		Cost per HH	Other
Hamtic	Evelio B. Javier													
	Fabrica													
	General Fullon													
	Igbucagay													
	Linaban													
	Mapatag													
	Poblacion S													
	Banban													
	Capnayan													
	Casit-an													
	Guamon													
	Intao													
	Jaguikican													
	Jinalinan													
Leon														
Laua-an	Liberato													
	Lindero													
	Liya-liya													
	Maria													
	Mauno													
	Maybunga													
	Pandanun													
	Panlatan													
	Panigayan													
	San Ramon													
	Santiago													
	Virginia													
	Codiong WWS													
	Igcagay WWS													
Libertad	Inyawan WWS	2												
	Lindero BWSA	2												
	Paz													
	Pucio WS	2.5												
	San Roque													
	Timigbas													
	Timindugan													

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 5 of 6

Name of Municipality	Name of Operating Body	Expenditures (P'000.00 / year)					Tariff (Pesos)				Average Collection Efficiency (%)			
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)	Cost per Pail		Cost per Cu.	Cost per HH	Other
Panday	Aracay													
	Badiangan													
	Listoga													
	Maadlos													
	Perfecta													
	San Joaquin													
	Santa Ana													
Patrongon	Alvaniz													
	Badiangan													
	Bitas													
	Cuyapiao													
	Gella													
	Igarawan													
	Igburi													
	La Roja													
	Mabasa													
	Macarina													
	Magarang													
	Pandanán													
	Patlabawon													
	Quezon													
	Salaguaiwan													
	San Rafael													
	Tamayoc													
	Tigbalogo													
	Tobias Fornier													
	Villa Crespo													
Villa Cruz														
Villa Elio														
Villa Flores														
Villa Laua-an														
Villa Sal														
Villa Salomon														
Vista Alegre														

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Expenditures (P' 000.00 / year)					Tariff (Pesos)				Average Collection Efficiency (%)		
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)	Cost per Pail		Cost per Cu.	Cost per HH
San Jose de Buenavista	Barin												
	Pantao												
San Remigio	San Angel												
	Anigalan												
	Iguirindon												
	La union												
	Nagbangi I												
	Nagbangi II												
	Osoio I												
	Osoio II												
	Pandanay I												
	Poblacion												
Sebasto	Abiera		6									10	
	Aguila		6									10	
	Alegre												
	Bacalan												
Sibalom	Brgy. Poblacion		7									25	5
	Bad-as												
	Bongbongan I												
	Bongbongan II												
	Bulacao												
	Cabarian												
	Cabladan												
	Calog												
	Calo-oy												
	Capoldolan												
	Cubay-Sermon												
	Esperanza II												
	Esperanza III												
	Igbanolong												
	Igcococ												
Igdagmay													
Imparayan													
Inabasan													
Intian													
Lacaron												50	

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Expenditures					Tariff					Average Collection Efficiency (%)		
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)				Cost per (Pesos)	
									Pail	Cu.	HH		Other	
Sibalom	Lambayagan													
	Luyang													
	Nagdayao													
	Odiang													
	Panlagangan													
	Pasong													
	Solong													
	Tabong-tabong													
	Tigbalua I													
	Tigbalua II													
	Tula-tula													
	Villafont													
Tibiao	Castillo											free		
	Esparagoza													
	Importante													
	La Paz													
	Martinez											free		
	Natividad													
	Pitac											free		
	San Francisco Norte													
	Santa Ana												5	
	Santa Justa													
	Tigbaboy											free		
	Tuno												5	
Tobias Fornier	Abaca WS													
	Atiotes WS													
	Balloscas WSS													
	Barasanan A WSS													
	Barasanan B WWS													
	Barasanan C WWS													
	Barin WWS													
	Camandagan WS													
	Cato-ogan WWS													
	Diclum WS													
	Fatima WS													
	Gamad WS													

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Expenditures						Tariff				Average Collection Efficiency (%)	
		Annual	Wages	Fuel, Chem.	Transport	Repairs	Loan Repayment	Other	Consumer Payment (Year)	Cost per Pail	Cost per Cu. (Pesos)		Cost per HH
Tobias Fornier	Igbangcal-A WS												
	Igbangcal-B WS												
	Igbangcal-C WWS												
	Igcadac WWS												
	Igcado WS												
	Igcasidac WS												
	Lawigan												
	Manaling WS												
	Nagsubuan WS												
	Nasuli-A WWS												
	Opsan WSS												
	Paciencia WS												
	Sto. Tomas WS												
	Ysulat WWS												
Valderama	Alon Spring Dev.												
	Bakiang Spring Dev.												
	Binanongan WS												
	Boroboroc Spring Dev												
	Bugnay Spring Dev.												
	Buluangan I												
	Buluangan I (LGU)												
	Buluangan II												
	Bunsod	14.6	2.4	15.5		3						15	
	Buri, Brgy. Bugnay												
	Busog												
	Cananghan												
	Canipayan												
	Cansilayan												
	Culyat												
	Iginab Spring Dev.												
	Ignasandig												
	Lublub												
	Pandan												
	San Agustin												
	Tignamale												
Ubos-takas WWS	128.36											30	

Table 4.1.2 Details on Existing Level II Systems

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Name of Municipality	Name of Operating Body	Billings				Revenues						
		Annual Billing (Number)	Public Faucet Consumers	House Connection Consumers	Expected Subsidies	Others	Annual Income (P '000.00 / year)	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other	
Anini-y	Bayo Grande											
	Bayo Pequeño											
	Casay											
	Iba											
	Igtumarom											
	Lisub B											
	Mabuyong											
	Salvacion											
	San Ramon											
	Tagaytay											
Belison	Boroctoroc BWSA											
	Buenavista BWSA											
Bugasong	Mojon BWSA											
	Camangahan WWS											
	Guja-Sabang West WWS						4.5					
	Ilaures Spring System											
	Zaragoza											
Culasi	Babatan Island											
	Bitadon Norte											
	Flores											
	Magsaysay											
	Malalison Island											
	Osonio											
	San Pascual											
	Simbola											
	Tigbobolo											
	Apdo											
Hamtic	Banawon											
	Bongbongan III											
	Botbot											
	Bubudan											
	Calacia I											
	Calacia II											
	Caromangay											
	Casalngan											

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Billings				Revenues					
		Annual Billing (Number)	Public Faucet Consume	House Connection Consumers	Expected Subsidies	Others	Annual Income (P '000.00 / year)	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other
Hamtic	Dangalan										
	Evelio B. Javier										
	Fabrica										
	General Fullon										
	Igbucagay										
	Linaban										
	Mapatag										
	Poblacion 5										
	Barban										
	Capnayan										
	Casit-an										
	Guamon										
	Intao										
	Jaguikican										
Laua-an	Jinalinan										
	Leon										
	Liberato										
	Lindero										
	Liya-liya										
	Maria										
	Mauno										
	Maybunga										
	Pandan										
	Panatan										
	Panigayan										
	San Ramon										
	Santiago										
	Virginia										
Libertad	Codiong WWS										
	Igcagay WWS										
	Inyawan WWS						4.68				
	Lindero BWSA						0.14				
	Paz										
	Pucio WS										

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Billings				Revenues					
		Annual Billing	Public Faucet Consume	House Connection Consumers	Expected Subsidies	Others	Annual Income	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other
		(Number)					(P' 000.00 / year)				
Liberad	San Roque										
	Timigbas										
	Timindugan										
Pandani	Aracay										
	Badiangan										
	Listoga										
	Maadlos										
	Perfecta										
	San Joaquin										
	Santa Ana										
Patnongon	Alvaniz										
	Badiangan										
	Bitas										
	Cuyapiao										
	Gella										
	Igarawan										
	Igburi										
	La Rioja										
	Mabasa										
	Macarina										
	Magarang										
	Pandanani										
	Patiabawon										
	Quezon										
	Salaguawan										
	San Rafael										
	Tamayoc										
	Tigbalogo										
	Tobias Fornier										
	Villa Crespo										
	Villa Cruz										
	Villa Elio										
	Villa Flores										
	Villa Laua-an										

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 6 of 6

Name of Municipality	Name of Operating Body	Billings					Revenues				
		Annual Billing	Public Faucet Consume	House Connection Consumers	Expected Subsidies	Others	Annual Income	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other
		(Number)					(P '000.00 / year)				
Patnongon	Villa Sal										
	Villa Salomon										
	Vista Alegre										
San Jose de Buenavista	Barin										
	Pantao										
	San Angel										
San Remigio	Aningalan										
	Iguirindon										
	La union										
	Nagbangi I										
	Nagbangi II										
	Osorio I										
	Osorio II										
	Pandanan I										
	Poblacion										
	Abiera			0.12			44.28		50.28		0.5
Sebaste	Aguila			0.12			16.8		16.8		0.01
	Alegre										
	Bacalan										
Sibalom	Brgy. Poblacion			0.12			146.8		153.8		0.1
	Bad-as										
	Bongbongan I										
	Bongbongan II										
	Bulalacao										
	Cabarian										
	Cabladan										
	Calog										
	Calo-oy										
	Capoldolan										
	Cubay-Sermon										
	Esperanza II										
	Esperanza III										
	Igbanolong										
	Igcococ										

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Billings				Revenues							
		Annual Billing (Number)	Public Faucet Consumers	House Connection Consumers	Expected Subsidies	Others	Annual Income (P '000.00 / year)	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other		
Sibalom	Igdamay												
	Imparayan												
	Inabasan												
	Initan												
	Lacaron						2.5						
	Lambayagan												
	Luyang												
	Nagdayao												
	Odtong												
	Panlagangan												
	Pasong												
	Solong												
	Tabong-tabong												
	Tigbalua I												
	Tigbalua II												
	Tula-tula												
	Villafont												
	Castillo												
Tibiao	Esparagoza												
	Importante												
	La Paz												
	Martinez												
	Natividad												
	Pitac												
	San Francisco Norte												
	Santa Ana												
	Santa Justa												
	Tigbaboy												
	Tuno												
	Abaca WS												
	Atiotes WS												
	Balloscas WSS												
	Barasanan A WSS												
	Barasanan B WWS												
	Tobias Fornier												

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
Sheet 6 of 6

Name of Municipality	Name of Operating Body	Billings				Revenues					
		Annual Billing (Number)	Public Faucet Consume	House Connection Consumers	Expected Subsidies	Others	Annual Income (P '000.00 / year)	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other
Tobias Fornier	Barasanan C WWS										
	Bariri WWS										
	Camandagan WS										
	Cato-ogan WWS										
	Diclum WS										
	Fatima WS										
	Garnad WS										
	Igbangcal-A WS										
	Igbangcal-B WS										
	Igbangcal-C WWS										
	Igcadac WWS										
	Igcado WS										
	Igcasicad WS										
	Lawigan										
	Manaling WS										
	Nagsubuan WS										
	Nasuli-A WWS										
	Opsan WWS										
	Paciencia WS										
	Sto. Tomas WS										
	Ysulat WWS										
Valderama	Alon Spring Dev.										
	Bakiang Spring Dev.										
	Binanongan WS										
	Boreboroc Spring Dev										
	Bugnay Spring Dev.										
	Buluangan I										
	Buluangan I (LGU)										
	Buluangan II										
	Bunsod						27.54				
	Bun. Brgy. Bugnay										
	Busog										
	Cananghan										
	Canipayan										

Table 4.1.2 Details on Existing Level II Systems (Cont'd)  
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Name of Municipality	Name of Operating Body	Billings			Revenues						
		Annual Billing	Public Faucet Consumer	House Connection Consumers	Expected Subsidies	Others	Annual Income	Payment by Public Faucet Consumers	Payment by House Connection	Subsidies	Other
		(Number)	(P '000.00 / year)								
Valderama	Cansilayan										
	Cuyat										
	Iginab Spring Dev.			36			2.52		36		
	Igmasandig										
	Lublub										
	Pandan										
	San Agustin										
	Tigmamale										
	Ubos-takas WWS							82			