6.   PW4SP DATA FILES

Data files are collection of information revelant to the preparation of PW4SP. Data files are logically group into three major areas of information. The first group of information are the base data that are composed of information derived from survey, ocular inspection, and existing information from the provincial and national agencies. The second group of information are the key parameter data that are composed of information derived from applicable policies, assumption, water test result, and current cost of commodity. The third group of information are the presentation of data which derived from the previously mentioned groups of information's, this data are processed and then logically arranged to show provincial profile, existing facilities and service coverage, past financial performance, future requirement of the relevant sector, cost estimates for future sector development, and financial arrangement.

6.1.   Base Information

1. *Socio-economic Data* (socio.xls)

   a) Administrative Composition ((M) Administrative Composition)
   b) Past Population ((M) Past Population Page 1 to 2)
   c) Projected Population ((M) Projected Population)
   d) Household ((M) Household)
   e) Services ((M) Services)
   f) Occupation ((M) Occupation)
   g) Family Income, Education and Literacy ((M) Family Income and Education)

2. *Land Use Data* (landuse.xls)

   a) Existing Land Use ((M) Existing Land Use)
   b) Future Land Use ((M) Future Land Use)

3. *Health Data* (health.xls)

   a) Morbidity, Mortality and Infant Mortality ((M) Morbidity and Mortality)
   b) Facility and Practitioner ((M) FacilityPractitioner)

4. *Water Resource Data* (h2ores.xls)

   a) General Information ((M) General Information)
   b) Water Source Information ((M) Source Information)

5. *Water Supply Systems Data* (h2osupp.xls)

   a) Level III Systems ((S) Level III P1-2 .. P2-2)
   b) Level II Systems ((S) Level II P1-4 .. P4-4)

6. *Environmental Sanitation Data* (sanit.xls)

    a) Household Toilets ((M) Household Toilets)
    b) School and Public Toilets ((M) Sch. and Pub. Toilets)
    c) Drainage Facility ((M) Drainage Facility)
    d) Solid Waste Collection and Disposal ((M) Solid Waste)

7. *Investment Data* (invest.xls)

    a) Previous Annual Investment ((P) Fin. Past Ann. Invest.)
    b) Planned Annual Investment ((P) Fin. Future Ann. Invest.)

6.2. Key Parameter

1. *Key Parameters* (keypar.xls)

    a) Key Parameter (Key Parameter)
    b) Level I - Safe and Unsafe (Level I Safe and Unsafe)
    c) Well Source Composition (Well Source Composition)
    d) Unit Cost (Unit Cost)
    e) Scoring Factor (Scoring Factor)
    f) Annual Investment (Annual Investment)

6.3. Data Presentation

1. *Provincial Profile* (chap-3.xls)

    a) Outline of City and Municipalities (MTable 3.1.1)
    b) Current Land Use (MTable 3.2.1)
    c) Drainage Areas and Flow Rates of Major Rivers (MTable 3.2.2)
    d) Distribution of Households by Income Class (MFigure 3.3.1)
    e) Population Distribution by Occupation (Figure 3.3.2)
    f) Population Distribution by Highest Attainment of Education (MFigure 3.3.3)
    g) Provincial Outline on Public Services (MTable 3.3.1)
    h) Public Facilities and Services by Municipality (MTable 3.3.2)
    i) Previous Population Development of the Province (MFigure 3.4.1)
    j) Previous Population Development by Municipality (MTable 3.4.1)
    k) Present Population Distribution (MFigure 3.4.2)
    l) Outline of Urban and Rural Areas in the Province (MTable 3.4.2)
    m) Household Numbers and Household Sizes (MTable 3.4.3)
    n) Number and Rates of Ten Leading Causes of Morbidity,
       Mortality and Infant Mortality (MTable 3.5.1)
    o) Reported Cases and Deaths of Notifiable Water Related Diseases (MTable 3.5.2)
    p) Municipal Solid Waste Collection and Disposal, and
       Service Coverage in 1994 (MTable 3.6.1)
    q) Number and Ratio of Population to Health Facilities
       and/or Medical Practitioners (STable 3.5.1)
    r) Types of Drainage Facilities (STable 3.6.1)
    s) DENR Water Quality Criteria/Water Usage and Classification
       for Fresh Water (STable 3.6.2)

2. *Existing Facilities and Service Coverage* (chap-4.xls)

    a) Information on Existing Level III Systems (MTable 4.1.2)
    b) Information on Water District (MTable 4.1.3)

c) Information on Existing Level II Systems (MTable 4.1.4)
d) Information on Existing Level I Facilities (MTable 4.1.5)
e) Water Supply Service Coverage by Municipality in 1994 (MTable 4.1.7)
f) Water Supply Service Coverage by Municipality (MFigure 4.1.1)
g) Sanitation Facilities and Service of Household Toilets, Urban and
    Rural, 1994 (MTable 4.2.1)
h) Provincial Service Coverage of Household Toilet Facilities, 1994 (MFigure 4.2.1)
i) School Toilet Facilities and Service Coverage in 1994 (MTable 4.2.2)
j) Public Toilet Facilities and Service Coverage in 1994 (MTable 4.2.3)
k) Details on Existing Level III Systems (STable 4.1.1 Sheet 1 to 4)
l) Details on Existing Level II System (STable 4.1.2 Sheet 1 to 6)
m) Number of Level I Facilities by Safe and Unsafe Classification (STable 4.1.4)
n) Estimation of Unserved Population by Municipality (STable 4.1.5)
o) Estimation of Population Covered by Safe and Unsafe Source
    by Municipality (STable 4.1.6 Sheet 1 to 2)
p) Sanitation Facilities and Service Coverage of Household Toilets
    by Type, by Municipality, Urban and Rural, 1994 (STable 4.2.1)

3) *Past Financial Performance in Water Supply and Sanitation* (chap-6.xls)

a) Previous Sector Investment to the Province by Concerned Agency (MTable 6.2.1)
b) Past Internal Allotment to the Province from Central Government (MTable 6.2.2)
c) Affordability in Water and Sanitation Services (MTable 6.4.1)
d) Financial Indicators of Water Districts (MTable 6.5.1)
e) Loan Status of Water Districts (MTable 6.5.2)
f) Past Internal Revenue Allotment to Municipalities from
   Central Government(STable 6.2.1)

4) *Water Source Development* (chap-7.xls)

a) Existing Groundwater Sources in the Province (MTable 7.1.1)
b) Work Flow of Groundwater Availability Map (SFigure 7.3.1)
c) Existing Spring Sources by Municipality (STable 7.4.1)
d) River Information and Related Data (STable 7.5.1)
e) Water Quality Analysis Results (STable 7.5.2)
f) Existing Well Sources (STable 7.6.1)
g) Standard Specification of Wells by Municipality (STable 7.6.2)

5) *Future Requirement in Water Supply and Sanitation Environment* (chap-8.xls)

1) Provincial Sector Targets (MTable 8.2.1)
2) Base Year Service Coverage of Water Supply (MTable 8.2.2)
3) Base Year Service Coverage of Household Toilets (MTable 8.2.3)
4) Base Year Service Coverage of Public School Toilets and
   Public Toilets (MTable 8.2.4)
5) Base Year Service Coverage of Municipal Solid Waste System in 1994 (MTable 8.2.5)
6) Future Population by Urban and Rural Area by Municipality (MTable 8.3.1)
7) Projected Public School Enrollment and Number of Public Utility
   by Municipality (MTable 8.3.2)
8) Population to be Served by Target Year (Water Supply) (MTable 8.5.1)
9) Additional Number of Households to be Served by Target Year
   (Household Toilets) (MTable 8.5.2)
10) Additional Number of Public School Student to be Served by
   Target Year (School Toilets) (MTable 8.5.3)

i) Unit Cost of Level II (600 Service Population) (STable 10.2.6)
j) Unit Cost of Level III (5,000 Service Population) (STable 10.2.7)
k) Unit Cost of Level III (10,000 Service Population) (STable 10.2.8)
l) Unit Cost of Level III (15,000 Service Population) (STable 10.2.9)
m) Unit Cost of Flush Water Sealed with Septic Tank Toilet (STable 10.2.10)
n) Unit Cost of Pour Flush with Double Pit Latrine (STable 10.2.11)
o) Unit Cost of Ventilated Improved Pit Latrine (STable 10..2.12)
p) Unit Cost of School Toilet (STable 10.2.13)
q) Unit Cost of Public Toilet (STable 10.2.14)
r) Construction Cost of Water Supply Facilities Required for
   Phase I (2000) (STable 10.3.1)
s) Construction Cost of Water Supply Facilities Required for
   Phase II (2010) (STable 10.3.2)
t) Cost of Sanitation Facilities Required for Phase I (2000) (STable 10.3.3)
u) Cost of Sanitation Facilities Required for Phase II (2010) (STable 10.3.4)

7) *Financial Arrangements* (chap-11.xls)

a) Projected Internal Revenue Allotment for Medium-Term
   Sector Development (MTable 11.2.1)
b) Projected Allotment of IRA to the Relevant Sector by
   Component, 1996-2000 (MTable 11.2.2)
c) Financing Requirements by Sector Component for the Province (MTable 11.3.1)
d) Additional Fund Requirement for Medium-Term Plan (MTable 11.3.2)
e) Internal Revenue Allotment for Water Supply and Sanitation Sector
   by Municipality (Medium-Term Development 1996-2000) (MTable 11.3.3)
f) Relationship between Funding Levels and Percent of Coverage
   for Water Supply Sector (MFigure 11.4.1)
g) Relationship between Funding Levels and Percent of Coverage
   for Sanitation Sector (MFigure 11.4.2)
h) Municipal Investment Need Ranking for Urban Water Supply (MTable 11.4.1)
i) Distribution of Provincial IRA to Municipality for
   Urban Water Supply (MTable 11.4.2)
j) Municipal Investment Need Ranking (MTable 11.4.3)
k) Percentages for Annual Investment (STable 11.3.1)
l) Comprehensive Investment Need Ranking of the Municipalities (STable 11.4.1)

7.   DATA FILES LINKAGES

Linkages are logical connection between records in the data files. Through linkages, once the user's updates the source data, all data in the streams of linkages are dynamically updated. Linkages are the convenient tools of updating related data, these also shield the user's from the complexity of formula manipulation. With the aid of the data linkages the user's can concentrate more in validating the source data.

The following table lists the logical connections for each worksheet.

Table 2.6.2   Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 3	MT 3.1.1	Outline of City and Municipality	Socio.xls	M 1.2.2	Past Population Page 2
	MT 3.2.1	Current LandUse	Landuse.xls	M 2.1	Existing Landuse
	MF 3.3.1	Distribution of Households by Income Class	Chap-3.xls	ST 3.3.1	Distribution of Household by Income Class
	MF 3.3.2	Population Distribution by Occupation	Chap-3.xls	ST 3.3.2	Gainful Workers by Occupation Group and Major Industry Group
	MF 3.3.3	Population Distribution by Highest Attainment of Education	Chap-3.xls	ST 3.3.3	Household Population by Highest Education Attainment
	MT 3.4.1 & MF 3.4.1	Previous Population Development by Municipality	Socio.xls	MT 1.2.1	Past Population Page 1
				M 1.2.2	Past Population Page 2
	MF 3.4.2	Present Population Distribution	Socio.xls	M 1.2.2	Past Population Page 2
	MT 3.4.2	Outline of Urban and Rural Areas in the Province	Chap-3.xls	MT 3.1.1 ST 3.3.2	Outline of City and Municipality Education Level and Literacy of Population
			Socio.xls	M 1.2.2	Past Population Page 2
	MT 3.4.3	Households Numbers and Household Sizes	Socio.xls	M 1.4	Household Number
			Chap-3.xls	MT 3.4.2	Outline of Urban and Rural Areas in the Province
	MT 3.5.1	Number and Rates of Ten Leading Causes of Mobidity, Mortality, & Infant Mortality	Health.xls	M 3.1	Morbidity and Mortality Summary
	MT 3.5.2	Reported Cases and Deaths of Notifiable Water related Diseases	Health.xls	M 3.1	Morbidity and Mortality Summary
	MT 3.6.1	Municipal Solid Waste Collection and Disposal, and Service Coverage, 1994	Socio.xls Sanit.xls Chap-3.xls	M 1.4 M 6.5 MT 3.3.2	Household Number SolidWaste Collection and Disposal Public Facilities and Services by Municipality
	ST 3.3.1	Number of Family by Income Class by Municipality	Socio.xls	M 1.7	Family Income and Education
	ST 3.3.2	Population Distribution by Occupation	Socio.xls	M 1.6	Occupation
	ST 3.3.3	Education Level and Literacy of Population	Socio.xls	M 1.7	Family Income and Education
Chapter - 4	MT 4.1.2	Information on Existing Level III Systems	Chap-4.xls	ST 4.1.1 Sheet 1, 3, and 4	Information on Existing Level III Systems

Note: MT - Main Report Table,   MF - Main Report Figure,   ST - Supporting Report Table,
M - Questionnaire Form (Municipal Data),   S - Questionnaire Form (System Data),   F - Questionnaire Form (Facility Data).

Table 2.6.2   Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 4	MT 4.1.3	Information on Water District Data	Chap-4.xls	ST 4.1.1 Sheet 1 & 4	Information on Existing Level III System
	MT 4.1.4	Information on Existing Level II System	Chap-4.xls	ST 4.1.2 Sheet 1 & 2	Existing Level II System
	MT 4.1.5	Estimation of Unserved Population by Municipality	Chap-4.xls	ST 4.1.4	Number of Level I Facilities by Safe and Unsafe Classification
				ST 4.1.6 Sheet 1 & 2	Estimation of Population Covered by Safe and Unsafe Source by Municipality
	MT 4.1.7	Water Supply Service Coverage by Municipality	Chap-4.xls	ST 4.1.6 Sheet 2	Estimation of Population Covered by Safe and Unsafe Source by Municipality
			Socio.xls	M 1.3	Projected Population
	MT 4.2.1	Sanitation Facilities and Service Coverage of Household Toilets, Urban and Rural, 1994	Socio.xls	M 1.4	Household Number
			Chap-4.xls	ST 4.2.1	Sanitation Facilities and Service Coverage of Household Toilets, by Type, by Municipality, Urban and Rural, 1994
	MT 4.2.2 Sheet 1	School Toilets Facilities and Service Coverage, 1994	Sanit .xls	M 6.2	School Toilets
	MT 4.2.2 Sheet 2	Public Toilets Facilities and Service Coverage, 1994	Sanit .xls	M 6.3	Public Toilets
	MF 4.1.1	Water Supply Coverage of the Province	Chap-4.xls	MT 4.1.7	Water Supply Service Coverage by Municipality
	ST 4.1.4	Number of Level I Facilities by Safe and Unsafe Classification	H2OSupp.xls Keypar.xls	(F) 5.3.1 ST 2.6.5	Level I Facility / Level I Safe and Unsafe Percentage
	ST 4.1.5	Estimation of Unserved Population by Municipality	Socio.xls Chap-4.xls	M 1.2.2 ST 4.1.6 Sheet 1 & 2 ST 4.1.2 Sheet 2	Past Population Page 2 / Estimation of Population covered by Safe and Unsafe / Details on Existing Level II System
	ST 4.2.1	Sanitation Facilities and Service of Household Toilets by Type, by Municipality, Urban and Rural, 1994	Socio.xls	M 1.4	Household Number
			Sanit.xls	M 6.1	Household Toilets

Note: MT - Main Report Table.   MF - Main Report Figure.   ST - Supporting Report Table.
M - Questionnaire Form (Municipal Data).   S - Questionnaire Form (System Data).   F - Questionnaire Form (Facility Data).

Table 2.6.2   Data File Linkages

Destination Link				Source Link	
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 4	ST 4.1.6 Sheet 1	Estimation of Population Covered by Safe and Unsafe Source by Municipality	Chap-4.xls	ST 4.1.4	Number of Level 1 Facilities by Safe and Unsafe Classification
				ST 4.1.5	Estimation of Unserved Population by Municipality
	ST 4.1.6 Sheet 2	Estimation of Population Covered by Safe and Unsafe Source by Municipality	Chap-4.xls	ST 4.1.5	Estimation of Unserved Population by Municipality
				ST 4.1.6 Sheet 1	Estimation of Population Covered by Safe and Unsafe Source by Municipality
Chapter - 8	MT 8.2.1	Provincial Sector Targets	Keypar.xls Chap-8.xls	ST 2.6.2 MT 8.5.1	Key Parameter Table Population to be served by target year(Water Supply)
				MT 8.5.2	Additional Number of Households to be Served by Target Year(Household Toilets)
				MT 8.5.5	Population to be Served in Urban Sewerage in Phase 2!
				MT 8.5.6	Add'l No.of Urban Households to be served by Municipal Solid Waste System in Phase I
				ST 8.5.7	Number of Public Utilities with Sanitary Toilets in Phases 1 and 11
				ST 8.6.6	Public School Toilets Required by Target Year
	MT 8.2.2	Base Year Coverage in Water Supply	Chap-4.xls Chap-8.xls	MT 4.1.7 ST 8.2.1	Water Supply Service Coverage by Municipality Estimation of Base Year Service Coverage of Water Supply
				MT 8.3.1	Future Population by Urban and Rural Area by Municipality
	MT 8.2.3	Base Year Service Coverage of Household Toilets	Chap-8.xls	ST 8.2.3	Number of Households Served by Sanitary Toilets in the Base Year(1994)
				MT 8.3.1	Future Population by Urban and Rural Area by Municipality
	MT 8.2.4	Base Year Service Coverage of Public School Toilets and Public Toilets	Chap-4.xls	MT 4.2.2 Sheet 1	Scool Toilet Facilities and Service Coverage in 1994

Note: MT - Main Report Table.   MF - Main Report Figure.   ST - Supporting Report Table.
M - Questionnaire Form (Municipal Data).   S - Questionnaire Form (System Data).   F - Questionnaire Form (Facility Data).

Table 2.6.2　Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 8	MT 8.2.4	Base Year Service Coverage of Public School Toilets and Public Toilets	Chap-8.xls	ST 8.2.4	Number of Public School Students Served by School Toilets in the Base Year (1994)
				ST 8.2.7	Public School Students and Public Utilities Coverage in Phase I Provided by Existing Facilities in the Base Year
	MT 8.2.5	Base Year Service Coverage of Municipal Solid Waste System in 1994	Chap-3.xls	MT 3.6.1	Municipal Solid Waste Collection and Disposal, and Service Coverage, 1994
			Chap-8.xls	ST 8.3.5	Projected No. of Households by Urban and Rural Area by Municipality by Target Year
	MT 8.3.1	Future Population by Urban and Rural Area by Municipality	Socio.xls	M 1.2.2	Past Population Page 2
				M 1.3	Projected Population
	MT 8.3.2	Projected Public School Enrollment and Number of Public Utility Facilities by Municipality	Chap-8.xls	ST 8.3.6	Projected School Enrollment by Municipality by Target Year
				ST 8.3.7	Projected No. of Public Utilities by Municipality by Target Year
	MT 8.5.1	Population to be Served by Target Year(Water Supply)	Chap-8.xls	ST 8.2.2	Population Coverage in Phase I Provided by Served Population in the Base Year(Water Supply)
				ST 8.5.2	Population to be Served in Phase I (Water Supply)
				ST 8.5.3	Population to be Served in Phase II (Water Supply)
	MT 8.5.2	Additional Number of Households to be Served by Target Year(Household Toilets)	Chap-8.xls	ST 8.5.4	Additional Number of Households to be Served in Phase I(Household Toilets)
				ST 8.5.5	Additional Number of Households to be Served in Phase II (Household Toilets)
	MT 8.5.3	Additional Number of Public School Students to be Served by target Year(School Toilets)	Chap-8.xls	ST 8.3.6	Projected School Enrollment by Municipality by Target Year
				ST 8.5.6	Additional Number of Public School Students to be Served in Phases I and II(School Toilets)
	MT 8.5.4	Additional Number of Public Utilities with Sanitary Toilets by Target Year	Chap-8.xls	ST 8.5.7	Number of Public Utilities with Sanitary Toilets in Phases I and II
	MT 8.5.5	Population to be Served by Urban Sewerage in Phase II	Chap-8.xls	MT 8.2.1	Provincial Sector Targets
				MT 8.3.1	Future Population by Urban and Rural Area by Municipality

Note:　MT - Main Report Table,　MF - Main Report Figure,　ST - Supporting Report Table.
M - Questionnaire Form (Municipal Data),　S - Questionnaire Form (System Data),　F - Questionnaire Form (Facility Data).

Table 2.6.2 Data File Linkages

	Destination Link		Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 8	MT 8.5.5	Population to be Served by Urban Sewerage in Phase II	Chap-8.xls	MT 8.5.1	Population to be Served by Target Year(Water Supply)
	MT 8.5.6	Add'l No. of Urban Households to be Served by Municipal Solid Waste System in Phase I	Chap-8.xls	MT 8.2.1	Provincial Sector Targets
				MT 8.2.5	Base Year Service Coverage of Municipal Solid Waste System in 1994
			Chap-8.xls	ST 8.3.5	Projected No. of Households by Urban and Rural Area by Municipality by Target Year
	MT 8.6.1	Water Supply Facilities Required by Target Year	Chap-8.xls	ST 8.6.1	Urban Water Supply Facilities Required by Target Year
				ST 8.6.3	Rural Water Supply Facilities Required by Target Year
	MT 8.6.2	Sanitation Facilities Required by Target Year	Chap-8.xls	MT 8.3.1	Future Population by Urban and Rural Area by Municipality
				MT 8.5.2	Additional No. of Household to be Served by Target Year(Household Toilets)
				ST 8.5.7	Number of Public Utilities with Sanitary Toilets in Phases I and II
				ST 8.6.6	Public School Toilets Required by Target Year
	MT 8.6.3	Number of Garbage Collection Trucks Required in Phase I	Chap-8.xls	MT 8.5.6	Add'l No. of Urban Households to be Served by Municipal Solid Waste System in Phase I
	ST 8.2.1	Estimation of Base Year Service Coverage of Water Supply	Chap-4.xls	MT 4.1.7	Water Supply Service Coverage by Municipality
			Chap-8.xls	MT 8.3.1	Future Population by Urban and Rural Area by Municipality
	ST 8.2.2	Population Coverage in Phase I Provided by Served Population in the Base Year (Water Supply)	Chap-8.xls	MT 8.2.2	Base Year Coverage in Water Supply
				MT 8.3.1	Future Population by Urban and Rural Area by Municipality
	ST 8.2.3	Number of Households Served by Sanitary Toilets in the Base Year (1994)	Chap-4.xls	ST 4.2.1	Sanitation Facilities and Service of Household Toilets by Type, by Municipality, Urban and Rural, 1994
			Chap-8.xls	MT 8.3.1	Future Population by Urban and Rural Area by Municipality

Note: MT - Main Report Table, MF - Main Report Figure, ST - Supporting Report Table, M - Questionnaire Form (Municipal Data), S - Questionnaire Form (System Data), F - Questionnaire Form (Facility Data).

Table 2.6.2 Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 8	ST 8.2.3	Number of Households Served by Sanitary Toilets in the Base Year (1994)	Chap-8.xls	ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year
	ST 8.2.4	Number of Public School Students Served by School Toilets in the Base Year(1994)	Chap-4.xls	MT 4.2.2 Sheet 1	School Toilets Facilities and Service Coverage, 1994
			Chap-8.xls	ST 8.3.6	Projected School Enrollment by Municipality by Target Year
	ST 8.2.5	Number of Public Utilities with Sanitary Toilets in the Base Year (1994)	Chap-4.xls	MT 4.2.2 Sheet 2	Public Toilets Facilities and Service Coverage, 1994
	ST 8.2.6	Household Coverage in Phase 1 Provided by Existing Facilities in the Base Year (Household Toilets)	Socio.xls	M 1.4	Household Number
			Chap-8.xls	MT 8.2.3	Base Year Service Coverage of Household Toilets
				ST 8.2.3	Number of Households Served by Sanitary Toilets in the Base Year (1994)
				ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year
	ST 8.2.7	Public School Students and Public Utilities Coverage in Phase 1 Provided by Existing Facilities in the Base Year	Chap-8.xls	ST 8.2.4	Number of Public School Students Served by School Toilets in the Base Year(1994)
				ST 8.2.5	Number of Public Utilities with Sanitary Toilets in the Base Year (1994)
				ST 8.3.6	Projected School Enrollment by Municipality by Target Year
				ST 8.3.7	Projected No. of Public Utilities by Municipality by Target Year
	ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year	Socio.xls	M 1.2.2	Past Population Page 2
				M 1.3	Projected Population
				M 1.4	Household Number
	ST 8.3.6	Projected School Enrollment by Municipality by Target Year	Socio.xls	M 1.2.2	Past Population Page 2
				M 1.3	Projected Population
	ST 8.3.7	Projected Number of Public Utilities by Municipality by Target Year	Chap-8.xls	ST 8.2.5	Number of Public Utilities with Sanitary Toilets in the Base Year (1994)

Note: MT - Main Report Table. MF - Main Report Figure. ST - Supporting Report Table.
M - Questionnaire Form (Municipal Data). S - Questionnaire Form (System Data). F - Questionnaire Form (Facility Data).

Table 2.6.2 Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 8	ST 8.5.1	Population to be Served by Level II System in Phase I	Socio.xls / Chap-8.xls	M 1.1 / ST 8.3.5	Administrative Composition / Projected Number of Households by Urban and Rural Area by Municipality by Target Year
	ST 8.5.2	Population to be served in Phase I (Water Supply)	Socio.xls / Chap-8.xls	M 1.3 / MT 8.2.2 / ST 8.5.1	Projected Population / Base Year Coverage in Water Supply / Population to be Served by Level II System in Phase I
	ST 8.5.3	Population to be Served in Phase II(Water Supply)	Socio.xls / Chap-8.xls	M 1.3 / ST 8.5.2	Projected Population / Population to be-Served in Phase I (Water Supply)
	ST 8.5.4	Additional Number of Households to be Served in Phase II(Household Toilets)	Chap-8.xls	MT 8.2.1 / ST 8.2.3 / ST 8.3.5	Provincial Sector Targets / Number of Households Served by Sanitary Toilets in the Base Year (1994) / Projected Number of Households by Urban and Rural Area by Municipality by Target Year
	ST 8.5.5	Additional Number of Households to be Served in Phase II(Household Toilets)	Chap-8.xls	MT 8.2.1 / ST 8.3.5 / ST 8.5.4	Provincial Sector Targets / Projected Number of Households by Urban and Rural Area by Municipality by Target Year / Additional Number of Households to be Served in Phase II(Household Toilets)
	ST 8.5.6	Additional Number of Public School Students to be Served in Phases I and II (School Toilets)	Chap-8.xls	MT 8.2.1 / ST 8.2.4 / ST 8.3.6	Provincial Sector Targets / Number of Public School Students Served by School Toilets in the Base Year(1994) / Projected School Enrollment by Municipality by Target Year
	ST 8.5.7	Number of Public Utilities with Sanitary Toilets in Phases I and II	Chap-8.xls	MT 8.2.1 / ST 8.2.5 / ST 8.3.7	Provincial Sector Targets / Number of Public Utilities with Sanitary Toilets in the Base Year (1994) / Projected Number of Public Utilities by Municipality by Target Year

Note: MT - Main Report Table, MF - Main Report Figure, ST - Supporting Report Table,
A1 - Questionnaire Form (Municipal Data), S - Questionnaire Form (System Data), F - Questionnaire Form (Facility Data).

Table 2.6.2   Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 8	ST 8.6.1	Urban Water Supply Facilities Required by Target Year	Socio.xls	M 1.3	Projected Population
			Keypar.xls	ST 2.6.2	Key Parameter Table
			Chap-4.xls	ST 4.1.1 Sheet 1 and 3	Details on Existing Level III Systems
			Chap-8.xls	ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year
				MT 8.4.1	GroundWater Productivity
				ST 8.5.2	Population to be Served in Phase I (Water Supply)
			Chap-8.xls	ST 8.5.3	Population to be Served in hase II (Water Supply)
	ST 8.6.3	Rural Water Supply Facilities Required by Target Year	Chap-7.xls	ST 7.6.2	Standard Specification of Water in the Municipality
			Chap-8.xls	ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year
				MT 8.4.1	GroundWater Productivity
				ST 8.5.1	Population to be Served by Level II System in Phase I
	ST 8.6.4	Urban Household Toilets Required by Target Year	Chap-8.xls	MT 8.5.2	Additional Number of Households to be Served by Target Year (Household Toilets)
	ST 8.6.5	Rural Household Toilets Required by Target Year	Chap-8.xls	MT 8.5.2	Additional Number of Households to be Served by Target Year (Household Toilets)
	ST 8.6.6	Public School Toilets Required by Target Year	Chap-8.xls	ST 8.5.6	Additional Number of Public School Student to be Served in Phase I and Phase II (School Toilets)
	ST 8.6.7	Public Toilets Required by Target Year	Chap-8.xls	ST 8.5.7	Number of Public Utilities with Sanitary Toilets in Phases I and II
Chapter - 10	MT 10.2.1	Unit Cost of Facilities by Type and Service Level	Keypar.xls	ST 2.6.6	Unit Construction Cost of Different Facilities
	MT 10.3.1	Construction Cost of Required Facilities by Municipality	Chap-10.xls	ST 10.3.1	Construction Cost of Water Supply Facilities Required for Phase I (2000)
				ST 10.3.2	Construction Cost of Water Supply Facilities Required for Phase II (2010)
				ST 10.3.3	Cost of Sanitation Facilities Required for Phase I (2000)
				ST 10.3.4	Costs of Sanitation Facilities Required for Phase II (2010)

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Note: MT - Main Report Table,   MF - Main Report Figure,   ST - Supporting Report Table,
        M - Questionnaire Form (Municipal Data),   S - Questionnaire Form (System Data),   F - Questionnaire Form (Facility Data).

Table 2.6.2 Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 10	MT 10.4.1	Recurrent Cost	Keypar.xls	ST 2.6.2	Key Parameter Table
			Chap-8.xls	MT 8.2.2	Base Year Coverage in Water Supply
				MT 8.2.4	Base Year Service Coverage of Public School Toilets and Public Toilets
				ST 8.3.5	Projected Number of Households by Urban and Rural Area by Municipality by Target Year
				MT 8.5.1	Population to be Served by Target Year(Water Supply)
				ST 8.6.6	Public School Toilets Required by Target Year
				ST 8.6.7	Public Toilets Required by Target Year
			Chap-11.xls	ST 11.3.1	Percentages for Annual Investments
	ST 10.3.1	Construction Cost of Water Supply Facilities Required for Phase I (2000)	Chap-8.xls	MT 8.5.1	Population to be Served by Target Year(Water Supply)
				MT 8.6.1	Water Supply Facilities Required by Target Year
				ST 8.6.3	Number of Garbage Collection Trucks Required in Phase 1
			Chap-10.xls	MT 10.2.1	Unit Cost of Facilities by Type and Service Level
	ST 10.3.2	Construction of Water Supply Facilities Required for Phase II (2010)	Keypar.xls	ST 2.6.2	Key Parameter Table
			Chap-8.xls	MT 8.5.1	Population to be Served by Target Year(Water Supply)
				ST 8.6.3	Number of Garbage Collection Trucks Required in Phase
			Chap-10.xls	MT 10.2.1	Unit Cost of Facilities by Type and Service Level
	ST 10.3.3	Cost of Sanitation Facilities Required for Phase I (2000)	Chap-8.xls	MT 8.6.2	Sanitation Facilities Required by Target Year
				ST 8.6.7	Public Toilets Required by Target Year
			Chap-10.xls	MT 10.2.1	Unit Cost of Facilities by Type and Service Level
	ST 10.3.4	Cost of Sanitation Facilities Required for Phase II (2010)	Chap-8.xls	MT 8.3.1	Future Population by Urban and Rural Area by Municipality
				MT 8.5.5	Population to be Served by Urban Sewerage in Phase II
				MT 8.6.2	Sanitation Facilities Required by Target Year

Note: MT - Main Report Table, MF - Main Report Figure, ST - Supporting Report Table,
M - Questionnaire Form (Municipal Data), S - Questionnaire Form (System Data), F - Questionnaire Form (Facility Data).

Table 2.6.2   Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter - 10	ST 10.3.4	Cost of Sanitation Facilities Required for Phase II (2010)	Chap-8.xls Chap-10.xls	ST 8.6.6 ST 8.6.7 MT 10.2.1	Public School Toilets Required by Target Year Public Toilets Required by Target Year Unit Cost of Facilities by Type and Service Level
Chapter - 11	MT 11.2.1	Projected Internal Revenue Allotment for Medium-Term Sector Development	Socio.xls Keypar.xls Chap-6.xls	M 1.1 ST 2.6.2 MT 6.2.2	Administrative Composition Key Parameter Table Past Internal Revenue Allotment to the Province from Central Government
	MT 11.2.2	Project Allotment of IRA to the Revelant Sector by Component 1996 - 2000	Chap-11.xls	MT 11.2.1	Projected Internal Revenue Allotment for Medium - Term Sector Development
	MT 11.3.1	Financing Requirements by Sector Component for the Province	Chap-10.xls Chap-11.xls	ST 10.3.2 ST 11.3.1	Construction of Water Supply Facilities Required for Phase II (2010) Percentage for Annual Investments
	MT 11.3.2	Additional Fund Requirement for the Medium-Term Plan	Chap-11.xls	MT 11.3.1	Financing Requirements by Sector Component for the Province
	MT 11.3.3	Internal Revenue Allotment for Water Supply and Sanitation Sector by Municipality (Medium-Term Development / 1996-2000)	Chap-10.xls Chap-11.xls	ST 10.3.1 ST 10.3.3 MT 11.2.2 MT 11.3.1 MT 11.4.2	Construction Cost of Water Supply Facilities Required for Phase-I (2000) Cost of Sanitation Facilities Required for Phase I (2000) Project Allotment of IRA to the Revelant Sector by Component 1996 - 2000 Financing Requirements by Sector Component for the Province Distribution of Provincial IRA to Municipalities for Urban Water Supply
	MT 11.4.1	Municipal Investment need Ranking for Urban Water Supply	Keypar.xls Chap-8.xls	ST 2.6.7 ST 8.2.2 MT 8.2.2	Scoring Factor for Municipal Investment Ranking for Urban Water Supply Number of Households Served by Sanitary Toilets in the Base Year (1994) Base Year Coverage in Water Supply
	MT 11.4.2	Distribution of Provincial IRA to Municipalities for Urban Water Supply	Chap-11.xls	MT 11.2.2	Project Allotment of IRA to the Revelant Sector by Component 1996 - 2000

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Note: MT - Main Report Table,   MF - Main Report Figure,   ST - Supporting Report Table,
M - Questionnaire Form (Municipal Data),   S - Questionnaire Form (System Data).   F - Questionnaire Form (Facility Data).

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Table 2.6.2   Data File Linkages

Destination Link			Source Link		
Chapter No.	Table No.	Title	Filename	Table/Form Number	Title
Chapter-11	MT 11.4.2	Distribution of Provincial IRA to Municipalities for Urban Water Supply	Chap-4.xls	MT 11.3.1	Financing Requirement by Sector Component for the Province
				MT 11.4.1	Municipal Investment need Ranking for Urban Water Supply
			Chap-10.xls	ST 10.3.1	Construction Cost of Water Supply Facilities Required for Phase 1 (2000)
				ST 10.3.3	Cost of Sanitation Facilities Required for Phase 1 (2000)
	MT 11.4.3	Municipal Investments Need Ranking	Chap-11.xls	ST 11.4.1	Comprehensive Investment need Ranking of Municipalities
	ST 11.3.1	Percentages for Annual Investments	Keypar.xls	ST 2.6.4	Annual Distribution of Investment Cost Required by Sub-Sector for Medium-Term Development Plan
	ST 11.4.1	Comprehensive Investment need Ranking of Municipalities	Keypar.xls	ST 2.6.8	Scoring Factor for Municipal Comprehensive Investment Ranking
			Chap-8.xls	ST 8.2.2	Population Coverage in Phase I Provided by Served Population in the Base Year (Water Supply)
				MT 8.2.3	Base Year Service Coverage of Household Toilets
			Chap-11.xls	MT 11.4.1	Municipal Investment need Ranking for Urban Water Supply

Note: MT - Main Report Table,   MF - Main Report Figure,   ST - Supporting Report Table,
M - Questionnaire Form (Municipal Data),   S - Questionnaire Form (System Data).   F - Questionnaire Form (Facility Data).

8.   UPDATING PW4SP DATA BASE

The following procedures are guide in updating the base data of the PW4SP data management system. The word *column* and *row* in this procedure mean the internal column and row notation in the worksheet environment.

8.1.   Updating Socio-economic Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *socio.xls* filename.
3.1 To update the Administrative Composition Data,
   click the tab of *(M) Area and Population* sheet.

- *NEDA geopgraphic code*: move mouse pointer to column A. Starting at the row below the column description, select the data you would like to update and type the new value.

- *Municipal Name*: move mouse pointer to column B. Starting at the row below the column description, in reference to column A (NEDA geographic code) select the data you would like to update and type the new value.

- *City*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Municipal*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Class*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Barangay*: move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Barangay*: move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.2 To update the Past Population Data,
   click the tab of *(M) Past Population Page 1* sheet.

- *1903*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1918*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1939:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1948:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1960:* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1970:* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *1975:* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

click the tab of *(M) Past Population Page 2* sheet.

- *Urban Population (1980):* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Population (1980):* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Population (1990):* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Population (1990):* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Population (1994):* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Population (1994):* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.3 To update the Population Projection Data,
click the tab of *(M) Project Population* sheet.

- *Urban Population (2000):* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Population (2000):* move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Population (2010)*: move mouse pointer to column S. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Population (2010)*: move mouse pointer to column U. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.4 To update the Household Data,
click the tab of *(M) Household* sheet.

- *Urban Household (1980)*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Household (1980)*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Household (1990)*: move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Household (1990)*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Urban Household (1994)*: move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rural Household (1994)*: move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.5 To update the Services Data,
click the tab of *(M) Services* sheet.

- *Number of Public Elementary School*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Private Elementary School:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Public High School*: move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Private High School:* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Colleges*: move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Hospitals:* move mouse pointer to column M. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Markets:* move mouse pointer to column N. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Banks:* move mouse pointer to column O. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.6 To update the Occupation Data,
    click the tab of *(M) Occupation* sheet.

- *Number of Professional,Technical and Related Workers:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Administrative, Executive and Managerial:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sales Workers:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Service Workers:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Agricultural, Animal Husbandry & Forestry Workers, Fisherman and Hunetrs,* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Production & Related Workers, Transportation Equipment Operators and Laborers:* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Occupation Not Adequately Defined or Reported:* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.7 To update the Family Income, Education and Literacy Data,
    click the tab of *(M) Family Income and Education* sheet.

- *Number of Family Receiving Under P 13,999:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Family Receiving Between P 15,000 to P 29,999:* move mouse pointer to column E. Starting at the row below the column description, in reference to

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column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Family Receiving Between P 30,000 to P 39,999*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Family Receiving Between P 40,000 to P 59,999*: move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Family Receiving over P 60,000*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Population that Finish Pre-School*: move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Population that Finish Elementary School*: move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Population that Finish High School*: move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Population that Finish College and Post Graduate*, move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Literate Population:* move mouse pointer to column M. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Illiterate Population:* move mouse pointer to column N. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

8.2. Updating Land Use Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *landuse.xls* filename.
3.1 To update the Existing Land Use Data,
   click the tab of *(M) Existing Land Use* sheet.

- *Forest Land Area:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Grass Land Area:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Built-up Land Area:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Agricultural Land Area:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Mangrove, Fishponds, In-land Area:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Open Land Area:* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

3.2 To update the Future Land Use Data,
click the tab of *(M) Future Land Use* sheet.

- *Forest Land Area:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Grass Land Area:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Built-up Land Area:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Agricultural Land Area:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Mangrove, Fishponds, In-land Area:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Open Land Area:* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

8.3. Updating Health Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *health.xls* filename.
3.1 To update the Morbidity, Mortality and Infant Mortality Data,
   click the tab of *(M) Morbidity and Mortality* sheet.

- *Number of Morbidity Case:* move mouse pointer to column E. Starting at the row below the column description, in reference to column C (name of diseases) select the data you would like to update and type the new value.

- *Number of Mortality Case:* move mouse pointer to column F. Starting at the row below the column description, in reference to column C (name of diseases) select the data you would like to update and type the new value.

- *Number of Infant Mortality Case:* move mouse pointer to column G. Starting at the row below the column description, in reference to column C (name of diseases) select the data you would like to update and type the new value.

3.2 To update the Facility and Practitioner Data
   click the tab of *(M) Facility and Practitioner* sheet.

- *Number of Hospital Facility:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Health Unit (RHU):* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Barangay Health Station (BHS):* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Practicing Doctors:* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Practicing Nurses:* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Practicing Midwives:* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Practicing Dentists:* move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

8.4.   Updating Water Resources Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *h2o-res.xls* filename.
3. To update the General Information Data,
   click the tab of *(M) General Information* sheet.

- *Number of Shallow (General Information):* move mouse pointer to column E/H. Starting at the row below the column description, in reference to column C (description of information) select the data you would like to update and type the new value.

- *Number of Deep Well (General Iinformation)*: move mouse pointer to column F/I. Starting at the row below the column description, in reference to column C (description of information) select the data you would like to update and type the new value.

- *Number of spring (General Information)*: move mouse pointer to column G/J. Starting at the row below the column description, in reference to column C (description of information) select the data you would like to update and type the new value.

Note: To add succeeding municipality. Copy *(M) General Information* sheet and erase the default data and type the new data following the aforementioned procedures.

8.5. Updating Water Supply Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *h2osupp.xls* filename.
3.1 To update the Level III System Data,
   click the tab of *(S) Level III P1-4* sheet.

   - *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

   click the tab of *(S) Level III P2-4* sheet.

   - *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

   click the tab of *(S) Level III P3-4* sheet.

   - *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

   click the tab of *(S) Level III P4-4* sheet.

   - *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

3.2 To update the Level II System Data,
   click the tab of *(S) Level II P1-2* sheet.

   - *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

click the tab of *(S) Level II P2-2* sheet.

- *Data*: move mouse pointer to column G.Starting at the row below the column description, in reference to column B (Info Description) select the data you would like to update and type the new data.

3.3 To update the Level I Facility Data,
click the tab of *(F) Level I* sheet.

Public Facility:

- *Deep Well*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Shallow Well*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Covered/Improved Dug Well*: move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Open Dug Well*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Developed Spring*: move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Undeveloped Spring*: move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

Private Facility:

- *Deep Well*: move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Shallow Well*: move mouse pointer to column M. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Covered/Improved Dug Well*: move mouse pointer to column N. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Open Dug Well*: move mouse pointer to column O. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Rain Collector:* move mouse pointer to column P. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

8.6.   Updating Environmental Sanitation Data base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *sanit.xls* filename.
3.1 To update the Household Toilet Data,
   click the tab of *(M) Household Toilets* sheet.

- *Number of Urban Households Using Water Sealed Flush Toilet:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Households Using Water Sealed Flush Toilet:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Urban Households Using Water Sealed Pour Flush Toilet:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Households Using Water Sealed Pour Flush Toilet:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Urban Households Using VIP Latrine Toilet:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Households Using VIP Latrine Toilet:* move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Urban Households Using Unsanitary Toilet:* move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Households Using Unsanitary Toilet:* move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Urban Households Without Toilet:* move mouse pointer to column N. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Rural Households Without Toilet:* move mouse pointer to column O. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

click the tab of *(M) School Toilets* sheet.

- *Number of Public School:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Private School:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Student in Public School:* move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Student in Private School:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sanitary Toilets in Public School:* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sanitary Toilets in Private School:* move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Unsanitary Toilets in Public School:* move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Unsanitary Toilets in Private School:* move mouse pointer to column M. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

click the tab of *(M) Public Toilets* sheet.

- *Number of Public Markets:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sanitary Toilets in Public Markets:* move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Unsanitary Toilets in Public Markets:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Jeepney/Bus Terminals:* move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sanitary Toilets in Jeepney/Bus Terminal*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Unsanitary Toilets in Jeepney/Bus Terminal*: move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Parks/Playground*: move mouse pointer to column K. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Sanitary Toilets in Parks/Playground*: move mouse pointer to column L. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Unsanitary Toilets in Parks/Playground*: move mouse pointer to column M. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

click the tab of *(M) Drainage Facility* sheet.

- *Length of Drainage Main*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Length of Open Channel (with concrete and masonry)*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Length of Open Ditches And Unlined Laterals*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Length of Reinforced Concrete Circular Pipes*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Length of Street Gutters*: move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Length of Outfalls To Rivers From Drainage Mains*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

click the tab of *(M) Solid Waste* sheet.

- *Number of Open Dump Trucks*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Closed Type Trucks*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Households Served By Open Dump Site*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Households Served By Sanitary Landfill*: move mouse pointer to column G. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Households Depending on Dumping on Land or Water*: move mouse pointer to column H. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Households Depending on Burying:* move mouse pointer to column I. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

- *Number of Households Depending on Composting*: move mouse pointer to column J. Starting at the row below the column description, in reference to column B (name of municipality) select the data you would like to update and type the new value.

8.7. Updating Investment Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *invest.xls* filename.
3.1 To update the Past Investment Data,
   click the tab of *(P) Past Invest* sheet.

- *Shallow Well:* move mouse pointer to column C. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Deep Well:* move mouse pointer to column D. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Spring Development:* move mouse pointer to column E. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Well Rehabilitation:* move mouse pointer to column F. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Rain Collector:* move mouse pointer to column G. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Level II System:* move mouse pointer to column H. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Level III System:* move mouse pointer to column I. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Sewer System:* move mouse pointer to column J. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Private Latrines:* move mouse pointer to column K. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *School Toilets:* move mouse pointer to column L. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

- *Public Toilets:* move mouse pointer to column M. Starting at the row below the column description, in reference to column A (name of funding agency) select the data you would like to update and type the new value.

3.2 To update the Planned Future Investment Data
click the tab of *(P) Future Invest* sheet.

- *Project Name:* move mouse pointer to column A. Starting at the row below the column description, type the project identification.

- *Type of Project:* move mouse pointer to column B. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Phase of Project:* move mouse pointer to column C. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Project Location:* move mouse pointer to column D. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Implementing Agency:* move mouse pointer to column E. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Start Date of Project:* move mouse pointer to column F. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Completion Date of the Project:* move mouse pointer to column G. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Accomplishment Status (%):* move mouse pointer to column H. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Number of Household Covered by the Project:* move mouse pointer to column I. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Finance Agency:* move mouse pointer to column J. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost of Level I Facility (Thousand of pesos):* move mouse pointer to column K. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost of Level II System (Thousand of pesos):* move mouse pointer to column L. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost of Level III System (Thousand of pesos):* move mouse pointer to column M. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost of Sewer System (Thousand of pesos):* move mouse pointer to column N. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Private Latrine (Thousand of pesos):* move mouse pointer to column O. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost School Toilets (Thousand of pesos):* move mouse pointer to column P. Starting at the row below the column description, in reference to column A (name of project) type the new value.

- *Cost of Public Toilets (Thousand of pesos):* move mouse pointer to column Q. Starting at the row below the column description, in reference to column A (name of project) type the new value.

8.8. Updating Key Parameter Data Base

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *keypar.xls* filename.
3. To update the Key Parameter Data,
   click the tab of *STable 2.6.2* sheet.

Water Supply:

- *Number of Household to be Served by Level I Facility:* move mouse pointer to column H-Row 5. Type the new value.

- *Water Consumption Rate for Level III System:* move mouse pointer to column H-Row 6. Type the new value.

Sanitation:

- *Standard Number of Student to be Served by a Unit of Sanitary Toilet:* move mouse pointer to column H-Row 8. Type the new value.

- *Standard Number of Toilets for Public Facility:* move mouse pointer to column H-Row 9. Type the new value.

Medium-term Plan:

- *Percentage of Population Covered by Urban Water Supply:* move mouse pointer to column H-Row 11. Type the new value.

- *Percentage of Population Covered by Rural Water Supply:* move mouse pointer to column H-Row 12. Type the new value.

- *Percentage of Population Covered by Sanitary Toilet:* move mouse pointer to column H-Row 14. Type the new value.

- *Percentage of Urban Household Covered by Flush Toilet:* move mouse pointer to column H-Row 16. Type the new value.

- *Percentage of Urban Household Covered by Pour Flush Toilet:* move mouse pointer to column H-Row 17. Type the new value.

- *Percentage of Urban Household Covered by VIP Latrine:* move mouse pointer to column H-Row 18. Type the new value.

- *Percentage of Rural Household Covered by Flush Toilet:* move mouse pointer to column H-Row 20. Type the new value.

- *Percentage of Rural Household Covered by Pour Flush Toilet:* move mouse pointer to column H-Row 21. Type the new value.

- *Percentage of Rural Household Covered by VIP Latrine:* move mouse pointer to column H-Row 22. Type the new value.

- *Percentage of Public Student Covered by School Toilet:* move mouse pointer to column H-Row 23. Type the new value.

- *Percentage of Public Utility Covered by Public Toilet:* move mouse pointer to column H-Row 24. Type the new value.

- *Percentage of Population Covered by Solid Waste Collection:* move mouse pointer to column H-Row 25. Type the new value.

Long-term Plan:
- *Percentage of Population Covered by Urban Water Supply:* move mouse pointer to column H-Row 27. Type the new value.

- *Percentage of Population Covered by Rural Water Supply:* move mouse pointer to column H-Row 28. Type the new value.

- *Percentage of Population Covered by Sanitary Toilet:* move mouse pointer to column H-Row 30. Type the new value.

- *Percentage of Urban Household Covered by Flush Toilet:* move mouse pointer to column H-Row 32. Type the new value.

- *Percentage of Urban Household Covered by Pour Flush Toilet:* move mouse pointer to column H-Row 33. Type the new value.

- *Percentage of Urban Household Covered by VIP Latrine:* move mouse pointer to column H-Row 34. Type the new value.

- *Percentage of Rural Household Covered by Flush Toilet:* move mouse pointer to column H-Row 36. Type the new value.

- *Percentage of Rural Household Covered by Pour Flush Toilet:* move mouse pointer to column H-Row 37. Type the new value.

- *Percentage of Rural Household Covered by VIP Latrine:* move mouse pointer to column H-Row 38. Type the new value.

- *Percentage of Public Student Covered by School Toilet:* move mouse pointer to column H-Row 39. Type the new value.

- *Percentage of Public Utility Covered by Public Toilet:* move mouse pointer to column H-Row 40. Type the new value.

- *Percentage of Population Covered by Urban Sewerage:* move mouse pointer to column H-Row 41. Type the new value.

Rehabilitation:

- *Percentage of Level I Wells for Rehabilitation:* move mouse pointer to column H-Row 42. Type the new value.

Sector Management Cost:

- *Percentage of Feasibility and Detail Design:* move mouse pointer to column H-Row 44. Type the new value.

- *Percentage of Construction Supervision:* move mouse pointer to column H-Row 45. Type the new value.

Contingencies:

- *Percentage of Physical Contingency:* move mouse pointer to column H-Row 47. Type the new value.

- *Percentage of Price Contingency:* move mouse pointer to column H-Row 48. Type the new value.

Community Development and Training Cost:

- *Percentage for Level III System:* move mouse pointer to column H-Row 50. Type the new value.

- *Percentage for Level I Facility and Level II System:* move mouse pointer to column H-Row 51. Type the new value.

Recurrent Cost:

- *Operating Cost for Level III System:* move mouse pointer to column H-Row 52. Type the new value.

- *Cost of Spare Parts/Equipment for Level III System:* move mouse pointer to column H-Row 53. Type the new value.

- *Cost of Spare Parts/Equipment for Level II System:* move mouse pointer to column H-Row 54. Type the new value.

- *Cost of Spare Parts/Equipment for Level I Facility:* move mouse pointer to column H-Row 55. Type the new value.

- *Public School Toilet Maintenance Cost:* move mouse pointer to column H-Row 56. Type the new value.

- *Public Utility Toilet Maintenance Cost:* move mouse pointer to column H-Row 57. Type the new value.

Allocation Factors/Percentages of IRA:

- *Percentage Share from Provincial IRA:* move mouse pointer to column H-Row 59. Type the new value.

- *Percentage Share from Municipal/Barangay IRA:* move mouse pointer to column H-Row 60. Type the new value.

Funding Levels/Percentages for Different Financing Scenarios:

- *1st Scenario:* move mouse pointer to column H-Row 62. Type the new value.

- *2nd Scenario:* move mouse pointer to column H-Row 63. Type the new value.

- *3rd Scenario:* move mouse pointer to column H-Row 64. Type the new value.

- *4th Scenario:* move mouse pointer to column H-Row 65. Type the new value.

- *5th Scenario:* move mouse pointer to column H-Row 66. Type the new value.

click the tab of *STable 2.6.3* sheet:

- *Percentage Proportion of Water Source:* move mouse pointer to column D. Starting at the row below the column description, in reference to column A (name of municipality), column B (type of area), column C (type of source) select the data you would like to update and type the new value.

- *Range Depth of Well:* move mouse pointer to column E. Starting at the row below the column description, in reference to column A (name of municipality), column B (type of area), column C (type of source) select the data you would like to update and type the new value.

- *Average Specific Capacity:* move mouse pointer to column F. Starting at the row below the column description, in reference to column A (name of municipality), column B (type of area), column C (type of source) select the data you would like to update and type the new value.

click the tab of *STable 2.6.5* sheet.

- *Unsafe Percentage:* move mouse pointer to column C. Starting at the row below the column description, in reference to column A (name of municipality) select the data you would like to update and type the new value.

click the tab of *STable 2.6.6* sheet.

- *Unit Construction Cost for New Level III System for 5,000 population:* move mouse pointer to column B-Row 7. Type the new value.

- *Unit Construction Cost for New Level III System for 10,000 population:* move mouse pointer to column B-Row 8. Type the new value.

- *Unit Construction Cost for New Level III System for 15,000 population:* move mouse pointer to column B-Row 9. Type the new value.

- *Unit Construction Cost for Level III System Expansion for 5,000 population:* move mouse pointer to column B-Row 11. Type the new value.

- *Unit Construction Cost for Level III System Expansion for 10,000 population:* move mouse pointer to column B-Row 12. Type the new value.

- *Unit Construction Cost for Level III System Expansion for 15,000 population:* move mouse pointer to column B-Row 13. Type the new value.

- *Unit Construction Cost for Level II System:* move mouse pointer to column B-Row 14. Type the new value.

- *Unit Construction Cost for Level I Facility (Deep Eell - 40 meter depth):* move mouse pointer to column B-Row 16. Type the new value.

- *Unit Construction Cost for Level I Facility (Deep Well - 80 meter depth):* move mouse pointer to column B-Row 17. Type the new value.

- *Unit Construction Cost for Level I Facility (Deep Well - 120 meter depth):* move mouse pointer to column B-Row 18. Type the new value.

- *Unit Construction Cost for Level I Facility (Shallow Well):* move mouse pointer to column B-Row 19. Type the new value.

- *Unit Construction Cost for Rehabilitation of Level I Facility:* move mouse pointer to column B-Row 20. Type the new value.

- *Cost for Disinfection of Level I Wells:* move mouse pointer to column B-Row 21. Type the new value.

- *Unit Construction Cost for Flush Toilet:* move mouse pointer to column B-Row 22. Type the new value.

- *Unit Construction Cost for Pour Flush Toilet:* move mouse pointer to column B-Row 23. Type the new value.

- *Unit Construction Cost for VIP Latrine Toilet:* move mouse pointer to column B-Row 24. Type the new value.

- *Unit Construction Cost for School Toilet:* move mouse pointer to column B-Row 25. Type the new value.

- *Unit Construction Cost for Public Toilet:* move mouse pointer to column B-Row 26. Type the new value.

- *Unit Construction Cost for Urban Sewerage:* move mouse pointer to column B-Row 27. Type the new value.

click the tab of *STable 2.6.4* sheet.

Urban Water Supply (Level III System):

- *Feasibility Study and Detail Design:* move mouse pointer to Row 6. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Construction and Supervision:* move mouse pointer to Row 7. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Community Development and Training:* move mouse pointer to Row 8. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

Rural Water Supply (Level I Facility):

- *Detail Design:* move mouse pointer to Row 10. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Construction and Supervision:* move mouse pointer to Row 11. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Community Development and Training:* move mouse pointer to Row 12. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

Rural Water Supply (Level II System):

- *Detail Design:* move mouse pointer to Row 14. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Construction and Supervision:* move mouse pointer to Row 15. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Community Development and Training:* move mouse pointer to Row 16. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

Sanitation:

- *Urban Household Toilet:* move mouse pointer to Row 17. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Rural Household Toilet:* move mouse pointer to Row 18. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Public School Toilet:* move mouse pointer to Row 19. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Public Toilet:* move mouse pointer to Row 20. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Disinfection of Level I Wells:* move mouse pointer to Row 21. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Detail Design:* move mouse pointer to Row 22. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Construction and Supervision:* move mouse pointer to Row 23. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

- *Community Development and Training:* move mouse pointer to Row 24. Starting at Column F (Year 1996) up to Column J (Year 2000) select the data you would like to update and type the new value.

click the tab of *STable 2.6.7 & 2.6.8* sheet.

Scoring Factor for Municipal Investment Ranking for Urban Water Supply:

- *Minimun Percentage of Underserved and Unserved Population in Base Year:* move mouse pointer to column B, in reference to column A (score) select the data you would like to update and type the new value.

- *Maximum Percentage of Underserved and Unserved Population in Base Year:* move mouse pointer to column D, in reference to column A (score) select the data you would like to update and type the new value.

- *Weight Allocation Score for Underserved and Unserved Population in Base Year:* move mouse pointer to column C-Row 9. Type the new value.

- *Minimun Percentage of Underserved and Unserved Population in Phase I:* move mouse pointer to column E, in reference to column A (score) select the data you would like to update and type the new value.

- *Maximu Percentage of Underserved and Unserved Population in Phase I:* move mouse pointer to column G, in reference to column A (score) select the data you would like to update and type the new value.

- *Weight allocation Score for Underserved and Unserved Population in Phase I:* move mouse pointer to column F-Row 9. Type the new value.

- *Minimun Percentage of Underserved and Unserved by Level III System in the Base Year:* move mouse pointer to column H, in reference to column A (score) select the data you would like to update and type the new value.

- *Maximum Percentage of of Underserved and Unserved by Level III System in the Base Year:* move mouse pointer to column J, in reference to column A (score) select the data you would like to update and type the new value.

- *Weight Allocation Score for Underserved and Unserved by Level III System in the Base Year:* move mouse pointer to column I-Row 9. Type the new value.

Scoring Factor for Municipal Comprehensive Investment Ranking:

- *Minimun Percentage of Rural Water Supply:* move mouse pointer to column E, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Maximum Percentage of Rural Water Supply:* move mouse pointer to column G, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Weight Allocation Score for Rural Water Supply:* move mouse pointer to column F-Row 20. Type the new value.

- *Minimun Percentage of Urban Sanitation:* move mouse pointer to column H, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Maximum Percentage of Urban Sanitation:* move mouse pointer to column J, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Weight Allocation Score for Urban Sanitation:* move mouse pointer to column I-Row 20. Type the new value.

- *Minimun Percentage of Rural Sanitation:* move mouse pointer to column K, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Maximum Percentage of Rural Sanitation:* move mouse pointer to column M, in reference to column A (score) at starting at row 15, select the data you would like to update and type the new value.

- *Weight Allocation Score for Rural Sanitation:* move mouse pointer to column L-Row 20. Type the new value.

8.9.   Updating Unit Construction Cost Data Base

8.9.1.   Water Supply

1. Click the File menu, select Open.
   Short-cut: Click the Open button.
2. From the Open Dialog Box. Select the *chap-10.xls* filename.
3.1. To update the Unit Cost for Level III (5,000 population).
   click the tab of *STable 10.2.7* sheet.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.2. To update the Unit Cost for Level III (10,000 population).

   click the tab of *STable 10.2.8* sheet.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.3. To update the Unit Cost for Level III (15,000 population).
   click the tab of *STable 10.2.9* sheet.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.4. To update the Unit Cost for Level II (600 population),
click the tab of *STable 10.2.6* sheet.

- *Lump Cost of Spring Box*: move mouse pointer to column G-Row-4. Type the new value.

- *Quantity of Installation of Pipelines and Fittings*: move mouse pointer to column D. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost of Installation of Pipelines and Fittings*: move mouse pointer to column F. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.5. To update the Unit Cost for Level I (Deep Well - 40 m depth),
click the tab of *STable 10.2.1* sheet.

- *Lump Sum Cost of Mobilization/Demobilization*: move mouse pointer to column F-Row-4. Type the new value.

- *Quantity*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.6. To update the Unit Cost for Level I (Deep Well - 80 m depth),
click the tab of *STable 10.2.2* sheet.

- *Lump Sum Cost of Mobilization/Demobilization*: move mouse pointer to column F-Row-4. Type the new value.

- *Quantity*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.7. To update the Unit Cost for Level I (Deep Well - 120 m depth),
click the tab of *STable 10.2.3* sheet.

- *Lump Sum Cost of Mobilization/Demobilization*: move mouse pointer to column F-Row-4. Type the new value.

- *Quantity*: move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.8. To update the **Unit Cost for Level I (Deep Well Rehabilitation),**
   click the tab of *STable 10.2.4* sheet.

- *Lump Sum Cost of Mobilization/Demobilization:* move mouse pointer to column F-Row-4. Type the new value.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.9. To update the **Unit Cost for Level I (Shallow Well - 18 m depth),**
   click the tab of *STable 10.2.5* sheet.

- *Lump Sum Cost of Mobilization/Demobilization:* move mouse pointer to column F-Row-4. Type the new value.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

8.9.2. Environmental Sanitation

1. Click the **File** menu, select **Open.**
   Short-cut: Click the **Open** button.
2. From the **Open Dialog Box.** Select the *chap-10.xls* filename.
3.1. To update the **Unit Cost of Flush Water Sealed Toilet with Septic**
   click the tab of *STable 10.2.10* sheet.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.2. To update the **Unit Cost of Pour Flush Toilet with Double Pit Latrine**
   click the tab of *STable 10.2.11* sheet.

- *Quantity:* move mouse pointer to column C. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

- *Unit Cost*: move mouse pointer to column E. Starting at the row below the column description, in reference to column B (item description) select the data you would like to update and type the new value.

3.3. To update the Unit Cost of Ventilated Improved Pit Latrine (VIP)
click the tab of *STable 10.2.12* sheet.

- *Quantity:* move mouse pointer to column D. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.
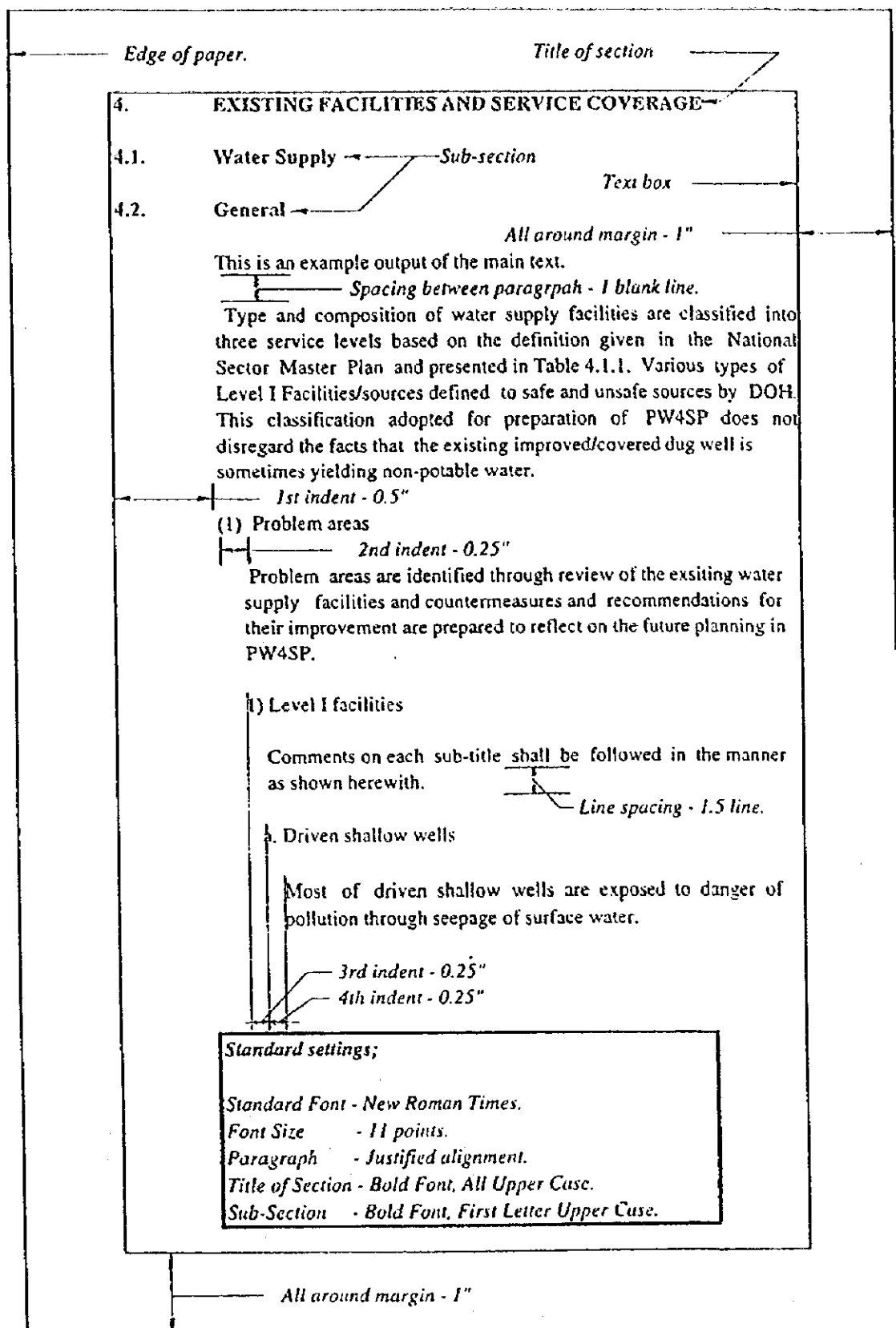
- *Unit Cost*: move mouse pointer to column H. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.

3.4. To update the Unit Cost of School Toilet
click the tab of *STable 10.2.13* sheet.

- *Quantity:* move mouse pointer to column D. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.

- *Unit Cost:* move mouse pointer to column H. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.

3.5. To update the Unit Cost of Public Toilet
click the tab of *STable 10.2.14* sheet.

- *Quantity:* move mouse pointer to column D. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.

- *Unit Cost*: move mouse pointer to column H. Starting at the row below the column description, in reference to column C (item description) select the data you would like to update and type the new value.

9. Standard Report Format

The following page describes the standard report format. Please refer to MS-Word Basic Operation in Section 5 for procedure in setting the MS-Word environment.

Specification for Standard Report Format

4.   EXISTING FACILITIES AND SERVICE COVERAGE

4.1.   Water Supply ← ——— Sub-section

Text box

4.2.   General

All around margin - 1"

This is an example output of the main text.

——— Spacing between paragrpah - 1 blank line.

Type and composition of water supply facilities are classified into three service levels based on the definition given in the National Sector Master Plan and presented in Table 4.1.1. Various types of Level I Facilities/sources defined to safe and unsafe sources by DOH. This classification adopted for preparation of PW4SP does not disregard the facts that the existing improved/covered dug well is sometimes yielding non-potable water.

—— 1st indent - 0.5"

(1) Problem areas

——— 2nd indent - 0.25"

Problem areas are identified through review of the exsiting water supply facilities and countermeasures and recommendations for their improvement are prepared to reflect on the future planning in PW4SP.

1) Level I facilities

Comments on each sub-title shall be followed in the manner as shown herewith.

Line spacing - 1.5 line.

a. Driven shallow wells

Most of driven shallow wells are exposed to danger of pollution through seepage of surface water.

—— 3rd indent - 0.25"
—— 4th indent - 0.25"

Standard settings;

Standard Font - New Roman Times.
Font Size   - 11 points.
Paragraph   - Justified alignment.
Title of Section - Bold Font, All Upper Case.
Sub-Section   - Bold Font, First Letter Upper Case.

——— All around margin - 1"

3.3 Socio-economic Conditions
3.3.2 Basic Infrastructure

Table 3.3.1 Number of Elementary School, High School and Other Served Facilities

Provincial Water Supply, Sewerage And Sanitation Sector Plan (PW4SP)											Page:
Content: Socio-economic - Services											Date: 20 Jul. 1998
Data Collection Level: Provincial			Prov. Number: 1302								Filename: Socio.xls
Region Number: CARAGA			Prov. Name: Agusan del Norte								Form No.: P.1.5

Services (As of 1995)

Geographic Code Number	Name of City or Municipality (Character)	Elementary School			High School			Vocational Schools	Colleges and Universities	Hospitals	Banks and Financing Institutions
		Public Number	Private Number	Total Number	Public Number	Private Number	Total Number				
130201	Buenavista	19		19	2	2	4	1	1		1
130203	Cabadbaran	24		24	1	4	5	1	3	3	6
130204	Carmen	8		8	2	1	3				
130205	Jabonga	11		11	3		3			1	
130206	Kitcharao	6		6	2	1	3		3	1	
130207	Las Nieves	13		13	3		3			1	
130208	Magallanes	4		4	1	1	2	1		2	
130209	Nasipit	17		17		5	5	1	2	3	4
130210	Remedios T. Romualdez	1		1							
130211	Santiago	5		5	2		2				
130212	Tubay	10		10	2		2		1		1

Source of data and date:
1. Department of Education, Culture and Sport, 1995
2. Municipal Planning Development Council

3.5 Health Status
3.5.1 Morbidity, Mortality and Infant Mortality

Table 3.5.1 Morbidity, Mortality and Infant Mortality by Municipality (Annual Incidence per 100,000 persons)

Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)		Prov. Number: 1302		Page:
Content: Health - Morbidity and Mortality		Prov. Name: Agusan del Norte		Date: 20 Jul 1998
Data Collection Level: Provincial		Municipal Number: N/A		Filename: Health.xls
Region Number: CARAGA		Municipal Name: N/A		Form Number: P.3 1

Cause Group Diseases of	Disease No.	Name of Diseases (Group)	Water Related Diseases	Morbidity Male	Morbidity Female	Morbidity Total	Mortality Male	Mortality Female	Mortality Total	Infant Mortality Male	Infant Mortality Female	Infant Mortality Total
Infective and Parasitic (001-135)	A 01	2-4/ Typhoid/Parathyphoid	X	3	1	4						
	A 02	5-7/ Dysentery	X									
	A 03	8-10/ Intestinal Parasites	X	107	128	235						
	A 04	11-13/ Diarrhea	X	572	578	1,150	11	8	19	4	1	5
	A 05	14-16/ Tuberculosis		105	123	228	26	10	36			
	A 06	17-19/ Conjunctivities	X	9	5	14						
	A 07	20-22/ Whooping Cough		62	64	126						
	A 08	23-25/ Throat/Ear/Nose										
	A 09	26-28/ Tetanus		10	6	16	2	3	5	1		1
	A 10	29-31/ Septicemia					5	5	10	3		3
	A 11	32-34/ Cholera	X									
	A 12	35-37/ Varicella, Chickenpox		20	21	41						
	A 13	38-40/ Measles		93	73	166	6	1	7	4	1	5
	A 14	41-43/ Dengue Fever	X				3		3			
	A 15	44-46/ Viral Hepatitis	X	9	9	18						
	A 16	47-49/ Malaria	X	261	179	440	3	1	4			
	A 17	50-52/ Schistosomiasis	X	97	84	181	1		1			
	A 18	53-55/ Filariasis	X									
	A 19	56-58/ Venerial Diseases										
	A 20	59-61/ Other Bacter./ Viral Dis										
Neoplasms (140-239)	B 01	62-64/ Malignant Neoplasms					14	30	44			
	B 02	65-67/ Leukemia						1	1			
Endocrine, Nutritional & Metabolic (250-279)	C 01	68-70/ Diabetes Mellitus						1	1			
	C 02	71-73/ Nutritional Deficiencies					2	4	6		2	2
	C 03	74-76/ Endocrine Disorder										
Blood & Blood Forming Organs (280-289)	D 01	77-79/ Anemias		34	95	129						
Mental Disorder (290-319)	E 01											
Nervous System & Sense Organs (320-389)	F 01	80-82/ Meningitis					1		1	1		1
	F 02	83-85/ Nervous System										
Circulatory Systems (390-459)	G 01	86-88/ Heart Diseases		18	27	45	94	73	167			
	G 02	89-91/ Vascular Diseases		44	105	149	44	32	76			
Respiratory Systems (460-519)	H 01	92-94/ Bronchitis		717	666	1,383	1		1			
	H 02	95-97/ Pneumonia		611	512	1,123	54	37	91	9	9	18
	H 03	98-100/ Influenza		95	82	177						
	H 04	101-103/ Obstructive Pulmonary										
	H 05	104-106/ ARI										
Digestive System (520-579)	I 01	107-109/ Appendicitis										
	I 02	110-112/ Gastroent. Colitis										
	I 03	113-115/ Chronic Liver Disease					13	2	15			
	I 04	116-118/ Other Diges. Diseases										
Genito-Urinary System (580-629)	J 01	119-121/ Kidney/ Nephritis					8	7	15			
	J 02	122-124/ Urinary Infections		79	251	330						
Complication of Pregnancy & the Puerperium (630-676)	K 01	125-127/ Prematurity						3	3		3	3
Skin & Subcutaneous Tissue (680-709)	L 01	128-130/ Skin Diseases	X									
	L 02	131-133/ Scabies	X	52	39	91						
Musculaoskeletal & Connective Tissue (710-739)	M 01	134-136/ Arthrop., Rheumatism		15	69	84						
Congenital Anomalies (740-759)	N 01	137-139/ Congenital Anomalies					1	1	2	1	1	2
Certain Causes of Prenatal Morbidity & Mortality (760-779)	P 01	140-142/ Birth Trauma										
	P 02	143-145/ Birth Injuries & Difficult Labor										
	P 03	146-148/ Resp. Fetus/Newborn					2		2	2		2
	P 04	159-151/ Other Prenatal Causes										
Symptoms & Illdefined Condition (780-799)	Q 01	152-154/ Senility										
	Q 02	155-157/ Ill-Defined Condition										
Accidents, Poisoning & Violence (800-999)	R 01	158-160/ Burns										
	R 02	161-163/ Suffoc. Foreign Body										
	R 03	164-166/ Other Accidents										

Table 3.6.1 Municipal Solid Waste Collection and Disposal by Municipality

Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)	Page:
Content: Environment Sanitation - Solid Waste Collection and Disposal	Date: 20 Jul. 1998
Data Collection Level: Provincial	Filename: Sanitation.xls
Prov. Number: 1302	Form Number: P.6.6
Region Number: CARAGA	Prov. Name: Agusan del Norte

Geographic Code		Name of City or Municipality	With Municipal Service					Without Service		
			Number of Collection Trucks			Disposal		Number of Household by Manner of		
			Open Dump Trucks	Closed Type Trucks	Total Units	Number of Households Served by Open Dump Site	Number of Household Served by Sanitary Landfill	Dumping (Land and Water)	Burying	Composting
Number	Character		Number	Number	Number	Number	Number	Number	Number	Number
130201	Buenavista		1		1	963		3,213	2,449	2,152
130203	Cabadbaran		2		2	6,628		1,777	436	1,225
130204	Carmen		1		1	50		799	978	1,274
130205	Jabonga							3,318	135	218
130206	Kitcharao							558	1,756	450
130207	Las Nieves							1,836	362	2,104
130208	Magallanes		1		1	2,719		232	73	178
130209	Nasipit		2		2	2,526		1,277	1,376	1,522
130210	Remedios T. Romua		1		1	87		2,405		
130211	Santiago							1,137	747	699
130212	Tubay							2,335		707

Source:

4. EXISTING FACILITIES AND SERVICE COVERAGE

4.1 Water Supply

4.2 Type of Facilities and Definition of Service Level Standard

NEDA Board Resolution

No. 12 (s. 1995)

APPROVING THE COMMON
DEFINITION OF TERMS RELATIVE TO WATER
SUPPLY, SEWERAGE AND SANITATION

DEFINITION OF TERMS

Water Supply

Levels of Service

Three levels of water service shall be provided to urban and rural communities depending upon technical and financial considerations, the needs of the WDs and RWSAs, and their willingness and ability to share in the costs and the responsibility of constructing and maintaining the water systems. These are:

1. Level I (point source) - a protected well or a developed spring with an outlet but without a distribution system, generally adaptable for rural areas where the houses are thinly scattered. A Level I facility normally serves an average of 15 households.

2. Level II (communal faucet system or standposts) -- a system composed of a source, a reservoir, a piped distribution network, and communal faucets. Usually one faucet serves 4 to 6 households. Generally suitable for rural and urban fringe areas where houses are clustered densely to justify a simple piped system.

3. Level III (waterworks system or individual house connections) -- a system with a source, a reservoir, a piped distribution network and household taps. It is generally suited for densely populated urban areas.

Urban – the revised definition of urban population included the criteria on the economic and social functions of barrios, poblaciones and central districts resulting to the new definition which states:

1. In their entirely, all municipal jurisdictions which, whether designated as chartered cities, provincial capital or not, have a population density of at least 1,000 persons per square kilometers.

2. Poblaciones or central districts of municipalities and cities which have a population density of at least 500 persons per square kilometer.

3. Poblaciones or central districts (not included in nos. 1 and 2) regardless of population size which have the following:

    a. Street pattern, i.e., network of streets in either at parallel or right angle orientation;

    b. At least six establishments (commercial, manufacturing, recreational and/or personal services); and

    c. At least three of the following:
        i)   a town hall, church or chapel with religious services at least once a month;
        ii) a public plaza, park or cemetery;
        iii) a market place or building on at least once a week and
        iv) a public building like school, hospital, puericulture and health center or library.

4. Barrios having at least 1,000 inhabitants which meet the conditions setforth in no. 3 above, and in which the occupation of the inhabitants is predominantly non-farming/fishing.

Rural – all areas not falling under the urban classification (National Statistics Office).

Rural Waterworks and Sanitation Association (RWSAs) – non-stock, non-profit organizations envisioned to operate and mange Level II water supply facilities.

Barangay Waterworks and Sanitation Association (BWSA) – non-stock, non-profit organizations envisioned to operate and manage Level I water supply facilities.

Water Supply – for purpose of the plan, refers to the supply of the water for domestic, municipal, industrial/commercial uses.

Water Supply Coverage – refers to the number of people in a given community of geographical area who have access to safe water. The extent to which the population of a geographical area is covered (expressed in terms of the number of people served compared to the total population of that community or area).

Adequate Served – refers to those with the following rate or consumption:

Level I	at least 20 liters/capita/day
Level II	at least 60 liters/capita/day
Level III	at least 100 liters/capita/day

Service Coverage – the no. of people a facility can serve.

Level I Water Supply Systems

1. Deepwell – are characterized by aquifers or water bearing formations generally located at a depth of more than 20 (mbgs.). Construction of deepwells with depths greater than 20 meters are recommended in these areas.

2. Shallow Well – are areas suitable for construction of well with depths not more than 20 meters and are recommended for rural water supply development, particularly levels I and II services. Static water level in these areas are generally within 6 meters below ground surface.

3. Developed Springs – developed to capture the natural flow of an aquifer, pollution generally originates close to the point of capture. It is projected by: 1) excluding shallow seepage waters through encircling the spring with a watertight chamber penetrating a safe-distance into the aquifer and; 2) diverting surface run-off away from the immediate vicinity.

4. Protected Dug Wells – WASAMS defines protected dug wells as those which are adequately protected (guarded) against surface or outside contamination through the use of lining or covering, with a rim sufficiently raised above the ground level, and may be equipped with a pump (any type).

Salt Intrusion -- encroachment of salt water upon fresh water.

Potable Water -- water that is satisfactory for drinking, culinary and domestic purposes and meets the requirements of the health authority having jurisdiction. (Plumbing Code).

Population Underserved -- population inadequately served.

Population Unserved -- population without access to water supply facility.

Population Served -- no. of population adequately served of connections x no. of persons served per connection.

Rainwater Cisterns/Collectors/Catchers -- reservoirs, tanks or vessels for the storage of rainwater.

Reliable Water Supply -- efficiency in the delivery of water supply in terms of quantity and quality.

Safe Drinking Water -- water must be free of disease-producing bacteria (pathogens). In addition, the water should not possess undesirable tastes, odors, colors, turbidity or chemicals.

Service Area -- geographic jurisdiction of water utilities.

Non-revenue Water -- unbilled water.

Appropriate Technologies -- suited to local conditions and resources.

Infiltration Galleries -- horizontal wells which collect water over the entire length.

Accounted-for-water -- billed water.

Access to Water Supply Facilities -- access to water supply is categorized as follows:

Level I   - the farthest user is not more than 250 meters from the point source.

Level II   - the farthest house is not more than 25 meters from the communal faucet system.

Level III   - the house have service connection from the system.

Private Water System -- privately-owned water supply system.

Public Water System – system owned by the government.

DEFINITION OF TERMS

Sewerage and Sanitation

Sanitation – the development and practical application of sanitary measures for the sake of cleanliness and protecting health.

Sanitary Toilet – is an approved type of facility used for receiving and disposing human waste (feces and urine).

APPROVED TYPES

1. Flush – type of toilet facility with a mechanical device used to wash the waste into the receiving sewer or septic tank by the use of flushing water and with traps to provide a "water seal".

2. Poor Flush – type of toilet facility without a mechanical device and in hand-flush with "water seal" connected to receiving sewer, septic tank or leaching pit.

3. Ventilated Improved Pit refers to an on-site toilet facility without using any amount of water comprising a vent pipe with a fly screen used to trap flies in a pit and, also allows evacuation of foul air into the atmosphere. This minimizes foul odor with the latrine superstructure and traps flies that could not spread diseases through faecal contamination.

4. Sanitary Pit Privy – type of toilet facility without using any amount of water, with a pit of at least 1-2 meters depth, a hole of one square meter, provided with a floor covering a riser, seat with cover which are all fly-and rodent proof and a building for privacy including the Antipolo type.

Unsanitary Toilet -- a type of facility used for receiving and disposing human waste which does not fall under the category of approved types of toilet facilities.

UNAPPROVED/UNSANITARY TYPES

1.   Open Pit Privy- a pit of at least the same dimension as the sanitary pit privy, provided with pit flooring, with or without riser and seat and without cover to protect from flies and rodents.

2.   Overhang – a structure provided with flooring and with an opening built above the body of water or above the ground without pit under it, used for defecation of the disposal of human waste. It can be a part of the house or a separate structure outside the house.

LEVELS OF TOILET USE

1.   Communal – a toilet facility shared by two or more households.
2.   Public – toilet facility located at public places like markets, bus stations, etc. intended for public use.
3.   School – a toilet facility located in a school.
4.   Household – a toilet facility being used by an individual household.

Sewerage - facilities that collect human waste and sullage from residences and establishments usually piped and conveyed in structures (sewers, pump stations) for eventual central treatment and safe disposal. Piped sewerage includes a collection system (street laterals), a conveyance system (trunk sewers and pump stations), and a treatment plant/disposal system.

Human Waste – solid (feces) and liquid (urine) wastes from human.

Sullage – liquid wastes resulting from washing, bathing and laundry.

Drainage System – facilities that deal with rainwater.

Unsanitary Drainage System – facilities without treatment that deal with rainwater and also receive septic tank overflow and sullage. Includes open canals.

Without Toilet – households without any toilet but using body of water like rivers, lakes, etc. open field including coastal areas, and other mean to dispose human waste.

Access – availability of toilet facility within the household premises that can be used anytime.

On Site – the human waste is deposited and treated where the toilet facility is located.

Off Site – the human waste is transported for treatment.

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4.2 Sanitation and Sewerage
4.2.3 Sanitation Facilities and Service Coverage

Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)
Content: Environment Sanitation - Household Toilet
Data Collection Level: Provincial
Region Number: CARAGA

Prov. Number: 1302
Prov. Name: Agusan del Norte

Page:
Date: 20 Jul. 1998
Filename: Sanitation.xls
Form Number: P.6.1

| Geographic Code Number | Name of City or Municipality / Character | Number of Households Using Sanitary Toilets | | | | | | | | Number of Households Using Unsanitary Toilets | | | Number of Households Without Toilets | | |
| | | Flush Toilet | | Pour Flush | | Sanitary Pit Latrine (VIP) | | Total | | Urban | Rural | Total | Urban | Rural | Total |
		Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Number	Number	Number	Number	Number	Number
130201	Buenavista			2,103	4,113			2,103	4,113	321	1,051	1,372	364	825	1,189
130203	Cabadbaran	595	31	2,249	5,923			2,844	5,954	74	377	451	185	630	815
130204	Carmen					753	1,811	753	1,811				67	470	537
130205	Jabonga			520	3,135			520	3,135	8		8	8		8
130206	Kitcharao			947	1,070			947	1,070	174	406	580	78	89	167
130207	Las Nieves			127	2,457			127	2,457	39	1,291	1,330	22	366	388
130208	Magallanes			412	452			412	452	970	255	1,225	974	139	1,113
130209	Nasipit			1,935	3,535			1,935	3,535	632	43	675	541	15	556
130210	Remedios T. Romualdez			547	1,209			547	1,209	33		33	85	613	703
130211	Santiago			997	1,230			997	1,230	193	46	239	93	24	117
130212	Tubay					366	1,826	366	1,826				190	660	850

Source:

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Geographic Code	Name of City or Municipality	Number of School			Number of Student		
		Public	Private	Total	Public	Private	Total
Number	Character	Number	Number	Number	Number	Number	Number
130201	Buenavista	20	2	22	7,963	1,560	9,523
130203	Cabadbaran	25	4	29	10,935	3,089	14,024
130204	Carmen	10	1	11	3,783	311	4,094
130205	Jabonga	13		13	3,819		3,819
130206	Kitcharao	7	1	8	2,874	412	3,286
130207	Las Nieves	14		14	4,100		4,100
130208	Magallanes	4	1	5	2,780	556	3,336
130209	Nasipit	17	5	22	5,444	2,410	7,854
130210	Remedios T. Romualdez	1		1	789		789
130211	Santiago	7		7	3,332		3,332
130212	Tubay	12		12	3,451		3,451

Source:

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Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)
Content: Environment Sanitation – School Toilets
Data Collection Level: Provincial
Region Number CARAGA

Prov. Number: 1302
Prov. Name: Aguan del Norte

Page:
Date: 20 Jul. 1998
Filename: Sanitation.xls
Form Number: P.6.3

Geographic Code Number	Name of City or Municipality (Character)	Number of Toilets												Total Units	
		Sanitary						Unsanitary							
		Public		Private		Total		Public		Private		Total			
		Male Number	Female Number	Male Number	Female Number	Male Number	Female Number	Male Number	Female Number	Male Number	Female Number	Male Number	Female Number	Male Number	Female Number
130201	Buenavista	94	80	9	8	103	88	6	6	3	3	9	9	103	88
130203	Cabadbaran	25	25	10	10	35	35			1	1	1	1	44	44
130204	Carmen	3	3	6	6	9	9							10	10
130205	Jabonga	18	18			18	18							18	18
130206	Kitcharao	24	24	4	4	28	28							28	28
130207	Las Nieves	13	13			13	13	1	1			1	1	14	14
130208	Magallanes	4	4	7	7	11	11	6	6	2	2	8	8	19	19
130209	Nasipit	79	79			79	79							79	79
130210	Remedios T. Romua	8	8			8	8							8	8
130211	Santiago	30	35			30	35							30	35
130212	Tubay	11	11			11	11	1	1			1	1	12	12

Source:

Public Markets

Geographic Code		Name of City or Municipality	Number	Number of Toilets					
				Sanitary		Unsanitary		Total	
				Male	Female	Male	Female	Male	Female
Number		Character	Number	Number	Number	Number	Number	Number	Number
130201		Buenavista	1	1	1			1	1
130203		Cabadbaran	1	1	1			1	1
130204		Carmen	1	1	1			1	1
130205		Jabonga							
130206		Kitcharao							
130207		Las Nieves	1	1	1			1	1
130208		Magallanes	1	1	1			1	1
130209		Nasipit	1	1	1			1	1
130210		Remedios T. Romualdez	1	1	1			1	1
130211		Santiago	1	1	1			1	1
130212		Tubay	1	1	1			1	1

Source:

Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)		Page:
Content: Environment Sanitation - Public Toilets(Jeepney/Bus Terminal)		Date: 20 Jul. 1998
Data Collection Level: Provincial	Prov. Number: 1302	Filename: Sanitation.xls
Region Number: CARAGA	Prov. Name: Agusan del Norte	Form Number: P.6.4.2

Jeepney/Bus Terminal

Geographic Code		Name of City or Municipality		Number	Number of Toilets					
					Sanitary		Unsanitary		Total	
					Male	Female	Male	Female	Male	Female
Number		Character		Number	Number	Number	Number	Number	Number	Number
130201	Buenavista			1	1	1			1	1
130203	Cabadbaran			1	1	1			1	1
130204	Carmen									
130205	Jabonga									
130206	Kitcharao									
130207	Las Nieves									
130208	Magallanes			1		1			1	1
130209	Nasipit			1	1	1			1	1
130210	Remedios T. Romualdez									
130211	Santiago									
130212	Tubay									

Source:

Provincial Water Supply, Sewerage and Sanitation Sector Plan (PW4SP)					Page:			
Content: Environment Sanitation - Public Toilets(Parks/Playground)					Date: 20 Jul. 1998			
Data Collection Level: Provincial		Prov. Number: 1302			Filename: Sanitation.xls			
Region Number: CARAGA		Prov. Name: Agusan del Norte			Form Number: P.6.4.3			

Geographic Code	Name of City or Municipality	Number	Parks/Playground Number of Toilets					
			Sanitary		Unsanitary		Total	
			Male	Female	Male	Female	Male	Female
Number	Character	Number	Number	Number	Number	Number	Number	Number
130201	Buenavista	1	2	2			2	2
130203	Cabadbaran	1	2	2			2	2
130204	Carmen	1	3	3			3	3
130205	Jabonga							
130206	Kitcharao	1	2	2			2	2
130207	Las Nieves							
130208	Magallanes							
130209	Nasipit							
130210	Remedios T. Romualdez							
130211	Santiago							
130212	Tubay							

Source: