

SAN PABLO

City of Seven Lakes



COMPREHENSIVE LAND USE PLAN 2015-2025

City Planning and Development Office
City Government of San Pablo

"UNITY IN PROGRESS"
Tuloy-tuloy ang pag-abante



VOLUME 3:
**SECTORAL
STUDIES**



**The Comprehensive Land Use Plan
of San Pablo City 2015-2025 is
composed of the following
Volumes:**

Volume 1: The Comprehensive Land Use Plan

Volume 2: Zoning Ordinance

Volume 3: Sectoral Studies



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1. HISTORICAL BACKGROUND

1.1 The History of San Pablo City

1.1.1 Orogeny

In ancient times, San Pablo was known as the Village of Sampaloc. It was an upland realm surrounded by mountain ranges and quiescent volcanic peaks. It was believed that mountain making movements or orogeny had thrust lower lying areas to uplands and low rolling plains after extensive volcanisms took place millions of years ago and where *Caesal piniaceus* tamarind or Sampalok trees grew in wild abundance. This upland realm became the town, San Pablo de los Montes.

1.1.2 The Pre-Hispanic Village of Sampaloc

Sampalok was a large and prospering village which had its own system of government and culture. Barangays already existed and each was headed by a chieftain who was also known as Gatpuno. Foremost among them were Gat Paguil, Gat Sungayan, Gat Salakab, and Gat Pulintan. Cultural development was manifested in marriage patterns, religion, and social groups. Even crude written symbols of communications were used to record simple trades and forms of literature although oral handing of customs, beliefs, songs and practices was preferred. The native had a glimpse of the outside world through Chinese traders who were the first group to be in contact with as evidenced by ceramic pieces that were unearthed and carbon-dated.

1.1.3 The Coming of the Spaniards

In search of gold, the first Spanish troops under Captain Juan de Salcedo reached the upland realm of Sampalok in 1571 and immediately announced governance in the name of the King of Spain. Administration of its affairs was turned over to the Augustinian Priest Father Mateo Mendoza in July 8, 1586 who then succeeded in converting most of the natives to Christianity. Fiesta was introduced as part of religious rituals. Consequently, some barangay villages were renamed after saints as a reason for the festivity. Native chieftains were renamed "cabeza de barangay". It was one of the four (4) barrios of Bae, Laguna and was separated as a municipality in 1647 and was renamed "San Pablo de los Montes" in honor of St. Paul the First Hermit. It was placed under the cabecera of Pagsanjan, with Bartolome Maghayain as first gobernadorcillo in 1648. Father Juan de Nicolas launched a long-range coconut tree planting, that the economic prosperity of San Pablo de Montes would depend largely on coconut that the citizens would be affluent enough to pay their taxes promptly and contribute more to church fund in 1696. In 1756, Governor Arandia placed San Pablo under the jurisdiction of Batangas and was returned under the jurisdiction of Laguna in 1883.



Centuries of Spanish colonization of the Philippine Islands had left its indelible imprint on the social, economic, and political life of the country. In San Pablo de los Montes, the gridiron plan for its central village or cabecera had been replicated from communities that were founded under the Spanish empire which conspicuously featured a central plaza. From 1648 to 1696, 249 gobernadorcillos and 94 parish priests had been installed in San Pablo de los Montes.

Over the years there was genial and friendly relationship between the natives and the religious who wielded the civil authority. Until the flames of revolution against Spain that was ignited by the execution of Dr. Jose P. Rizal, who was well known to the local citizenry, had crept into San Pablo de los Montes and produced revolutionists and local heroes.

In the face of impending defeat the Spanish troops left the town and the Philippine Flag was raised in the town plaza on June 6, 1898. The revolutionist led by General Juan Cailles immediately appointed prominent citizens as councilmen and town officials to effect local administration.

1.1.4 American Occupation

The subsequent defeat of the Spanish colonizers set the stage for another war the Filipino - American war. This led to the inevitable American occupation and establishment of the Philippine Commonwealth. Under the American military government in 1899, a municipal government was established with Inocente Martinez as Municipal President. The first American cavalry arrived in San Pablo on January 14, 1900 after taking Santa Cruz and Calamba earlier and routed the local freedom fighters. America's pacification drive and grant of amnesty to freedom-fighters did much to quell animosity and distrust among the local citizenry, on January 24, 1901, U.S military authorities appointed Don Pedro de Gorostiza as municipal president of San Pablo.

The Civil Government of the Philippines was inaugurated on July 01, 1902. It was ushered in locally by the elite of San Pablo which was composed of the influential, wealthy, and closely related families who easily dominated the fledgling electoral process.

Don Marcos Paulino was the first elective municipal president of San Pablo (1902-1904). The other municipal presidents who succeeded him were as follows:

- 1905 – 1907– Don Melecio Fule
- 1908 – 1910– Don Cornelio Alcantara
- 1911 – 1913– Don Simeon Gesmundo
- 1914 – 1916– Don Marcial Alimario
- 1919 – 1918– Don Feliciano Exconde
- 1919 – 1921– Don Potenciano Cabrera



- 1922 – 1924– Don Isidoro Alvaran
- 1925 – 1927– Don Zacarias Sahagun
- 1928 – 1931– Don Crispin Calabia
- 1931 – 1934– Don Gaudencio Aquino
- 1935 – 1938– Don Inocencio Barleta
- 1938 – 1940– Don Cristeto Brion

On May 7, 1940, San Pablo became a chartered city by virtue of Republic Act No. 520 through the effort of Assemblyman Tomas Dizon and as approved by President Manuel Luis Quezon. It was inaugurated on March 30, 1940 with Dr. Potenciano Malvar as first appointive City Mayor.

1.1.5 Japanese Occupation

In the morning of December 25, 1941, Japanese fighter planes dropped bombs in the City and strafed people and edifices. They left behind a harrowing scene of ruins and death. On December 30, 1941, General Susuma Marioka arrived and took over San Pablo in the name of the invading Japanese Imperial Forces.

World War II brought extensive damage to the City in terms of lives lost and properties destroyed. It brought out the worst and the best in men – from the dreaded notoriety of the local *kempetai* and *makapili* collaborators to the admirable heroism of the local guerillas and freedom fighters, one of which was Cipriano B. Colago, who became the first elected City Mayor of San Pablo. Japanese occupation ended when the Americans troops marched into the City on April 03, 1945.

Don Marcos Paulino was the first elective municipal president of San Pablo (1902-1904). The other municipal presidents who succeeded him were as follows:

Prewar Mayor	
Potenciano Malvar	January 1941
Japanese Occupation	
Manuel Quisumbing	1941-1942
Postwar Mayors	
Alfonso Farcon	1945-1946
Tomas Dizon	1946
Fernando Bautista	1947-1949
Marciano Brion	1950-1951
Artemio Fule	1951-1953
Tomas Dizon	1953-1955
Elective Mayors	
Cipriano Colago	1956-1959



Lauro Dizon	1960-1963
Zacarias Ticzon	1964-1967
Cesar Dizon	1968-1972 (September) 1972-1986 (February) 1986-OIC Mayor Zacarias A. Ticzon 1988-OIC Mayor Ruben Adarlo 1988-OIC Mayor Jose de Roma
Zacarias Ticson	1988-1992
Vicente Amante	1992-2001
Florante Aquino	2001-2004
Vicente Amante	2004-2013
Loreto S. Amante	2013-present

On September 21, 1972, President Ferdinand E. Marcos issued Proclamation No. 1081 which placed the entire Philippine archipelago under Martial Law. Among others, it paved the way for the issuance of Presidential Decree No. 86 dated December 31, 1972; Presidential Decree No. 86-A dated January 5, 1973; and Presidential Decree No. 86-B dated January 7, 1973. All these decrees were contributory to the creation of Citizen Assemblies or Barangays. Under these decrees 80 barangays were created in the City.

On February 25, 1986, the so-called EDSA Revolution or People Power Revolution broke out. It was followed by the withdrawal of support by Defense Minister Enrile and Philippine Constabulary Chief Fidel V. Ramos to the martial law government. President Marcos fled the country and went to Hawaii where he died on September 28, 1989.

A Revolutionary Government was established by President Corazon C. Aquino who was catapulted to power by the EDSA revolution. Local government executives all over the country were either booted out of office or retained. In San Pablo City, Mayor Cesar P. Dizon was replaced by long-time political rival, former City Mayor Zacarias A. Ticzon as OIC Mayor. Upon filing of his certificate of candidacy, Ticzon was replaced by OIC Jose de Roma who was later on replaced by OIC Ruben Adarlo of the MILG. Upon ratification of the Philippine Constitution of 1986, normalcy in governance returned and so did the electoral process.

In 1992, Vicente B. Amante was elected City Mayor of San Pablo and served for three consecutive terms until 2001. He was succeeded by Florante Aquino who served as City Mayor for only one term. Mayor Vicente B. Amante won on the following 2004 election and again completed three consecutive terms thereby making him the only local political leader who has performed such feat. In 2013, he was succeeded by his son, Loreto S. Amante, as City Mayor.



2. PHYSICAL/NATURAL CHARACTERISTICS

2.1 Geographical, Administrative/Political Profile

2.1.1 Geographical Location and Administrative Boundaries

San Pablo City is located at the southern tip of the province of Laguna in the island of Luzon with geographic coordinates: 14° 4' north latitude and 121° 19' east longitude. It is bounded by six municipalities and one (1) city namely, Calauan, Laguna in the northwest; Nagcarlan in the northeast; Alaminos, Laguna in the west; Rizal, Laguna in the east; Lipa City, Batangas in the southwestern tip; and the municipalities of Tiaong and Dolores Quezon in the south (Map 1).

2.1.1 Political Subdivision (Urban – Rural Barangays)

2.1.1.1 Land Area

Based on the digitized cadastral map, adjusted to DENR's certification, the City of San Pablo has a land area of 19,756 hectares (Map 2) (Table 1 and 2).

Thirty-two barangays make up the main urban area and expanding outwards to adjacent barangays such as Del Remedio, San Lucas I, San Lucas 2, San Roque, San Francisco, Concepcion and portions of San Jose, San Gregorio, San Gabriel, San Rafael and Soledad. This is based on a semi-concentric pattern within the three kilometer radius urban areas set forth in the City Framework Plan of 1975 (CLUP, 2000). The urban area comprises 17.80% or 3,517.47 hectares of the City's total land area (Table 1), (Map 3). Rural areas are composed of 36 barangays and large portion of San Jose, San Gregorio, San Gabriel, San Rafael and Soledad. Though representing less than half of the City's total number of barangays, the rural barangays encompass 82.20% of the entirety, equivalent to 16,238.54 hectares (Table 2), (Map 4).

**Table 1. Land Area by Urban Barangay, San Pablo City 2015**

Barangay	Land area (ha)	Percentage (%)	Barangay	Land area (ha)	Percentage (%)
I-A	13.50	0.07	VI-A	11.92	0.06
I-B	27.58	0.14	VI-B	6.31	0.03
I-C	49.30	0.25	VI-C	10.95	0.06
II-A	4.41	0.02	VI-D	18.50	0.09
II-B	8.39	0.04	VI-E	15.44	0.08
II-C	7.58	0.04	VII-A	8.10	0.04
II-D	3.99	0.02	VII-B	4.77	0.02
II-E	11.36	0.06	VII-C	2.43	0.01
II-F	15.57	0.08	VII-D	1.23	0.01
III-A	5.97	0.03	VII-E	3.09	0.02
III-B	8.87	0.04	Concepcion	369.30	1.87
III-C	10.52	0.05	Del Remedio	284.79	1.44
III-D	7.71	0.04	San Francisco	286.59	1.45
III-E	13.87	0.07	San Gabriel	285.98	1.48
III-F	2.83	0.01	San Gregorio	248.58	1.26
IV-A	40.01	0.20	San Jose	867.25	4.39
IV-B	4.74	0.02	San Lucas I	61.39	0.31
IV-C	11.01	0.06	San Lucas II	120.75	0.61
V-A	29.94	0.15	San Rafael	225.96	1.14
V-B	4.92	0.03	San Roque	66.42	0.34
V-C	2.67	0.01	Santo Cristo	12.96	0.07
V-D	2.52	0.01	Soledad	317.94	1.61
			Sub-total	3,517.47	17.80

Source: Cadastral Map, DENR

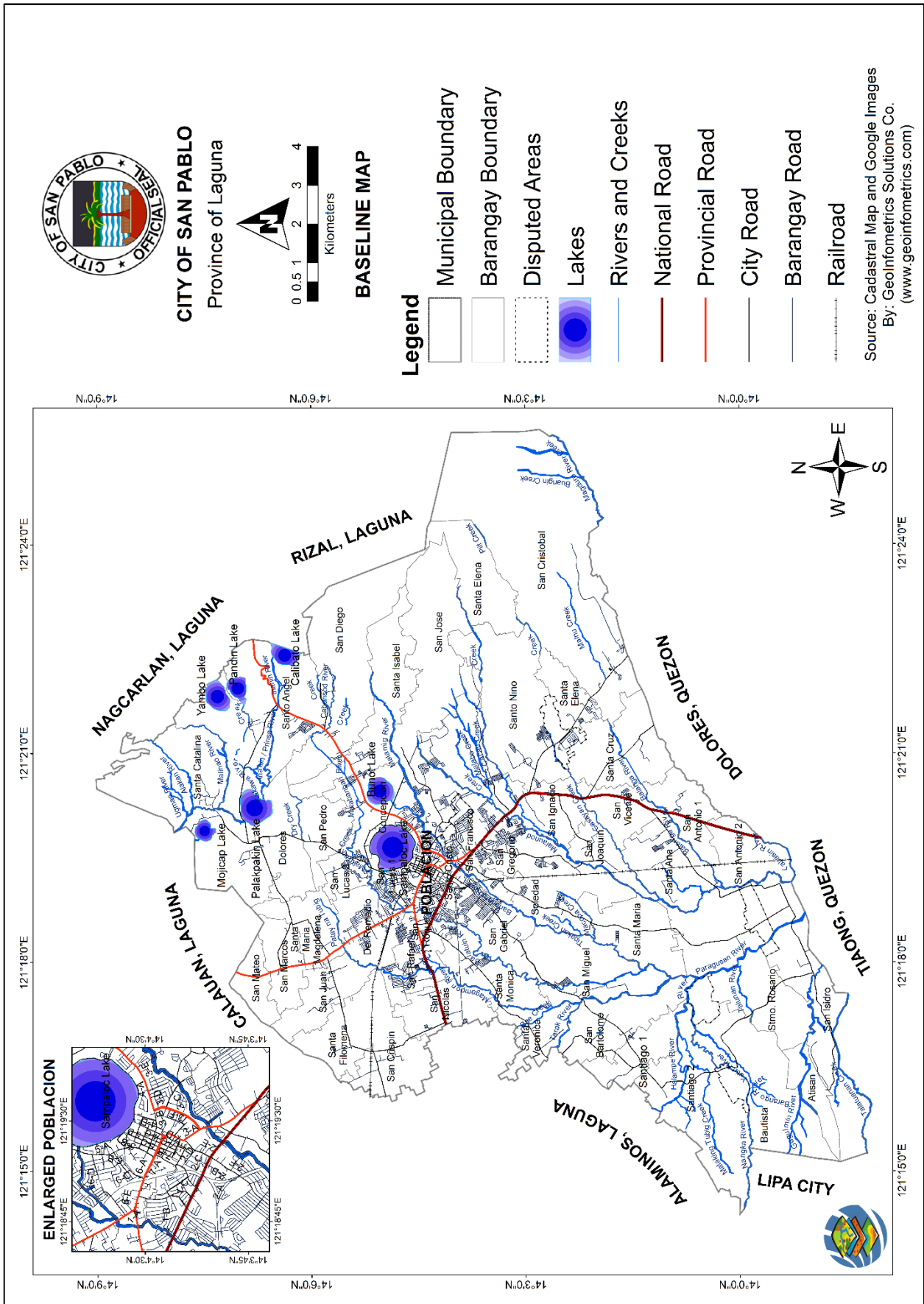
Table 2. Land Area by Rural Barangay, San Pablo City 2015

Barangay	Land area (ha)	Percentage (%)	Barangay	Land area (ha)	Percentage (%)
Atisan	164.63	0.83	San Pedro	203.03	1.03
Bautista	691.61	3.50	San Vicente	220.19	1.11
Dolores	337.77	1.71	Santiago I	233.96	1.18
San Antonio I	236.30	1.20	Santiago II	703.20	3.56
San Antonio II	271.30	1.37	Sta. Ana	361.20	1.83
San Bartolome	410.98	2.08	Sta. Cruz	441.39	2.23
San Buenaventura	390.95	1.98	Sta. Elena	577.42	2.92
San Crispin	360.86	1.83	Sta. Filomena	277.24	1.40
San Cristobal	1939.58	9.82	Sta. Isabel	501.67	2.54
San Diego	796.98	4.03	Sta. Maria	347.82	1.76
San Ignacio	643.75	3.26	Sta. Monica	279.04	1.41
San Isidro	691.84	3.50	Sta. Veronica	214.92	1.09
San Joaquin	172.58	0.87	Sta. Catalina	590.56	2.99
San Juan	259.64	1.31	Sta. Maria Magdalena	246.99	1.25
San Lorenzo	421.47	2.13	Stmo. Rosario	792.53	4.01
San Marcos	215.12	1.09	Sto. Angel	599.07	3.03
San Mateo	148.62	0.75	Sto. Niño	759.71	3.85
San Miguel	477.36	2.42	Sub-total	16,238.54	82.20
San Nicolas	257.29	1.30	Total	19,756.04	100.00

Source: Cadastral Map, DENR

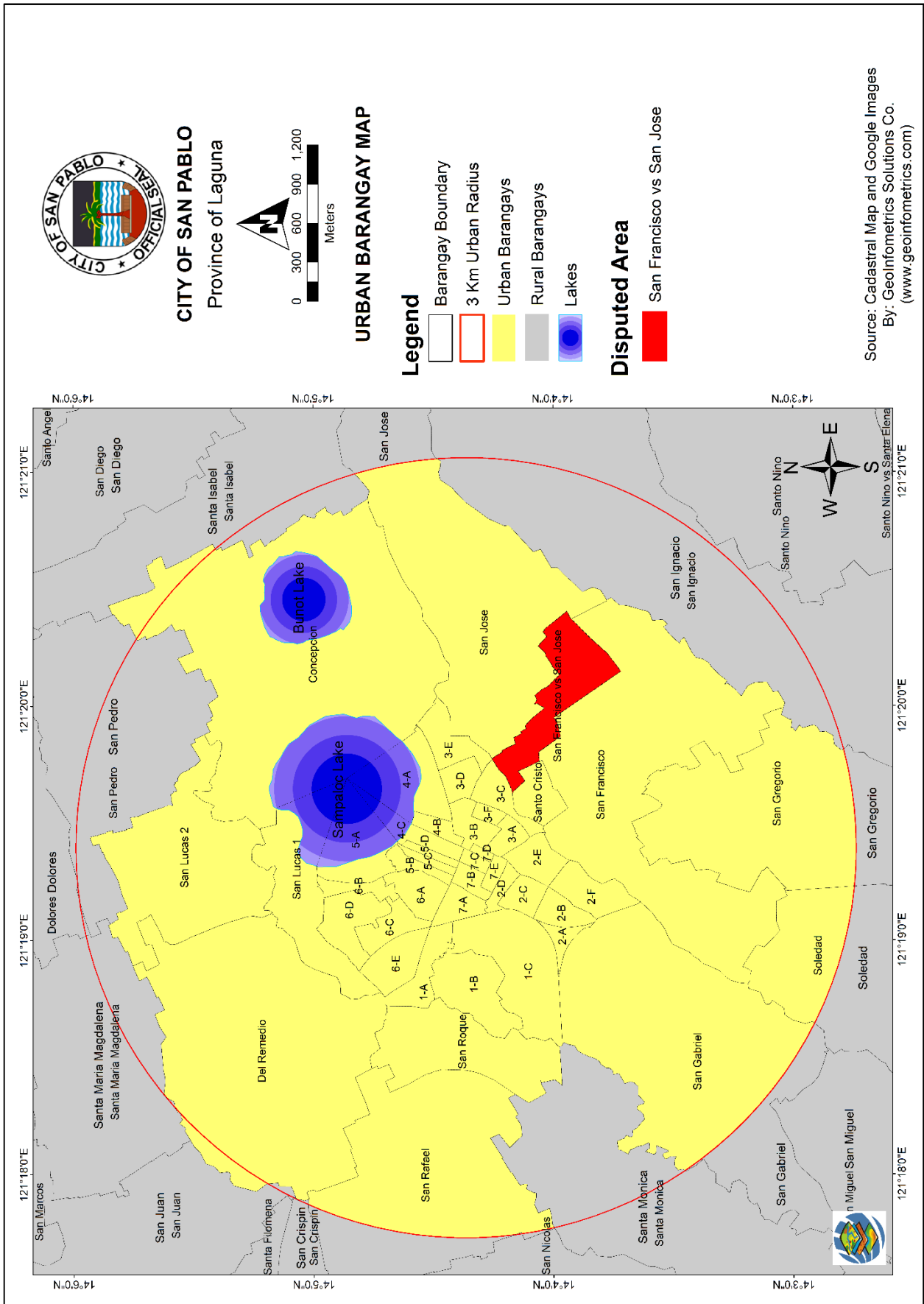


Map 1. Location Map of San Pablo City

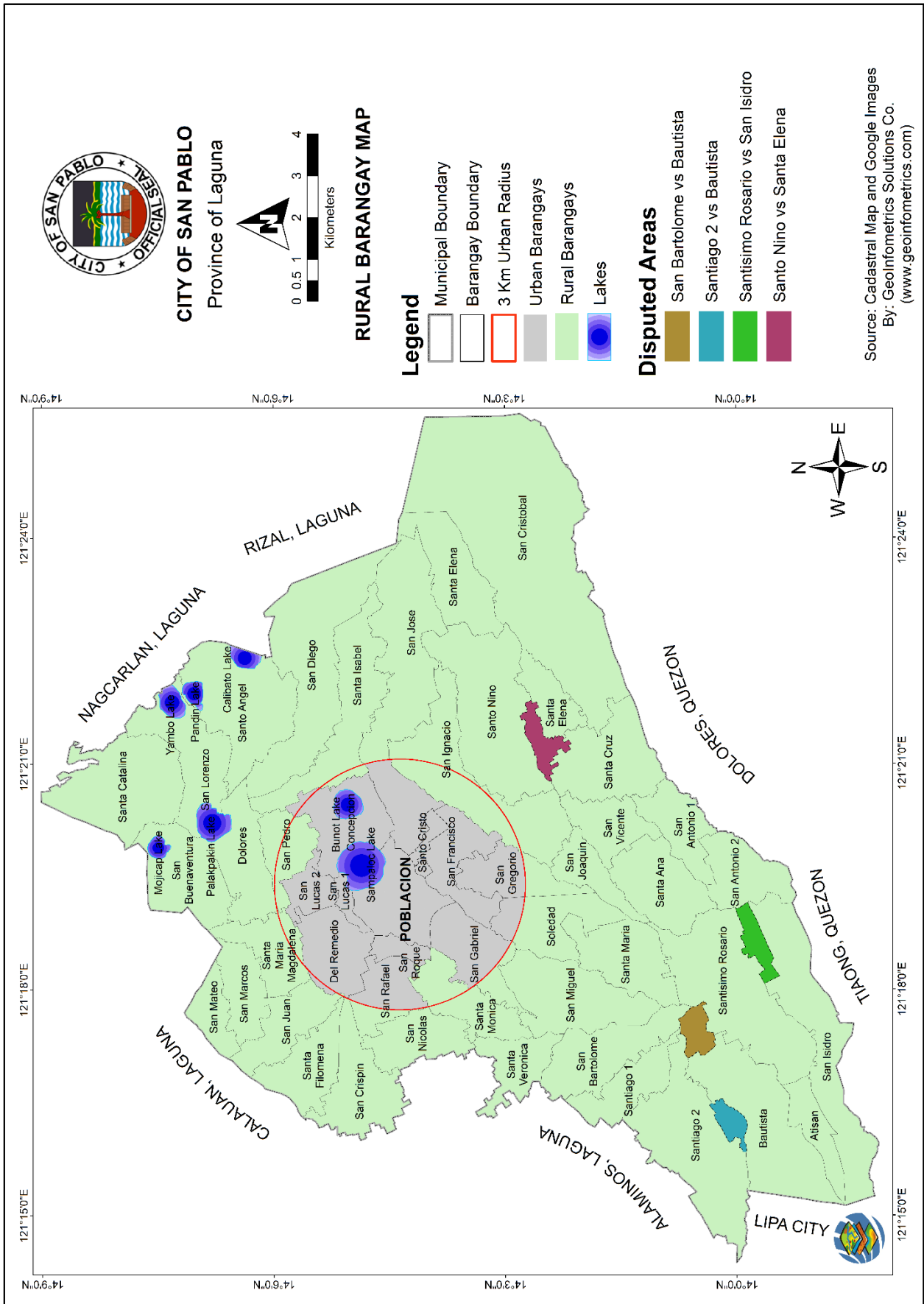


Source: Cadastral Map and Google Images
 By: Geoinformatics Solutions Co.
 (www.geoinformatics.com)

Map 2. Map of San Pablo City



Map 3. Urban Barangay Map of San Pablo City



Map 4. Rural Barangay Map of San Pablo City



Boundary disputes between adjacent municipalities are non-existent. However, boundary disagreements exist within the City which consists of nine (9) barangays. In total, 334.51 hectares are in disagreement (Table 3).

Table 3. Boundary Disputes within San Pablo City

Barangays	Area (ha)	Land Area Under Dispute to Involved Barangays (ha)
Bautista vs San Bartolome	73.01	36.5063
San Francisco vs San Jose	41.58	20.79232
Santa Elena vs Santo Niño	85.01	42.5056
Santisimo Rosario vs San Isidro	79.67	39.8329
Bautista vs Santiago 2	55.24	27.6180
Total	334.51	

Source: Cadastral Map, DENR

2.1.2 Location and significant role in relation to the province, region and country

In 2008, San Pablo City was identified as one of the primary growth centers which perform significant functions for surrounding smaller centers. It is one of the largest centers performing such functions as educational service center, industrial service center, and tourist service center. In addition, the City is accessible from seven points by road to neighboring municipalities which consider the City as their center of trade, commerce, and major services. These are Calauan, Alaminos, Nagcarlan, and Rizal in Laguna; Dolores and Tiaong in Quezon, and Lipa City in Batangas. All the adjoining municipalities and cities have entry points making San Pablo accessible from almost all directions. San Pablo City is at a geographical advantage. The City is at border of the provinces of Laguna and Quezon and is generally considered the gateway to the rest of Southern Tagalog Region, Bicol, Visayas, and Mindanao. This geographical advantage of the City benefits well its clientele and stakeholders. The geographical location of the City in relation to adjacent municipalities and city is summarized in Table 4.

**Table 4. Distance of San Pablo City to Nearby Municipalities**

Municipality/City / Landmark	Straight Distance (km)	Road Distance (km)	Direction from City Proper
Alaminos, Laguna	8.13	9.70	West
Calauan, Laguna	9.52	11.20	North
Dolores, Quezon	10.56	11.90	Southeast
Lipa City, Batangas	21.85	27.10	Southwest
Nagcarlan, Laguna	12.65	20.50	Northeast
Rizal, Laguna	9.15	14.90	Northeast
Tiaong, Quezon	12.30	14.50	South
Mt San Cristobal	11.11	15.20	East

Source: Provincial Development and Physical Framework Plan 2010-2020

2.2 Natural and Physical Characteristics

2.2.1 Topography

San Pablo City is situated on a plateau 485 feet above sea level on the lower slopes of Mt. Malarayat (Map 5).

Topography is generally plain to gently sloping with small portion of rolling to very steep hills on the northern, eastern, and southern edges. It is bounded by the mountain ranges of Kalusungan and Calauan Hills in the north, Mabilog in the northeast; San Cristobal and Banahaw Mountains in the east; and Susong Dalaga, Napayong, and Masalukot Hills in the south to southwest.

2.2.1.1 Elevation

The City is on a plateau with an elevation of 485 feet above sea level. The terrain of the City is generally sloping from east to west. Ground surface elevation within the City ranges from approximately 50 meters to over 600 meters (Map 6).

2.2.1.2 Slope

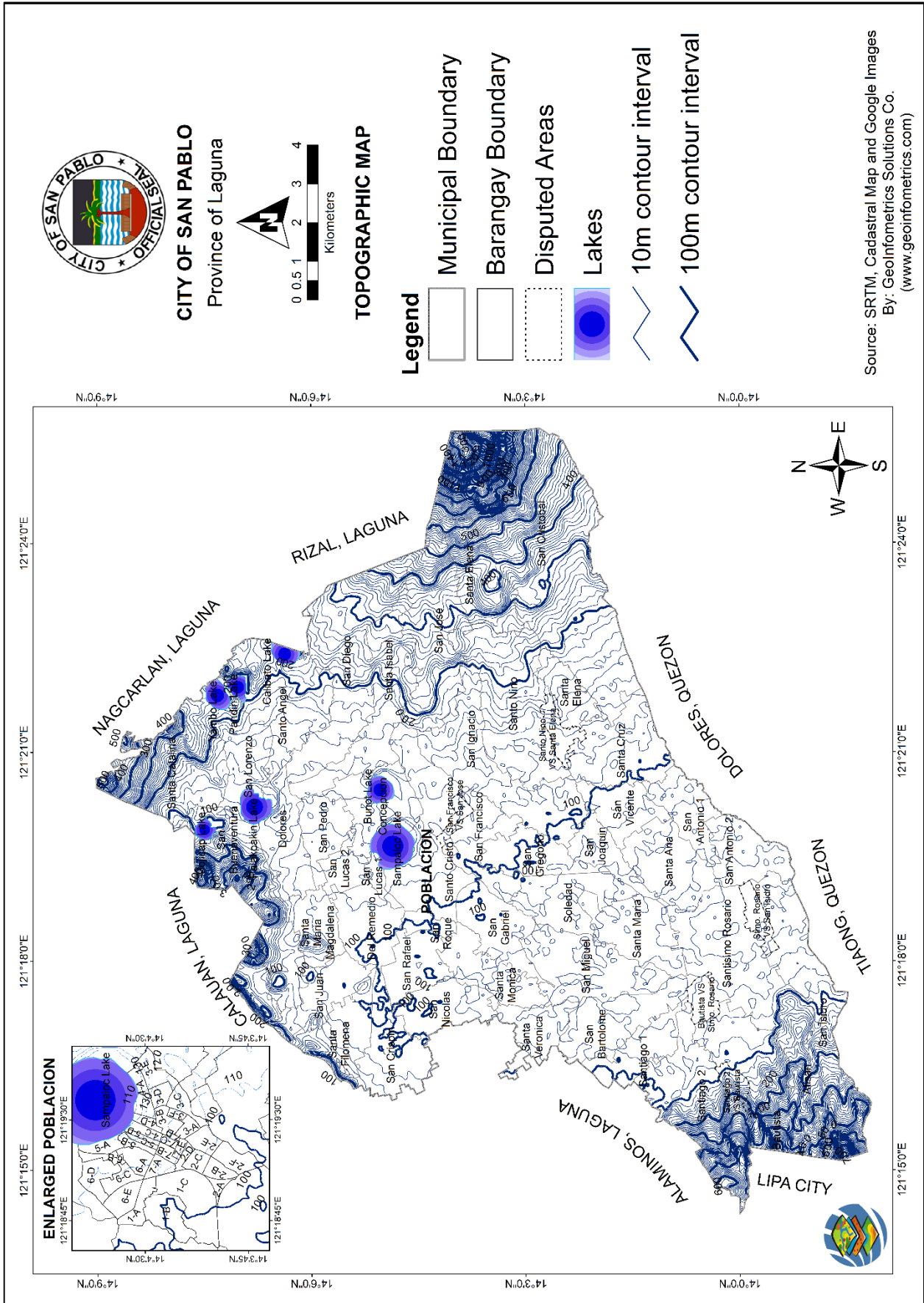
More than half of the total land area of San Pablo City can be generally described as gently sloping to undulating (Table 5). This can easily be observed in rural areas and even in the central part of the City wherein transportation is essential due to the gently sloping terrain of the City. Moreover, more than a quarter of the City has an undulating to rolling terrain (8-18% slope) which is more observable in far-flung barangays. Less than 2% of the City is level or plain which is observable in parts of the Poblacion, San Pedro, and Del Remedio. The slope of the City is visualized in Map 7.



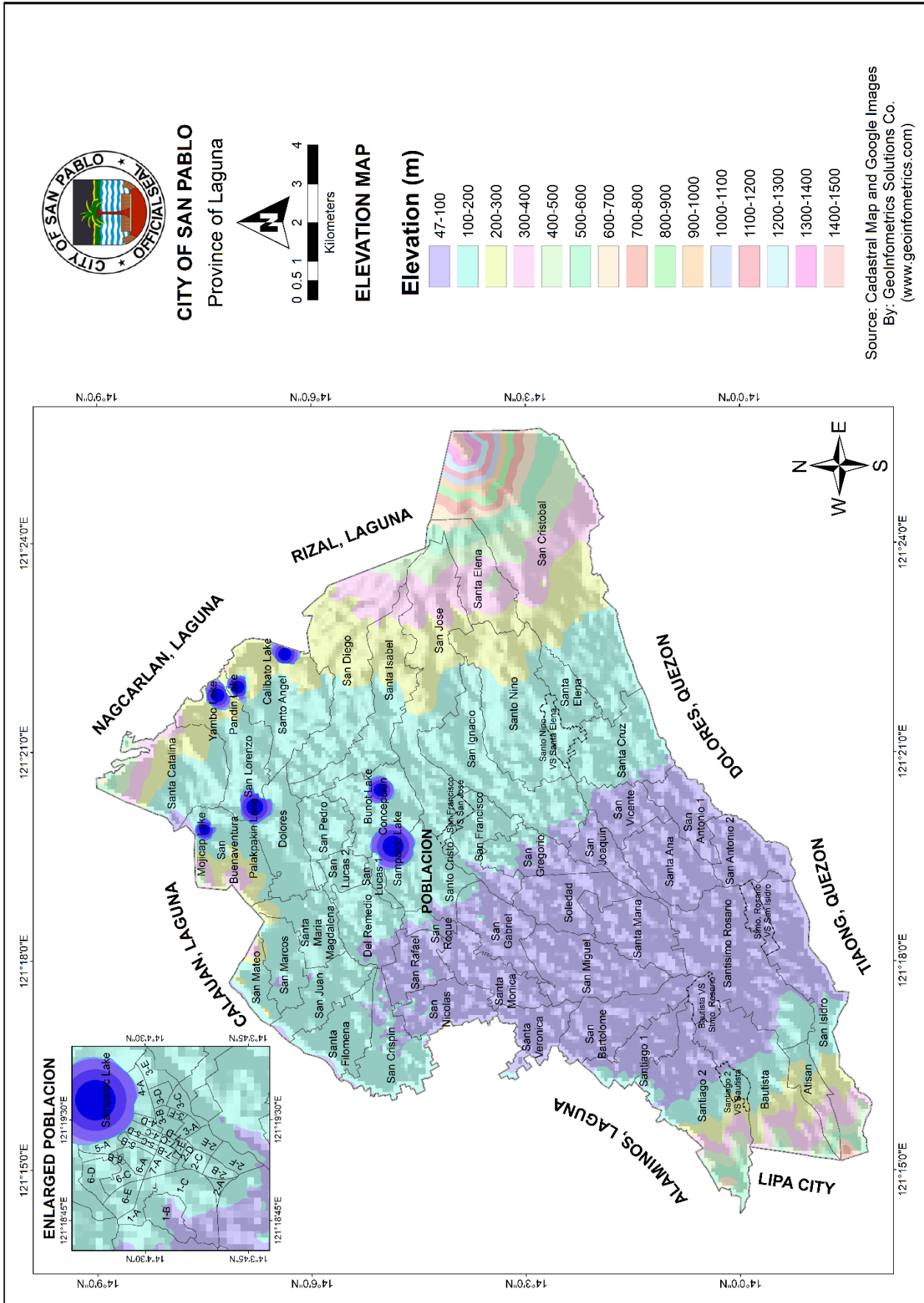
Table 5. Slope Description, San Pablo City 2013

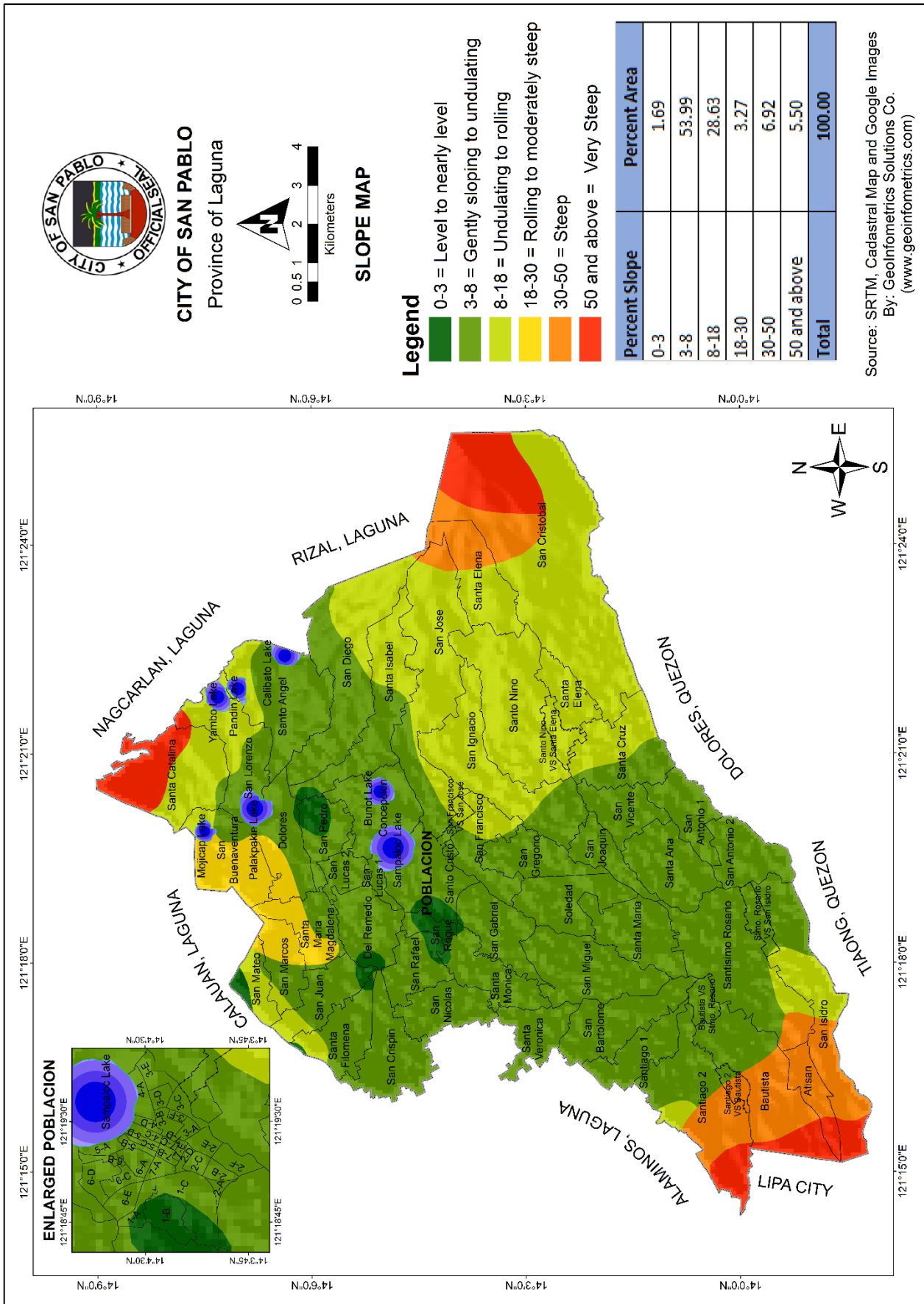
Slope Classification	Description	Area (in hectares)	Percentage (%)
0-3%	Level to very gentle sloping	334.40	1.69
3-8%	Gently Sloping to undulating	10,666.61	53.99
8-18%	Undulating to rolling	5,656.19	28.63
18-30%	Rolling to hilly	645.04	3.27
30-50%	Steep Hills	1,366.69	6.92
Above 50%	Very Steep Hills	1,087.07	5.50
Total		19,756.04	100.00

Sources: BSWM, GIS computed area



Source: SRTM, Cadastral Map and Google Images
By: Geoinformatics Solutions Co. (www.geoinformatics.com)





Map 7. Slope Map of San Pablo City



2.2.2 Soil

2.2.2.1 Soil Types and Classes of Land Capabilities

There are seven (7) soil types in San Pablo City as portrayed in Table 6: Calumpang Clay, Mountain Soil, Macolod Clay Loam, Macolod Clay Loam (Steep Phase), Ibaan Loam, Lipa Loam and Lipa Loam (Deep Phase) (Map 8).

Table 6. Soil Types in San Pablo City

Soil Types	Code	Area in Hectares	Percentage
Calumpang Clay		266.71	1.35
Mountain Soil (Undifferentiated)	45	4,188.28	21.20
Macolod Clay Loam (Steep Phase)	144	1,056.95	5.35
Macolod Clay Loam	143	472.17	2.39
Lipa Loam (Deep Phase)	145	3.95	0.02
Lipa Loam	62	12,922.43	65.41
Ibaan Loam		541.31	2.74
Lakes	N/A	304.24	1.54
TOTAL		19,756.04	100.00

Source: BSWM, GIS Computed area

Covering the whole land area of the City, a vast majority of land is characterized by Lipa Loam Soil (65.41%). Lipa Loam soil type occupies the central and biggest portion of the City (12,922.43 hectares). It is characterized by deep level, well-drainage, acidic, and friable soil. The supply of nutrients, such as phosphorous, potassium, and organic matter, is moderately high. Permeability is also moderate.

The next most common soil type is Mountain Soil (undifferentiated) type, covering a total area of 4,188.28 hectares, or 21.20% of the total land area of the City. It is characterized with soil found in San Cristobal and nearby hilly and mountainous region. It characterizes the soils found in most parts of Brgys. San Diego, Sta. Isabel, San Jose, Sta. Elena, San Cristobal, Sto. Niño, Santiago 2, Bautista and Atisan.

Macolod Clay Loam (Steep Phase) covers a total area of 1,056.95 hectares, or 5.35% of the total land area of the City. It is a soil type that can be found in different parts of Laguna such as in Mt. Calauan and Mt. Makiling. Lanzones, coconuts and sweet potatoes are some of the principal crops that are popularly cultivated in this soil type. This soil type can be found in parts of Brgy. Sta. Catalina, San Lorenzo especially around Lakes Yambo and Pandin, San Mateo and around Mohicap Lake.



Macolod Clay Loam can be found in about 472.17 hectares, or 2.39% of the total land area of the City. It is located at the higher portions of Mt. Makiling, characterized by commercial and non-commercial forest. This soil type follows Macolod Clay Loam, in parts of San Mateo, San Marcos, San Crispin, Sta. Filomena and San Juan.

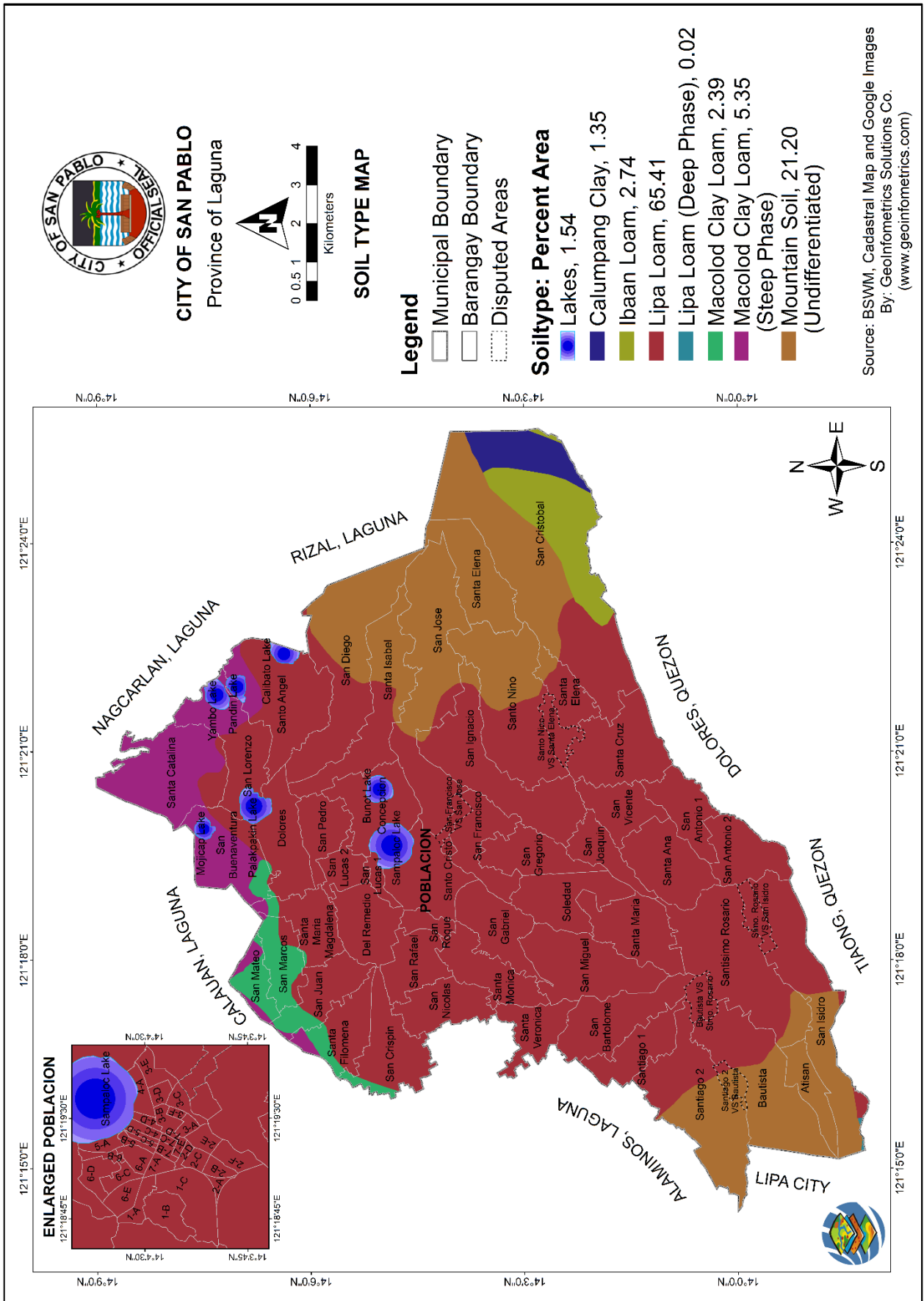
Calumpang Clay can be found in the higher elevations of San Cristobal, covering an area of 268.64 hectares or 1.35% of the City's total land area. Calumpang clay has good external drainage but its fine clayish texture tends to hamper favorable internal drainage. This type of soil is most suitable for lowland rice but is not recommended for diversified crop due to its drainage problem.

Ibaan Loam can be found in the lower slopes of San Cristobal, covering an area of 541.31 hectares or 2.74% of the City's total land area. This type of soil developed from volcanic tuff found from level to mountainous relief. Similar to Calumpang Clay, Ibaan Loam also has poor drainage.

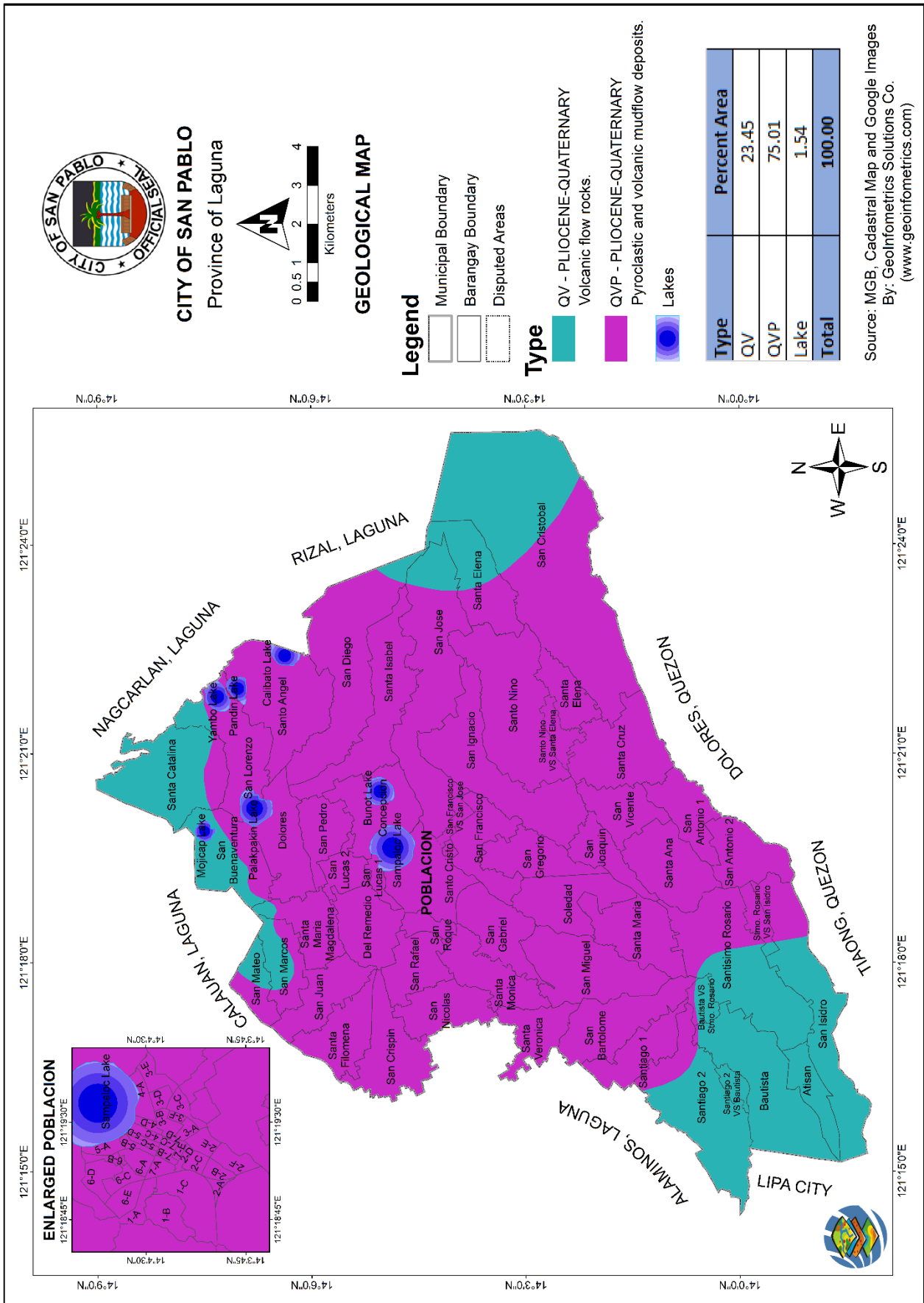
Typical of a plateau, the distribution of the different soil types in the City as shown in Map 9 depict two distinct geologic characteristics - both which are volcanic and pyroclastic in origin.

QV Type (Pliocene-Quaternary) or volcanic flow are found in the higher elevation barangays of Sta. Catalina, San Mateo, San Marcos, Sta. Elena, San Cristobal, Santiago 2, Bautista, Atisan, Stmo. Rosario (parts of) and San Isidro (parts of). This type comprises 23.45% of the total land area of San Pablo City.

QVP Type (Pliocene-Quaternary) or pyroclastic and volcanic mudflow deposits are soils found in the remaining lower elevation barangays, comprising of 75.01% of the City's land area.



Map 8. Soil Type Map of San Pablo City



Map 9. Geological Map of San Pablo City



2.2.2.2 Soil Suitability

The optimal use of land may be based on soil suitability ratings. Suitability provides criteria on which a certain piece of land can be judged on such as soil type, slope, soil erosion, elevation, and geohazard susceptibility. The said measures were used to determine the suitability of the lands of San Pablo City for agriculture, forestry, commerce, industry, human settlements, and institutions. Soil suitability ratings of the City are summarized in Table 7.

Map 10 depicts the locations most suitable for agriculture in San Pablo. All the soil types found in San Pablo were all found to be conducive to agriculture, ranging from fairly suitable to highly suitable. Emanating from the Poblacion and stretching towards to outskirts of the rural areas, lands highly suitable to agriculture cover 65% of the total land area. The only regions found not favourable for agriculture are the parts covered by Mount San Cristobal and those areas with elevations higher than 500 meters above sea level, characterized by high susceptibility to erosion.

In contrast to agriculture, forestry is most conducive to areas which are not suitable for farming. As a city with a fairly high elevation, the rural areas are the most ideal locations for forest growth. Map 11 suggests that the mountainous part of Barangays San Cristobal, Sta. Catalina, Atisan, Santiago and Bautista – characterized by Mountain Type and Calumpang Soil Types, having at least 18% slope and elevations at least 400 meters above sea level (masl) imply high suitability for forest growth. These areas represent 10.77% of the total land area. Settlement areas are highly discouraged due to high geohazard susceptibility in forested areas.

Commercial-industrial lands relatively have the same measure of suitability with residential-institutional lands. Similar to agricultural suitability, these built-up areas are most ideal in low-lying (47-200 masl) and flat to gently rolling areas (slopes of less than or equal to 8%) and having no apparent erosion risks. With walking and vehicular movement as a common activity in built-up areas, suitability is cut off at areas with slopes of 30% or higher. Suitable areas for Commercial & Industrial uses and Residential & Institutional use comprise about 60.20% and 64.99% of the City's land area, respectively. Suitability of built-up areas is visualized in Maps 12 (Commercial & Industrial) and Map 13 (Residential & Institutional).

**Table 7. Soil Suitability Rating for San Pablo City**

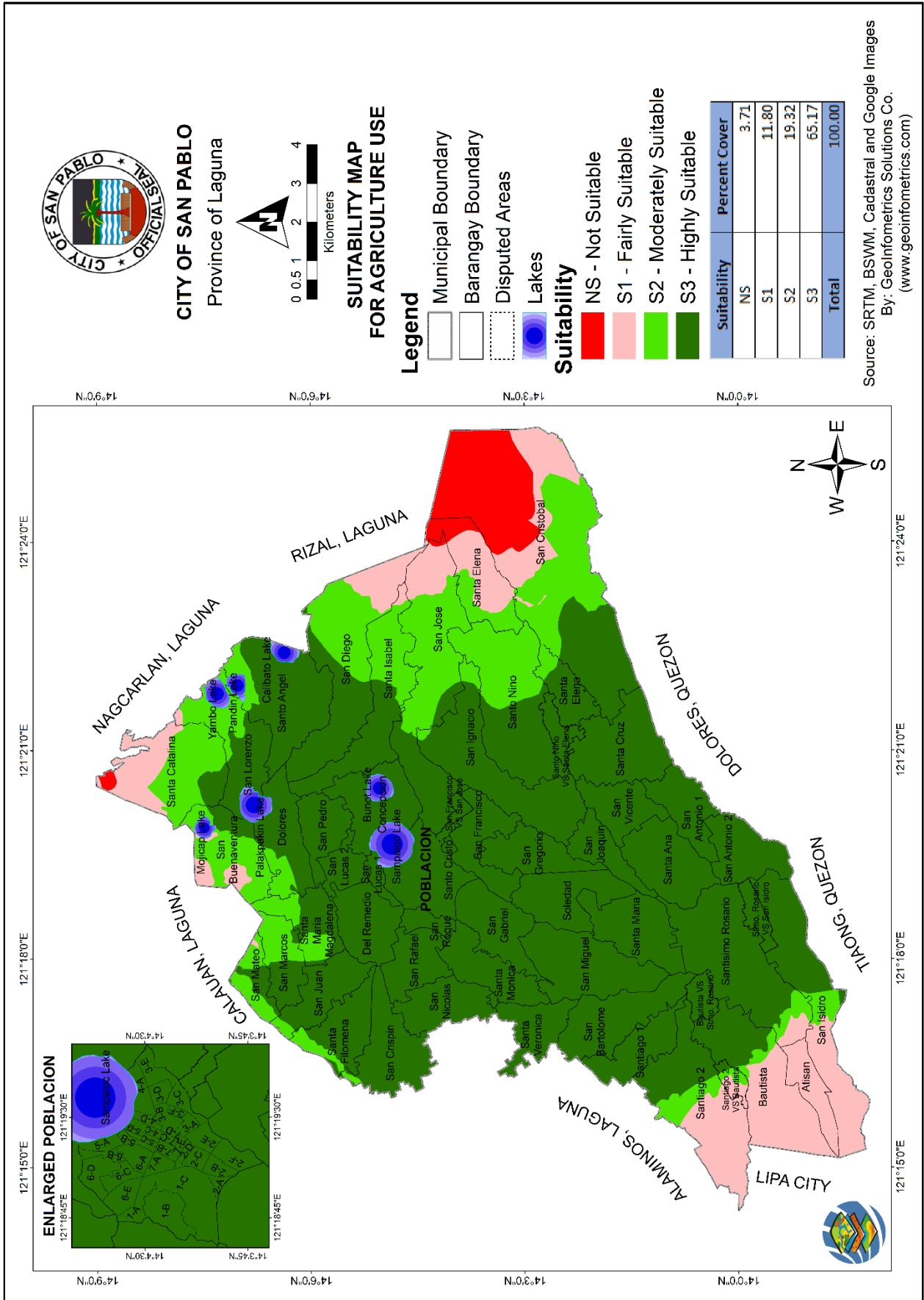
Characteristics	Agriculture	Forest	Commercial-Industrial	Residential-Institutional
Soil Type				
Calumpang Clay	S1	S3	S1	S1
Ibaan Loam	S2	S1	S2	S2
Lake	NS	NS	NS	NS
Lipa Loam	S3	S1	S3	S3
Lipa Loam (Deep Phase)	S3	S1	S3	S3
Macolod Clay Loam	S3	S1	S3	S3
Macolod Clay Loam (Steep Phase)	S2	S2	S2	S2
Mountain Soil (undifferentiated)	S1	S3	NS	NS
Slope				
0-3%	S3	NS	S3	S3
3-8%	S3	S1	S3	S3
8-18%	S2	S2	S2	S2
18-30%	S1	S3	S1	S1
30-47%	NS	S3	NS	NS
50% above	NS	S2	NS	NS
Soil Erosion				
Severe Erosion	NS	S3	NS	NS
Moderate Erosion	S2	S3	S2	S2
Slight Erosion	S3	S2	S3	S3
No Apparent Erosion	S3	NS	S3	S3
Elevation (masl)				
47-100	S3	NS	S3	S3
100-200	S3	NS	S3	S3
200-300	S3	S2	S2	S2
300-400	S1	S2	S1	S1
400-500	S1	S3	S1	S1
500-600	NS	S3	NS	S2
600-700	NS	S3	NS	S1
700-800	NS	S3	NS	S1
800-900	NS	S3	NS	S1
900-1000	NS	S3	NS	S1
1000-1100	NS	S3	NS	NS
1100-1200	NS	S3	NS	NS
1200-1300	NS	S3	NS	NS
1300-1400	NS	S3	NS	NS
1400-1500	NS	S3	NS	NS
Geohazard Susceptibility				
High Susceptibility	NS	S3	NS	NS
Moderate Susceptibility	NS	S3	NS	S1
Low Susceptibility	S2	S1	S1	S2
Not Susceptible	S3	NS	S3	S3

NS – Not Suitable

S1 – Fairly Suitable

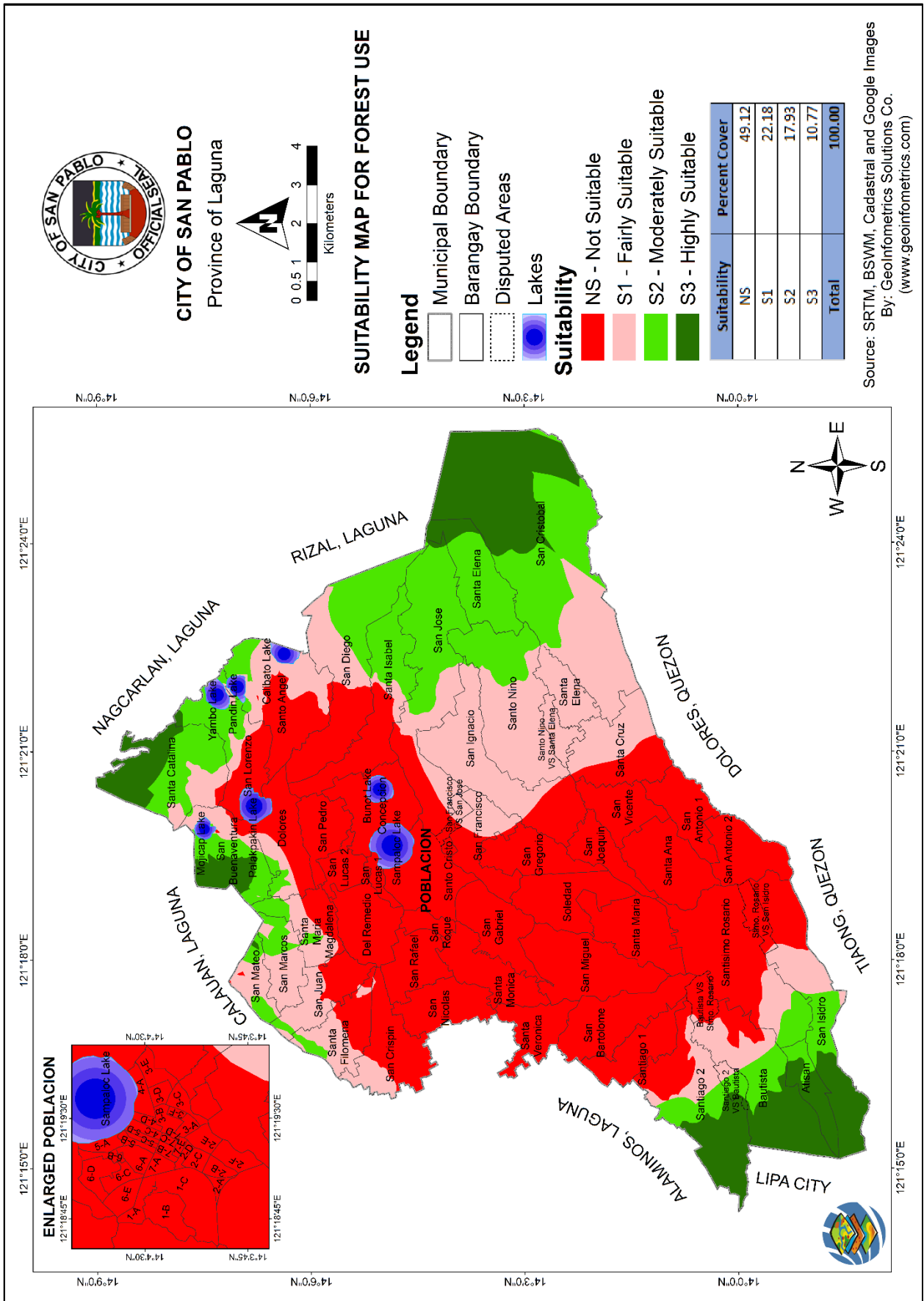
S2 – Moderately Suitable

S3 – Highly Suitable

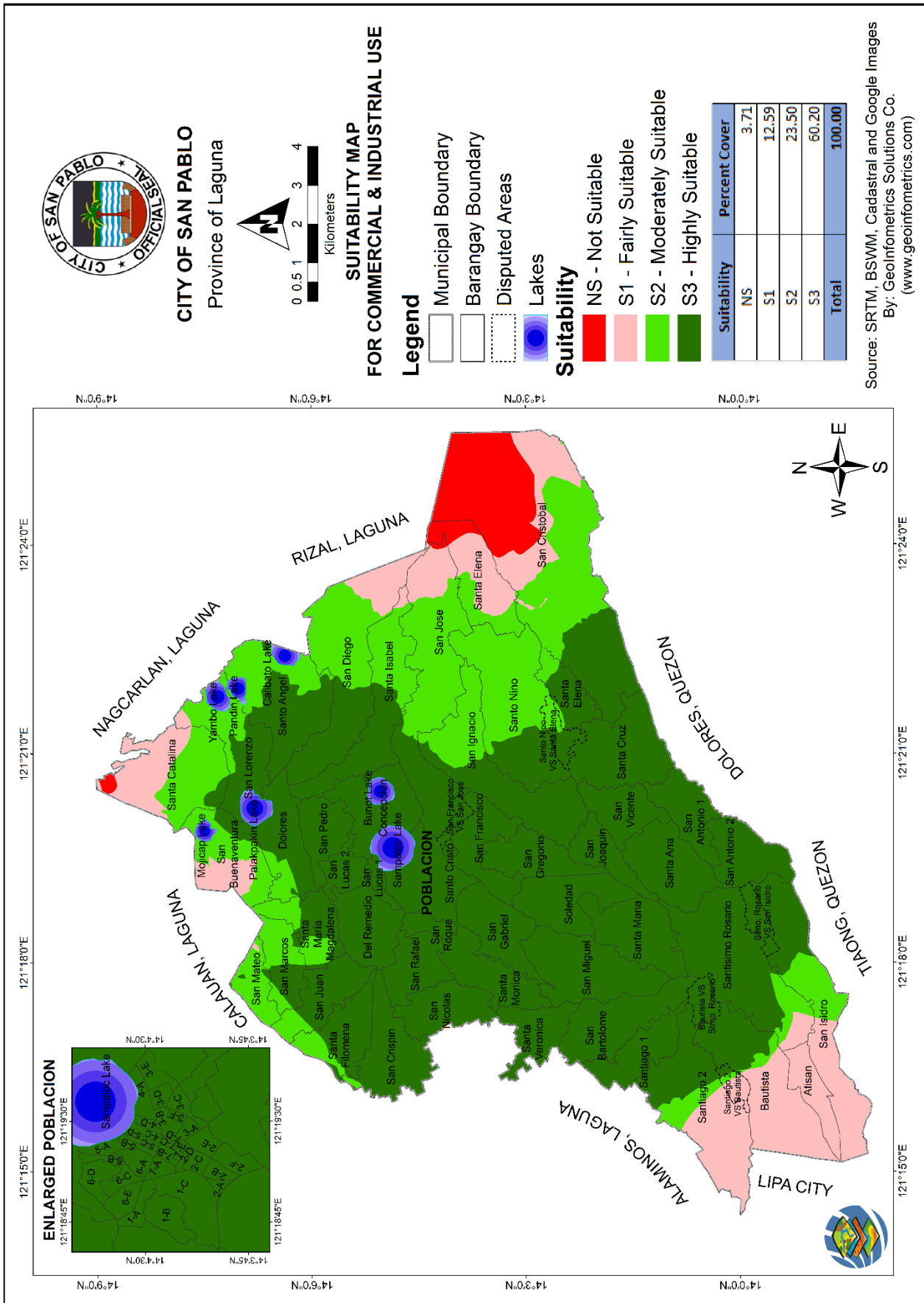


Source: SRTM, BSWM, Cadastral and Google Images
 By: Geoinformatics Solutions Co. (www.geoinformatics.com)

Map 10. Suitability Map for Agriculture Use of San Pablo City

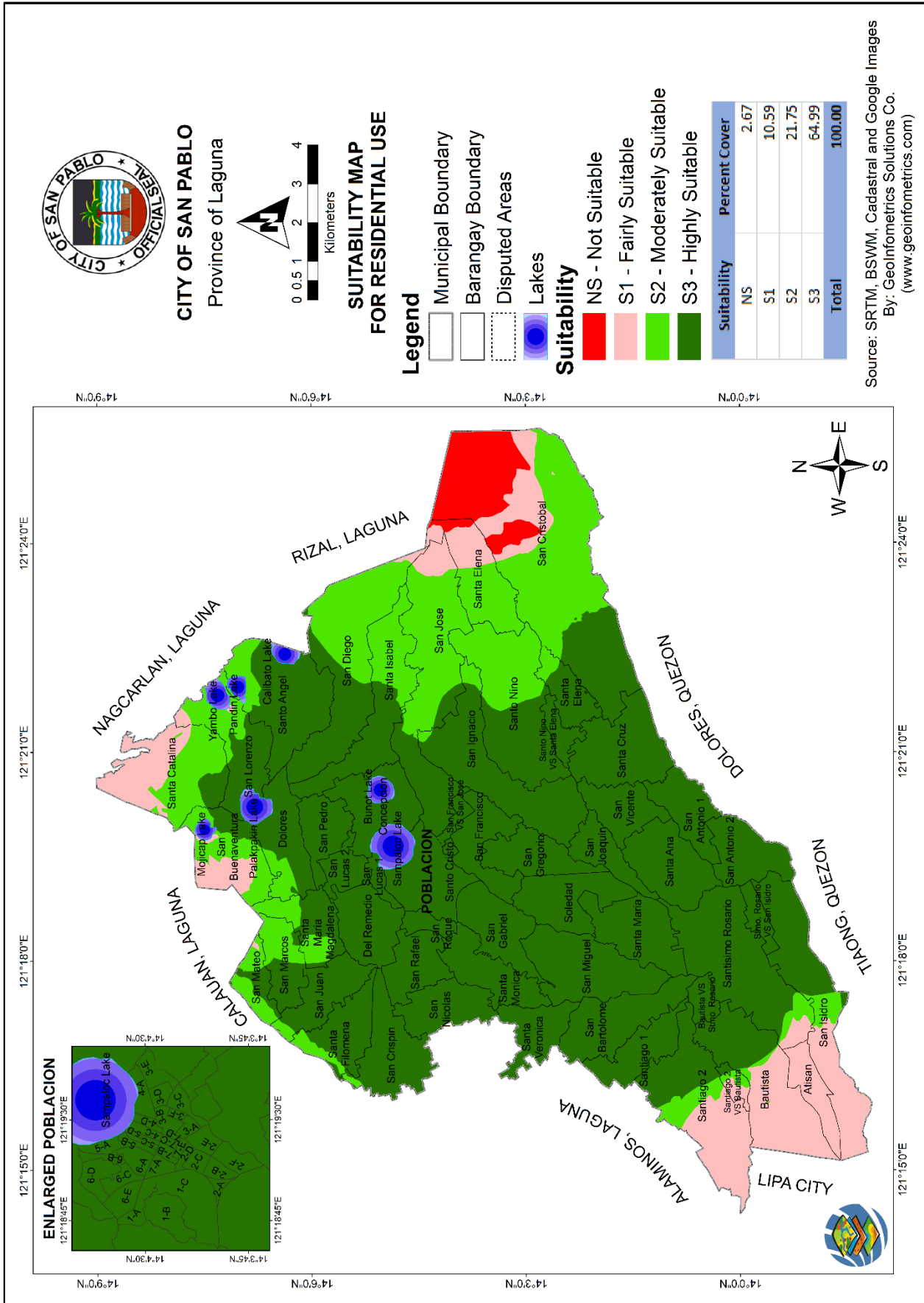


Map 11. Suitability Map for Forest Use of San Pablo City



Source: SRM, BSWM, Cadastral and Google Images
 By: Geoinformatics Solutions Co. (www.geoinformatics.com)

Map 12. Suitability Map for Commercial and Industrial Use of San Pablo City





2.2.3 Land Capability

Land Capability classes in San Pablo City include Class A to D with the following descriptions:

2.2.3.1 Capability Class A

The class consists of both soils of the Lipa and Macolod Series. This soil is level, deep-well drained, acidic, and friable. The supply nutrients, such as phosphorous, and potassium, and organic matters are moderately high. Permeability, on the other hand, is moderate. This soil is highly suitable to any perennial field crop, sugar cane, pineapple, vegetable, wetland paddy rice, annual upland field crops (corn, upland rice, soybeans, peanuts) root crops, lanzones, banana, cacao, and mango.

Green manuring is advisable to maintain the friable condition of the soils. Soils belonging to this class are Lipa Clay loam and sandy loam. Most of the drainage systems of the City traverse this area so that irrigation water is highly available.

2.2.3.2 Capability Class B

This class consists of both soils of the Lipa and Macolod Series. They are located at the alluvial terraces along the slopes of the hills and mountains in the northern border. The soils are deep, well drained, and have moderate to moderately slow permeability of textural types.

Soils are generally medium acid soils. They have moderate amounts of organic and high phosphorous content. These soils are subject to slight erosion hazard. Good soil conservation practice is required to prevent erosions such as contour plowing, strip cropping, sub-soiling, and green manuring to further improve soil condition for productivity. Water is available for irrigation with the creeks and rivers as main sources. Similarly, these soils can be utilized for crops suited to Class A lands.

2.2.3.3 Capability Class C

This class consists of soils of the Lipa, Macolod, and San Cristobal Series. These soils are located along the back slopes, foot slopes, and toe slopes of the mountain areas in the City, with moderate slopes ranging 8% to 15%. The soils are deep, well drained and have moderately slow permeability. The soil types include: Lipa clay, Macolod clay, and San Cristobal Loam. The erosion hazards require upland cropping and the use of broad-base terracing, strip



cropping, and contour plowing. Soil management practices, such as green manuring, use of lime and fertilizer and soil conditioning additives, such as compost should also be employed. These soils may also be utilized for diversified field crops such as those in Class A lands.

2.2.3.4 Capability Class D

This class consists of soils of Lipa, Macolod and San Cristobal series. These soils are found along the shoulders, back slopes and rolling toe slopes of the mountain areas in the City. Soils are subjects to severe erosions hazards. The soil types include Lipa Clay, Macolod Clay and San Cristobal Sandy Loam. These soils are best suited to pasture land, legumes and are highly recommended for forage production; liming is required to supplement nutrient losses due to erosion. A careful and complex conservation practice for safe cultivation is highly required.

2.2.4 Hydrogeologic Feature

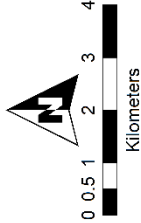
2.2.4.1 Groundwater Resources

Groundwater resources are abundant in San Pablo due to its seven springs located in different Barangays: Cabunsod Spring, Upper Malamig Spring, and Malaunod Spring in Barangay San Diego, Malabanban Spring in Barangay Sto. Angel, Lagaslasan Spring in Barangay San Jose, Balanga Spring in Barangay San Antonio I, and Baloc Spring in Barangay San Ignacio.

Aside from the seven springs, San Pablo City has nine (9) production wells that can be found in: Brgy. San Mateo, Brgy. Sta. Catalina, Brgy. San Marcos, SPC Central School, Brgy. San Pedro, Maharlika, Brgy. San Cristobal, Brgy. Concepcion and San Antonio I (Israel Village). It has a total annual rated production capacity of 14,258,676 cubic meters (Source: San Pablo City Water District). Groundwater potentials are depicted in Map 14.



CITY OF SAN PABLO
Province of Laguna



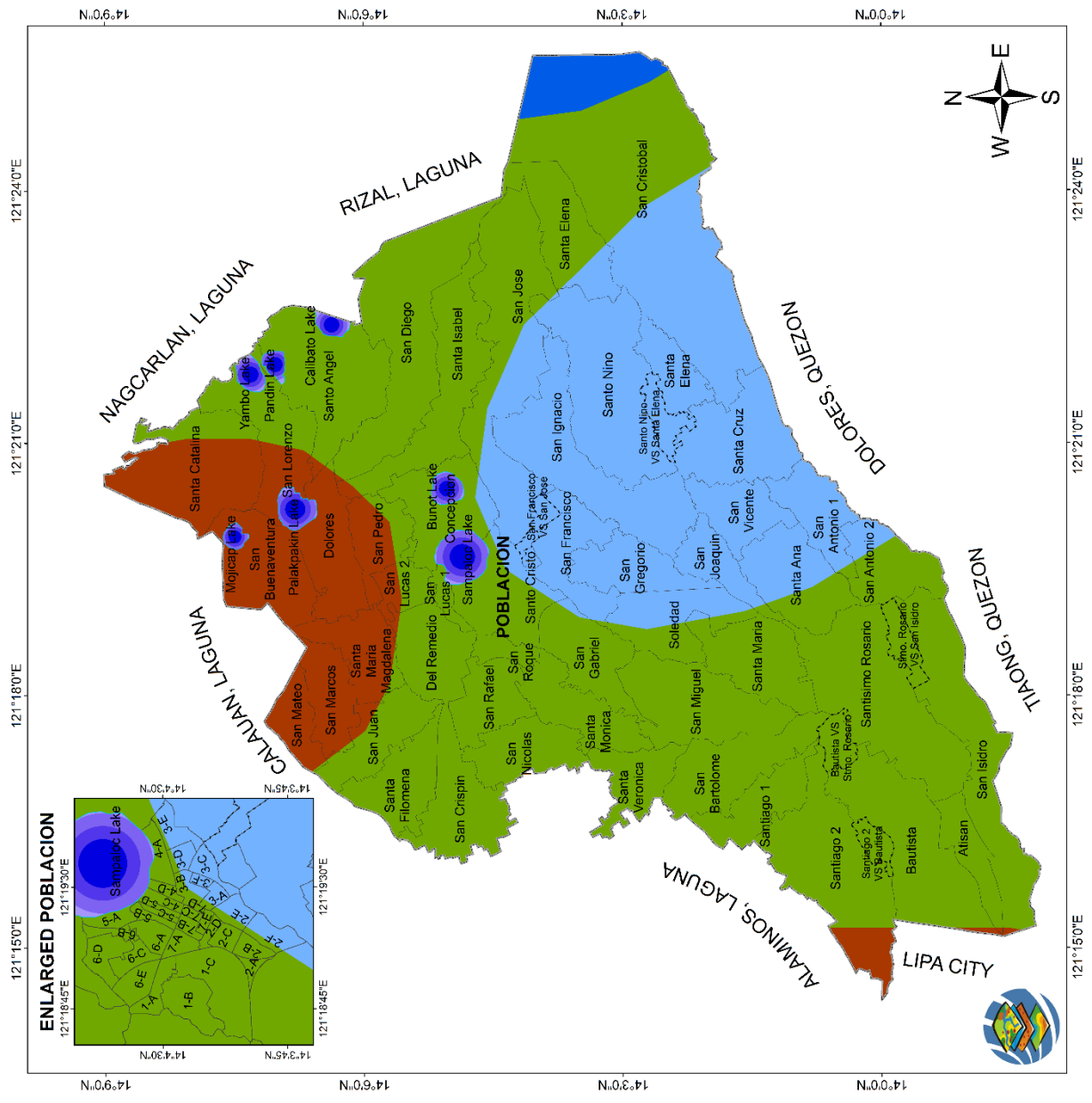
GROUNDWATER POTENTIAL MAP

Legend

- I-B** Fairly extensive and productive aquifers.
- I-C** Local and less productive aquifers.
- II-A** Fairly extensive and productive aquifers with high potential recharge.
- III-B** Rocks without any known significant groundwater obtainable through drilled wells, largely untested.

CLASS	Percent Area
I-B	25.46
I-C	61.28
II-A	1.52
III-B	11.74
Total	100.00

Source: MGB, Cadastral Map and Google Images
By: Geoinformatics Solutions Co. (www.geoinformatics.com)



Map 14. Groundwater Potential Map of San Pablo City



2.2.4.2 Fault Lines

San Pablo City withstood countless earthquakes that left hundreds of lives and properties devastated. Nevertheless, the City has no recorded fault lines.

2.2.4.3 Volcanoes

According to Philippine Institute of Volcanology and Seismology (PHIVOLCS), all seven lakes of San Pablo are volcanic craters or maars. Maars are broad, low-relief volcanic crater that is caused by a phreatomagmatic eruption, which is an explosion caused by groundwater coming into contact with hot lava or magma. A maar characteristically fills with water to form a relatively shallow crater lake. The seven freshwater lakes of the City were formed by a unique process call phreatic eruption where shallow lava from Mount San Cristobal intersected groundwater which blew out (steam heated eruption) the overlying rocks to form a circular and crater-like depression that was eventually filled-up by rainwater.

Mt. San Cristobal is 11.11 kilometers east of the City proper. However volcanic in origin, the lakes and their immediate surrounding areas are not threatened by any volcanic activity from Mt. San Cristobal as it is classified as a dormant volcano. It is one of the three-peaks comprising the Banahaw volcano complex together with Mt. Banahaw and Mount Banahaw de Lucban.

Mount Banahaw, with its main crater located 18.2 kilometers Southeast of San Pablo City Proper, is an active volcano. According to PHIVOLCS, Mt. Banahaw has had three historical eruptions: in the years 1730, 1743, and 1843. Volcanic hazards that may be brought about by explosive nature of eruption of Mt. Banahaw include debris avalanche, lahar and lake break-out. On this premise, the City Disaster Risk Reduction and Management Office of San Pablo, has approximated about nine (9) Barangays at risk of lahar and pyroclastic materials flow from possible volcanic eruption of Mt. Banahaw.

2.2.4.4 Bedrock Foundation

There is no bedrock formation in San Pablo City because no coastline is present in the City.



2.2.5 Water Resources

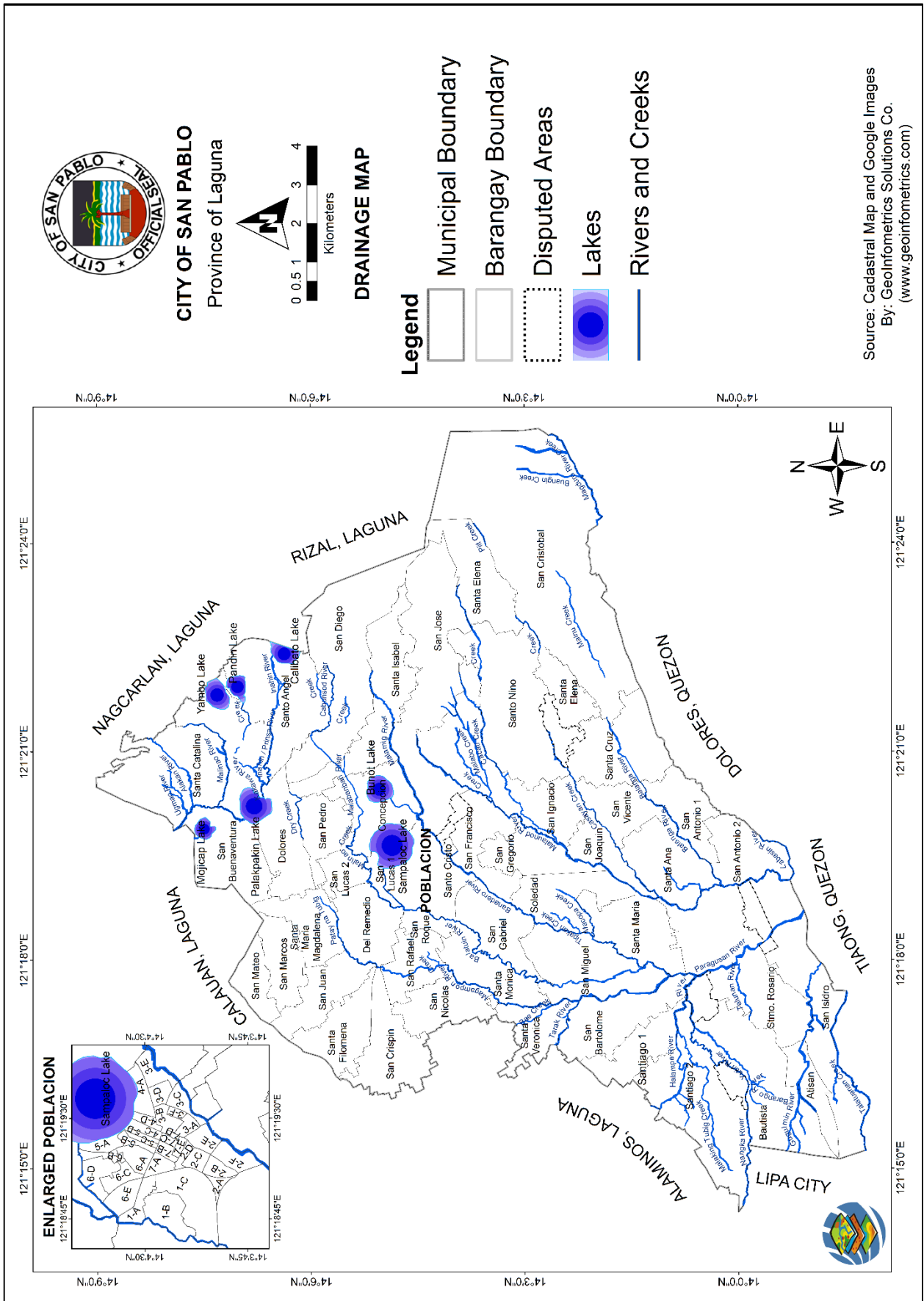
The existing water supply sources of San Pablo Water District (SPCWD) consist of seven springs (Cabunsod, Malabanban and Malaunod, Malamig, Balanga, Lagaslasan and Baloc Springs) and nine production wells located in Brgy. San Mateo (1), Sta. Catalina (1), San Marcos (2), SPC Central School (1), San Pedro (1), Maharlika (1), San Cristobal (1), Concepcion (1), with a total monthly rated production capacity of 1,904,310 cubic meters.

The rivers and creeks or tributaries within the City are the following:

RIVERS	CREEKS
1. Palakpakin	1. Sabang
2. Alakan	2. Kasayan
3. Sta. Catalina	3. Onipa
4. Malinaw	4. Bonbon
5. Kakate	5. Gugulmin Prinsa
6. Imahen	6. Talutuanan
7. Malamig	7. Malabo
8. Malaunod	8. Kakate
9. Bañadero	
10. Magampon	
11. Balanga	
12. Tubunan	
13. Gugulin	
14. Nangka	
15. Tarak Limao	
16. Palakpakin	
17. Matanag	
18. Malaking Tubig River	

2.2.5.1 *Inland water resources/surface drainage*

The Seven Lakes of San Pablo represent the most attractive surface water supply of the City. Table 8 shows the characteristics of these lakes. Sampaloc Lake is located near the City Hall, Lake Bunot in Barangay Concepcion, Lake Calibato in Sto. Angel, Lake Mohicap and Lake Palakpakin in San Buenaventura, and the twin lakes of Pandin and Yambo in San Lorenzo. On the other hand, Map 15 shows the water drainage in San Pablo.



Source: Cadastral Map and Google Images
By: Geoinformatics Solutions Co.
(www.geoinformatics.com)

**Table 8. Characteristics of the Seven Crater Lakes, San Pablo City 2013**

Name	Locations	Characteristics	
		Maximum depths (meters)	Surface area (hectares)
Sampaloc	City Proper	27.00	99.21
Bunot	Brgy. Concepcion	23.00	38.16
Calibato	Brgy. Sto. Angel (San Pablo City) and Brgys. Tala and Antipolo (Rizal, Laguna)	135.0	27.18
Mohicap	Brgy. San Buenaventura	27.00	20.49
Palakpakin	Brgy. San Buenaventura, San Lorenzo and Dolores	7.50	54.39
Pandin	Brgy. San Lorenzo and Barangay Sto. Angel	63.00	23.54
Yambo	Brgy. San Lorenzo (San Pablo) and Brgy Sulsugin (Nagcarlan)	40.00	36.00
TOTAL			298.96

Sources: LLDA, GIS computed area

2.2.5.2 The Seven Lakes

San Pablo City is famous for its legendary seven lakes. All of these are teeming with various fishes and other species and area able to supply the City and nearby town with its abundant blessing.

Sampaloc Lake

Among the seven majestic lakes of San Pablo, Sampaloc is the largest, and perhaps the most popular. It is sunk in a shallow depression revealing its volcanic origin. It is covered by five Barangays, namely: Brgy. IV-A, Brgy. IV - C, Brgy. V-A, Brgy. Concepcion and Brgy. San Lucas I. It has a maximum depth of 27 meters, 14,100 m³ volume of water and a surface area of 104.0 hectares. Lake Sampaloc is blessed with *tilapia*, *dalag*, *ayungin*, *bangus*, *carpa*, *catfish*, *dulong*, and various species of shrimp. Today, a lot of civic organizations built mini parks around the Lake.

Calibato Lake

Calibato Lake has two jurisdictional areas: Brgy. Sto. Angel in San Pablo City and Brgys. Tala and Antipolo in Rizal, Laguna. It is 6.40 km away from the City proper and has a maximum depth of 135.00 meters making it the deepest lake among the seven lakes, with 29,600 m³ volume of water and 27.18 hectares surface area. The Lake is rich in various fishes and other species like *tilapia*, *carpa*, *hito*, *dalag*, *gurami*, *big heads*, *bangus*, *hipon*, *bitoo*, *kuhol*, and *ayungin*.



Pandin Lake and Yambo Lake

Known as “The Twin Lakes,” both Pandin and Yambo Lakes are considered oligotrophic because of their deep clear waters with low nutrient supplies, high dissolved oxygen level and containing little organic matter. Pandin Lake is covered by two barangays, namely Barangay San Lorenzo and Barangay Sto. Angel. Pandin Lake is 6.30 kilometers away from the City proper with 63 meters maximum depth, an approximate of 6,600 m³ volume of water in storage, and 24 hectares surface area. It is teeming with lots of tilapia, hito, dalag, bangus, carpa, bighead, *hipon*, *dulong*, *bakuli*, *bitoo*, *kuhol*, *yapyap*, *gurami*, and *ayungin*.

Situated 6.70 kilometers away from the City proper, on the other hand, is Yambo Lake. Yambo is shared by two municipalities: Brgy. San Lorenzo in San Pablo City and Brgy. Sulsugin in Nagcarlan. It is adjacent to Pandin Lake. It has a surface area of 36 hectares, has a maximum depth of 40 meters and approximately 5,800 cubic meters volume of water in storage. Yambo Lake is a sanctuary of various kinds of fish and other species such as *tilapia*, *carpa*, *hito*, *gurami*, bighead, *bangus*, *hipon*, *bitoo*, *kuhol*, and *ayungin*. It is also suitable for swimming, outings and picnics.

Bunot Lake

Situated in Brgy. Concepcion, Lake Bunot is 2.20 kilometers away from the City proper. It has 23 meter maximum depth, approximately 3,500 cubic meters volume of water, and 38.16 hectares surface area. Bunot Lake is used primarily for floating cages operation where most of the resident derived their source of income. It is also a major source of *tilapia* for Metro Manila and suburbs.

Mohicap Lake

Abounding with different kind of fish such as *tilapia*, *carpa*, bighead, *bangus*, *dalag*, *hito*, *gurami*, *hipon*, *bitoo*, *kuhol*, and *ayungin*, Mohicap Lake has a total surface area of 20.49 hectares, a maximum depth of 30 meters, and approximately 2,000 cubic meter volume of water in storage. It is 5.60 kilometers away from the City proper and is situated in Brgy. San Buenaventura. Lake Mohicap is one of San Pablo’s main source of water to this day.



Palakpakin Lake

Covered by three (3) barangays, namely Brgys. San Buenaventura, San Lorenzo and Dolores, Lake Palakpakin has a surface area of 54.49 hectares and an average depth of 7.7 meters. The Lake's inlet is connected with the outlet of lakes Calibato and Pandin. Palakpakin Lake, the shallowest among the seven lakes, is utilized as communal fishing ground. It produces various fishes and other species such as *tilapia*, *bangus*, *dalag*, *hito*, *gurami*, *ayungin*, *carpa*, *hipon*, big head, *bakuli*, *bitoo*, *kuhol*, *dulong*, and *tahong*.

2.2.6 Forest Resources

The City's portrait in forestry could be well described by way of its land classification map of alienable and disposable land such as production and protection areas, maps and Presidential Proclamation on its forest. The Alienable and Disposal land of the City covers an area of about 17,665.82 hectares which is equivalent to 89.42% of the total land area of the City of 19,746 hectares.

Currently, San Pablo has no identified production forests, however, there are private lands covering permits for harvesting timber forest products in various barangays in San Pablo. As of 2006, the PENRO of Laguna has listed Private Land Timber Production (PTLP) in Barangays San Agustin in Alaminos an adjacent barangay of San Pablo City, San Jose, San Joaquin, San Rafael and San Miguel.

Also reported by PENRO in 2006, is a mini forest park (urban forestry project) in Sta. Filomena Elementary School Mini-Forest covering 1.03 hectares.

Protection forests are those under the declaration of the National Government and City's forest reserves/protected landscape, where cutting of trees for timber production is not allowed. The City has two proclaimed protection forests: Mount Banahaw-San Cristobal Protected Landscape and Malabanban Forest Reserve.

Initially proclaimed for protection on 21 May 1941 (Proclamation No 716) and again on 9 August 1966 (Proclamation No 75), Mount Banahaw-San Cristobal National Park covered an area of approximately 11,133.30 hectares falling under the jurisdiction of ten (10) municipalities/City from two provinces: Laguna and Quezon:

LAGUNA

San Pablo
Liliw
Nagcarlan
Rizal
Majayjay

QUEZON

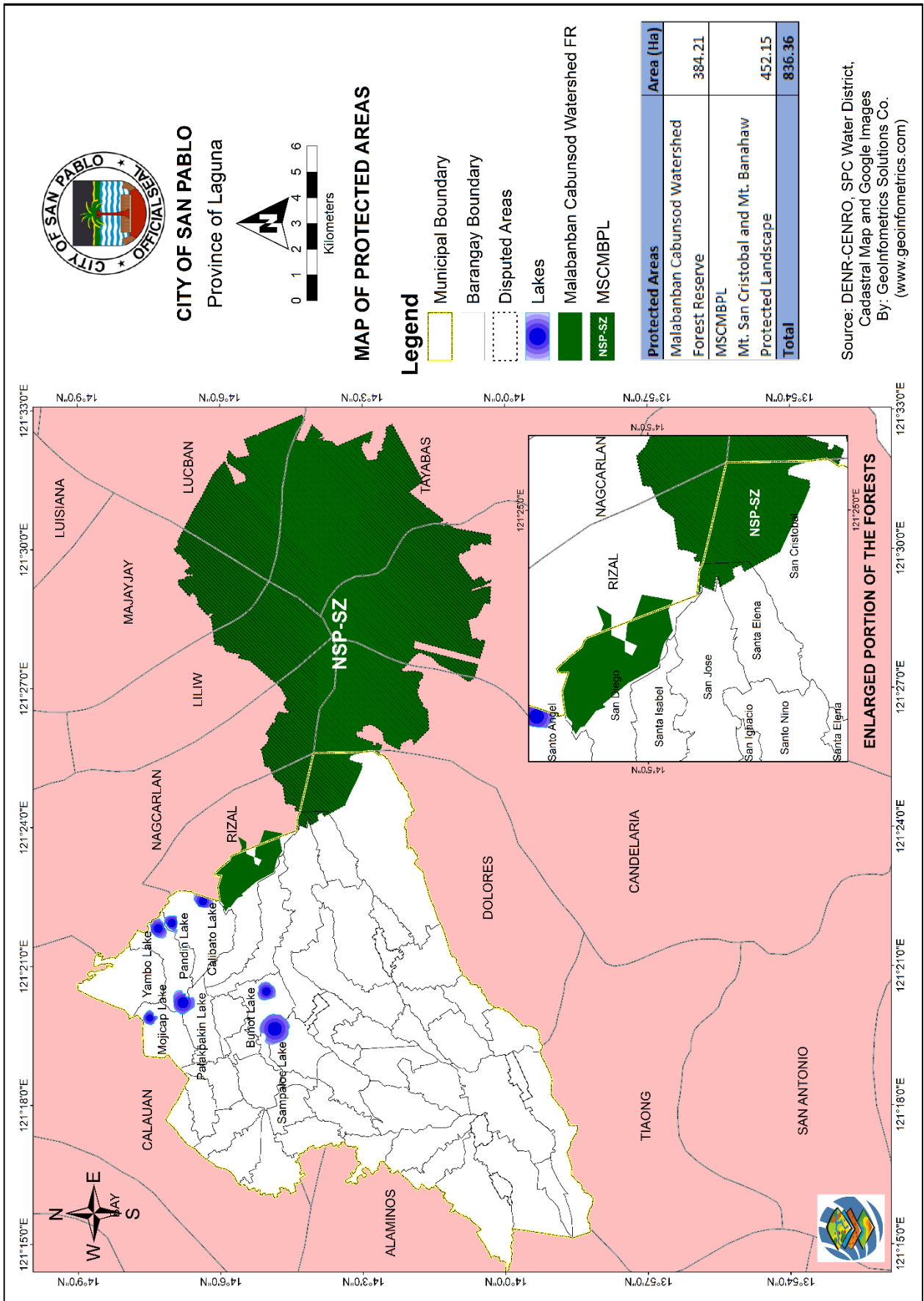
Lucban
Sariaya
Candelaria
Tayabas
Dolores

Listed as one of the Key Conservation Sites in the Philippines, Mount Banahaw-San Cristobal National Park supports a number of unique species of birds, mammals, plants and intensive forest cover. The most extensive stands of closed canopy forest found the Laguna side of Mt. Banahaw. The forest type includes lowland dipterocarp forest on the lower slopes and montane forest above 900 m, including mossy forest around the peak. On the lower slopes of the mountains there are coconut plantations intensively intercropped with fruit trees and areas of kaingin, and the surrounding area is intensively cultivated. The forests are a vital watershed for the surrounding lowlands.

Under NIPAS Law, Mount Banahaw-San Cristobal Protected Landscape was declared by virtue of Republic Act 9847 on December 11, 2009. It covers protection for 10,900.59 hectares. Out of the total protected area, 452.15 are under the jurisdiction of San Pablo City. Covered protected area within San Pablo can be found in higher elevation parts of Barangays San Cristobal and Sta. Elena.

Another area devoted to Protection Forest in the City is the Malabanban Cabunsod Watershed Forest Reserve located in Barangays Sto. Angel and San Diego. Established under Presidential Proclamation No 82, in June 26, 1999 by the then President Joseph Ejercito-Estrada, this Reserve comprises an area of about 384.21 hectares with the purpose of protecting, maintaining and improving its water yield and providing restraining mechanism for inappropriate forest exploitation and disruptive land uses.

Map 16 shows the proclaimed Protected Areas found within and around the vicinity of San Pablo City.



Map 16. Map of Protected Areas in San Pablo City



2.2.7 Climate

Under PAGASA's classification, San Pablo has a third type climate (Map 17). This classification is characterized by not so pronounced seasons, usually dry from November to April and wet during the rest of the year.

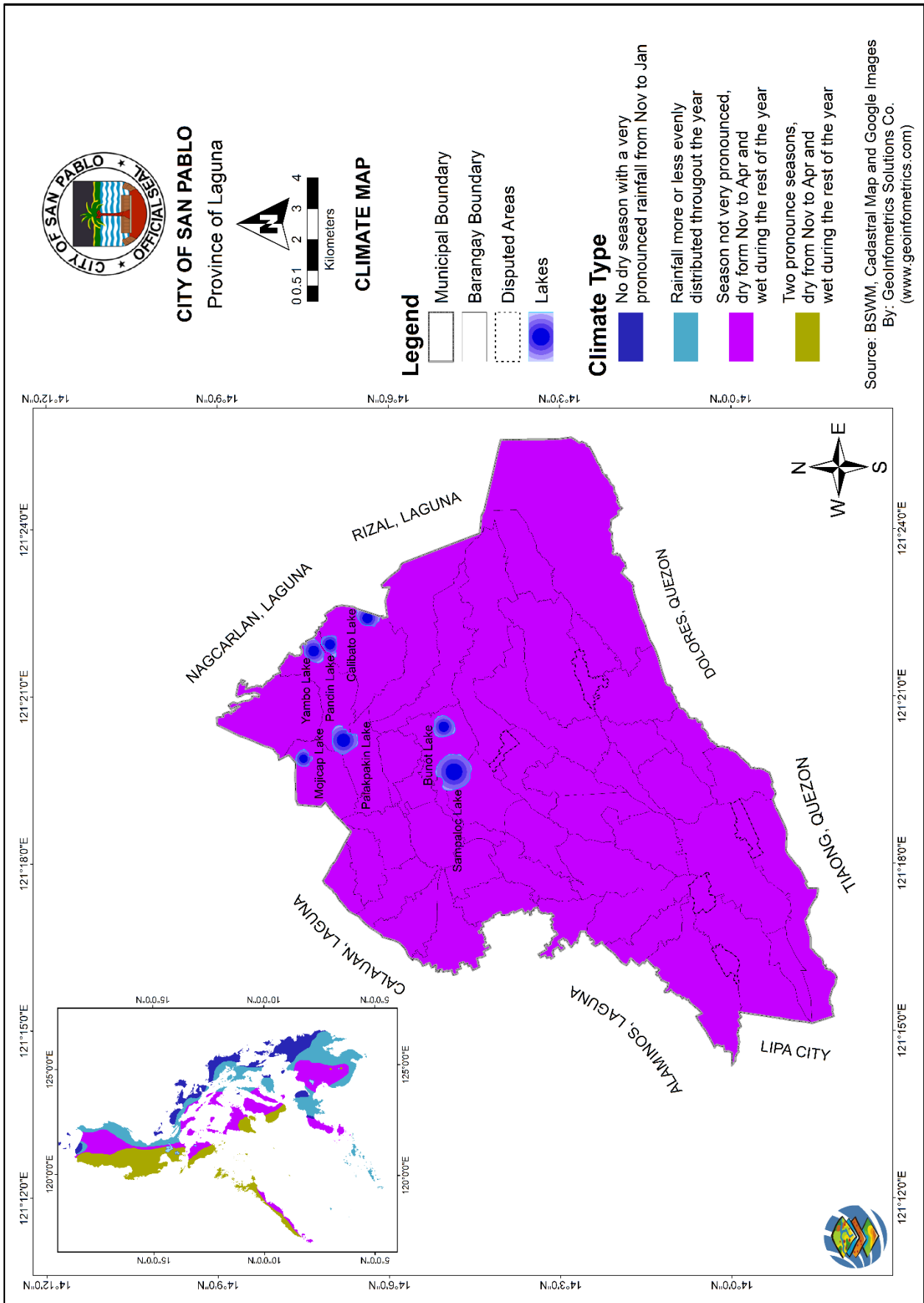
San Pablo City has a cool climate owing to its location at the foothills of three mountains: Mount Banahaw, Mount Makiling, and the Sierra Madre mountains. These mountains do not only provide attractions for the tourism industry (such as waterfalls) and source of many forest based products, but also serve as stewards for the clean air.

The average amount of precipitation recorded in 2013 has been recorded at around 265.33 mm (Table 9). August 2013 had the highest amount of precipitation, having 1,060 mm caused by Typhoon Labuyo with maximum winds of 45 kph; while April had the least amount, having 12 mm. The average daily wind speed of around 5km/hr maximum sustained wind speed has reached an average of 63 km/hr.

Table 9. Climate data for San Pablo City, 2013

Month	Average high °C	Average low °C	Mean°C	Precipitation (mm)
Jan	29°	24°	26.5°	31
Feb	31°	25°	28.0°	70
Mar	32°	25°	28.5°	76
Apr	34°	27°	30.5°	12
May	34°	27°	30.5°	74
Jun	33°	26°	29.5°	403
Jul	32°	25°	28.5°	318
Aug	30°	28°	29.0°	1,060
Sept	30°	25°	27.5°	703
Oct	31°	28°	29.5°	258
Nov	31°	28°	29.5°	122
Dec	31°	28°	29.5°	57
Annual	31.5°	26.3°	28.9°	3,184

Source: <http://www.accuweather.com>





2.2.8 Existing Land Uses

Akin to all provincial areas, the land use of the province-based City of San Pablo is mostly characterized as agricultural, at 72.41% (14,305.74 hectares) (Table 10) (Map 18). Agricultural areas include protection areas (NPAAD and SFADZ) and production (crops, orchards and pasture lands). These areas stretch from low lying areas up to the rolling edges towards the mountains surrounding the plateau. This land use type also comprises of poultry, livestock and allied industries (slaughter houses, dressing plants).

Second widest area, giving San Pablo its urban character is the dense residential, comprising a total land area of 2,537.06, or 12.84% of the total City's land area. Residential/ Built-up areas are highly concentrated in the urban barangays. But like all mature settlements, San Pablo demonstrates centric and nodal development, where sporadically found in the poblacions of the rural barangays. The major center in the urban barangays of the City provides specialized facilities and services to its rural barangays and acts as its external linkages to the other centers of the City. Key installations in the nodes support the urban core as its captive market while providing neighbourhood facilities and services to its area of influence.

Third most expansive land use in the City is Forest and Forest Land, covering a total land area of 1,361.39 hectares, or 6.89% of the total City's land area. These areas comprise clearly delineated portions of proclaimed protection forest reserves (MSCMBPL and Malabanban Forest Reserve) and parts of the mountainous areas in Sta. Catalina, Santiago 2, Bautista, Atisan and San Isidro.

Cumulative land area of Infrastructure/Utilities, Transportation and Services comprise the 4th expansive land use. Road and Infrastructure/Utilities covers a total land area of 278.42 hectares, or 1.409 % of the total City's land area.

Tourism and eco-tourism areas follow with a total land area of 344.06 hectares, or 1.74 % of the total City's land area. Majority of these areas are those that envelope the five (5) lakes: Mohicap, Palakpakin, Yambo, Pandin, and Calibato. Other areas included in this land use type are the resort and hotel complexes found in a few rural barangays.

Waterways follow with a total land area of 306.42 hectares, or 1.74 % of the total City's land area. This covers all seven (7) crater lakes of San Pablo.

As the center of commerce and education in this part of Laguna, San Pablo currently uses 105.23 hectares and 62.97 hectares of its land to



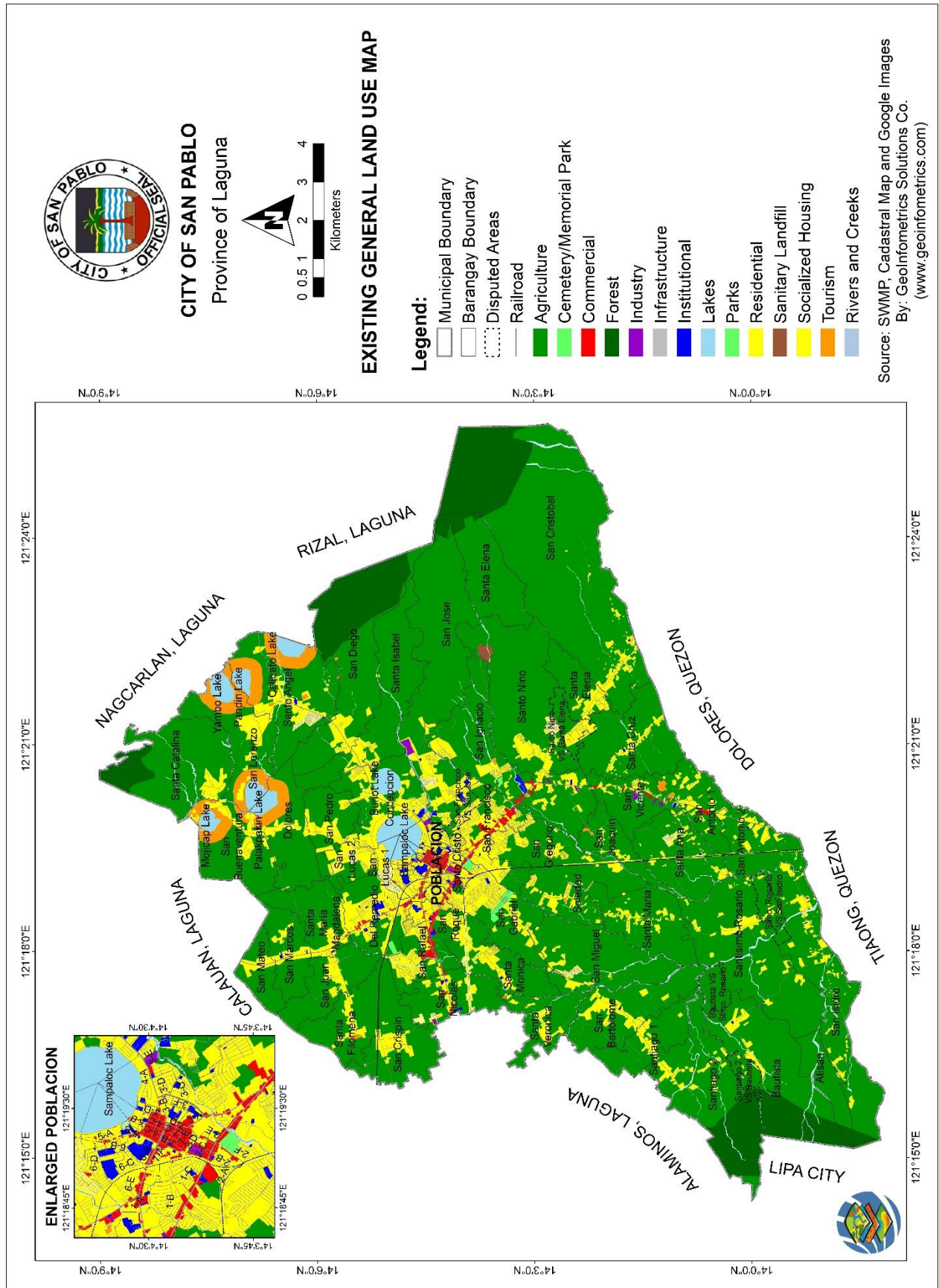
Commercial and Institutional land uses, respectively. Commercial areas covering about 0.53% of the total City's land area can be found parallel to main roads, especially along Maharlika Highway, and also densely located in the urban core of the Poblacion. Institutional areas cover about 0.32% of the total City's land area, comprising of schools (public and private), hospitals and medical facilities (public and private), and various government installations (health centers, barangay and municipal offices).

Socialized housing land use type occupies a total land area of 83.41 hectares, or 0.42 % of the total City's land area. Other land uses (cemetery, sanitary landfill in Brgy. Sto. Niño, industries and parks) comprise 66.50 hectares, or 0.34 % of the total City's land area.

Table 10. Existing Land Use Categories and Percent Distribution, San Pablo City

Land Use	Land Area	Percentage
Agricultural Areas	14,305.74	72.41
Residential	2,537.06	12.84
Cemetery	32.40	0.16
Commercial	105.23	0.53
Sanitary Landfill	12.64	0.067
Forest	1,361.39	6.89
Industrial	20.34	0.10
Infrastructure	278.42	1.41
Institutional	62.97	0.32
Lakes	304.84	1.54
Parks	1.12	0.01
Socialized Housing	83.41	0.42
Tourism	344.06	1.74
Waterways	306.42	1.55
Total	19,756.04	100.00

Sources: GIS Computed area based on GPS survey, Google Street Map



Map 18. Land Use Map of San Pablo City



Existing Water Use of San Pablo City

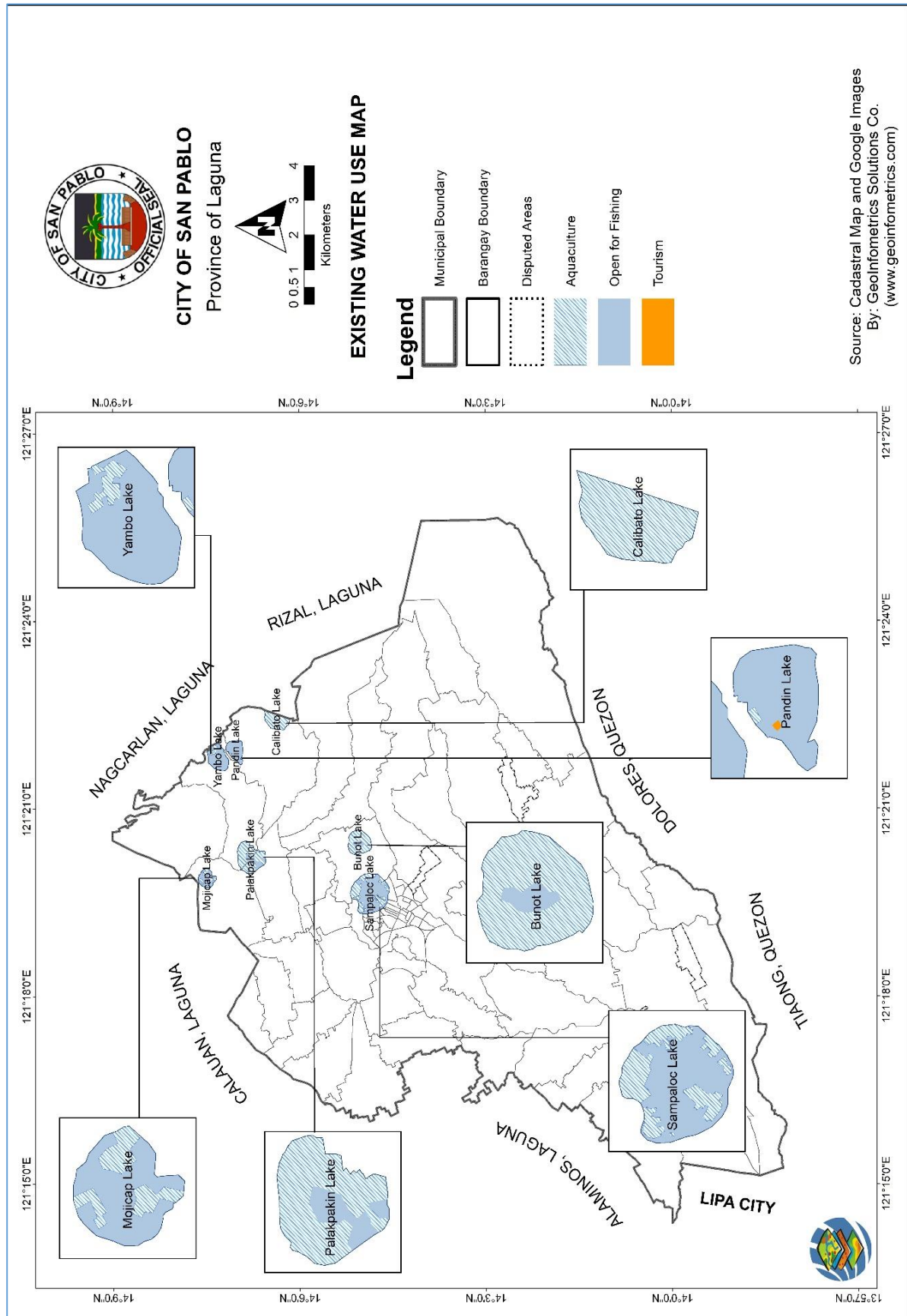
The majority of the surfaces of the lakes, except Calibato Lake, do not have a particular use. As such, 50% of the lakes are used for small- or individual-scale level of fishing. On the contrary, the whole of Calibato Lake is utilized for aquaculture. Almost 90% of Lake Bunot is used for aquaculture (34.79 ha) while 82% (14.56 ha) is similarly dedicated for Lake Palakpakin. Lake Pandin has its waters utilized for tourism (0.18 ha) and aquaculture (0.14 ha) and open fishing (22.43 ha) (Table 11; Map 19). The seven crater lakes in San Pablo City are currently under the management of Laguna Lake Development Authority (LLDA) by virtue of Executive 927 (since 1983). Though clearly directed towards ecotourism, commercial aquaculture and subsistence fishing, form a large part of the current non-existent delineation of the multiple uses in all seven crater lakes.

In December 2013, the LLDA in partnership with the Local Government of the City of San Pablo conducted a Stakeholders Consultation Workshop aiming to formulate Seven Crater Lakes Tourism Master Development Plan and Framework for the Formulation of Development and Management Plan for the Seven Crater Lakes. The said event recognized the importance of lakes in human development and preservation of sound ecosystems and biodiversity, taking into consideration aquatic biodiversity and provision of livelihood, while gaining social, economic, and aesthetic benefits that are essential for a better quality of life. Aimed at reaching a mutually acceptable agreement on common and complementary management actions among partner organizations and the rest of major stakeholders, the Tourism Master Plan and the Zoning and Management Plan for the seven lakes is currently under assessment by the LLDA.

Table 11. Existing Water Use Categories and Percent Distribution, San Pablo City

LAKES	Aquaculture		Open for Fishing		Tourism		Total	
	Area (ha)	Percent (%)	Area (ha)	Percent (%)	Area (ha)	Percent (%)	Area (ha)	Percent (%)
Bunot	34.79	11.41	4.12	1.35	0.00	0.00	38.91	12.76
Calibato	27.71	9.09	0.00	0.00	0.00	0.00	27.71	9.09
Mojico	6.05	1.99	14.84	4.87	0.00	0.00	20.89	6.85
Palakpakin	44.37	14.56	11.09	3.64	0.00	0.00	55.46	18.19
Pandin	0.40	0.13	23.43	7.69	0.18	0.06	24.00	7.87
Sampaloc	34.83	11.42	66.34	21.76	0.00	0.00	101.16	33.19
Yambo	3.42	1.12	33.28	10.92	0.00	0.00	36.70	12.04
Total	151.57	49.72	153.09	50.22	0.18	0.06	304.84	100.00

Sources: GIS Computed area based on GPS survey, Google Street Map



Map 19. Existing Water Use Map of San Pablo City



2.2.9 Land Use Potentials and Constraints

Suitability ratings of the City's soil resources prescribe the optimal land uses. Soil suitability provides criteria on which a certain piece of land can be judged on such as soil type, slope, soil erosion, elevation, and geohazard susceptibility. Suitability of the lands of San Pablo City show high land use potential for agriculture, forestry, commerce, industry, human settlements, and institutions. These are based on the plateau-natured landscaped where land in the low-lying areas are characterized by soils conducive for agricultural production and slopes are ideal for horizontal developments for residential, commercial, industrial and institutional uses.

Restrictions or constraints to land use in San Pablo City become apparent in areas with high slope (at least 18% slope) and those that are susceptible to severe erosion. Non-negotiable areas for land use and development are also apparent in the areas covered for forest protection, under proclamations covering Mt. San Cristobal-Mt. Banahaw Protected Landscape and that of the local forest: Malabanban-Cabunsod Watershed.

2.3 Existing Environmental Condition (Location/Distribution)

2.3.1 Protected Areas

San Pablo City serves host to two proclaimed protected areas: Mount Banahaw-San Cristobal Protected Landscape (part of) and Malabanban Forest Reserve.

Mount Banahaw-San Cristobal Protected Landscape (MBSCPL)

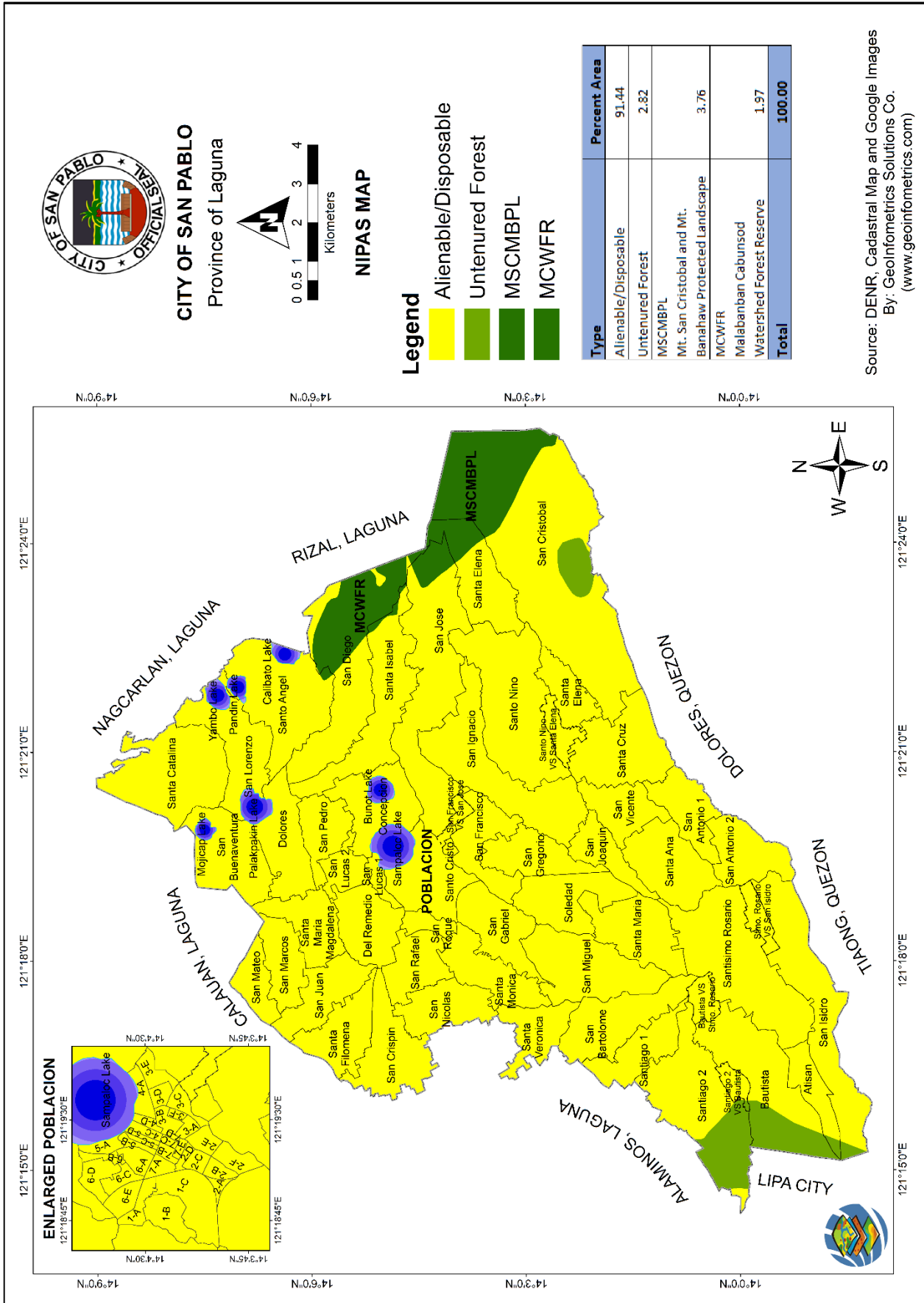
Mount Banahaw-San Cristobal Protected Landscape (MBSCPL) was proclaimed under R.A. 9847 on December 11, 2009 by then President Gloria Macapagal Arroyo. This has always been regarded by the people living around it as "Holy Mountain."

Because of the stresses caused by human visitors, the MBSCPL Protected Area Management Board (PAMB), which is composed of representatives from various stakeholders, issued on March 9, 2004 Resolution No. 001-2004 to order a closure order on selected sites or areas within the MBSCPL due to degraded vegetation caused by trekkers and pilgrims, the presence of coliform bacteria in its waters, and tons of garbage and trash. Later, the moratorium was



extended, initially for three years, from 2005 to 2008; then again from 2009-2012. Although vegetation has regenerated and the garbage has lessened, the PAMB has decided to extend further the moratorium for another three years, from 2012 to 2015, to allow the natural environment to heal itself.

Under the massive forest rehabilitation program, National Greening Project (NGP), some 100 hectares falling under the San Pablo area (in the vicinity of Brgy. San Cristobal) of the MBSCPL have been planted with 500 seedlings per hectare. The protected landscape is visualized in Map 20.



Source: DENR, Cadastral Map and Google Images
By: Geoinformatics Solutions Co. (www.geoinformatics.com)



Malabanban Cabunsod Watershed Forest Reserve

Another area devoted to Protection Forest in the City is the Malabanban Cabunsod Watershed Forest Reserve located in Barangays Sto. Angel and San Diego. Established under Presidential Proclamation No 82, in June 26, 1999 by the then President Joseph Ejercito-Estrada, this Reserve comprises an area of about 384.21 hectares with the purpose of protecting, maintaining and improving its water yield and providing restraining mechanism for inappropriate forest exploitation and disruptive land uses. Of the 384.21 hectares proclaimed, 239 hectares is protected, while 86 hectares is characterized as rock land (Table 12).

In 2007, a 151.0 ha grassland (part includes rocky area) was proposed for reforestation and management whereby said area will be converted into a plantation of endemic hardwoods and fruit trees under the Laguna de Bay Community Watershed Rehabilitation Project-2 by LLDA. Consultations for said Project in 2007 drew attention to future benefits that could be derived from its implementation, such as: increase in potable water supply in the entire San Pablo City; possible employment opportunities; protection to stakeholders' agricultural crops, livestock, homes and lives; and enhancement in the local environment of the site which can become a local tourist area.

In 2011, under the NGP, some 40,000 seedlings were planted for reforestation project in Malabanban, which covered about 80 hectares.

As of September 2015, SPCWD reported 207.97% accomplishment of the target 106,250 seedlings planted in 170 hectare-area of Malabanban. SPCWD has planted a total of 220,969 seedlings of Mahogany, Narra, Acacia, Madre Cacao, Dap-dap, Durian, Marang, Balete, Golden Shower and other tree species in the targeted reforestation area. This program, as envisioned, aims to demonstrate appropriate practices and techniques in reforesting the open and rocky areas including best practice of watershed management for Malabanban. Reforestation of the open area through this project hopes to continuously improve water quality in the aquifer towards increase in water supply for every household in the community.

**Table 12. Area and Location of Protection Forest in San Pablo City**

Category	Location	Area (ha)
Protection Forest		
1. NIPAS Areas		
a. Protected Landscape and Seascapes	San Cristobal	452.15
	Sto. Angel and San Diego	384.21
b. Other categories		
2. Non- NIPAS Areas		
a. Forest cover		945.63
Total		1,781.99

Sources: CENRO-SPC and CENRO, L.B., Laguna San Pablo City Water District, NAMRIA

2.3.2 Surface Water

San Pablo City is famous for its seven crater lakes, which are Sampaloc, Bunot, Palakpakin, Pandin, Mohicap, Calibato, and Yambo. Its catchment is Mount San Cristobal. San Pablo City also has 18 rivers, 7 creeks, and 6 springs.

The City's seven crater lakes, as well as its rivers and creeks, are being threatened by human activities like illegal squatting and its resulting pollution, illegal fish pens, over-feeding, and crowding fish cages in fisheries operations, as well as by infrastructures near shores used for commercial purposes.

Fish farming affects the biodiversity in and around the lakes. As intensive fish culture on cages in the lakes increases, the amount of dissolved oxygen being consumed by the fish themselves and other organisms that are involved in the decomposition process of all organic matters has an adverse effect on the ecological balance, thus resulting to deterioration in the quality of water. Like all bodies of standing water, these seven lakes have no assimilative capabilities which could counteract these ongoing pressures and pollutions.

The monitoring and sampling of the seven crater lakes and their tributaries are being conducted by the Laguna Lakes Development Authority (LLDA) once every quarter. The LLDA has been conducting regular water quality monitoring with the following objectives:

- To accurately assess the suitability of the lake for all its present and intended beneficial uses;
- To evaluate the impacts of development activities on the lake's water quality that will serve as important criteria for environmental planning and management; and
- To provide sound technical basis for water resources management policies and programs for the lake.

Tables 13-14 in the succeeding pages show the bodies of water in the City, their classifications, qualities, degrees of pollution, and probable source



of pollution. Discussions on the historical water quality of the lakes are also presented, following reports from LLDA, dating their quality monitoring as early as the 1980s to as late as 2012. Parameters that have been and are still being monitored include: (a) Physico-Chemical parameters (pH), Dissolved Oxygen at different depths, Biochemical Oxygen Demand, Ammonia, Nitrate, Phosphate, Total Dissolved Solids, Total Suspended Solids, Chloride and Turbidity); (b) Biological parameters (Phytoplankton, Zooplankton and Chlorophyll-a); (c) Bacteriological parameters (Total Coliforms and Fecal Coliforms).

Table 13. Classification of Lakes in San Pablo City and Their Current Conditions, 2014

Lakes	Location	Classification	Quality		Probable Source of Pollution
			Polluted	Degree of Pollution	
Sampaloc	City Proper	C	/	Moderate	Domestic Fisheries Commercial activities
Bunot	Brgy. Concepcion	C	/	High	Domestic Backyard Piggeries Heavy commercial fisheries
Calibato	Brgy. Sto. Angel (San Pablo City) and Brgys. Tala and Antipolo (Rizal, Laguna)	C	/	Moderate	Domestic Fisheries
Mohicap	Brgy. San Buenaventura	C	/	Moderate	Domestic
Palakpakin	Brgy. San Buenaventura, San Lorenzo and Dolores	C	/	Moderate	Domestic Fisheries
Pandin	Brgy. San Lorenzo and Barangay Sto. Angel	C	/	Low	Domestic
Yambo	Brgy. San Lorenzo (San Pablo) and Brgy. Sulsugin (Nagcarlan)	A	/	Low	Domestic

Sources: City Environment and Natural Resources Office; 2014 Water Quality Report by ELRD, LLDA

According to LLDA, the Seven Crater Lakes are extremely threatened by the resulting pollution from the surrounding areas (domestic wastes pollution and solid wastes), by illegal fish pens, crowded fish pens and overfeeding using artificial feeds. They cited the case of Sampaloc Lake's rehabilitation where a number of settlers in the area had been relocated, hence, the discharge of untreated domestic wastes had been reduced. As a result, the Biochemical Oxygen Demand (BOD) and the Dissolved Oxygen have improved.

Table 13 lists the probable sources of pollution for each of the lake. Degrees of pollution for each inland body of water were determined and assessed based on the water quality reports obtained from LLDA.

Figures 1 to 8 show glimpses of the water quality of all seven (7) lakes, as reported in the Water Quality Monitoring Report of Environmental Laboratory and Research Division (ELRD) of LLDA in 2013. For 2012, Lake Bunot has



exceeded all key water quality criteria for Class C, in most months of recorded monitoring. Calibato Lake has shown exceedance in BOD and PO4 performance. Both Sampaloc and Palakpakin Lakes have shown high PO4 pollutants. Lake Mohicap has shown exceeding BOD levels set for Class C inland waters. Twin lakes Yambo and Pandin showed water quality below and within Class standards.

Environmental conditions based on key parameters shall be discussed per lake in the succeeding pages. This latest published monitoring data reports that perennially, Lakes Bunot and Mohicap have been exceeding Class C Criteria. All other five (5) lakes have reported being able to adequately meet the key criteria for Class C inland waters.

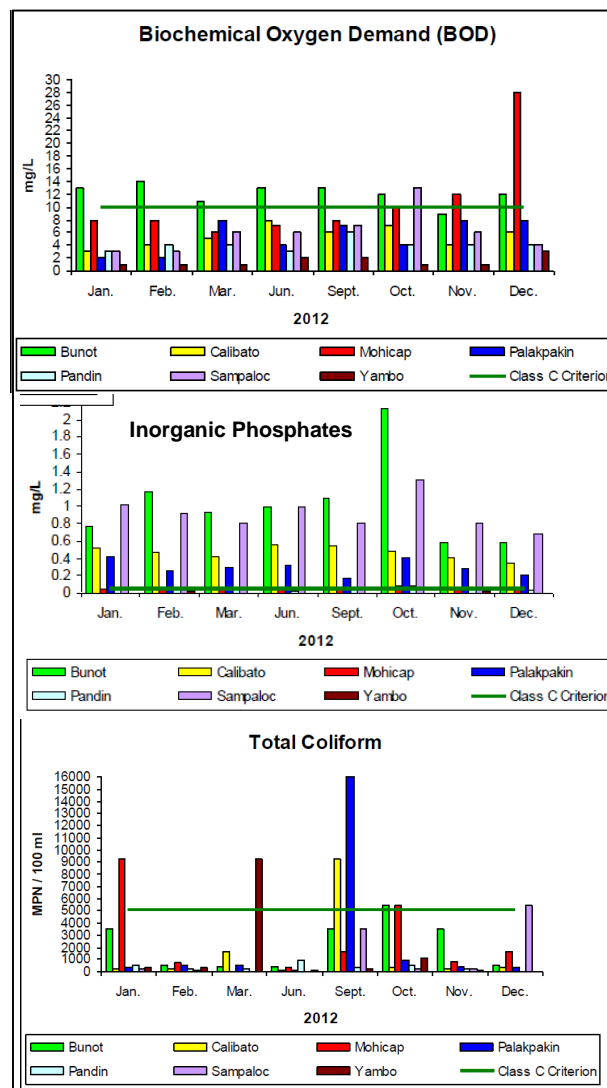


Figure 1. Key Water Quality Parameters of the Seven Lakes in San Pablo City



Sampaloc Lake

At present, the shoreline of Sampaloc Lake is being developed into ecology parks. Through the years, aquaculture development in Sampaloc Lake has rapidly increased. Fish culture in floating cages has become a very popular and profitable business.

LLDA proposes a Zoning and Development Plan (ZODEP) of Sampaloc Lake to cover the following activities: (a) Regulation of aquaculture operations in the lake; (b) Relocation of the residents living along the shoreline; (c) Demolition of commercial establishments located along the shoreline; and (d) Preparation and implementation of a land use plan. The City Tourism Office has submitted to LLDA in early 2015, a Zoning and Management Plan (ZOMAP) for Sampaloc Lake, in accord to this direction.

Though some of the above activities have been in place since 2000, LLDA has noted improvement of the water quality of the Lake.

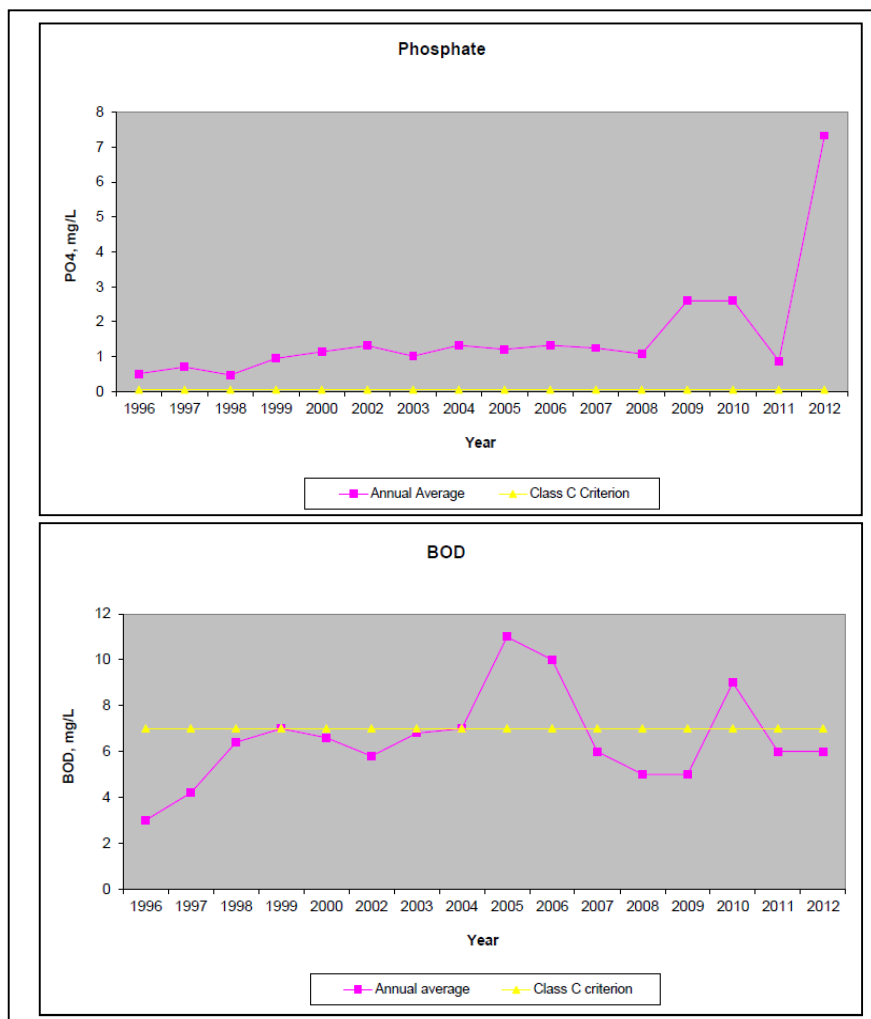


Figure 2. Key Water Quality Parameters (BOD and P04) of Sampaloc Lake, 2013 (ELRD, LLDA)



Another main source of pollution identified by the LLDA in Sampaloc Lake is the untreated domestic wastes from the surrounding areas. Given the high density of population and activities around Sampaloc Lake, there is an urgent need for a centralized sewerage treatment plant to treat all domestic wastes to improve the water quality of the Lake.

Since 2005, some commercial areas and some residential areas along the shoreline were already demolished and developed as part of recreational/ecology parks. Proper waste management (liquid and solid) must be implemented in these parks to prevent direct discharge of wastes into the Lake. It is in these premises that LLDA instituted LLDA Board Resolution No. 295, Series of 2006 which was approved on October 27, 2006. It provides the Guidelines for the Use of Shoreline of Sampaloc Lake, San Pablo City and its Development into a Recreational Park.

Like in other programs being implemented by LLDA, they aim to characterize the quality of Sampaloc Lake, hence, total coliform and fecal coliform counts have already been included in the water quality monitoring program of the LLDA starting 2006.

Environmental quality of Sampaloc Lake will also affect the quality of Balatuin River, where it eventually drains. Currently, Balatuin River is classified as "C".

Lake Bunot

Bunot Lake is the most critical in terms of water quality among the seven lakes of San Pablo City, according to LLDA's 2005 Water Quality Report. For the periods reported in 2005 and 2013, Bunot Lake showed annual averages for BOD exceeding the Class C criterion since the start of monitoring program by LLDA in 1996. Phosphate exhibited increasing trend, which is an indication of the worsening organic pollution in the Lake.

According to LLDA in 2005, Bunot Lake is already congested with fish pens/ fish cages with more than 30 % being occupied by these structures. There is a need to immediately implement a reduction scheme of aquaculture structures to the allowed limit of 10% of the total area as provided in RA 8550, the Fisheries Code of the Philippines.

Wastes from the nearby residential area as well as wastes from backyard piggeries are discharged without proper treatment into the Lake causing the deterioration of the Lake's water quality. Measures must also be implemented to address these issues. To characterize the quality of the lake in terms of health



aspects, total coliform and fecal coliform counts have already been included in the water quality monitoring program of the LLDA starting 2006.

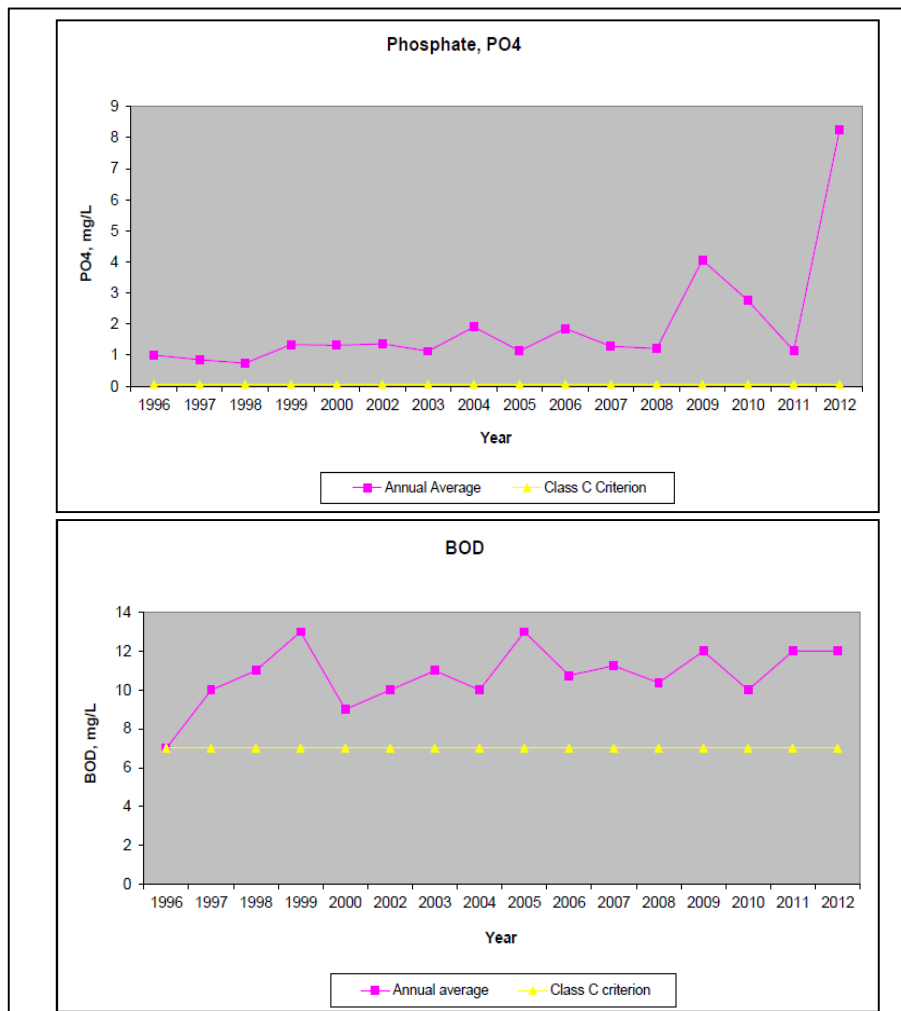


Figure 3. Key Water Quality Parameters (BOD and P04) of Bunot Lake, 2013 (ELRD, LLDA)

Lake Calibato

According to LLDA, Calibato Lake is in critical state in terms of water quality. The BOD level from 1996 to 2005 met the criterion, however, it had been increasing. Measures must be undertaken to prevent further increase. The phosphate level in Calibato Lake had consistently exceeded the allowed average of 0.05 mg/L. The high nutrient loading in Calibato Lake could be attributed partly to the aquaculture activities in the area. Unconsumed feeds add up to the pollution in the Lake.



Fish cage/ fish pen areas exceeded the 10 % allowable area allocation for aqua structure operation pursuant to the Fisheries Code. Domestic wastes from the surrounding areas also contribute to the organic pollution in the Lake. Mitigating measures must also be undertaken.

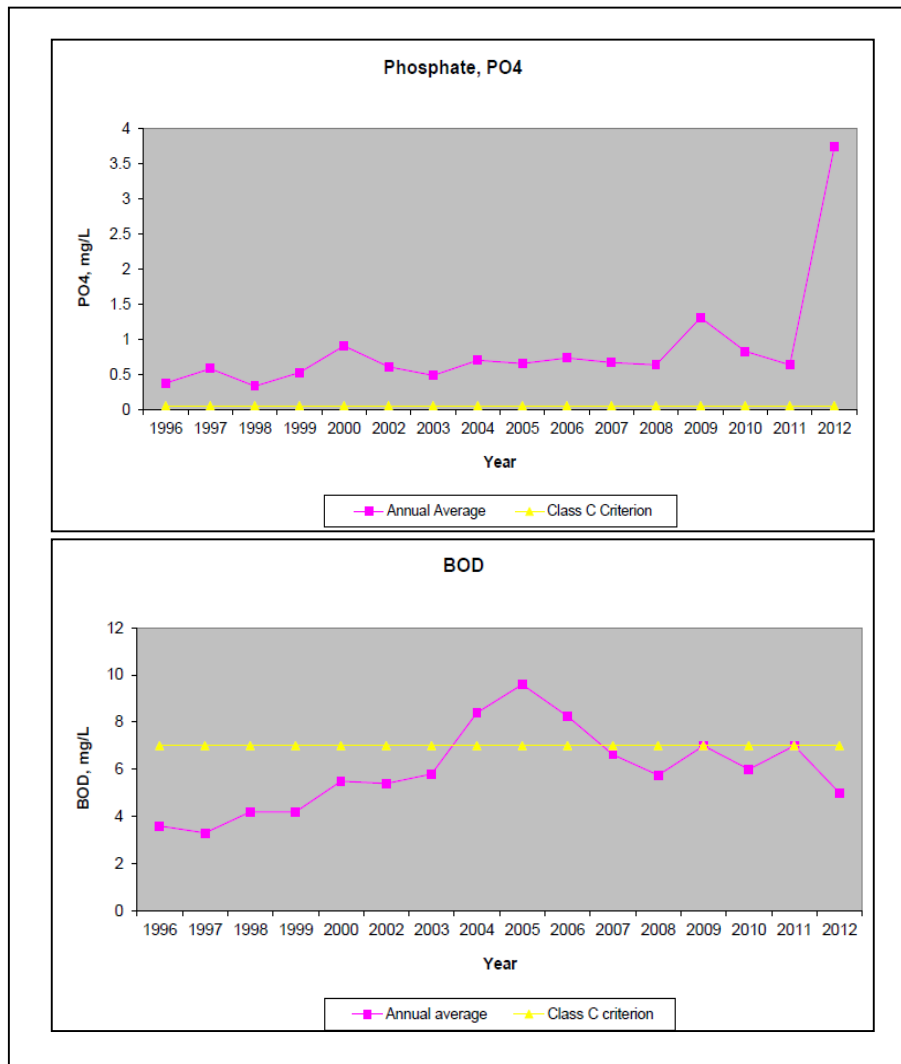


Figure 4. Key Water Quality Parameters (BOD and P04) of Calibato Lake, 2013 (ELRD, LLDA)

Mohicap Lake

Similar to the state of other crater lakes, Mohicap Lake is in a critical state in terms of water quality, according to LLDA Reports. Though the BOD level for some periods over the years met the criteria, BOD had been increasing. The phosphate level in Mohicap Lake had consistently exceeded the allowed average of 0.05 mg/L.



As per LLDA reports and evaluation, the degrading water quality of the Lake may be attributed to the discharge of domestic wastes from the surrounding community and to the inappropriate feeding practices in the aqua structures. Pursuant to RA 8550, Fisheries Code, the maximum limit for aquaculture is 10% of the Lake area but at present, fish pen and fish cages occupy a total area of 36,000 sq. m. or 17.56% of the total surface area in 2005.

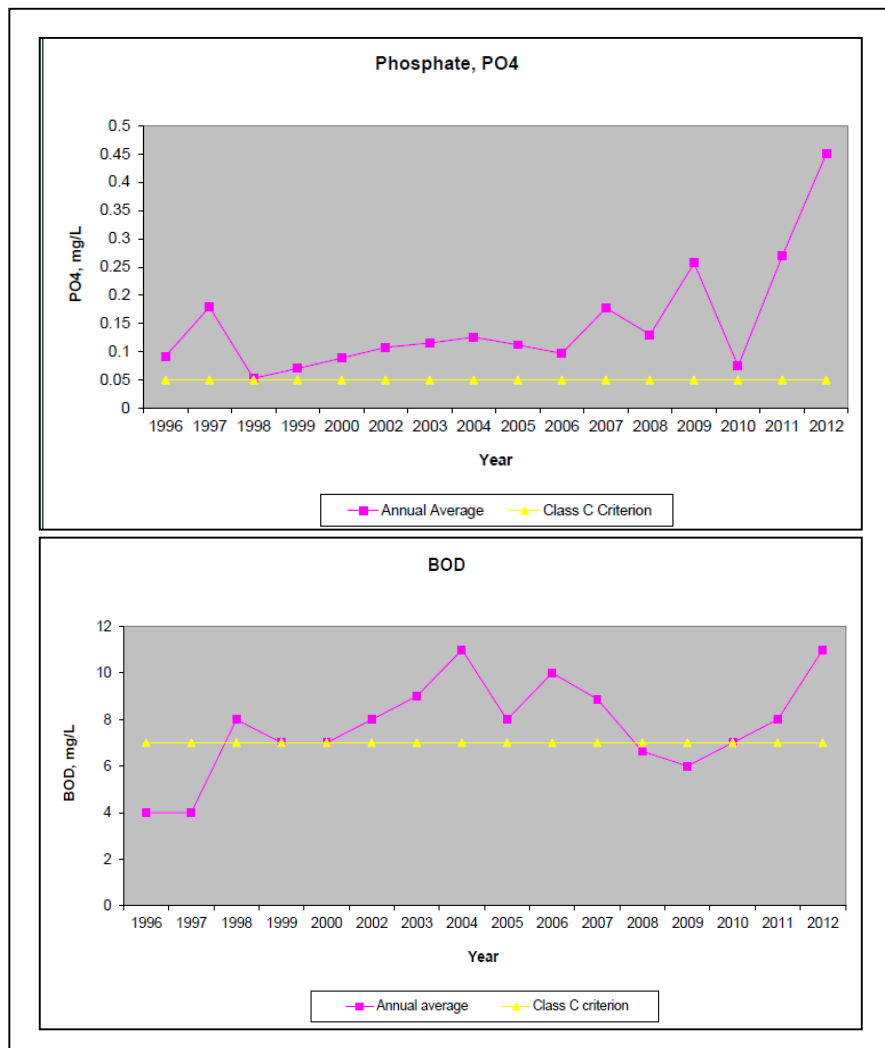


Figure 5. Key Water Quality Parameters (BOD and P04) of Mohicap Lake, 2013 (ELRD, LLDA)

The Laguna Lake Development Authority (LLDA), through its Lake Management Division (LMD), has been implementing several programs to protect the Lake. Lake seeding and water lily clearing are done on a regular basis. To characterize the quality of the Lake in terms of health aspects, total coliform and fecal coliform counts have already been included in the water quality monitoring program of the LLDA starting 2006.



Palakpakin Lake

According to LLDA, Palakpakin Lake faces the same threat as the other lakes in the system. BOD has always fallen within the limit set for Class C Waters. Increased concentration of nutrients like inorganic phosphate affects the generally good water quality of the Lake. Phosphate levels are way above the criterion of 0.05 mg/L.

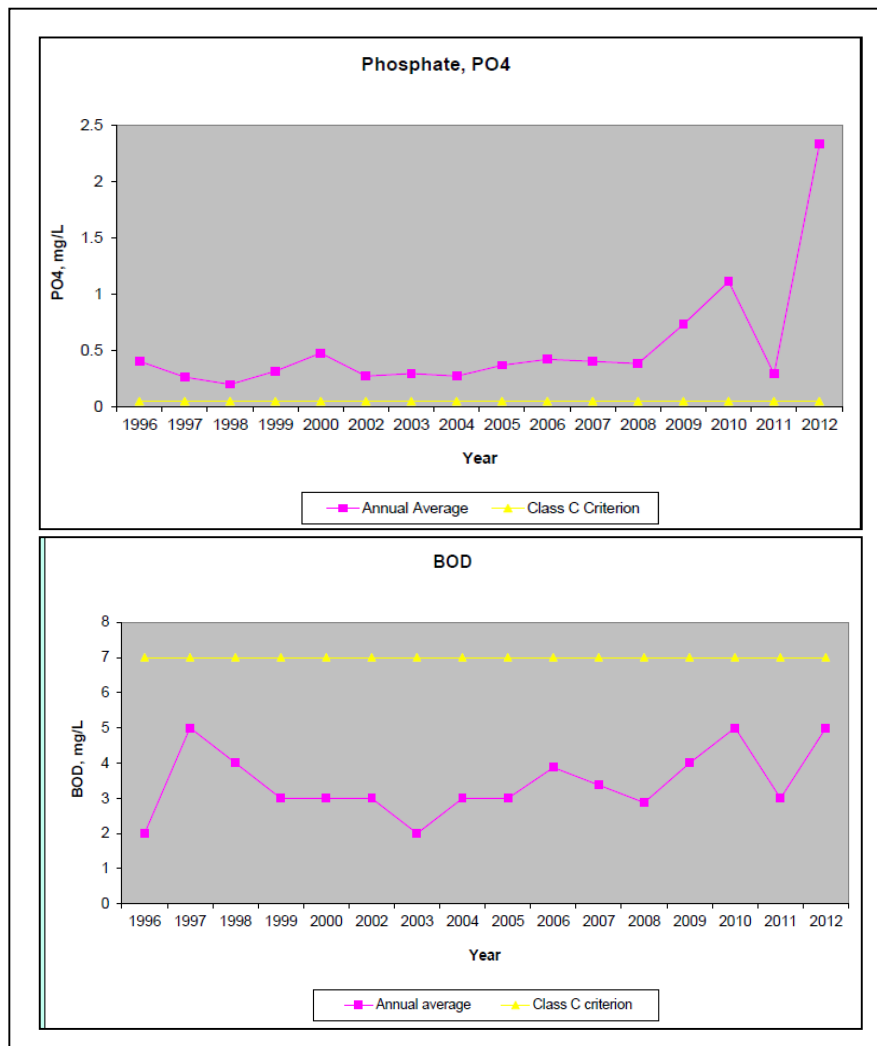


Figure 6. Key Water Quality Parameters (BOD and P04) of Palakpakin Lake, 2013 (ELRD, LLDA)

Human activities and improper use of resources may have triggered this. Communities living around the lake should be properly informed of the possible threats these may pose and continuous efforts of preserving the Lake should be implemented.



Pandin Lake

Pandin Lake is one of the cleanest among the crater lakes of San Pablo City. BOD exceeded the Class C criterion only once during the study period. Annual averages for BOD consistently met the set criterion. As a result of the low nutrient levels in Pandin Lake, phytoplankton counts were considerably low compared to the other crater lakes. Fishermen complained of the prolonged culture period of their stocks due to low productivity.

Due to high potential for tourism, Pandin Lake may be developed into an ecotourism area in San Pablo City. However, measures must be undertaken to prevent the direct discharge of wastes into the Lake.

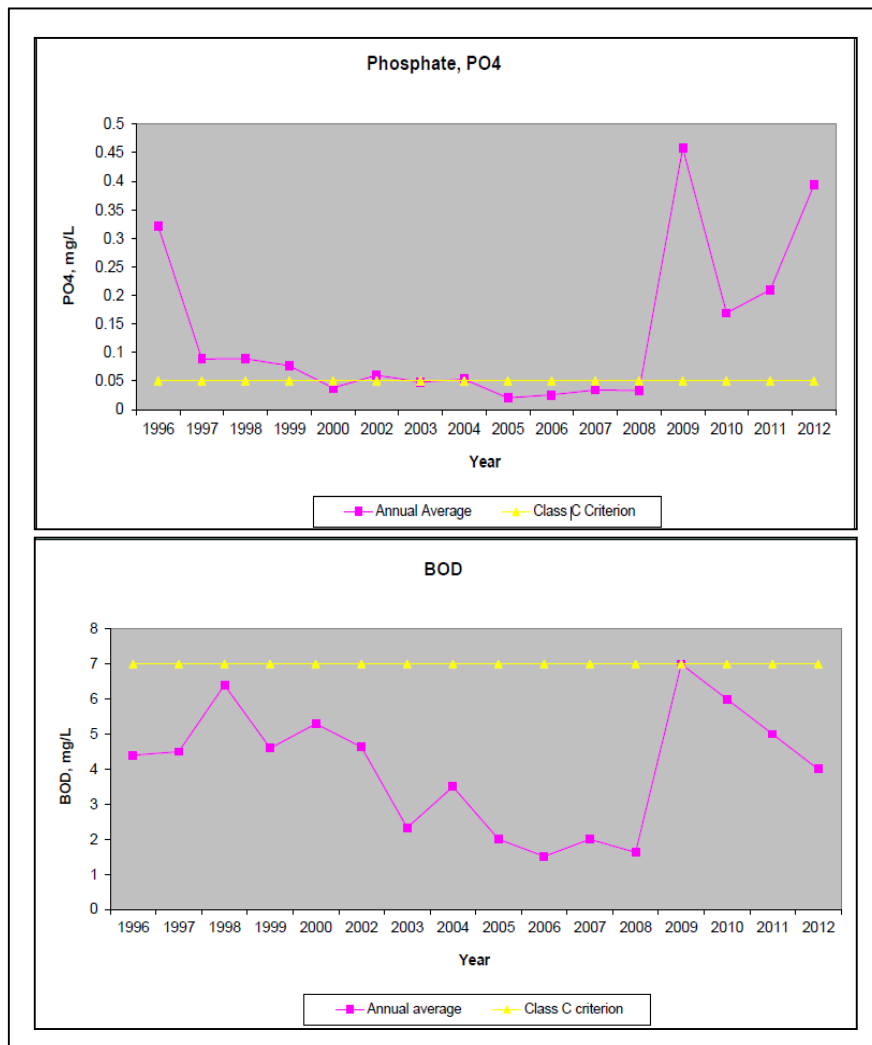


Figure 7. Key Water Quality Parameters (BOD and P04) of Pandin Lake, 2013 (ELRD, LLDA)



As the agency responsible for managing the biggest freshwater body in the country, LLDA notes rarity in Pandin Lake's pristine condition, and urges preservation of its natural beauty.

Yambo Lake

According to LLDA reports, regular monitoring of Yambo Lake was conducted only from 2002, unlike in the other crater lakes. Based on the water quality parameters evaluated during the study period (2002 – 2005), Yambo Lake has the best water quality. It has met the Class C Water Quality Criteria. This makes the Lake still suitable for aquaculture and fishery development.

Annual BOD average even met the Class B criterion. Phosphate met the Class C criteria, except for two monitoring years (2003 and 2011) but increasing in trend.

Yambo Lake may be developed into an ecotourism area in San Pablo City. However, measures must be undertaken to prevent the direct discharge of wastes into the lake. Although most parameters are still way below the criteria, efforts to continually preserve the water quality of the Lake must continue.

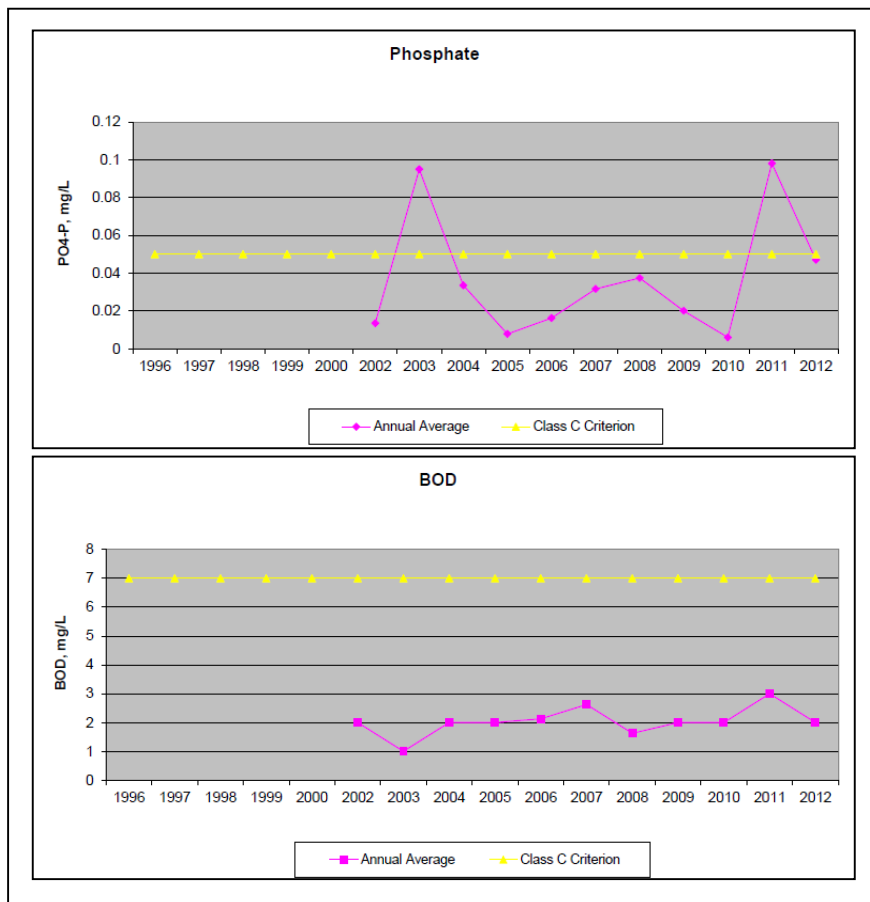


Figure 8. Key Water Quality Parameters (BOD and P04) of Yambo Lake, 2013 (ELRD, LLDA)

According to the City Environment and Natural Resources Office of San Pablo, 16 of the 18 rivers traversing San Pablo City are in good quality characterized by low levels of pollution. Two (2) of the 18 rivers are highly polluted: Banadero and Malaking Tubig. Banadero River is the main outlet for the heavily polluted Bunot Lake and as natural drainage to some commercial and industrial establishments in Brgy. San Francisco and adjacent urban barangays in the Poblacion. Malaking Tubig, on the other hand, is host natural tributary to industrial establishments in Barangay San Isidro.

Though still fit for the prescribed uses in classifications (C and D), indiscriminate dumping of untreated or partially treated wastewater in the river systems must not continue. Poor water quality can affect the integrity and services / beneficial uses communities derive from the rivers (Table 13).

**Table 14. Classification of Rivers in San Pablo City and Their Current Conditions, 2015**

Rivers	Location	Classification	Quality		Degree of Pollution	Probable source of Pollution
			Polluted	Not Polluted		
Alakan	Sta. Catalina	C	/		Low	Domestic
Malinaw	San Lucas	C	/		Low	Domestic
Kakati	Dolores	C	/		Low	Domestic
Prinsa	San Lorenzo	C	/		Low	Domestic Outlet for Lakes Mohicap, Palakpakin and Pandin
Imahen	Sto. Angel	C	/		Low	Domestic
Malamig	San Jose	C	/		Low	Domestic
Malaunod	San Antonio 2	C	/		Low	Domestic
Banadero	San Francisco	D	/		High	Commercial Industrial Outlet for Lake Bunot
Magampon	Sta. Monica	C	/		Low	Domestic
Balanga	San Antonio 1	C	/		Low	Domestic
Tubunan		C	/		Low	Domestic
Gugulmin	Bautista	C	/		Low	Domestic
Nangka	Santiago 2	C	/		Low	Domestic
Tarak	Sta. Veronica	C	/		Low	Domestic
Limao		C	/		Low	Domestic
Matanag	San Bartolome	C	/		Low	Domestic
Malaking Tubig	San Isidro	D	/		High	Commercial Industrial
Balatuin	San Gabriel	C	/		Low	Domestic Outlet for Lake Sampaloc

Source: City Environment and Natural Resources Office, ELRD

The names of creeks connected to the numerous rivers of San Pablo are listed in Table 15. All seven (7) creeks have been classified as “C” similar to the lakes and majority of the rivers of the City. Identified likely sources of pollution to these seven are mostly from partially or untreated wastewater from domestic sources.

**Table 15. Classification of Creeks in San Pablo City and Their Current Conditions**

Creeks	Location	Clasifi- cation	Quality		Degree of Pollution	Probable source of Pollution
			Polluted	Not Polluted		
Sabang	Sn Lucas	C	/		Low	Domestic
Cacayan	Sto. Niño	C	/		Low	Domestic
Onipa	Santiago 2	C	/		Low	Domestic
Bonbon	Santiago 2	C	/		Low	Domestic
Gugulmin	Bautista	C	/		Low	Domestic
Taluntuanan	Stmo. Rosario	C	/		Low	Domestic
Malabo	San Ignacio	C	/		Low	Domestic

Source: City Environment and Natural Resources Office, 2015

All six (6) springs of San Pablo City are classified as “AA” or Public Water Supply Class 1. This class is intended primarily for waters having watersheds which are uninhabited and otherwise protected and which require only approved disinfection in order to meet the National Standards for Drinking Water (NSDW) of the Philippines (Table 16).

Table 16. Classification of Fresh Surface Water (DENR)

Classification	Beneficial Use
Class AA	Public Water Supply Class 1. This class is intended primarily for waters having watersheds which are uninhabited and otherwise protected and which require only approved disinfection in order to meet the National Standards for Drinking Water (NSDW) of the Philippines.
Class A	Public Water Supply Class II. For sources of water supply that will require complete treatment (coagulation, sedimentation, filtration and disinfection) in order to meet the NSDW.
Class B	Recreational Water Class. For primary contact recreation such as bathing, swimming, ski diving, etc. (particularly those designated for tourism purposes).
Class C	<ol style="list-style-type: none"> 1. Fishery water for the propagation and growth of fish and other aquatic resources. 2. Recreational Water Class II (boating, etc.) 3. Industrial Water Class I (for manufacturing processes after treatment.)
Class D	<ol style="list-style-type: none"> 1. For agriculture, irrigation, livestock watering, etc. 2. Industrial Water Supply Class II (e.g. cooling, etc.) 3. Other inland waters, by their quality, belong to this classification.

Source: DENR AO No. 34 otherwise known as “Revised Water Usage and Classification/Water/Quality Criteria” amending section nos. 68 and 69 Chapter III of the 1978 NPCC Rules and Regulations.

Most of these springs are found in the elevated Barangays of San Diego, Sto. Angel, San Jose. Other two (2) are found in San Antonio 1 and in San Francisco. These pristine conditions of all springs of the City must be preserved and protected for longer use by the City's growing population (Table 17).

**Table 17. Classification of Springs in San Pablo City and Their Current Conditions**

Springs	Location	Classification	Quality		Degree of Pollution
			Polluted	Not Polluted	
Cabunsod	San Diego	AA		/	None
Malaunod	San Francisco	AA		/	None
Lubigan	Sto. Angel	AA		/	None
Malamig	San Jose	AA		/	None
Malabanban	Sto. Angel	AA		/	None
Balanga	Sn Antonio 1	AA		/	None

Source: City Environment and Natural Resources Office, 2015

2.3.1 Geological/Environmental Hazard Areas

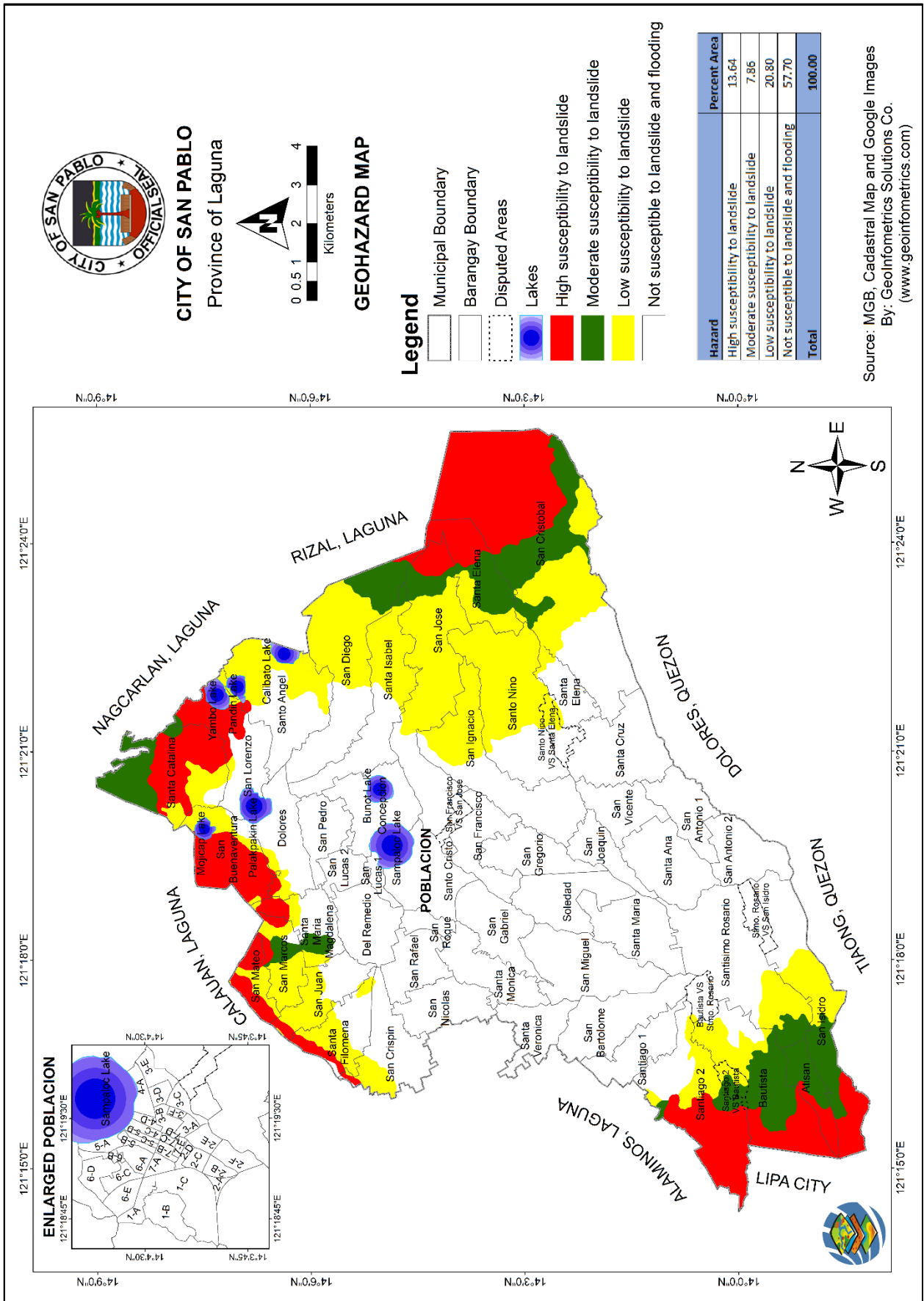
Based on the reports from City Disaster Risk Reduction Management Office, there are 16 identified barangays classified as susceptible or prone to flooding; and 17 barangays that are susceptible to landslides. Populations that are at risk of being affected within these identified barangays are further detailed in the succeeding tables.

Table 18 shows a summary of susceptibility to natural hazards, both flooding and landslides. Representing more than three-fourths of the City's plateau-natured area are lands characterized by none to low vulnerability to natural hazards. Those with high exposure to both flooding and landslides are those areas characterized by very steep slopes in the fringes of the City. These areas are further illustrated in Map 21.

Table 18. Geohazard Susceptibility in San Pablo City

Hazard Susceptibility	Area in Hectares	Percentage
High susceptibility to landslide and flooding	2,694.72	13.64
Moderate susceptibility to landslide and flooding	1,552.82	7.86
Low susceptibility to landslide and flooding	4,109.26	20.80
Not susceptible to landslide and flooding	11,399.24	57.70
TOTAL	19,756.04	100.00

Source: GIS Computed area



Map 21. Geohazard Map of San Pablo City



Of the identified barangays prone to either flooding or landslide, four (4) barangays were noted to be at risk to both hazards: Barangays San Francisco, San Ignacio, San Lucas I and San Lucas II. Thorough study must be done prior any proposed development is undertaken in said areas. Risks are heightened due to proximity to populous urban barangays, notwithstanding the four barangays' total share of 12.25% of immediate affected population.

Further detailed in succeeding tables, six (6) barangays are identified to be particularly susceptible to both rain-induced landslides and earthquake-induced landslides. These are Barangays: San Mateo, San Marcos, San Cristobal, Atisan, Sta. Catalina and Bautista. Careful use of land must be given prior any developmental activities are implemented in these areas.

Tables 19 and 20 list the barangays identified to be prone to natural disasters: flooding and landslide, respectively. Thirteen (13) of the 16 barangays prone to flooding are in fact situated in areas characterized by 0 to 8% maximum slope, or level to undulating areas (Table 18). Two (2) barangays are characterized by undulating to rolling slopes, while only one (1) barangay has slopes to as steep as 50% and above. As normal catchment areas, low-lying barangays, particularly those near rivers and bridges are inherently prone to flooding during season of high rainfall.

Table 19. Disaster Prone (Flooding) Areas in San Pablo City

Barangay	Specific Location	% slope and characterization
Brgy. San Francisco	Banadero Bridge located at the boundary of City Proper & Brgy. San Francisco SPC	3-8% = Gently sloping to undulating 8-18% = Undulating to rolling
Brgy. Sto. Cristo	Near Magcaseville	0-3% = Level to nearly level 3-8% = Gently sloping to undulating
Brgy. San Ignacio	Bridge located at Maharlika Highway, Brgy. San Ignacio, SPC	8-18% = Undulating to rolling
Brgy. Sta. Filomena	-	3-8% = Gently sloping to undulating 8-18% = Undulating to rolling
Brgy. San Crispin	-	3-8% = Gently sloping to undulating
Brgy. Del Remedio	-	3-8% = Gently sloping to undulating
Brgy. Soledad	-	3-8% = Gently sloping to undulating
Brgy. Sta. Maria	-	3-8% = Gently sloping to undulating
Brgy. Stmo. Rosario	-	3-8% = Gently sloping to undulating
Brgy. San Isidro	-	8-18% = Undulating to rolling 30-50% = Steep 50% and above = Very steep
Brgy. Sta. Veronica	-	3-8% = Gently sloping to undulating
Brgy. San Gregorio	-	3-8% = Gently sloping to undulating
Brgy. Sta. Ana	-	3-8% = Gently sloping to undulating
Brgy. San Lucas 1	-	3-8% = Gently sloping to undulating
Brgy. San Lucas 2	-	3-8% = Gently sloping to undulating

Source: City Disaster Risk Reduction Management Office, GIS-Generated Slope Map



As shown in Table 20, landslides-prone areas are identified in some 19 barangays occurring from flat areas to very steep slopes. Depending on the vegetative cover in these hilly to mountainous areas, steep slopes are more prone to landslide, hence, pose threat to communities located along or near slopes. These areas are shown in Map 22 and are broken down to susceptibility types in Table 21. Though a vast majority (88.86%) of the City stand with Low or Slight to No Apparent Erosion susceptibility, the remaining part (11.14%) characterized by moderate to severe erosion susceptibility are those areas found in steep slopes, corresponding to those listed in Table 19 having slopes of at least 30%.

Table 20. Disaster Prone (Landslide) Areas in San Pablo City

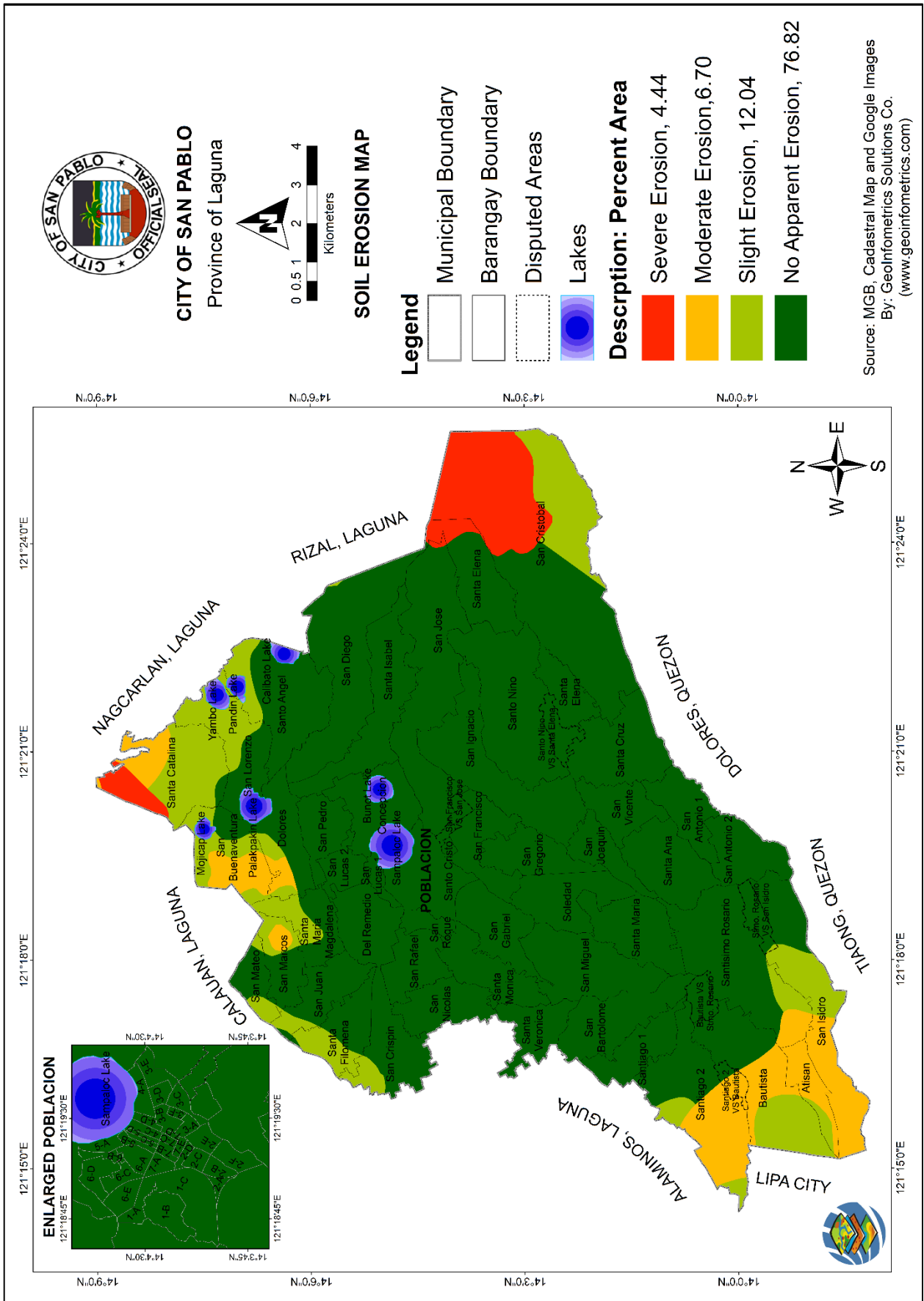
Barangay	Specific Location	% slope and characterization
Brgy. San Roque	-	0-3% = Level to nearly level 3-8% = Gently sloping to undulating
Brgy. San Mateo	Lake Tikew and Mt. Ubabis	3-8% = Gently sloping to undulating
Brgy. V-C	In front of Sampaloc Lake	8-18% = Undulating to rolling
Brgy. San Buenaventura	Imperial Homes & Mohicap Lake	3-8% = Gently sloping to undulating
Brgy. Sta. Catalina		8-18% = Undulating to rolling 50% and above = Very steep
Brgy. San Lorenzo	Lake Pandin and Lake Yambo	3-8% = Gently sloping to undulating
Brgy. San Marcos	Telecommunication site	3-8% = Gently sloping to undulating
Brgy. Sto. Angel	Lake Calibato	3-8% = Gently sloping to undulating
Brgy. Concepcion	Lake Bunot and Lake Sampaloc	3-8% = Gently sloping to undulating 8-18% = Undulating to rolling
Brgy. San Francisco	Riverside	8-18% = Undulating to rolling
Brgy. San Ignacio	Riverside	8-18% = Undulating to rolling 30-50% = Steep 50% and above = Very steep
Brgy. San Cristobal	Sitio Nakalkal	30-50% = Steep 50% and above = Very steep
Brgy. Atisan	-	8-18% = Undulating to rolling 30-50% = Steep 50% and above = Very steep
Brgy. Sta. Elena	-	30-50% = Steep 50% and above = Very steep
Brgy. Bautista	-	0-3% = Level to nearly level 3-8% = Gently sloping to undulating 8-18% = Undulating to rolling 18-30% = Rolling to moderately steep
Brgy. I-B	Riverside	3-8% = Gently sloping to undulating
Brgy. San Lucas 1	Residential along Sampaloc Lake	3-8% = Gently sloping to undulating
Brgy. San Lucas 2	Residential along Sampaloc Lake	3-8% = Gently sloping to undulating
Brgy. IV-C	Residential along Sampaloc Lake	0-3% = Level to nearly level 3-8% = Gently sloping to undulating

Source: City Disaster Risk Reduction Management Office, GIS-Generated Slope Map

Table 21. Soil Erosion Susceptibility in San Pablo City

Soil Erosion Susceptibility	Area in Hectares	Percentage
Severe Erosion	877.17	4.44
Moderate Erosion	1,323.65	6.70
Slight Erosion	2,378.63	12.04
No Apparent Erosion	15,176.59	76.82
TOTAL	19,756.00	100.00

Source: GIS Computed area





The CDRRMO has approximated about nine (9) Barangays at risk of lahar and pyroclastic materials flow from possible volcanic eruption of Mt. Banahaw. Barangays located in the Eastern, Southern and South-eastern parts of the City, or those adjacent to the Western portion of Mt. Banahaw volcano complex include the following: San Antonio I, San Cristobal, San Diego, San Ignacio, San Jose, San Vicente, Sta. Elena, Sta. Isabel, and Sto. Niño. These nine barangays comprise about 17.8% of the City's population (2013). Mt. Banahaw, with its main crater located 18.27 kilometers Southeast of San Pablo City Proper is an active volcano. PHIVOLCS has identified volcanic hazards that may be brought about by explosive nature of eruption of Mt. Banahaw which may include debris avalanche, lahar and lake break-out. There have been no specific areas in San Pablo City that were identified by the lead agency in earthquake and volcanology where danger is imminent, in case of Mt. Banahaw's eruption (Table 22).

Table 22. Inventory of Households and Housing Units Living in Danger Areas in San Pablo City

Area	Population	Number of Household
Barangays that have low susceptibility to Earthquake Induced Landslide		
Atisan	1,319	299
Bautista	2,628	596
San Bartolome	3,395	770
San Cristobal	5,858	1,328
San Isidro	3,789	859
San Juan	3,710	841
San Marcos	3,009	682
San Mateo	3,126	709
Santiago II	3,258	739
Sta. Catalina	2,555	579
Total	32,647	3,134
Barangays that are susceptible to Rain induced Landslide		
Atisan	1,319	299
Bautista	2,628	596
San Bartolome	3,395	770
San Cristobal	5,858	1,328
San Marcos	3,009	682
San Mateo	3,126	709
Santiago II	3,258	739
Sta. Catalina	2,555	579
Total	25,148	5,702
Barangays prone to be affected by lahar & Pyroclastic flow from volcanic eruption		
San Antonio I	5,172	596
San Cristobal	5,858	1,328
San Diego	5,564	1,262
San Ignacio	4,871	1,105
San Jose	7,512	1,703
San Vicente	3,405	772
Sta. Elena	4,754	1,078
Sta. Isabel	3,502	794
Sto. Niño	4,474	1,015
Total	46,768	10,029

Source: City Disaster Risk Reduction Management Office



Meanwhile, Table 23 shows the list of infrastructures that are susceptible to landslides. Infrastructures in Barangay San Mateo are identified as high susceptible to landslides are the covered court, cellsite, San Mateo Pumping Station, San Mateo Elementary School, San Mateo Brgy. Hall/Health Center/Day Care and Moon Rise Mountain Resort. Landslide mitigation measures should be strictly observed.

Table 23. Facilities located within Critical Areas in San Pablo City, 2015

Geohazard	Facilities	Location
High susceptibility to landslide	Covered Court	San Mateo
	Cellsite	San Mateo
	San Mateo Pumping Station	San Mateo
	San Mateo Elementary School	San Mateo
	San Mateo Brgy. Hall/Health Center/Day Care	San Mateo
	Moon Rise Mountain Resort	San Marcos
Moderate susceptibility to landslide	Open Basketball Court	San Isidro
	Atisan Multi-Purpose Hall	San Isidro
	Brgy. Hall/Day Care Center	San Isidro
	Cellsite	San Marcos
	San Marcos Pumping Station A	San Marcos
	San Marcos Elementary School	San Marcos
	Basketball Court	San Marcos
	Cellsite	San Marcos
	Basketball Court	Santa Maria Magdalena
	San Marcos Pumping Station B	Santa Maria Magdalena
Low susceptibility to landslide	De Mesa Elementary School Santiago	Santiago
	Angels Kiddie Learning Center	Santa Filomena
	San Marcos Brgy. Hall/Health Center/Day Care	San Marcos
	Starlake Resort	Santa Catalina
	Sta. Catalina Elem. School	Santa Catalina
	Brgy. Hall/Health Center	Santa Catalina
	SPC Water District Pumping Station (Sto. Angel)	Santo. Angel
	Malabanban-Tubigan Spring Source	San Diego
	Cabunsod/Boying's Resort	San Diego
	Countryside Resort	San Diego
	Malaunod Pumping Station	San Jose
	Cellsites	Ignacio
	Sto. Niño-Baloc Elementary School	Sto. Niño
Baloc Landfill	Sto. Niño	

Note: No susceptibility to flooding based on MGB Hazard Map.



3. DEMOGRAPHY

Population is the starting point of planning. The demographic profile provides a backgrounder and general information on the population composition and distribution of the City. The changes in population brought about by its components such as birth, death, and migration relate to the historical and projected growth of the population.

Population composition includes the characteristics of the population in terms of age groupings and sex ratings. It provides the basis for social and economic planning considerations. Economic dependency ratios and participation measures as in labor force participation rate are derived from population composition data. School age population and the enrollment participation ratios are also derived from population distribution patterns. Population distribution, which is the geographic pattern of the location of people, is important in determining centers of population, hierarchy of settlements, and growth points in the City. Urbanization trends and density levels are also derived from population distribution patterns.

It is essential to take into account population projections, its size and characteristics, at City levels, which would serve as basis for estimating future needs and potentials in short and long-range planning. It also serves as a guide for allocating land for various uses.

3.1 Population Composition

3.1.1 Population by Age Group and Sex

Latest population census of 2010 reveals that San Pablo City has a total population of 248,890 and has a total household population of 248,320¹. Of the total household population recorded, 122,819 are male and 125,501 female (Table 24). Between 2000 and 2010 censal years, the Philippine Statistics Authority estimated a population growth of 1.81%. Using the said population growth, the total population and household population in 2014 is projected at 267,452 and 266,840, respectively.

¹Household population is the aggregate of private household population. Compared to total population, this excludes population enumerated in institutional households such as national/provincial/municipality/City jails/detention centers, military camps, tuberculosis pavilions, mental hospitals, leprosaria/leprosy colonies or drug rehabilitation centers. (Source: nscb.gov.ph)



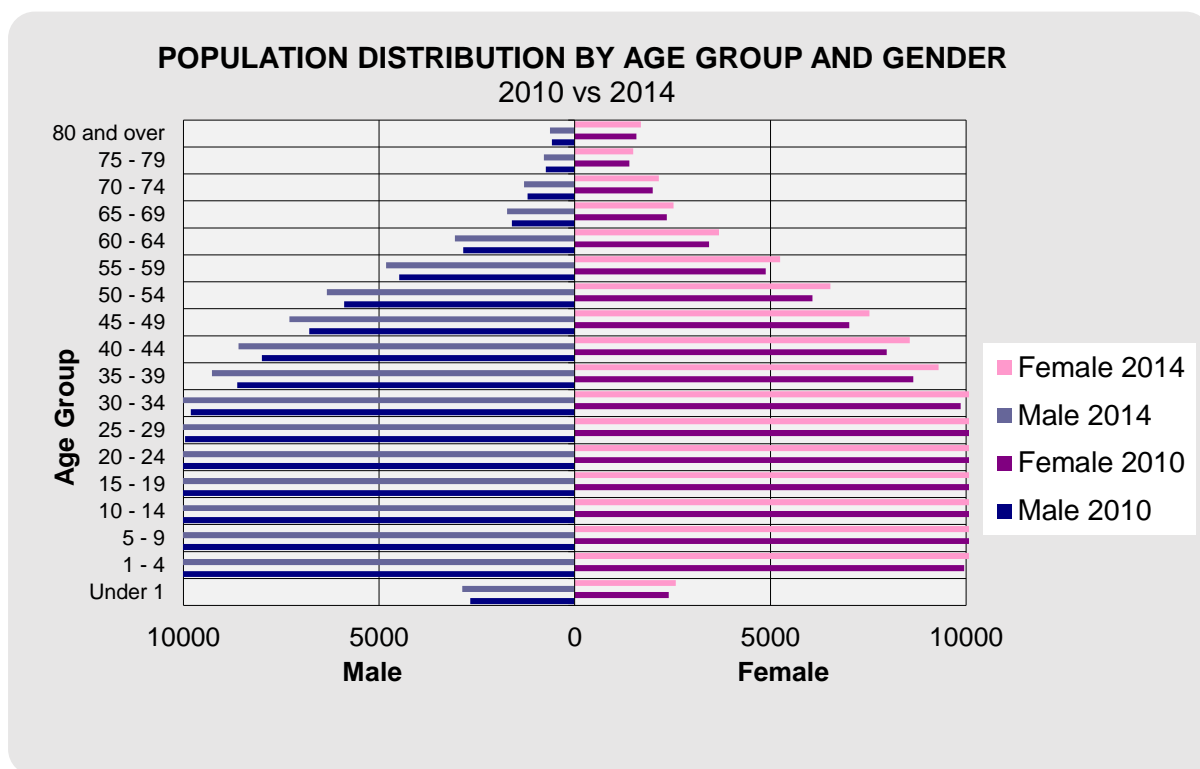
The City has a young population distribution. Table 24 shows that people aged 1-29 years old mostly comprise the City's population. Age groups 5-9, 10-14, and 15-19 are the most numerous. This implies that the population is mainly composed of children and teenagers and are assumed to be the school-going population in elementary and high school. As widely observed among population compositions, San Pablo City follows the common pattern of a decline in population as the age groups go higher.

As shown in Figure 9, San Pablo City's population pyramid is classified as expansive. An expansive pyramid has a broad base which shows a youthful population. This also indicates fertility within the population and an increase in population growth rate in the future.

Table 24. Household Population Distribution by Age Group and Setoff San Pablo City, 2010-2014

Age Group	2010			2014		
	Male	Female	Total	Male	Female	Total
Under 1	2,672	2,401	5,073	2,871	2,580	5,451
1 - 4	10,850	9,955	20,805	11,659	10,697	22,357
5 - 9	13,285	12,306	25,591	14,276	13,224	27,500
10 - 14	12,905	12,224	25,129	13,867	13,136	27,003
15 - 19	11,964	12,063	24,027	12,856	12,963	25,819
20 - 24	10,610	10,841	21,451	11,401	11,650	23,051
25 - 29	9,960	10,513	20,473	10,703	11,297	22,000
30 - 34	9,806	9,859	19,665	10,537	10,594	21,132
35 - 39	8,625	8,653	17,278	9,268	9,298	18,567
40 - 44	7,993	7,970	15,963	8,589	8,564	17,154
45 - 49	6,783	7,011	13,794	7,289	7,534	14,823
50 - 54	5,893	6,077	11,970	6,332	6,530	12,863
55 - 59	4,486	4,881	9,367	4,821	5,245	10,066
60 - 64	2,853	3,432	6,285	3,066	3,688	6,754
65 - 69	1,609	2,353	3,962	1,729	2,528	4,257
70 - 74	1,202	1,996	3,198	1,292	2,145	3,437
75 - 79	736	1,392	2,128	791	1,496	2,287
80 and over	587	1,574	2,161	631	1,691	2,322
Total	122,819	125,501	248,320	131,979	134,861	266,840

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 9. Population Pyramid of San Pablo City, 2010 and 2014

3.1.2 Age-Dependency Ratio

In 2014, 39% of San Pablo's population is composed of the school-going population (Table 25). Among them, elementary students are the most numerous which is followed by children in high school. The population studying college is the least among the school-going force.

The productive population or the working age group makes 64% of the total population. Thirty-five percent of San Pablo City's total population relies on the working age group, 30% of which are the young and the rest as the senior citizens. With this, the age dependency ratio suggests that there are 55 individuals dependent per 100 working age people. Of this 55 dependent individuals people, 48 are children and 7 are elders.

In schools, there are 104 males per 100 females. This means that both sexes have relatively equal access to education at all levels. In the working force, men are slightly outnumbered by women with a sex ratio of 98. The notion that women outlive men is affirmed by the sex ratio of 57 males per 100 females in the old age group.



Table 25. Population Composition by School-Age, Working-Age, Dependent-Age Group and Sex in San Pablo City, 2014

Age Group	Both Sexes	Percentage	Male		Female		Sex Ratio
			No.	%	No.	%	
School-going Population	105,330	39.38	53,645	50.93	51,686	49.07	104
Pre-school (3-6)	22,178	8.29	11,539	52.03	10,639	47.97	109
Elementary (7-12)	32,702	12.23	16,884	51.63	15,814	48.36	107
Secondary (13-18)	31,456	11.76	15,832	50.33	15,624	49.67	102
Tertiary (19-22)	18,994	7.10	9,412	49.55	9,583	50.45	99
Working Age (15-64)	172,226	64.40	84,856	49.27	87,370	50.73	98
Labor Force³ (15 and over)	184,529	69.00	89,312	48.40	95,217	51.60	94
Dependent Population	94,613	35.38	47,118	49.80	47,496	50.20	100
Young (0-14)	82,311	30.78	42,670	51.84	39,641	48.16	108
Old (65-over)	12,303	4.60	4,443	36.11	7,860	63.89	57

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

³Labor Force refers to the population 15 years old and above who are either employed or unemployed.

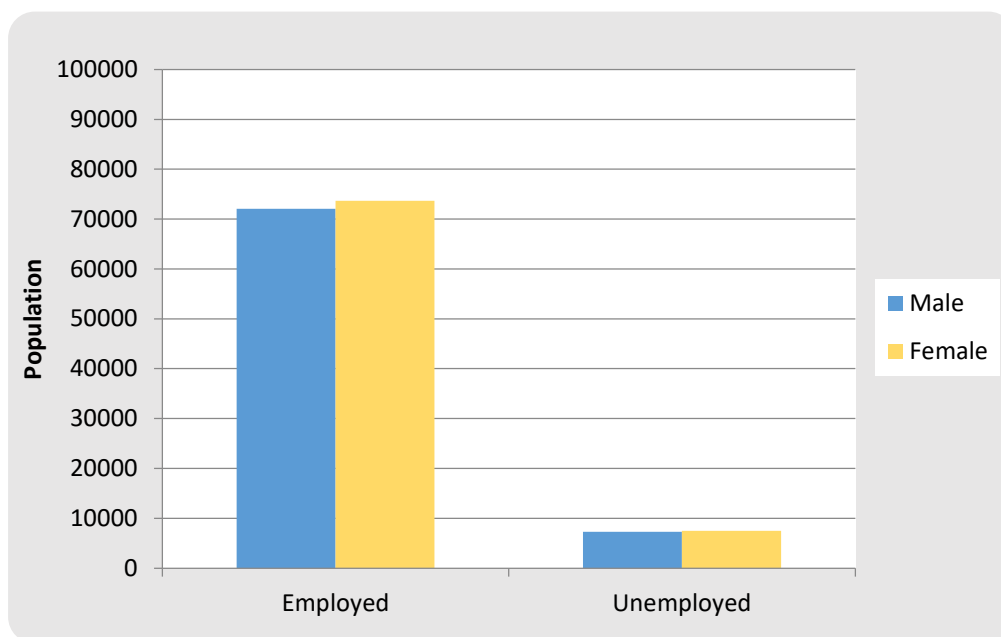
3.1.3 Labor Force and Employment

Table 26 shows that more than half (59%) of the total population of San Pablo City is employed. Both men and women have relatively equal access to employment as indicated by the employment status. There are roughly 30% female and 29% male employed in 2014. Unemployment rate is recorded at 6%, which is relatively low compared to other cities. Figure 10 visualizes the literacy rate of the City in relation to Laguna's.

Table 26. Labor Force Population by Sex and Employment Status in San Pablo City, 2014

Sex	Employment Status				
	Population	Employed	Percentage (%)	Unemployed	Percentage (%)
Male	131,979	72,095	28.97	7,832	2.94
Female	134,861	73,669	29.60	8,002	3.00
Total	266,840	145,764	58.57	15,834	5.93

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 10. Labor Force by Sex and Employment Status in San Pablo City, 2014

3.1.4 School Age Population

As shown in Table 25, 39% of the total population of San Pablo City is classified as the school-going population. Of this, 8% are in preschool education, 12% in elementary, 12% in high school, and 7% in college. A sex ratio measures the number of males for every 100 females. Across the age groups, males and females have equal access to all levels of education, with sex ratios of: 109 (preschool), 107 (elementary), 102 (secondary), and 99 (tertiary). The general sex ratio for the school-age population is 104.

3.2 Population Distribution

3.2.1 Total Population by Barangay

The projected total population of San Pablo City in 2014 is 267,452 (Table 27). There are 80 barangays in the City, 44 are classified as urban and 36 as rural. Previously, there were only 32 urban barangays in the City but the construction of infrastructures and the increase in population have led to the reclassification of 12 rural barangays into urban ones. These barangays are Concepcion, Del Remedio, San Francisco, San Gabriel, San Gregorio, San Jose, San Lucas I, San Lucas II, San Rafael, San Roque, Sto Cristo, and Soledad.



Urban barangays have a total population of 133,565. Barangays San Francisco and Del Remedio are the most populous among urban barangays and the whole City. San Pablo City's urban barangays are characterized by small populations, ranging from 80 (Barangay VII-D) to 5,639 (Barangay I-C). Recently reclassified urban barangays have more populations than their counterpart. Rural barangays have a total population of 133,887. Barangay Sto. Angel has the most population in it. Rural barangays in San Pablo City have populations ranging from 1,225 (Barangay Atisan) to 7,266 (Barangay Sta. Monica).

Barangays Del Remedio (5.54%) and San Francisco (5.96%) have the highest participation rate while Barangay VII-D has the smallest with 0.03%. The sum of the participation rates of the barangays suggests that the whole City is evenly divided into urban and rural. It also implies that urban area and the rural area of San Pablo relatively have the same population.

3.2.1 Urban-Rural Household Population² by Barangay

As seen in Table 27, the total population of the City is greater than its household population which is 266,840. It is lower because household population excludes institutional households. The Participation Rate of each barangay (shown in Table 28) was used to compute their household population. Barangays Del Remedio and San Francisco have the highest household population among urban barangays and the City. Sto. Angel, among rural barangays, has the most numerous household population.

²Household population is the aggregate of private household population. Compared to total population, this excludes population enumerated in institutional households such as national/provincial/municipality/City jails/detention centers, military camps, tuberculosis pavilions, mental hospitals, leprosaria/leprosy colonies or drug rehabilitation centers. (Source: nscb.gov.ph)

**Table 27. Total Population by Barangay in San Pablo City, 2014**

Barangay	Population	Participation Rate	Barangay	Population	Participation Rate
Rural Barangays			Sto Cristo	3,316	1.24%
I-A	587	2.661	Soledad	2,476	0.99%
I-B	4,860	1.82%	Sub-Total (Rural)	133,565	50%
I-C	6,060	2.27%	Urban Barangays		
II-A	2,876	1.08%	Atisan	1,316	0.49%
II-B	2,423	0.91%	Bautista	2,626	0.98%
II-C	1,226	0.46%	Dolores	2,419	0.90%
II-D	1,310	0.49%	San Antonio I	5,172	1.93%
II-E	3,064	1.15%	San Antonio II	3,752	1.40%
II-F	2,263	0.85%	San Bartolome	3,396	1.27%
III-A	431	0.16%	San Buenaventura	3,972	1.48%
III-B	960	0.36%	San Crispin	4,078	1.52%
III-C	3,159	1.18%	San Cristobal	5,859	2.19%
III-D	1,408	0.53%	San Diego	5,565	2.08%
III-E	673	0.25%	San Ignacio	4,872	1.82%
III-F	331	0.12%	San Isidro	3,790	1.42%
IV-A	840	0.31%	San Joaquin	1,576	0.59%
IV-B	498	0.19%	San Juan	3,709	1.39%
IV-C	881	0.33%	San Lorenzo	2,045	0.76%
V-A	521	0.19%	San Marcos	3,009	1.12%
V-B	979	0.37%	San Mateo	3,127	1.17%
V-C	508	0.19%	San Miguel	3,197	1.20%
V-D	437	0.16%	San Nicolas	4,814	1.80%
VI-A	534	0.20%	San Pedro	2,581	0.97%
VI-B	926	0.35%	San Vicente	3,405	1.27%
VI-C	2,064	0.77%	Santiago I	2,222	0.83%
VI-D	2,075	0.78%	Santiago II	3,256	1.22%
VI-E	2,808	1.05%	Sta. Ana	2,713	1.01%
VII-A	1,832	0.69%	Sta. Catalina	2,554	0.96%
VII-B	560	0.21%	Sta. Cruz	2,541	0.95%
VII-C	179	0.07%	Sta. Elena	4,753	1.78%
VII-D	86	0.03%	Sta. Filomena	3,687	1.38%
VII-E	165	0.06%	Sta. Isabel	3,501	1.31%
Concepcion	8,519	3.19%	Sta. Ma.		
Del Remedio	14,817	5.54%	Magdalena	2,609	0.98%
San Francisco	15,930	5.96%	Sta. Maria	3,539	1.32%
San Gabriel	8,382	3.13%	Sta. Monica	7,808	2.92%
San Gregorio	5,919	2.21%	Sta. Veronica	1,655	0.62%
San Jose	7,513	2.81%	Stmo. Rosario	4,866	1.82%
San Lucas I	5,741	2.15%	Sto. Angel	9,428	3.53%
San Lucas II	6,200	2.32%	Sto. Niño	4,473	1.67%
San Rafael	3,726	1.39%	Sub-total (Urban)	133,887	50%
San Roque	3,316	1.24%	Total	267,452	100%

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

**Table 28. Household Population per Barangay of San Pablo City, 2014**

Barangay	Total Population	Household Population
Urban Barangays		
Barangay I-A	587	585
Barangay I-B	4,860	4,849
Barangay I-C	6,060	6,046
Barangay II-A	2,876	2,869
Barangay II-B	2,423	2,418
Barangay II-C	1,226	1,223
Barangay II-D	1,310	1,307
Barangay II-E	3,064	3,057
Barangay II-F	2,263	2,258
Barangay III-A	431	430
Barangay III-A	960	957
Barangay III-B	3,159	3,152
Barangay III-D	1,408	1,404
Barangay III-E	673	671
Barangay III-F	331	330
Barangay IV-A	840	838
Barangay IV-B	498	496
Barangay IV-C	881	879
Barangay V-A	521	520
Barangay V-B	979	977
Barangay V-C	508	507
Barangay V-D	437	436
Barangay VI-A	534	533
Barangay VI-B	926	924
Barangay VI-C	2,064	2,060
Barangay VI - D	2,075	2,070
Barangay VI - E	2,808	2,801
Barangay VII - A	1,832	1,828
Barangay VII - B	560	559
Barangay VII - C	179	179
Barangay VII - D	86	86
Barangay VII - E	165	165
Concepcion	8,519	8,500
Del Remedio	14,817	14,783
San Francisco	15,930	15,893
San Gabriel	8,382	8,363
San Gregorio	5,919	5,905
San Jose	7,513	7,496
San Lucas I	5,741	5,728
San Lucas II	6,200	6,186
San Rafael	3,726	3,717
San Roque	3,316	3,309
Sto Cristo	3,316	3,309
Soledad	2,661	2,655
Sub-total	133,565	133,259
Rural Barangays		
Atisan	1,316	1,313
Bautista	2,626	2,620
Dolores	2,419	2,413
San Antonio I	5,172	5,160
San Antonio II	3,752	3,744
San Bartolome	3,396	3,388
San Buenaventura	3,972	3,963
San Crispin	4,078	4,069



Barangay	Total Population	Household Population
San Cristobal	5,859	5,845
San Diego	5,565	5,553
San Ignacio	4,872	4,861
San Isidro	3,790	3,781
San Joaquin	1,576	1,573
San Juan	3,709	3,701
San Lorenzo	2,045	2,040
San Marcos	3,009	3,002
San Mateo	3,127	3,120
San Miguel	3,197	3,190
San Nicolas	4,814	4,803
San Pedro	2,581	2,575
San Vicente	3,405	3,398
Santiago I	2,222	2,217
Santiago II	3,256	3,249
Sta. Ana	2,713	2,707
Sta. Catalina	2,554	2,548
Sta. Cruz	2,541	2,536
Sta. Elena	4,753	4,742
Sta. Filomena	3,687	3,678
Sta. Isabel	3,501	3,493
Sta. Ma. Magdalena	2,609	2,603
Sta. Maria	3,539	3,530
Sta. Monica	7,808	7,790
Sta. Veronica	1,655	1,651
Stmo. Rosario	4,866	4,855
Sto. Angel	9,428	9,407
Sto. Niño	4,473	4,463
Sub-total	133,887	133,581
Total	267,452	266,840

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

3.2.2 Urbanization Level

Table 29 shows that the census conducted in 1975 registered a population of 116,607. Fifteen years later, in 1990, it had a population of 161,426. The population of San Pablo City hit 207,927 in 2000, almost twice its size 25 years earlier. The 2010 census almost recorded 250,000 people in San Pablo City, just ten years after it hit 200,000.

There was a spurt of urbanization that happened in 1975 until 1980. The level of urbanization was 52% which means that half of the City lives in urban areas. However, there was a decrease in the tempo of urbanization between 1980 and 1990 because of installations of water systems in the rural areas. The event led to the sprout of subdivisions which made way for urban folks to reside in rural areas, causing the rural growth rate to rise over the years. Residential houses in the City were converted into commercial ones. The tempo of urbanization continued to slow down until 2007. The record-low for the tempo of urbanization of San Pablo City was in 2000 where it was -22.14. During the



same year, the growth rate of the rural area was also highest (10%) and the lowest for the urban area -11%. The tempo of urbanization slows down when both the population and the population growth rate of a rural area is greater than the urban area. The level of urbanization continued to decrease in the recent years as the portion of those living in urban areas became smaller over the years.

However, the trend was reversed in 2010 when 12 rural barangays were reclassified as urban barangays and caused another spurt in the tempo of urbanization. Currently, there is an equal allocation of population between rural and urban areas as the level of urbanization in 2010 is at 50%.

Table 29. Tempo of Urbanization of San Pablo City

Year	Population		Total	Growth Rate (%)		Tempo of Urbanization (%)	Level of Urbanization (%)
	Urban	Rural		Urban	Rural		
1975	42,489	74,118	116,607				36.44
1980	68,608	63,047	131,655	10.06	-3.18	13.24	52.11
1990	78,734	82,692	161,426	1.39	2.75	-1.36	48.77
1995	86,421	97,336	183,757	1.88	3.31	-1.43	47.03
2000	46,823	161,104	207,927	-11.54	10.60	-22.14	22.52
2007	47,978	189,281	237,259	0.35	2.33	-1.98	20.22
2010	124,295	124,595	248,890	37.34	-13.01	50.35	49.94

Source: Philippine Statistics Authority

Table 30 shows further details of urbanization level for the past 20 years according to barangay. Urban and rural barangays have a relatively similar number of sub-total households of 31,488 and 31,564, respectively. According to the latest censal data and population projection, San Pablo City has an average household size of 5. Statistically, a household in San Pablo City is composed of the parents and three children. Urban barangays Del Remedio and San Francisco have 3,493 and 3,755 households, respectively. Having the fewest total population in the City, Barangay VII-D only has 20 households. Meanwhile, Sto. Angel has the most households (2,223) among rural households.

**Table 30. Urbanization Levels for the Past 20 Years in San Pablo City, 2014**

Barangay	Population	No. of Household	Ave. Household Size
URBAN BARANGAYS			
Barangay I-A	587	138	5
Barangay I-B	4,860	1,146	5
Barangay I-C	6,060	1,429	5
Barangay II-A	2,876	678	5
Barangay II-B	2,423	571	5
Barangay II-C	1,226	289	5
Barangay II-D	1,310	309	5
Barangay II-E	3,064	722	5
Barangay II-F	2,263	534	5
Barangay III-A	431	102	5
Barangay III-A	960	226	5
Barangay III-B	3,159	745	5
Barangay III-D	1,408	332	5
Barangay III-E	673	159	5
Barangay III-F	331	78	5
Barangay IV-A	840	198	5
Barangay IV-B	498	117	5
Barangay IV-C	881	208	5
Barangay V-A	521	123	5
Barangay V-B	979	231	5
Barangay V-C	508	120	5
Barangay V-D	437	103	5
Barangay VI-A	534	126	5
Barangay VI-B	926	218	5
Barangay VI-C	2,064	487	5
Barangay VI - D	2,075	489	5
Barangay VI - E	2,808	662	5
Barangay VII - A	1,832	432	5
Barangay VII - B	560	132	5
Barangay VII - C	179	42	5
Barangay VII - D	86	20	5
Barangay VII - E	165	39	5
Concepcion	8,519	2,008	5
Del Remedio	14,817	3,493	5
San Francisco	15,930	3,755	5
San Gabriel	8,382	1,976	5
San Gregorio	5,919	1,395	5
San Jose	7,513	1,771	5
San Lucas I	5,741	1,354	5
San Lucas II	6,200	1,462	5
San Rafael	3,726	878	5
San Roque	3,316	782	5
Sto Cristo	3,316	782	5
Soledad	2,661	627	5
Sub-total	133,565	31,488	



Barangay	Population	No. of Household	Ave. Household Size
RURAL BARANGAYS			
Atisan	1,316	310	5
Bautista	2,626	619	5
Dolores	2,419	570	5
San Antonio I	5,172	1219	5
San Antonio II	3,752	885	5
San Bartolome	3,396	801	5
San Buenaventura	3,972	936	5
San Crispin	4,078	961	5
San Cristobal	5,859	1,381	5
San Diego	5,565	1,312	5
San Ignacio	4,872	1,149	5
San Isidro	3,790	894	5
San Joaquin	1,576	372	5
San Juan	3,709	875	5
San Lorenzo	2,045	482	5
San Marcos	3,009	709	5
San Mateo	3,127	737	5
San Miguel	3,197	754	5
San Nicolas	4,814	1,135	5
San Pedro	2,581	609	5
San Vicente	3,405	803	5
Santiago I	2,222	524	5
Santiago II	3,256	768	5
Sta. Ana	2,713	640	5
Sta. Catalina	2,554	602	5
Sta. Cruz	2,541	599	5
Sta. Elena	4,753	1,120	5
Sta. Filomena	3,687	869	5
Sta. Isabel	3,501	825	5
Sta. Ma. Magdalena	2,609	615	5
Sta. Maria	3,539	834	5
Sta. Monica	7,808	1,841	5
Sta. Veronica	1,655	390	5
Stmo. Rosario	4,866	1,147	5
Sto. Angel	9,428	2,223	5
Sto. Niño	4,473	1,055	5
Sub-total	133,887		31,564
Total	267,452		63,052

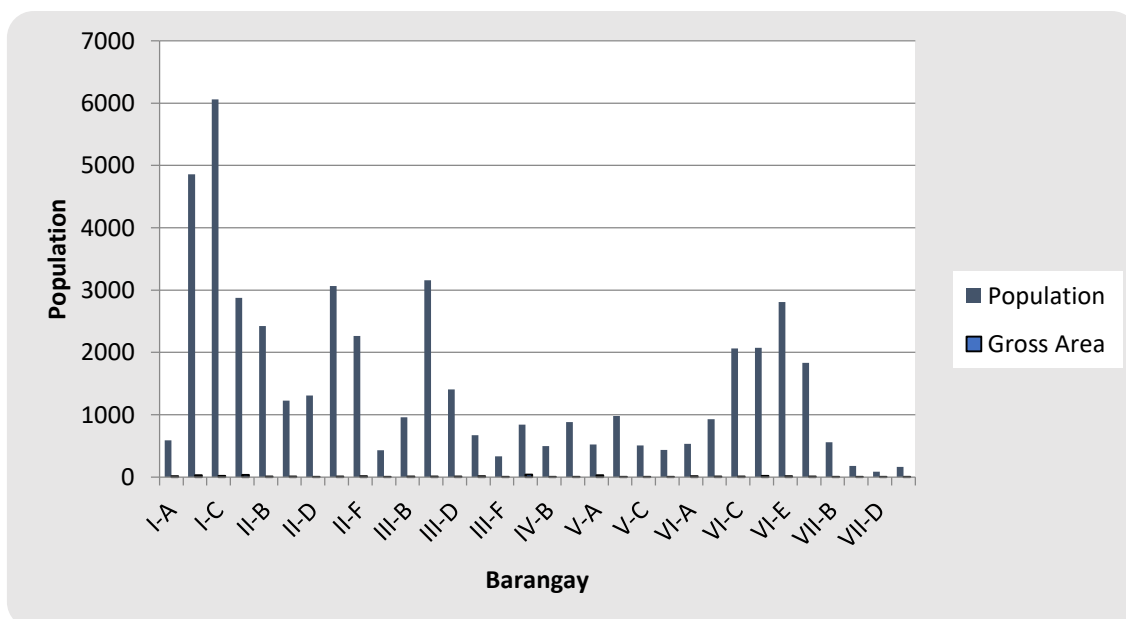
Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



3.2.3 Population Density/Residential Density

Portrayed in Table 31 are the population densities of all barangays in San Pablo. Generally, the City has an average density of 14 people per hectare. Looking closer, the gross rural density of the City is 9. Additionally, the gross urban density is 38 persons per hectare. Even though the distribution of the population is equally distributed among urban and rural areas, the big difference of the densities can be attributed to the large area occupied by the rural half of the City which is more than five times the size of the urban zone. Furthermore, people are attracted to the urban area due to the existence of more and better services and facilities as it is also where government offices are situated. Aside from offering a wide variety of choices, employment is also in demand in urban areas, hence, the reason for flocking towards the district.

Urban barangays are characterized by having small land areas, ranging from 1.23 ha (VII-D) to 40.01 ha (IV-A). The relationship between gross land area and populations of urban barangays can be observed in Figure 11. Recently reclassified urban barangays have larger land areas than the formerly established ones (Figure 12). Among urban barangays, Barangay II-A is the most crowded. Upon computation, density is computed at 652 persons per hectare of land (gross area of 4.41 hectares). On the contrary, rural barangays are characterized by having a larger land area than its counterpart (Figure 13). Land areas range from 148 ha (San Mateo) to 797 ha (San Diego). Having almost 2,000 hectares of land, San Cristobal is the least occupied with only 3 people found per hectare.



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 11. Population Density of Urban Barangays in San Pablo City, 2014

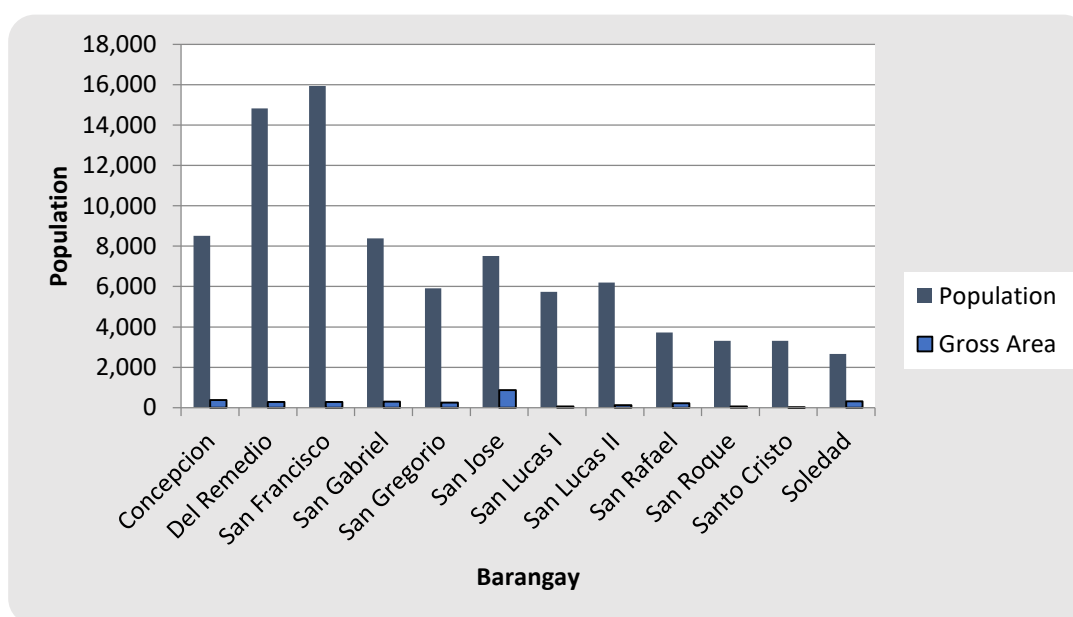
**Table 31. Population Density of Barangays in San Pablo, 2014**

Barangay	Population	Gross Area (ha)	Population Density
URBAN			
I-A	587	13.5	44
I-B	4,860	27.58	177
I-C	6,060	49.3	123
II-A	2,876	4.41	652
II-B	2,423	8.39	289
II-C	1,226	7.58	162
II-D	1,310	3.99	329
II-E	3,064	11.36	270
II-F	2,263	15.57	146
III-A	431	5.97	73
III-B	960	8.87	109
III-C	3,159	10.52	301
III-D	1,408	7.71	183
III-E	673	13.87	49
III-F	331	2.83	117
IV-A	840	40.01	21
IV-B	498	4.74	105
IV-C	881	11.01	80
V-A	521	29.94	18
V-B	979	4.92	199
V-C	508	2.67	191
V-D	437	2.52	174
VI-A	534	11.92	45
VI-B	926	6.31	147
VI-C	2,064	10.95	189
VI-D	2,075	18.5	113
VI-E	2,808	15.44	182
VII-A	1,832	8.1	227
VII-B	560	4.77	118
VII-C	179	2.43	74
VII-D	86	1.23	70
VII-E	165	3.09	54
Concepcion	8,519	369.3	23
Del Remedio	14,817	284.79	52
San Francisco	15,930	286.59	56
San Gabriel	8,382	285.98	30
San Gregorio	5,919	248.58	24
San Jose	7,513	867.25	9
San Lucas I	5,741	61.39	94
San Lucas II	6,200	120.75	52
San Rafael	3,726	225.96	17
San Roque	3,316	66.42	50
Santo Cristo	3,316	12.96	256
Soledad	2,661	317.94	9
Sub-total	133,565	3,517.94	38
RURAL			
Atisan	1,316	164.63	8
Bautista	2,626	691.61	4
Dolores	2,419	337.77	8
San Antonio I	5,172	236.3	22
San Antonio II	3,752	271.3	14
San Bartolome	3,396	410.98	9
San Buenaventura	3,972	390.95	11
San Crispin	4,078	360.86	12



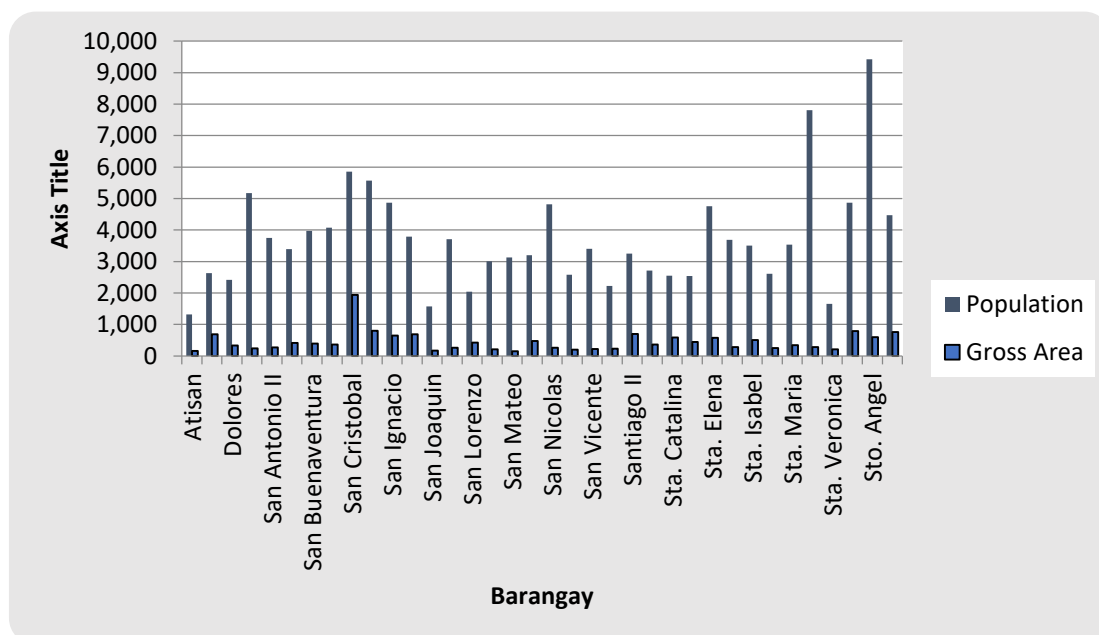
Barangay	Population	Gross Area (ha)	Population Density
San Cristobal	5,859	1939.58	3
San Diego	5,565	796.98	7
San Ignacio	4,872	643.75	8
San Isidro	3,790	691.84	6
San Joaquin	1,576	172.58	10
San Juan	3,709	259.64	15
San Lorenzo	2,045	421.47	5
San Marcos	3,009	215.12	14
San Mateo	3,127	148.62	21
San Miguel	3,197	477.36	7
San Nicolas	4,814	257.29	19
San Pedro	2,581	203.03	13
San Vicente	3,405	220.19	16
Santiago I	2,222	233.96	10
Santiago II	3,256	703.2	5
Sta. Ana	2,713	361.2	8
Sta. Catalina	2,554	590.56	5
Sta. Cruz	2,541	441.39	6
Sta. Elena	4,753	577.42	9
Sta. Filomena	3,687	277.24	14
Sta. Isabel	3,501	501.67	7
Sta. Maria Magdalena	2,609	246.99	11
Sta. Maria	3,539	347.82	11
Sta. Monica	7,808	279.04	28
Sta. Veronica	1,655	214.92	8
Stmo. Rosario	4,866	792.53	7
Sto. Angel	9,428	599.07	16
Sto. Niño	4,473	759.71	6
Sub-total	133,887	16,238.57	9
Total	267,452	19,756	14

Source: Basic data 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 12. Population Density of Urban Barangays in San Pablo City, 2014



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 13. Population Density of Rural Barangays in San Pablo City, 2014

3.2.4 Hierarchy of Settlements by Barangays

Table 32 arranges all the barangays in descending order according to their total population. The two most populous barangays are San Francisco and Del Remedio with total populations of more than 10,000. There are 11 barangays with total populations of more than 5,000. Conversely, there are 18 barangays with total populations of less than 1,000. Three of these barangays have the fewest people residing in it: Barangay VII-C (179), Barangay VII-E (165), and Barangay VII-D (86).

**Table 32. Hierarchy of Settlements/Barangays in San Pablo City, 2014**

Rank	Barangay	Population	Rank	Barangay	Population
1	San Francisco	15,930	41	VI-E	2,808
2	Del Remedio	14,817	42	Sta. Ana	2,713
3	Sto. Angel	9,428	43	Soledad	2,661
4	Concepcion	8,519	44	Bautista	2,626
5	San Gabriel	8,382	45	Sta. Maria Magdalena	2,609
6	Sta. Monica	7,808	46	San Pedro	2,581
7	San Jose	7,513	47	Sta. Catalina	2,554
8	San Lucas II	6,200	48	Sta. Cruz	2,541
9	I-C	6,060	49	II-B	2,423
10	San Gregorio	5,919	50	Dolores	2,419
11	San Cristobal	5,859	51	II-F	2,263
12	San Lucas I	5,741	52	Santiago I	2,222
13	San Diego	5,565	53	VI-D	2,075
14	San Antonio I	5,172	54	VI-C	2,064
15	San Ignacio	4,872	55	San Lorenzo	2,045
16	Stmo. Rosario	4,866	56	VII-A	1,832
17	I-B	4,860	57	Sta. Veronica	1,655
18	San Nicolas	4,814	58	San Joaquin	1,576
19	Sta. Elena	4,753	59	III-D	1,408
20	Sto. Niño	4,473	60	Atisan	1,316
21	San Crispin	4,078	61	II-D	1,310
22	San Buenaventura	3,972	62	II-C	1,226
23	San Isidro	3,790	63	V-B	979
24	San Antonio II	3,752	64	III-B	960
25	San Rafael	3,726	65	VI-B	926
26	San Juan	3,709	66	IV-C	881
27	Sta. Filomena	3,687	67	IV-A	840
28	Sta. Maria	3,539	68	III-E	673
29	Sta. Isabel	3,501	69	I-A	587
30	San Vicente	3,405	70	VII-B	560
31	San Bartolome	3,396	71	VI-A	534
32	San Roque	3,316	72	V-A	521
33	Santo Cristo	3,316	73	V-C	508
34	Santiago II	3,256	74	IV-B	498
35	San Miguel	3,197	75	V-D	437
36	III-C	3,159	76	III-A	431
37	San Mateo	3,127	77	III-F	331
38	II-E	3,064	78	VII-C	179
39	San Marcos	3,009	79	VII-E	165
40	II-A	2,876	80	VII-D	86

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



3.3 Population Changes

3.3.1 Historical Growth

Table 33 describes the historical increase in population and the situation of the City when compared with provincial, regional, and national growth rates. The first census conducted in 1903 registered 22,612 inhabitants and continued to grow up to 1918, posting a 2.21% increase annually. There is a marked increase in the growth rate during the inter-censal period 1960–1970. The decade has seen a 4.09% annual growth rate. This is highest growth rate ever recorded in the history of San Pablo since 1903 when industries and oil mills in the area began to power the economy. The slowest growth rate occurred between 1939 and 1948.

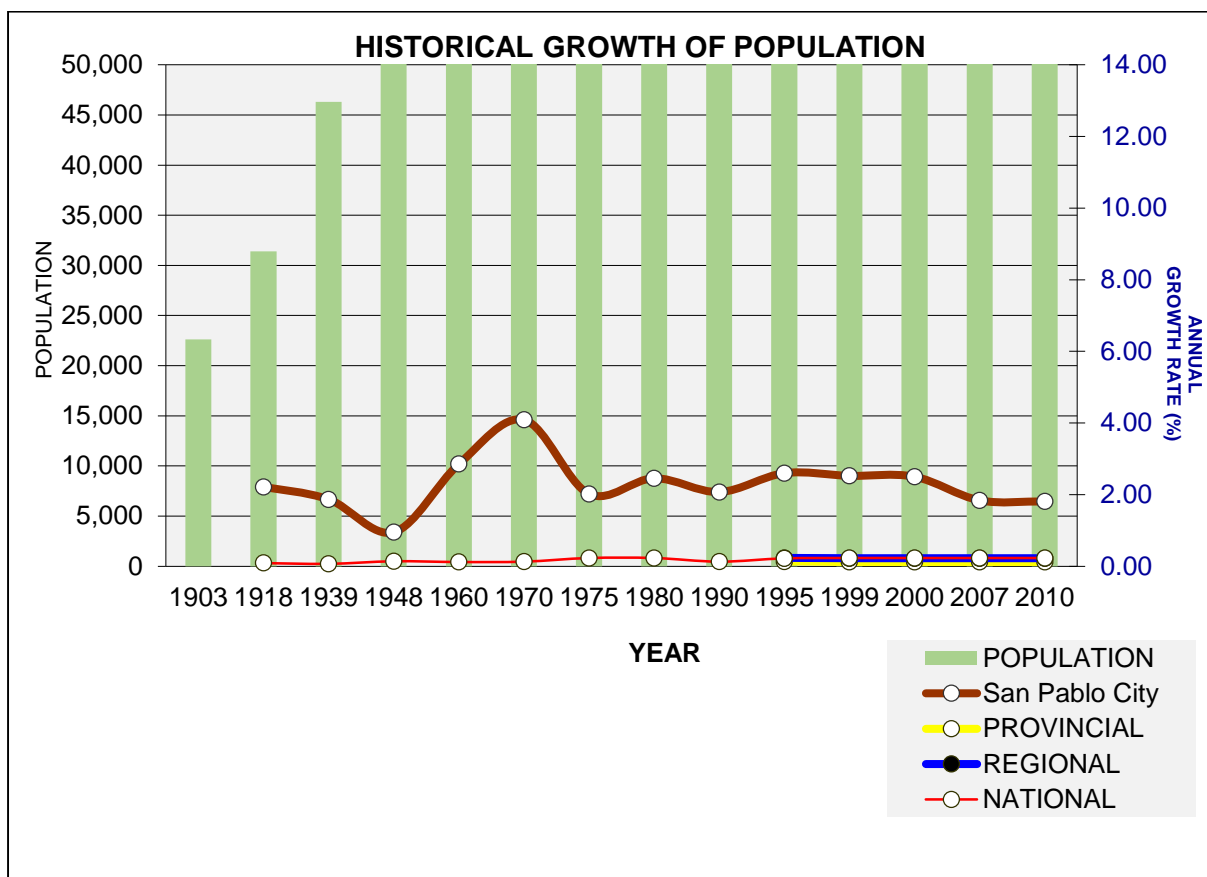
Between 1975 and 1995, the growth rate of the City reported an alternating trend of 2.01%, 2.45%, 2.07% and 2.43% respectively. The extensive family planning program of the Department of Health and City Population Office helped control the population growth of the City. Since 1995, the annual growth rate of the City has continued to decline.

The annual growth rate of San Pablo City has stayed in moderation. It was always below the prevailing provincial, regional, and national population growth rate (Figure 14).

Table 33. Historical Population Growth of San Pablo City

Year	Population	Increase/ Decrease	Annual growth rate (%)			
			San Pablo City	Provincial	Regional	National
1903	22,612					
1918	31,399	8,787	2.21			
1939	46,311	14,912	1.87			
1948	50,435	4,124	0.95			
1960	70,680	20,245	2.85			
1970	105,517	34,837	4.09			
1975	116,607	11,090	2.02			
1980	131,655	15,048	2.46			
1990	161,630	29,975	2.07			
1995	183,757	22,127	2.60			
1999	202,280	18,523	2.43			
2000	207,927	5,647	2.79	3.02	4.03	2.36
2007	237,259	29,332	1.90	2.58	3.56	2.34
2010	248,890	11,631	1.61	2.29	2.72	1.90
Average						

Source: Philippine Statistics Authority



Source: Philippine Statistics Authority

Figure 14. Historical Population Growth of San Pablo City

3.3.1 Fertility and Mortality

Crude Birth Rate refers to the number of live births per 1,000 population and similarly, Crude Death Rate is the occurrence of deaths per population of 1,000.

Table 34 shows that in 2010, there were 32 live births in San Pablo City for every 1,000 people. The crude birth rate of San Pablo City has been steadily declining for the last five years. There was a decrease of 6% in 2011, making it only 30 live births per 1,000 population. Although the City's CBR bounced back by 1% in 2012, it went down another 6% over the next two years which resulted to the latest CBR of 28. Controlling population growth helps in easing the demand for natural resources.

As shown, the changes in the crude death rate of the City over the years did not affect the whole number. It still amounts to roughly 8 deaths occurring per 1,000 population. The year 2013 has shown the highest increase in the CDR of the City while 2012 showed the least.



Table 34. Crude Birth Rate (CBR) and Crude Death Rate (CDR) for the Past Five Years/Planning Period in San Pablo City

Period	CBR	% Increase/Decrease from Previous Year	CDR	% Increase/Decrease from Previous Year
2010	31.49		7.45	
2011	29.33	-6.86	7.32	-1.74
2012	29.62	0.99	7.33	0.14
2013	28.83	-2.67	7.80	6.41
2014	27.79	-3.61	7.75	-0.64

Source: City Health Office

3.4 Other Population Characteristics

3.4.1 Marital Status

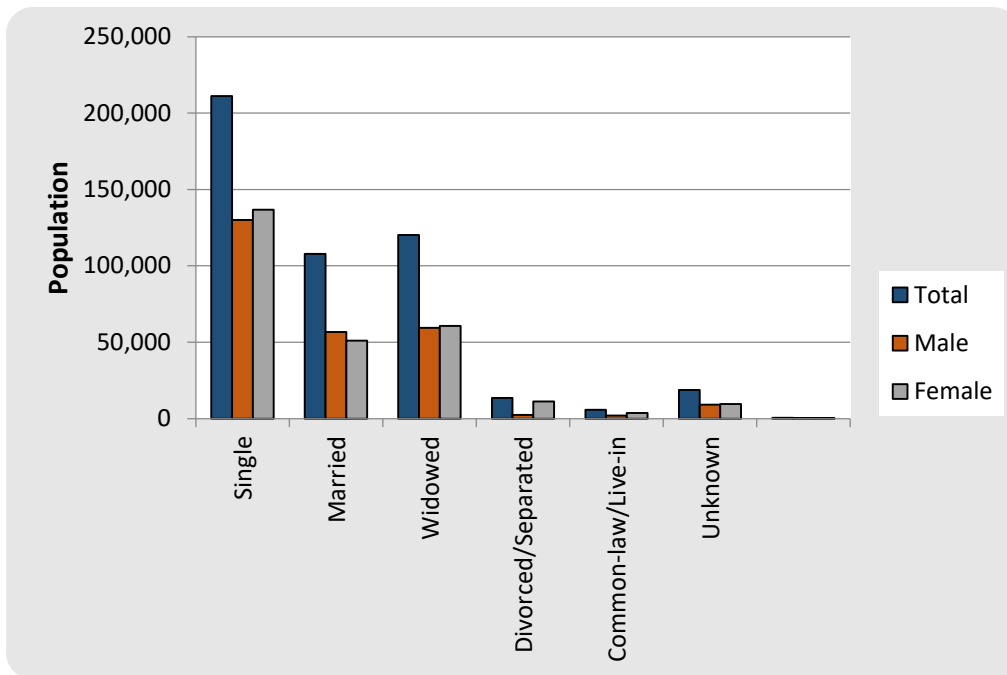
Thirty two percent of the population of San Pablo City are single (Table 35). Out of 79,586 single individuals, there are 4,102 more single males than females and 35% are reportedly married while 5% are living together without being legally married. Widows comprise 4% of the population in which females outnumber males by 6,592. Divorced or separated people comprise the least of the population (1.71%) (Figure 15).

Table 35. Marital Status of San Pablo City, 2014

Marital Status	Total	Percentage	Male	Female
Single	107,882	40.43	56,721	51,161
Married	120,196	45.04	59,443	60,753
Widowed	13,629	5.11	2,374	11,309
Divorced/Separated	5,753	2.16	2,096	3,657
Common-law/Live-in	18,791	7.04	9,248	9,543
Unknown	535	0.20	267	268
Total	211,048	79.09	130,148	136,692

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Note: Single population is composed of population 10 years old and above



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 15. Marital Status of San Pablo City, 2014

3.4.2 Mother Tongue/Ethnicity

In terms of mother tongue, Tagalog is the primary language/dialect spoken by the people of San Pablo City. Table 36 shows that 97.37% of the total household population use Tagalog as their mother tongue. Due to immigration as a result of marriage and various economic activities, San Pablo City has become a mixture of languages such as Bikol which registered at 1.22% and Cebuano, 0.25%.

**Table 36. Mother Tongue of Household of San Pablo City, 2013**

Mother tongue	Number of Households	Percentage (%)
Aklanon	26	0.01
Balangaw	26	0.01
Bantaonan	51	0.02
Bikol	3,140	1.22
Boholano	51	0.02
B'laan	26	0.01
Caviteno-Chabacano	26	0.01
Cebuano	643	0.25
Cotobaten-Chavacano	515	0.20
Davao-Chavacano	515	0.20
Ilonggo	2,317	0.90
Ilocano	386	0.15
Ilongot	2,317	0.90
Kalinga	257	0.10
Kapampangan	309	0.12
Maranao	515	0.20
Masbateno	515	0.20
Pangasinan	515	0.20
Rombloanom	515	0.20
Sambal	257	0.10
Subanon	257	0.10
Sulud	257	0.10
Tagalog	250,622	97.37
Tagbanwa	515	0.20
Tausog	618	0.24
Waray	257	0.10
Zamboangeno	515	0.20
Chinese	618	0.24
English	257	0.10
Other local dialect	1,287	0.50
Other foreign Languages	772	0.30
Not Stated	772	0.30
Total	257,391	100.00

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by CPDO

3.4.3 Religious Affiliation

The Philippines is primarily a Catholic country. Just as well, 90% of the total population of San Pablo City believes in Catholicism, 2.6% are believers of the Iglesia ni Cristo while 1.2% are followers of the Aglipay religion. Significant churches of religion also exist in the City such as Protestantism, Evangelicals, Seventh Day Adventist, and Jehovah's Witness (Table 37 and Figure 16).

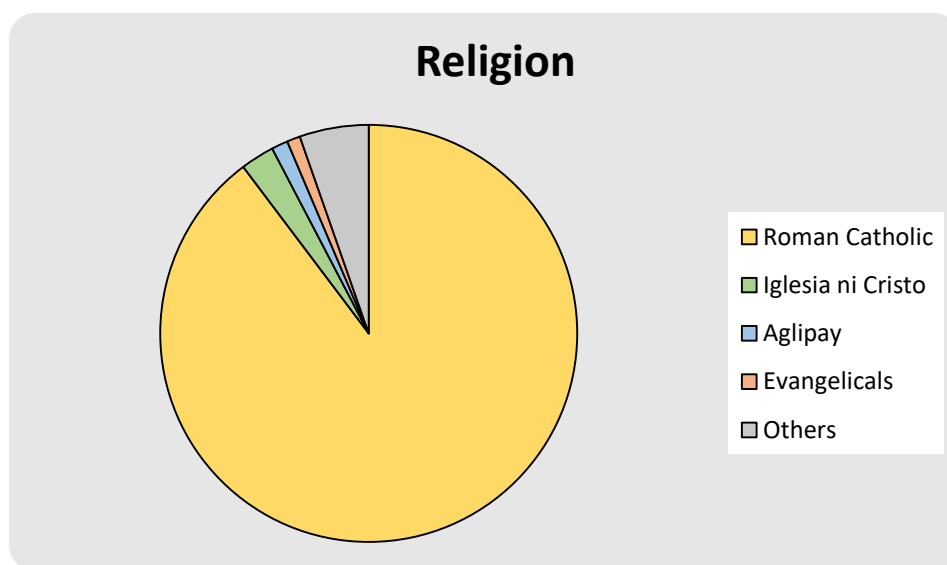
**Table 37. Religious Affiliations in San Pablo City, 2014**

Religious affiliation	Population	Percentage
Aglipay	3,386	1.27
Association of Baptist Churches in Luzon	17	0.01
Association of Fundamental Baptist Churches	70	0.03
Bible Baptist Church	919	0.34
Bread of Life Ministries	40	0.01
Buddhist	53	0.02
Cathedral of Praise Incorporated	86	0.03
Church of Christ	1,114	0.42
Church of Jesus Christ of the latter Day	623	0.23
Convention of the Phil Baptist Church	45	0.02
Crusaders of the Devine Church of Christ	3	0.00
Door of Faith	59	0.02
Evangelical Christian Outreach Foundation	141	0.05
Evangelicals	2,756	1.03
Faith Tabernacles Church	3	0.00
Good News Christian Church	20	0.01
Higher Ground Baptist Mission	2	0.00
Iglesia Evangelical Unida de Cristo	129	0.05
Iglesia ni Cristo	6,999	2.62
Iglesia sa Dios Espiritu Santo Incor.	44	0.02
International Baptist Missionary Fellowship	5	0.00
International One Way Outreach	1	0.00
Islam	460	0.17
Jehovah's Witness	643	0.24
Jesus is Alive Community Incorporated	5	0.00
Jesus is Lord Church	603	0.23
Love of Christ International Ministries	26	0.01
Lutheran Church of the Philippines	4	0.00
Miracle Revival Church of the Philippines	9	0.00
Missionary Baptist Churches of the	0	0.00
Non-Roman Catholic and Protestant	141	0.05
Philippine Benevolent Missionaries	12	0.00
Philippine Ecumenical Christian Church	23	0.01
Philippine Good News Ministries	11	0.00
Philippine Grace Gospel	12	0.00
Philippine Independent Catholic Church	16	0.01
Potter's House Christian Center	26	0.01
Roman Catholic Including Catholic	239,416	89.72
Salvation Army Philippines	2	0.00
Seventh Day Adventist	1070	0.40
Things to come	9	0.00
UNIDA Evangelical Church	508	0.19
Union Epiritista Cristiana de Filipinas	1	0.00
United Church of Christ in the Philippines	188	0.07
United Pentecostal Church	133	0.05
Victory Chapel Christian Fellowship	67	0.02
Way of Salvation Church Incorporated	10	0.00
Other Baptist	413	0.15



Religious affiliation	Population	Percentage
Other Protestants	1,245	0.47
Other Religious Affiliation	5,198	1.95
Tribal Religion	55	0.02
None	20	0.01
Total	266,840	100.00

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 16. Religious Affiliations in San Pablo City, 2014

3.4.4 Literacy Rate

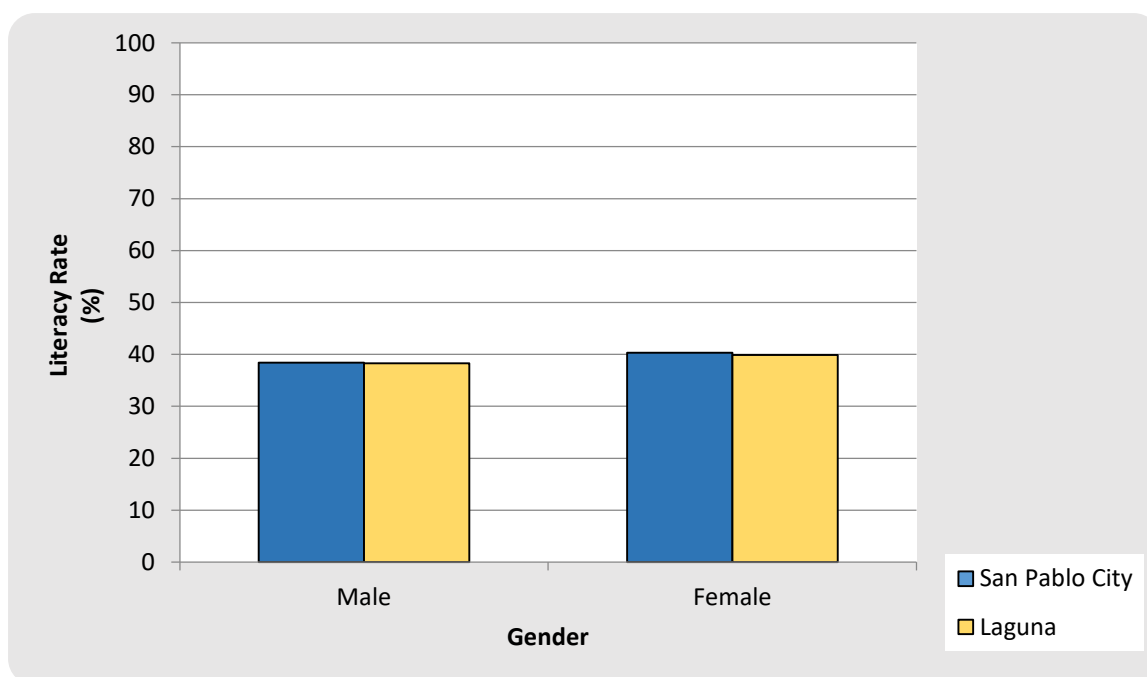
Literacy rate in the City (78.77%) is slightly higher by 0.59% than the province's literacy rate of 78.18% (Table 38). In 2014, only 1,334 people in San Pablo City are illiterate which can easily be aided by the Alternative Learning System. Literate women outnumber literate men by 1.91% in the City. However, there are also more illiterate women than illiterate men. When compared to the province's prevailing literacy rate, female literacy rate is slightly higher by 0.46% and male literacy rate is also higher by 0.14% (Figure 17).



Table 38. Literacy Rate of Population 10 Years Old and Over by Sex in San Pablo City, 2014

Population		Literate		Illiterate		Total (10 Years and older)	
		No.	Rate (%)	No.	Rate (%)	No.	Rate (%)
San Pablo City	Male	102,547	38.43	640	0.24	103,187	38.66
	Female	107,643	40.34	720	0.27	108,363	40.61
	Both Sex	210,190	78.77	1,360	0.50	211,550	79.27
Laguna	Male	1,168,116	38.29	7,932	0.26	1,176,048	38.55
	Female	1,216,622	39.88	7,932	0.26	1,224,554	40.14
	Both Sex	2,385,043	78.18	15,864	0.51	2,400,907	78.69

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

Figure 17. Literacy Rate of Population 10 Years Old and Over by Sex in San Pablo City, 2014

Moreover, 31% of the population of San Pablo City have attained secondary education, half of which has graduated from it (Table 39). Twenty-eight percent have reached elementary and 12% of this population has completed elementary. Only 4% have graduated from college while 12% already possesses an academic degree. Only 2% of the total population has no grade completed.



Looking at the sex composition of the population, 15% of both male and female populations have reached high school. For the male population, half of those that have reached high school graduated from it and the other half did not. Nine percent of the female population have graduated from high school and 6% did not finish. Males that have attained elementary education outnumber females that have attained the same level by 0.89%. Conversely, females outnumber males that possess an academic degree by 2.05%. Overall, more females have accessed education regardless of level and completion.

Table 39. Household Population 5 Years Old and Over by Highest Educational Attainment in San Pablo City, 2014

Highest Educational Attainment	San Pablo City					
	Male		Female		Both Sexes	
	No.	%	No.	%	No.	%
No Grade Completed	2,941	1.10	2,498	0.94	5,440	2.04
Preschool	3,674	1.38	3,397	1.27	7,071	2.65
Elementary	38,808	14.54	36,434	13.65	75,242	28.20
1st-4th Grade	17,209	6.45	15,397	5.77	32,606	12.22
5th-6th Grade	5,474	2.05	5,178	1.94	10,652	3.99
Graduate	16,125	6.04	15,859	5.94	31,984	11.99
High school	40,744	15.27	42,394	15.89	83,138	31.16
Undergraduate	20,076	7.52	18,338	6.87	38,414	14.40
Graduate	20,667	7.75	24,057	9.02	44,724	16.76
Post-Secondary	5,633	2.11	4,758	1.78	10,391	3.89
Undergraduate	244	0.09	190	0.07	434	0.16
Graduate	5,389	2.02	4,568	1.71	9,957	3.73
College Undergraduate	12,424	4.66	13,238	4.96	25,662	9.62
Academic Degree Holder	12,978	4.86	18,447	6.91	31,425	11.78
Post baccalaureate	176	0.07	291	0.11	467	0.18
Not Stated	70	0.03	126	0.05	196	0.07
Total	117,448	44.01	121,583	45.56	239,032	89.58

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

3.5 Population Projections and Estimates

3.5.1 Projected Population and Household

In 2015, the City of San Pablo has a total population of 272,305 based on the 2010 population of 248,890 and annual growth rate of 1.81%. Population will hit the 300,000 mark on 2021 and by 2025, it will have a population of 325,951. Table 40 suggests that annually, the population of San Pablo City is expected to increase by 5,137 people.

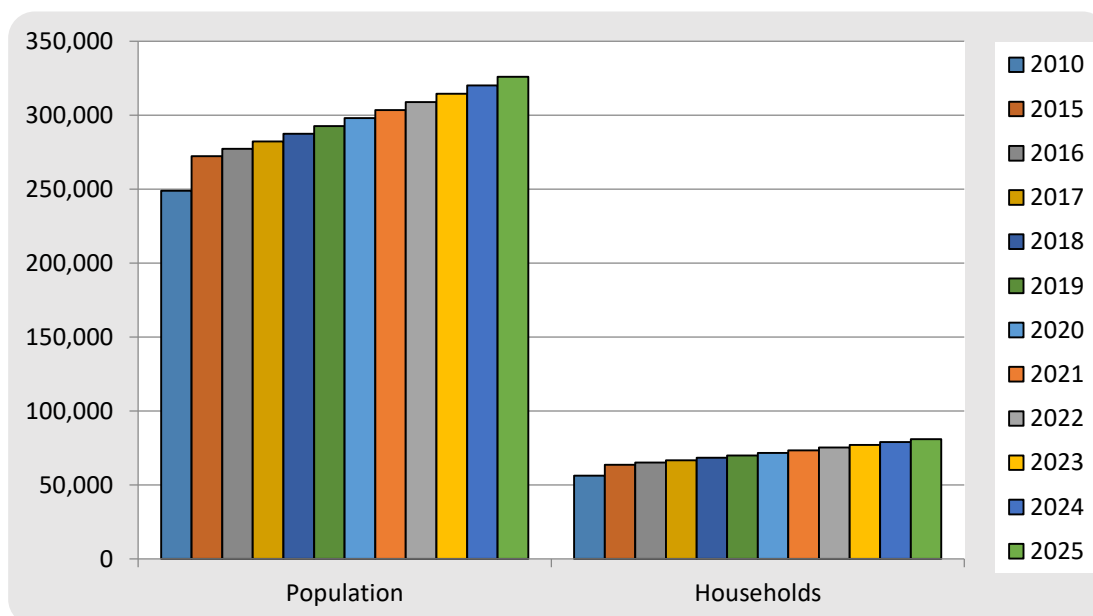


In relation, by 2019, the number of households will be almost 70,000. The year 2025 shows a total number of households of 80,889. Every year, an average of 1,642 households is being added to the total number of households (Figure 18).

Table 40. Projected Population Growth of San Pablo City for the Next Ten Years

Year	Total Population	No. of Households
2010	248,890	56,261
2011	253,406	57,279
2012	258,004	58,316
2013	262,686	59,372
2014	267,452	60,446
2015	272,305	61,540
2016	277,246	62,654
2017	282,277	63,788
2018	287,399	64,943
2019	292,613	66,118
2020	297,923	67,315
2021	303,329	68,533
2022	308,833	69,774
2023	314,436	71,037
2024	320,142	72,323
2025	325,951	73,632

Source: Philippine Statistics Authority; Projected by GIS, Co.
 Note: Annual growth rate = 1.81% (2000-2010)



Source: Philippine Statistics Authority; Projected by GIS, Co.

Figure 18. Projected Population Growth of SanPablo City for the Next Ten Years



3.5.2 Projected Population by Barangay

Tables 41 and 42 show the population growths of San Pablo City for the entire planning period (2015-2025). To project the population growth of each barangay, the Participation Rate Method was used.

Ten years from now, the City will have a population of 325,951. For the current year 2015, the most populous barangays Del Remedio and San Francisco have total populations of 15,086 and 16,219. However, using the population growth rate of 1.81, they are yet to hit a population of 20,000 by 2025. The three fewest barangays are also yet to reach populations of 500 by 2025 (Barangay VII-D will be 105). Urban and rural barangays will hit a population on 150,000 on 2021 which is five years from the current year.

**Table 41. Projected Population by Urban Barangay in San Pablo City**

Barangay	2010	Participation Rate	Population										
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
I-A	546	0.22%	597	608	619	630	642	654	665	677	690	702	715
I-B	4,523	1.82%	4,949	5,038	5,130	5,223	5,318	5,414	5,512	5,612	5,714	5,818	5,923
I-C	5,639	2.27%	6,170	6,281	6,395	6,511	6,630	6,750	6,872	6,997	7,124	7,253	7,385
II-A	2,676	1.08%	2,928	2,981	3,035	3,090	3,146	3,203	3,261	3,320	3,381	3,442	3,505
II-B	2,255	0.91%	2,467	2,512	2,557	2,604	2,651	2,699	2,748	2,798	2,849	2,901	2,953
II-C	1,141	0.46%	1,248	1,271	1,294	1,318	1,341	1,366	1,391	1,416	1,441	1,468	1,494
II-D	1,219	0.49%	1,334	1,358	1,383	1,408	1,433	1,459	1,486	1,513	1,540	1,568	1,596
II-E	2,851	1.15%	3,119	3,176	3,233	3,292	3,352	3,413	3,475	3,538	3,602	3,667	3,734
II-F	2,106	0.85%	2,304	2,346	2,389	2,432	2,476	2,521	2,567	2,613	2,661	2,709	2,758
III-A	401	0.16%	439	447	455	463	471	480	489	498	507	516	525
III-A	893	0.36%	977	995	1,013	1,031	1,050	1,069	1,088	1,108	1,128	1,149	1,169
III-B	2,940	1.18%	3,217	3,275	3,334	3,395	3,456	3,519	3,583	3,648	3,714	3,782	3,850
III-D	1,310	0.53%	1,433	1,459	1,486	1,513	1,540	1,568	1,597	1,625	1,655	1,685	1,716
III-E	626	0.25%	685	697	710	723	736	749	763	777	791	805	820
III-F	308	0.12%	337	343	349	356	362	369	375	382	389	396	403
IV-A	782	0.31%	856	871	887	903	919	936	953	970	988	1,006	1,024
IV-B	463	0.19%	507	516	525	535	544	554	564	575	585	596	606
IV-C	820	0.33%	897	913	930	947	964	982	999	1,017	1,036	1,055	1,074
V-A	485	0.19%	531	540	550	560	570	581	591	602	613	624	635
V-B	911	0.37%	997	1,015	1,033	1,052	1,071	1,090	1,110	1,130	1,151	1,172	1,193
V-C	473	0.19%	517	527	536	546	556	566	576	587	598	608	619
V-D	407	0.16%	445	453	462	470	478	487	496	505	514	524	533
VI-A	497	0.20%	544	554	564	574	584	595	606	617	628	639	651
VI-B	862	0.35%	943	960	978	995	1,013	1,032	1,051	1,070	1,089	1,109	1,129
VI-C	1,921	0.77%	2,102	2,140	2,179	2,218	2,258	2,299	2,341	2,384	2,427	2,471	2,516
VI - D	1,931	0.78%	2,113	2,151	2,190	2,230	2,270	2,311	2,353	2,396	2,440	2,484	2,529
VI - E	2,613	1.05%	2,859	2,911	2,964	3,017	3,072	3,128	3,185	3,242	3,301	3,361	3,422
VII - A	1,705	0.69%	1,865	1,899	1,934	1,969	2,005	2,041	2,078	2,116	2,154	2,193	2,233
VII - B	521	0.21%	570	580	591	602	613	624	635	646	658	670	682
VII - C	167	0.07%	183	186	189	193	196	200	204	207	211	215	219
VII - D	80	0.03%	88	89	91	92	94	96	97	99	101	103	105
VII - E	154	0.06%	168	172	175	178	181	184	188	191	195	198	202
Concepcion	7,928	3.19%	8,674	8,831	8,991	9,155	9,321	9,490	9,662	9,837	10,016	10,198	10,383
Del Remedio	13,789	5.54%	15,086	15,360	15,639	15,922	16,211	16,506	16,805	17,110	17,420	17,736	18,058
San Francisco	14,824	5.96%	16,219	16,513	16,813	17,118	17,428	17,744	18,066	18,394	18,728	19,068	19,414
San Gabriel	7,800	3.13%	8,534	8,689	8,846	9,007	9,170	9,337	9,506	9,679	9,854	10,033	10,215
San Gregorio	5,508	2.21%	6,026	6,136	6,247	6,360	6,476	6,593	6,713	6,835	6,959	7,085	7,213
San Jose	6,992	2.81%	7,650	7,789	7,930	8,074	8,220	8,369	8,521	8,676	8,833	8,994	9,157
San Lucas I	5,343	2.15%	5,846	5,952	6,060	6,170	6,282	6,396	6,512	6,630	6,750	6,873	6,997
San Lucas II	5,770	2.32%	6,313	6,427	6,544	6,663	6,784	6,907	7,032	7,160	7,290	7,422	7,556
San Rafael	3,467	1.39%	3,793	3,862	3,932	4,003	4,076	4,150	4,225	4,302	4,380	4,460	4,540
San Roque	3,086	1.24%	3,376	3,438	3,500	3,563	3,628	3,694	3,761	3,829	3,899	3,969	4,041
Sto Cristo	3,086	1.24%	3,376	3,438	3,500	3,563	3,628	3,694	3,761	3,829	3,899	3,969	4,041
Soledad	2,476	0.99%	2,709	2,758	2,808	2,859	2,911	2,964	3,018	3,072	3,128	3,185	3,243
Sub-Total	124,295	50%	135,988	138,456	140,968	143,526	146,130	148,782	151,482	154,230	157,029	159,878	162,779

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.

**Table 42. Population Projection by Rural Barangay in San Pablo City**

Barangay	2010	Participation Rate	Population										
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Atisan	1,225	0.49%	1,340	1,365	1,389	1,415	1,440	1,466	1,493	1,520	1,548	1,576	1,604
Bautista	2,444	0.98%	2,674	2,722	2,772	2,822	2,873	2,925	2,979	3,033	3,088	3,144	3,201
Dolores	2,251	0.90%	2,463	2,507	2,553	2,599	2,646	2,694	2,743	2,793	2,844	2,895	2,948
San Antonio I	4,813	1.93%	5,266	5,361	5,459	5,558	5,659	5,761	5,866	5,972	6,081	6,191	6,303
San Antonio II	3,492	1.40%	3,821	3,890	3,960	4,032	4,105	4,180	4,256	4,333	4,412	4,492	4,573
San Bartolome	3,160	1.27%	3,457	3,520	3,584	3,649	3,715	3,783	3,851	3,921	3,992	4,065	4,138
San Buenaventura	3,696	1.48%	4,044	4,117	4,192	4,268	4,345	4,424	4,504	4,586	4,669	4,754	4,840
San Crispin	3,795	1.52%	4,152	4,227	4,304	4,382	4,462	4,543	4,625	4,709	4,794	4,881	4,970
San Cristobal	5,452	2.19%	5,965	6,073	6,183	6,296	6,410	6,526	6,644	6,765	6,888	7,013	7,140
San Diego	5,179	2.08%	5,666	5,769	5,874	5,980	6,089	6,199	6,312	6,426	6,543	6,662	6,783
San Ignacio	4,534	1.82%	4,961	5,051	5,142	5,236	5,331	5,427	5,526	5,626	5,728	5,832	5,938
San Isidro	3,527	1.42%	3,859	3,929	4,000	4,073	4,147	4,222	4,298	4,376	4,456	4,537	4,619
San Joaquin	1,467	0.59%	1,605	1,634	1,664	1,694	1,725	1,756	1,788	1,820	1,853	1,887	1,921
San Juan	3,452	1.39%	3,777	3,845	3,915	3,986	4,058	4,132	4,207	4,283	4,361	4,440	4,521
San Lorenzo	1,903	0.76%	2,082	2,120	2,158	2,197	2,237	2,278	2,319	2,361	2,404	2,448	2,492
San Marcos	2,800	1.12%	3,063	3,119	3,176	3,233	3,292	3,352	3,412	3,474	3,537	3,602	3,667
San Mateo	2,910	1.17%	3,184	3,242	3,300	3,360	3,421	3,483	3,546	3,611	3,676	3,743	3,811
San Miguel	2,975	1.20%	3,255	3,314	3,374	3,435	3,498	3,561	3,626	3,691	3,758	3,827	3,896
San Nicolas	4,480	1.80%	4,901	4,990	5,081	5,173	5,267	5,363	5,460	5,559	5,660	5,763	5,867
San Pedro	2,402	0.97%	2,628	2,676	2,724	2,774	2,824	2,875	2,927	2,980	3,035	3,090	3,146
San Vicente	3,169	1.27%	3,467	3,530	3,594	3,659	3,726	3,793	3,862	3,932	4,004	4,076	4,150
Santiago I	2,068	0.83%	2,263	2,304	2,345	2,388	2,431	2,475	2,520	2,566	2,613	2,660	2,708
Santiago II	3,030	1.22%	3,315	3,375	3,436	3,499	3,562	3,627	3,693	3,760	3,828	3,897	3,968
Sta Ana	2,525	1.01%	2,763	2,813	2,864	2,916	2,969	3,022	3,077	3,133	3,190	3,248	3,307
Sta Catalina	2,377	0.96%	2,601	2,648	2,696	2,745	2,795	2,845	2,897	2,949	3,003	3,057	3,113
Sta Cruz	2,365	0.95%	2,587	2,634	2,682	2,731	2,780	2,831	2,882	2,935	2,988	3,042	3,097
Sta Elena	4,423	1.78%	4,839	4,927	5,016	5,107	5,200	5,294	5,390	5,488	5,588	5,689	5,792
Sta Felomina	3,431	1.38%	3,754	3,822	3,891	3,962	4,034	4,107	4,181	4,257	4,335	4,413	4,493
Sta Isabel	3,258	1.31%	3,565	3,629	3,695	3,762	3,830	3,900	3,971	4,043	4,116	4,191	4,267
Sta Ma. Magdalena	2,428	0.98%	2,656	2,705	2,754	2,804	2,855	2,906	2,959	3,013	3,067	3,123	3,180
Sta Maria	3,293	1.32%	3,603	3,668	3,735	3,802	3,871	3,942	4,013	4,086	4,160	4,236	4,313
Sta Monica	7,266	2.92%	7,950	8,094	8,241	8,390	8,542	8,697	8,855	9,016	9,180	9,346	9,516
Sta Veronica	1,540	0.62%	1,685	1,715	1,747	1,778	1,811	1,843	1,877	1,911	1,946	1,981	2,017
Stmo. Rosario	4,528	1.82%	4,954	5,044	5,135	5,229	5,323	5,420	5,518	5,619	5,720	5,824	5,930
Sto Angel	8,774	3.53%	9,599	9,774	9,951	10,132	10,315	10,503	10,693	10,887	11,085	11,286	11,491
Sto Niño	4,163	1.67%	4,555	4,637	4,721	4,807	4,894	4,983	5,074	5,166	5,259	5,355	5,452
Sub-Total	124,595	50%	136,317	138,790	141,308	143,872	146,483	149,141	151,847	154,602	157,408	160,264	163,172

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



3.5.3 Projected School-Age Population, Labor Force and Dependent Population

Table 43 shows the projected school-age, labor force, and dependent population using the growth rate of 1.81%. The school-going population is currently at 98,020. By 2017, it will be 110,000 and 128,000 by 2025. The population taking up elementary education has the greatest participation rate and will reach 35,000 by 2018 and will be almost 40,000 by 2025. Second to students in elementary are high school students which will be 35,000 on 2020. However, based on S.Y. 2014-15 data, school going population is lower than the current enrolment for elementary and high school. Nonetheless, the fast increase of the school-going population calls for adequate educational facilities to accommodate them. A working force of 200,000 is estimated by 2019 which can aid the economy of the City. Productive activities must be generated in order to support the dependent population which will reach 100,000 by 2018. A work force of 224,000 is expected to provide for a dependent population of 115,000 in 2025.

Table 43. Projected School-Age Population, Labor Force, and Dependent Population in San Pablo City

Grouping	2014	Participation Rate	Population										
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Population	267,452	1	272,305	277,246	282,277	287,399	292,613	297,923	303,329	308,833	314,436	319,142	325,951
School-going	105,330	0.39	107,241	109,187	111,169	113,186	115,239	117,331	119,460	121,627	123,834	126,081	128,369
Pre-school	22,178	0.08	22,581	22,990	23,408	23,832	24,265	24,705	25,153	25,610	26,074	26,548	27,029
Elementary	32,702	0.12	33,295	33,899	34,514	35,141	35,778	36,427	37,088	37,761	38,446	39,144	39,854
Secondary	31,456	0.12	32,027	32,608	33,200	33,802	34,415	35,040	35,676	36,323	36,982	37,653	38,336
Tertiary	18,994	0.07	19,339	19,690	20,047	20,411	20,781	21,158	21,542	21,933	22,331	22,736	23,149
Working Age	172,226	0.64	175,351	178,533	181,773	185,071	188,428	191,848	195,329	198,873	202,481	206,156	209,897
Labor Force	184,529	0.69	187,877	191,286	194,757	198,291	201,889	205,552	209,282	213,080	216,946	220,882	224,890
Dependent	94,613	0.35	96,330	98,078	99,858	101,670	103,514	105,393	107,305	109,252	111,234	113,253	115,308
Young	82,311	0.31	83,804	85,325	86,873	88,449	90,054	91,688	93,352	95,046	96,770	98,526	100,314
Old	12,303	0.05	12,526	12,753	12,985	13,220	13,460	13,705	13,953	14,206	14,464	14,727	14,994

Source: Basic data: 2010 Census of Population and Housing, Philippine Statistics Authority, Projected by GIS Co.



4. SOCIAL SECTOR

It is the major task of the government to improve the level of human development within the community. Analysis of the social sector can, among others, pave the way for the local government to achieve this intention, with the support and assistance of the community and other stakeholders.

The pursuit of desirable outcomes is set within the context of determining and understanding the underlying causes and effects of existing conditions. This will generate proposals or interventions that will support and influence the desired level of delivery of services to the community. Individuals enjoy some level of well-being as influenced by the state of health and education, leisure or recreation, safety and comfort. While there are other dimensions of well-being, it is important to recognize the effects or benefits of interventions on the overall development of individuals.

4.1 Education

Education as one of the basic social services necessitates primary prioritization of the City Government as it caters to the young population of the City. The youth being the most vulnerable yet the largest in terms of numbers are pivotal in the future development of the City. The City has 63 public elementary schools and 47 private schools while there are 14 secondary public schools and 19 secondary private schools. Tertiary education facilities are also available in the City which does not just cater the local population of San Pablo City but also students from nearby towns. There are 2 public schools and 9 private tertiary schools. Aside from the regular school, the City has one (1) special education facility, the Paaralang Pag-ibig at Pag-asa that offers both elementary and high school education for students with special needs. Overall, the City of San Pablo has 156 education facilities, of which 81 schools are public and 75 are private.

4.1.1 Elementary School

4.1.1.1 Number of Enrolment by School

As seen in Table 44, School Year 2014-2015 has seen a total enrolment of 36,163 children in elementary schools and 6,184 in preschool. Combined, they have a total of 36,163 or 13.5% of the current population (12% elementary and 2.3% preschool). Table 44 shows that there are 31,989 students enrolled in public elementary schools and 4,759 preparatory students enrolled in public preschools. The biggest elementary school in San Pablo City in terms of



population is San Pablo Central Elementary School for both public and private types. It has a hefty enrolment from preparatory up to grade VI with almost 600 students per level. Don Enrique Bautista Elementary School and Del Remedio Elementary School are the second largest elementary schools with populations of more or less half of that of the Central Elementary School. Public elementary schools have an average population of 507 while private schools are at 120. San Pedro Elementary Schools is the least populous among public schools with only 164 students.

There are 4,174 students enrolled in private elementary schools while 1,359 are in private preschools. For private elementary schools, Blue Danube School Inc. is the largest (521 students) while Infant Jesus Montessori Center Phils. is the smallest with only 30 students.

Except three (3) schools, all public and private elementary schools already offer preschool education. There are only six (6) schools exclusively offering preschool educations.

Table 44. Number of Enrolment by Elementary School in San Pablo City, S.Y. 2014-2015

Name of School	Pre-Sch.	I	II	III	IV	V	VI	Grand Total (I-VI)
PUBLIC ELEMENTARY SCHOOLS								
Ambray E/S	153	147	167	165	151	176	18	824
Col. Lauro Dizon E/S	46	40	45	42	29	27	40	223
Guadalupe E/S	40	49	37	37	35	28	35	221
San Anton E/S	59	73	66	71	65	47	68	390
San Gabriel E/S	54	58	54	49	64	44	27	296
San Miguel E/S	58	59	82	66	59	58	63	387
Sta. Maria E/S	90	86	104	79	63	68	71	471
Stmo. Rosario E/S	75	89	82	79	94	77	68	489
Soledad E/S	41	59	61	53	62	43	54	332
Dapdapan E/S	31	75	61	75	58	56	60	385
Magcaseville E/S	40	61	78	96	70	60	54	419
Placido Escudero Mem. School	104	107	108	119	112	101	95	642
Platon E/S	70	56	76	66	63	55	48	364
San Cristobal E/S	101	108	87	105	81	89	91	561
San Jose E/S	84	111	89	90	67	74	71	502
Sta. Cruz E/S	42	40	47	64	36	55	56	298
Sto. Cristo E/S	35	31	30	47	35	32	51	226
Sto. Niño E/S	71	84	70	101	81	57	50	443
Del Remedio E/S	249	283	306	263	293	246	238	1,629
San Crispin E/S	71	69	86	79	72	66	88	460
San Juan E/S	52	54	59	53	50	53	62	331
San Marcos E/S	68	97	91	67	61	55	64	435



Name of School	Pre-Sch.	I	II	III	IV	V	VI	Grand Total (I-VI)
San Mateo E/S	19	54	37	38	32	36	34	231
Prudencia D. Fule MES	108	151	190	120	151	146	139	897
Margarita Lopez Laurel MS	62	48	46	50	46	40	26	256
Sta. Filomena E/S	47	96	67	72	63	61	80	439
Sta. Maria E/S	90	86	104	79	63	68	71	471
Bagong Bayan E/S	85	95	98	92	79	78	81	523
Bagong Lipunan E/S	93	101	100	116	98	102	76	593
Banaad E/S	46	65	51	65	45	49	47	322
Jose De Mesa E/S	36	31	31	42	33	24	23	184
Fule Almeda E/S	37	30	24	38	41	37	30	200
San Roque E/S	78	94	87	76	80	70	72	479
Sta. Monica E/S	62	63	63	66	56	51	53	352
Sta. Veronica E/S	39	65	44	46	32	39	28	254
Santiago I E/S	72	77	66	71	68	58	56	396
Major Juan Eseo E/S	40	61	49	69	53	46	51	329
Bagong Pook E/S	32	49	44	56	53	27	27	256
C.M Azcarate E/S	86	117	94	99	99	89	83	581
San Lucas I E/S	53	72	57	82	72	83	64	430
San Lucas II E/S	59	109	83	104	88	62	87	533
San Pablo Central E/S	426	585	584	670	645	605	622	3,711
Atisan E/S	21	40	31	32	28	23	23	177
Don Enrique Bautista E/S	246	290	258	272	255	233	216	1,524
F. A Quisumbing E/S	52	60	58	58	63	65	54	358
San Antonio I E/S	77	101	95	99	85	97	84	561
San Antonio II E/S	63	82	84	74	82	81	78	481
San Gregorio E/S	56	65	63	58	48	46	47	327
Branzza E/S	108	122	120	122	107	97	96	664
San Isidro E/S	76	93	91	104	96	92	88	564
San Joaquin E/S	81	80	70	62	55	62	54	383
San Vicente E/S	74	83	70	407	95	76	69	800
Sta. Ana E/S	50	76	72	55	69	57	50	379
Antonio Manuel Magcase E/S	67	81	95	86	87	83	70	502
Concepcion E/S	29	32	33	51	35	28	28	207
Dolores E/S	37	53	47	48	48	28	34	258
Guerillas E/S	56	91	80	94	61	70	65	461
San Buenaventura E/S	68	63	66	59	69	67	53	377
San Diego E/S	85	86	103	90	108	87	91	565
San Lorenzo E/S	42	42	39	29	28	31	23	192
San Pedro E/S	26	35	23	25	24	27	30	164
Sta. Catalina E/S	63	69	59	70	67	44	59	368
Sto. Angel E/S	120	141	137	144	130	149	120	821
Subtotal	4,759							31,989
PRIVATE ELEMENTARY SCHOOLS								
Academia De San Ignacio De Loyola	29	13	12	17	17	20	16	95
Angels Kiddie Learning Center	14	9	5	5	3	6	5	33
Blue Danube School Inc.	248	102	83	82	105	76	73	521
Canossa College	51	53	59	80	108	89	98	487



Name of School	Pre-Sch.	I	II	III	IV	V	VI	Grand Total (I-VI)
Celestial Children Montessori	21	17	6	6	8	5	11	53
CREST Christian Academy	11	14	15	9	12	11	18	79
Escuela de Valle Verde	6	6	14	11	15	10	6	62
First Evangelical Learning Center	23	22	13	19	18	15	7	94
Golden Liahona Kiddie Learning Center	17	0	0	0	0	0	0	-
Golden State College	66	0	0	0	0	0	0	-
Grace & Truth School	27	13	16	19	14	9	9	80
Headstart School for Child Total Development Inc.	33	15	17	0	0	0	0	32
Holy Dream Kiddie Learning Center	23	0	0	0	0	0	0	-
Hope Zoel Young Mind's Builder Inc.	45	8	4	0	0	0	0	12
Immaculate Concepcion School of San Pablo City	46	20	20	23	22	8	7	100
Infant Jesus Montessori Center Phils.	7	9	9	1	8	2	1	30
JAJ Christian School Inc.	16	7	9	4	8	5	2	35
King Solomon Academy	61	0	0	0	0	0	0	-
Kitner Christian Academy	13	12	21	27	12	22	19	113
Laguna College	15	37	38	36	39	37	34	221
Lake City Christian School	4	11	12	15	20	19	21	98
Liceo De San Pablo	23	34	44	46	33	53	68	278
Maranatha Christian Academy	37	19	26	15	11	12	8	91
Maryden Learning Center	18							-
Melrose School of San Pablo City	10	13	13	11	16	5	9	67
Niño Jesus Science-Oriented Montessori	32	15	20	20	21	15	14	105
Open Door Christian Academy	28	14	15	12	14	8	14	77
Ramirez Kiddie Learning Center	25	0	0	0	0	0	0	-
San Pablo Christian School	25	20	24	26	32	27	26	155
San Pablo Chung Hua School	8	13	13	13	15	6	10	70
San Pablo Colleges	22	23	28	49	32	39	41	212
San Rafael Adventist Elementary School	-	8	9	17	6	10	20	70
Scuola Dei Bambini di Sta. Teresita International Montessori Inc.	80	23	17	26	24	34	17	141
Scuola San Giuseppe Marello	23	11	19	14	15	17	11	87
St. Anne Carmelli Academy Inc.	19	5	3	4	5	3	3	23
St. John & Philomel of San Pablo City Center Inc.	31	16	21	8	23	9	0	77
St. Joseph School	48	27	34	24	25	26	31	167
St. Therese Montessori School of San Pablo	128	47	55	34	25	44	47	252
Sta. Isabel Adventist Elementary School	-	13	9	12	17	13	12	76
The Learner's Academy	37	12	12	5	11	12	9	61
West Greenville (Laguna) Colleges Inc.	0	0	4	5	5	2	4	20
Zamora Learning Center Inc.	55	0	0	0	0	0	0	-
Subtotal	1,425							4,174
Total	6,184							36,163

Source: DepEd – Region IV – A, San Pablo City Division



Only one (1) public school in the City named Paaralang Pag-Ibig at Pag-Asa caters children with special needs located in Brgy. San Gabriel. In School Year 2012-2013, most of their clients were children who have hearing impairment and intellectual disabilities (Table 45). They have also served children with autism, visual impairment, and those who are handicapped. It is open to both locals and students from other towns. Given the positive population growth rate, it is expected that the number of students that will need to attend the institution will increase through time. In response to this, DepEd's strategy is to mainstream special education across all regular schools. Currently, Central School already offers SPED classes.

Table 45. Number of Enrolment in Paaralang Pag-Ibig At Pag-Asa in San Pablo City, S.Y. 2012-2013

DISTRICT: Ambray								
SCHOOL: Paaralang Pag-Ibig at Pag-Asa								
Exceptionalities	Pre-Sch.	I	II	III	IV	V	VI	Grand Total
Learning disability	0	0	0	0	0	0	0	0
Hearing impaired	10	4	3	8	7	8	4	44
Visually impaired	1	1	2	0	1	1	1	7
Intellectual disability	21	2	0	2	4	0	7	36
Multiple handicap	5	1	2	0	2	2	0	12
Orthopedically handicap	0	0	0	0	0	0	0	0
Autism	13	0	3	0	0	0	0	16
Cerebral palsy	3	0	0	0	0	0	1	4
Special health problem	0	0	0	0	0	0	0	0
Behavioral problem	0	0	0	0	0	0	0	0

Source: DepEd – Region IV – A, San Pablo City Division (as of July 31, 2012)

4.1.1.2 Historical Enrolment for the Last Five Years

The historical enrolment of students in Grades I to VI for the past five years in San Pablo City is portrayed in Table 46. These accounts the historical enrolment from public and private elementary schools. There were 30,775 students in elementary schools in 2010. The year 2011 has seen the greatest increase in enrollees in elementary schools of 5,252. However, there was a decrease of elementary schools population of 293 in 2013.

**Table 46. Historical Enrolment in Elementary Schools in San Pablo City, 2010-2014**

Year	No. of Enrolment	Increase/Decrease
2010	30,775	-
2011	36,027	5,252
2012	36,293	266
2013	36,000	-293
2014	35,996	-4

Source: DepEd – Region IV – A, San Pablo City Division

4.1.1.3 Student-Teacher and Student-Classroom Ratio

Considering the elementary schools enrolment only, Table 47 shows that during the last school year (2014-2015), there were 900 teachers in public elementary schools for a grand total enrolment of 31,989. This resulted to a student-teacher ratio of 1:35. Meanwhile, there were 792 classrooms for a 1:40 student-classroom ratio. The said ratios are beyond the DepEd target in 2010 of 1:35 student-teacher and student-classroom.

Table 47. Student-Teacher and Student-Classroom Ratio in Elementary Public Schools, 2014-2015

Level	Enrolment	Teachers	No. of Classrooms	Student-Teacher Ratio	Student-Classroom Ratio
Elementary	31,989	900	792	1:35	1:40

Source: DepEd – Region IV – A, San Pablo City Division

Table 48 shows that almost all of public elementary schools in the City have toilets in their classrooms – only eight (8) do not have. However, all of the schools have communal toilets. It is also observed that there need to improve the water supply in some schools and only four schools have clinics. These facilities should be increased in number in order to enhance the sanitation and health services within school premises. Also, none have listed to have laboratories and shops. The presence and use of these facilities helps in enriching the learning experience of the students. They cater a venue for students to practice and apply what they have learned. Although not all schools have libraries, schools have designated a corners or space in one of their office rooms/classrooms that houses reading materials. Moreover, based on the information by the CPDO, few schools have facilities for sports and recreation such as San Pablo Central School with 50 mtrs olympic size swimming pool, basketball court, track and field oval, softball diamond, tennis court; Del Remedio Elementary School with covered basketball court w/ stage; and Sto. Angel E/S with an open basketball court.



Finally, although the standard school area for elementary school is 0.5 hectares for non-central school and 1.0 hectares for central school, the size of elementary schools still depends on the number of enrollment with a minimum requirement of 1.4sqm/pupil. Drawing from this assumption, all schools can still accommodate their students except for Ambray School Elementary School which was identified to be crowded as area of this school is only 1,090 sqm which is currently being occupied by 824 students. This implies that schools can still accommodate school expansions within their premises but for Ambray School, there is a need to acquire new lots if establishment of 2-3 storey building is not possible so that it can accommodate its increasing student population. In addition, many schools need renovation due to their poor physical operations.

Table 48. Facilities Present in Public Elementary Schools in San Pablo City, S.Y. 2014-2015

School	Location	Area (sq. m)	Ownership	Facilities and Condition						
				La	S	Li	Cl	CR	P	Others
Ambray E/S	Brgy. II-B	1,090.00	Deed of Absolute Sale	-	-	-	-	26	-	-
Col. Lauro Dizon E/S	Brgy. II-F	1,500.00	Deed of Donation	-	-	-	-	16	-	-
Guadalupe E/S	Brgy. II-A	1,117.00	Deed of Donation	-	-	-	-	14	-	-
San Anton E/S	Brgy. II-E	2,234.00	Deed of donation	-	-	1	-	12	-	-
San Gabriel E/S	San Gabriel	4,275.5	Deed of Absolute Sale	-	-	1	-	22	-	-
San Miguel E/S	San Miguel	5,645.00	Presidential Proclamation/Special Patent	-	-	-	-	16	-	-
Sta. Maria E/S	Santa Maria	5,000.00	Deed of Donation	-	-	1	-	20	-	-
Stmo. Rosario E/S	Santisimo Rosario	2,961.00	donation	-	-	-	-	26	-	-
Soledad E/S	Soledad	1,818.00	Deed of Absolute Sale	-	-	-	-	24	-	-
Dapdapan E/S	Barangay III-D	3,056.62	Deed of Donation	-	-	1	-	32	-	-
Magcaseville E/S	Santo Cristo	2,393.00	Deed of Donation	-	-	-	-	16	-	-
Placido Escudero Mem. School	Santa Elena	13,698.00	Tax Declaration	-	-	-	-	36	-	1
Platon E/S	Barangay III-C	11,650.00	Tax Declaration	-	-	-	-	22	-	-
San Cristobal E/S	San Cristobal	5,117.00	Tax Declaration	-	-	-	-	32	-	-
San Jose E/S	San Jose	5,616.00	Deed of Donation	-	-	-	-	41	-	-
Sta. Cruz E/S	Santa Cruz	3,355.00	Deed of Donation	-	-	-	1	26	-	-
Sto. Cristo E/S	Santo Cristo	2,357.00	Transfer Cert. of Title	-	-	-	-	16	-	1
Sto. Niño E/S	Santo Niño	2,366.00	Deed of donation	-	-	2	-	48	-	-
Del Remedio E/S	Del Remedio	6,134.00	Deed of Donation	-	-	1	-	45	-	1



School	Location	Area (sq. m)	Ownership	Facilities and Condition						
				La	S	Li	CI	CR	P	Others
Margarita Lopez Laurel Memorial School	San Rafael	4,250.00	Deed of Donation	-	-	-	-	28	-	2
Prudencia D. Fule Memorial Elementary School	San Nicolas	6,304.00	Deed of Donation	-	-	-	-	33	-	1
San Crispin E/S	San Crispin	6,191.00	Tax Declaration	-	-	1	-	30	-	-
San Juan E/S	San Juan	5,216.00	Tax Declaration	-	-	1	-	22	-	-
San Marcos E/S	San Marcos	5,130.00	Transfer Cert. of Title	-	-	1	-	26	-	1
San Mateo E/S	San Mateo	2,900.00	Deed of Donation	-	-	1	-	14	-	-
Sta. Filomena Integrated School	Santa Filomena	17,230.00	Cotract of Usufrunct	-	-	1	-	28	-	-
Sta. Maria Magdalena E/S	Santa Maria Magdalena	10,000.00	Tax Declaration	-	-	1		18	-	-
Bagong Bayan E/S		5,922.00	Tax Declaration	-	-	1	1	18	-	-
Bagong Lipunan E/S	Santa Monica	4,263.50	Deed of Donation	-	-	-		26	-	-
Banaad E/S	San Bartolome	5,350.00	Deed of Donation	-	-	1		16	-	-
Jose De Mesa E/S	Santiago II	5,000.00	Deed of Donation			-		14	-	-
Fule Almeda E/S	Barangay VII-A	640.00	Deed of Donation	-	-	1		16	-	-
San Roque E/S	Barangay I-B	8,997.00	Deed of Donation	-	-	-		18	-	-
Sta. Monica E/S	Santa Monica	6,752.00	Tax Declaration	-	-	-		16	-	-
Sta. Veronica E/S	Santa Veronica	2,102.00	Tax Declaration	-	-	-		16	-	-
Santiago I E/S	Santiago I	5,300.00	Deed of Donation	-	-	-	1	10	-	-
Major Juan Eseo E/S	Santiago II	4,834.00	Deed of Donation	-	-	-		16	-	-
Bagong Pook E/S	Bagong Pook	1,800.00	Tax Declaration	-	-	-		16	-	-
C.M Azcarate E/S	Barangay VI-D	12,934.00	Deed of Donation			-		30	-	-
San Lucas I E/S	San Lucas I	5,439.00	Deed of Donation	-	-	-		10	-	-
San Lucas II E/S	San Lucas 2	3,871.00	Deed of Absolute Sale	-	-	-		28	-	-
San Pablo Central E/S	Barangay VI-A	72,628.00	Tax Declaration	-	-	1	1	207	-	-
Atisan	Atisan	1,451.00	Deed of Donation	-	-			10	-	-
Don Enrique Bautista E/S	San Francisco	10,000.00	Deed of Donation	-	-	1		88	-	-
F. A Quisumbing E/S	Bautista	5,001.00	Deed of Donation	-	-	1		24	-	-
San Antonio I E/S	San Antonio 1	1,316.00	Deed of Donation	-	-			24	-	-
San Antonio II E/S	San Antonio 2	4,999.00	Deed of Donation					27	-	-
San Gregorio E/S	San Gregorio	980.00	Deed of Donation	-	-			16	-	-
Branzza E/S	San Ignacio	5,000.00	Transfer Cert. of Title	-	-			15	-	-
San Isidro E/S	San Isidro	2,918.00	Deed of Absolute Sale	-	-			26	-	-
San Joaquin E/S	San Joaquin	1,800.00	Deed of Donation	-	-			24	-	-
San Vicente E/S	San Vicente	10,200.00	Tax Declaration	-	-			26	-	-



School	Location	Area (sq. m)	Ownership	Facilities and Condition						
				La	S	Li	Cl	CR	P	Others
Antonio Manuel Magcase E/S	Brgy. Sta. Isabel	7,642.80	Owned	-	-	1	-	38	-	1
Concepcion E/S	Concepcion	1,259.00	Deed of Donation			1	-	18	-	-
Dolores E/S	Dolores	3,278.00	Deed of Donation	-	-	1	-	20	-	1
Guerillas E/S	Concepcion	2,715.76	Tax Declaration	-	-		-	32	-	-
San Buenaventura E/S	San Buenaventura	5,889.00	Tax Declaration	-	-	1	-	28	-	-
San Diego E/S	San Diego	7,487.00	Tax Declaration	-	-		-	26	-	-
San Lorenzo E/S	San Lorenzo	2,400.00	Tax Declaration	-	-		-	14	-	-
San Pedro E/S	San Pedro	3,735.00	Deed of Absolute Sale	-	-	1	-	14	-	-
Sta. Catalina E/S	Sta. Catalina	5,129.00	Deed of Donation	-	-	-	-	26	1	-
Sto. Angel E/S	Sto. Angel	9,516.00	Deed of Donation	-	-	-	-	46	1	-

Source: DepEd – Region IV – A, San Pablo City Division

La – Lab

P – Playground

S – Shop

Li – Library

Cl – Clinic

CR – Comfort Room

Condition is indicated as follows:

G – Good (Well Maintained)

C – Critical (Needs Priority Action)

P – Poor (Needs Improvement)

N – None/No Such Facility

4.1.2 Secondary School

4.1.2.1 Number of Enrolment by School

School Year 2014-2015 has seen a total enrolment in secondary schools of 20,138 or 7.5% of the current population. There are 14,483 enrolments in secondary education in public high schools while 5,655 are in private schools (Table 49).

Col. Lauro Dizon Memorial National High School is the largest high school in the City of San Pablo. Freshmen and sophomores largely contribute to its population. Among secondary public schools, San Pablo City National High School is the second largest with 700 students per year level. The third largest is San Jose National High School. The least numbered high school is Paaralang Pag-Ibig at Pag-asa which is an institution for special education (SPED) exclusively for students with distinct needs.

Laguna College and Liceo de San Pablo are the two largest private high schools in the City. They have populations of more than 1,000 students. Having only 19 students, Infant Jesus Montessori Center Phils is the least populous private high school.

Niño Jesus Science Oriented Montessori School Inc., St. Therese Montessori School of San Pablo, and Scuola Dei Bambini di Sta. Teresita



International Montessori Inc. are yet to have enrolment at all levels, hence, the small school population.

Table 49. Number of Enrolment by Secondary School in San Pablo City, S.Y. 2014-2015

School	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
PUBLIC HIGH SCHOOLS					
San Pablo City NHS	803	775	673	613	2,864
San Jose NHS	580	435	378	342	1,735
San Isidro NHS	114	109	79	101	403
Dolores NHS	134	110	104	82	430
Del Remedio NHS	219	194	135	139	687
Sto. Angel NHS	185	131	122	110	548
Santisimo Rosario NHS	186	172	196	158	712
Col. Lauro Dizon Mem. NHS	1,111	1,034	853	736	3,734
San Bartolome NHS	109	159	183	190	641
San Vicente NHS	244	263	218	230	955
San Cristobal NHS	175	133	145	121	574
Paaralang Pag-ibig at Pag-asa (SPED)	12	13	5	6	36
San Pablo City Science High School	122	11	80	43	256
Prudencia D. Fule MNHS	209	177	170	140	696
Sta. Filomena Integrated School	68	48	56	40	212
Subtotal	14,483				
PRIVATE HIGH SCHOOLS					
Academia De San Ignacio De Loyola	30	35	24	0	89
Canossa College	233	229	220	221	903
CREST Christian Academy	21	25	33	25	104
Frontline Christian Academy, Inc.	15	4	3	11	33
Grace & Truth School	21	21	20	27	89
Infant Jesus Montessori Center Phils.	2	3	4	10	19
Kitner Christian Academy	17	22	21	23	83
Laguna College	355	344	327	315	1,341
Lake City Christian School	131	147	95	82	455
Liceo De San Pablo	299	329	324	267	1,219
Niño Jesus Science Oriented Montessori School Inc.	5	0	0	0	5
Open Door Christian Academy	27	24	27	35	113
San Pablo Christian School	54	62	52	50	218
San Pablo Colleges	115	135	153	161	564
Scuola Dei Bambini di Sta. Teresita International Montessori Inc.	12	13	0	0	25
St. Joseph School	75	67	65	62	269
St. Therese Montessori School of San Pablo	7	0	0	0	7
VYP Management Systems Consultants Institute of Technology, Inc.	14	31	16	25	86
West Greenville (Laguna) Colleges Inc.	11	5	6	11	33
Subtotal	5,655				
Total	20,138				

Source: DepEd – Region IV – A, San Pablo City Division



4.1.2.2 Historical Enrolment for the Last Five Years

Table 50 shows the historical enrolment in high schools for the last five years. This accounts the historical enrolment from public and private secondary schools. In 2010, there were 12,944 high school students while 2013 has seen an enrolment of 19,786. There was a great increase of 6,234 enrollees in 2011 and a decrease of 183 in 2014.

Table 50. Historical Enrolment in Secondary Schools in San Pablo City, 2010-2014

Year	No. of Enrolment	Increase/Decrease
2010	12,944	
2011	19,178	6,234
2012	19,431	253
2013	19,786	355
2014	19,603	-183

Source: DepEd – Region IV – A, San Pablo City Division

Looking at the enrolment in secondary public schools only, during SY 2014-2015, there is a total enrolment of 14,483 and 528 teachers. Considering the DepEd's prescribed teacher student ratio of 1:40, there is more than an adequate number of teachers in high schools with a student-teacher ratio of 1:27 (Table 51). Meanwhile, in terms of student-classroom ratio, current ratio is estimated to be 1:53, which means that in order to meet the 1:40 student-classroom ratio, the government should establish additional 500 classrooms, at the minimum. However, it should be noted that the estimated number are based on total of the enrolment and classrooms and there is a need for more detailed information to determine which schools need additional classrooms. Also, number of teachers usually depends on the number of subjects they teach and not just on the number of classrooms which means that the current number of teachers is not more than what is needed but adequately corresponds to the number of subjects they teach. Given this, there might be a need to employ more teachers in the future to respond to the projected increase in enrolment.

Table 51. Student-Teacher and Student-Classroom Ratio in Secondary Public Schools, 2014-2015

Level	Enrolment	Teachers	No. of Classrooms	Student-Teacher Ratio	Student-Classroom Ratio
Secondary	14,483	528	272	1:27	1:53

Source: DepEd – Region IV – A, San Pablo City Division



In terms of facilities, only five (5) schools have clinics and libraries. Seven schools have playgrounds and all schools have comfort rooms within their school premises (Table 52). Moreover, based on the data gathered by CPDO in 2013, ten schools have no science laboratory. Twelve schools do not have industrial or home economic shops.

Table 52. Facilities Present in Public Secondary Schools in San Pablo City, S.Y. 2014-2015

School	Brgy.	Area (sq m)	Facilities and Condition						
			La	S	Li	Cl	CR	P	Other s
San Pablo City NHS	VI-A (Pob.)	14,034	1	0	1	1	49	0	8
San Jose NHS	San Jose	17,000	0	0	1	1	6	1	2
San Isidro NHS	San Isidro	907	0	0	0	0	18	0	0
Dolores NHS	Dolores	2,000	1	0	0	0	21	0	4
Col. Lauro Dizon Mem. NHS	VI-A (Pob.)	12,000	1	0	1	0	17	1	0
Del Remedio NHS	Del Remedio	1,971	1	0	0	0	13	0	0
Paaralang Pag-ibig at Pag-asa (SPED)	San Gabriel	6,912	0	0	0	0	6	1	0
Prudencia D. Fule MNHS	San Nicolas	4,102	0	0	1	1	16	0	0
San Bartolome NHS	San Bartolome	2,500	0	0	0	0	29	1	0
San Cristobal NHS	San Cristobal	1,215	1	0	0	0	9	0	0
San Pablo City Science High School	San Jose	16,080	1	0	0	1	12	0	0
San Vicente NHS	San Vicente	5,025	0	0	1	1	13	1	0
Santisimo Rosario NHS	Stmo. Rosario	10,000	0	0	0	0	12	0	0
Sta. Filomena Integrated School	Sta. Filomena	17,230	0	0	0	0	6	1	0
Sto. Angel NHS	Santo Angel	3,200	0	0	1	1	33	1	2

Source: DepEd – Region IV – A, San Pablo City Division

La – Lab

S – Shop

Cl – Clinic

Condition is indicated as follows:

G – Good (Well Maintained)

P – Poor (Needs Improvement)

P – Playground

Li – Library

CR – Comfort Room

C – Critical (Needs Priority Action)

N – None/No Such Facility

4.1.3 Tertiary Education

There are eleven institutions that offer tertiary education in San Pablo City (Table 53). Among them, two are government owned with one being a state university – Laguna State Polytechnic University and Dalubhasaan ng Lungsod ng San Pablo. Of the eleven colleges in the City, only three (3) do not offer professional courses. These colleges are Capellan Institute of Technology, MSC Institute of Technology and Montessori Professional Colleges. Post-graduate education is offered in San Pablo Colleges, Laguna State Polytechnic University and Laguna Colleges.



Table 53. Type of Tertiary Schools, Courses Offered, Manpower, and Facilities in San Pablo City

School	Barangay	Area (ha)	Ownership	Courses Offered	Manpower
Canossa College	Lakeside Park Subdivision	2.03	Private	Professional and Short Courses	
Laguna College	Paseo de Escudero, IV-C	1.40	Private	Professional and Short Courses, Masteral	
San Pablo Colleges	Brgy. III-A	0.27	Private	Professional and Short Courses, Masteral, Doctorate	
St. Peter College Seminary	Concepcion	1.20	Private	Professional Course (B.S. Theology)	
STI College of Luzon	Lim Chok Bldg. Lopez Jaena St. Brgy. VII-B	3.16	Private	Professional and Short Courses	
Dalubhasaan ng Lungsod ng San Pablo	San Jose	0.17	Public	Professional, Vocational, and Short Courses	not specified
Laguna State Polytechnic University	Del Remedio	2.62	Public	Professional and Short Courses, Masteral, Doctorate	146
Capellan Institute of Technology	Rizal Avenue, IV-A	3.94	Private	Technical and Short Courses	
AMA Computer Learning Center	IV-B	0.05	Private	Professional and Short Courses	
MSC Institute of Technology	San Gabriel	0.03	Private	Junior and Senior High School, Vocational and Short Courses	
Montessori Professional College	Del Remedio	0.04	Private	Vocational and Short Courses	

Source: Different Schools

Note: Number of facilities and condition present were not provided

Table 54 shows the historical enrolment of the two public colleges in San Pablo City and private colleges for 2nd semesters only. No data provided by private colleges for 1st semesters and school year 2014-2015.

Table 54. Number of Enrolment in Tertiary Schools in San Pablo City

School	2011		2012		2013		2014	
	1 st	2 nd	1 st	2 nd	1 st	2 nd	1 st	2 nd
Canossa College		289	75	214		267		
Laguna College		1,720	977	743		1,757		
San Pablo Colleges		1,231	438	793		1,623		
St. Peter College Seminary		45	57	-		57		
STI College of Luzon		442	281	161		531		
Capellan Institute of Technology		226	153	73		236		
AMA Computer Learning Center		205	134	102		224		
MSC Institute of Technology		31	14	17		31		
Dalubhasaan ng Lungsod ng San Pablo	3,164	3,593	4,333	3,828	4,450	3,533	4,765	4,045
Laguna State Polytechnic University	1,840	4,417	1,775	4,728	2,136	5,259	2,783	6,008

Source: Various colleges/university records



There is a steady increase in enrolment in colleges in the City. From 12,199 students' enrolment in 2011 2nd semester alone, it grew to 13,518 in 2013 2nd semester. Meanwhile, looking at the two university states enrolment for 1st and 2nd semesters, the year 2012 has seen the greatest increase in enrolment with 3,490 students while 2013 had the least with only 714. From over 6,000 students every semester in 2011, public colleges have almost 9,000 students in every semester 2014.

The Dalubhasaan ng Lungsod ng San Pablo has a steady increase in enrolment except for the year 2013 where it had 7,983 students compared to 8,161 in 2012. On the contrary, Laguna State Polytechnic University has a steady growth in enrolment for the said school years.

4.1.4 Projected Classroom, Teacher Requirements in Public Schools by Level

It is an imperative undertaking for the national government that education is not only accessible but also of good quality. Contributing to the quality of education is a desirable ratio between teacher and students and classroom and students. For the Philippines, the desirable ratio for teacher to students as well as classroom to students is 1:35 (elementary) and 1:40 (secondary). Table 55 shows the projected enrolment for elementary and secondary level and the corresponding need for classroom and teacher to accommodate them.

For the school year 2014-2015, there were 31,989 students enrolled in elementary schools and 14,483 in high school. The school year 2024-2025 will see an enrolment of 50,004 in elementary schools and 23,142 in high schools. On average, enrolment in elementary schools increases by 1,720 every year while enrolment in high schools grows by 840 every year.

During the same school year, there are 900 teachers and 792 classrooms across all elementary schools in San Pablo City. This resulted to a teacher student ratio of 1:35 and a classroom-student ratio of 1:40 which means that there is an adequate number of teachers. The next school year will see a need for 1,217 more teachers. To maintain the 1:35 ratio until school year 2024-2025, there is a need to hire 1,856 more teachers. Moreover, there needs for 1,111 more classrooms to comfortably accommodate students in elementary schools.



For the secondary level, the current teacher student ratio is 1:27, adequate for a 5:3 teacher-class ratio. There are currently 528 teachers teaching in secondary institutions. A need for 546 more teachers is forecasted for the succeeding school year while almost 600 is needed for school year 2020-2021. In ten years, high schools will have to hire 859 instructors to educate the students. However, the classroom student ratio is 1:53, higher than the desirable 1:40 ratio. School year 2015-2016 demands for 327 classrooms in secondary levels. To avoid overcrowding in classes, there is a need to provide 514 classrooms across all high schools in the City.

Table 55. Projected Classroom, Teacher Requirements in Public Schools by Level in San Pablo City

Level	Enrollment/Number	Planning Period											
		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Enrollment													
Kindergarten	4,759	7,962	5,012	5,062	5,416	5,795	6,201	6,635	7,098	7,591	8,115	8,671	
Elementary	31,989	32,795	34,195	35,534	37,054	38,648	40,319	42,071	43,909	45,839	47,868	50,004	
Secondary	14,483	14,709	15,323	15,972	16,702	17,473	18,287	19,147	20,057	21,022	22,048	23,142	
Classroom													
Kindergarten	120	99	100	101	108	116	124	133	142	152	162	173	
Elementary	792	729	760	790	823	859	896	935	976	1,019	1,064	1,111	
Secondary	272	327	341	355	371	388	406	425	446	467	490	514	
Teacher													
Kindergarten	56	99	100	101	108	116	124	133	142	152	162	173	
Elementary	900	1,217	1,269	1,319	1,375	1,434	1,496	1,561	1,630	1,701	1,776	1,856	
Secondary	528	546	569	593	620	648	679	711	744	780	818	859	

Source: DepEd – Region IV – A, San Pablo City Division

Aside from the estimated future classroom and teacher requirements, the CPDO has identified several issues that need to be taken into consideration. Some school buildings are dilapidated already which needs to be renovated. Moreover, the K-12 will start by 2016 which indicates the need for additional teachers and classrooms. Teachers should also be capacitated with the new curriculum the K-12 system requires. Specifically, the CPDO identified the need to increase the compensation of Day Care Teacher as well as enhance their teaching capacity. The City Government with coordination with DepEd should prepare for this new education system in order to adequately address the educational services of the City.

4.1.5 Education Analysis Matrix

Table 56. Education Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Inadequate water supply on certain public school	- May become sources of diseases among the	- Improvement of City water supply facilities



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
	student population like: typhoid, diarrhea	
Dilapidated school buildings	- May pose danger to students and teachers	- Inventory and status of building - Replacement of school buildings through SEF
Ambray Elementary School does not meet the standard area requirement for elementary school	- Students are crowded in this school - Facilities for ancillary services cannot be provided	- Provision of high rise buildings (2 to 3 storey) - Acquisition of additional land area
Need for more than 150 classroom requirements in secondary schools	- Students are crowded in this school - Facilities for ancillary services cannot be provided	- -Provision of high rise buildings (2 to 3 storey) - -Scheduling of classes in schools where there is inadequate number of classrooms
Some schools do not have their own school clinics	- Complete medical and dental services cannot be provided when children are in schools	- Provision of health facilities to at least 50% of the schools
Only one (1) Special Education School serving special children of the City and neighboring municipalities.	- Not all special children in the City can access the services of the SPED school	- Mainstreaming of special education in Central school and other private institutions
Need for capacity building of teachers and additional number of teachers for the implementation of K-12 System by June 2016	- There are no provision of classrooms and other facilities to accommodate Senior High School students - Increasing demand for teachers with capacity to teach the K-12 curriculum	- Explore the possibility to acquire land to establish additional school buildings - Coordinate with DepEd on how to prepare for the K-12 System in terms of the facilities needed and manpower capacity
Capability and Compensation of Day Care Teacher	- If the day care teachers are not compensated appropriately, they will have difficulty in performing their tasks, this will affect the quality of learning of the community students	- Increase salaries and wages, enhance the capabilities of day care teachers

4.2 Health and Sanitation

4.2.1 Health Resources

In San Pablo City, basic health and sanitation services are being provided mainly by the City Health Office in Brgy. V-A. It has an extension office in Brgy. San Jose. There is a total of 94 health personnel composed of 7 physicians, 7 dentists, 20 nurses, 35 midwives, 2 medical technologist, 12 sanitary inspectors. Aside from these healthcare front liners, the City has



support staff such as 2 dental aide, 2 staff assigned in cemetery and 7 administrative staff assigned in different departments of the City Health Office. Moreover, there are 99 active barangay health workers stationed in various barangays to respond to the health and sanitation needs of San Pablēños. In terms of health facilities there are 6 District Health Offices, 80 Barangay Health Station, 7 hospitals and 13 private lying-in clinics.

4.2.1.1 City Health Office Personnel and Population Ratio

Based on Table 57, there are a total of 189 health personnel in the City Health Office. The majority of this population is composed of active barangay health workers (99), midwives (35), and nurses (20). In terms of ratio, there is 1 health personnel to every 1,389 population in the City. There is one midwife to every 7,560 people, 1 nurse to every 13,229 population, and one active barangay health worker for 2,673 citizens in the City.

Table 57. Health Personnel* and Population Ratio in San Pablo City, 2013

Indicators	Number	Ratio to Population ¹
Physicians / Doctors	7	1 : 37,798
Dentists	7	1 : 37,798
Nurses	20	1 : 13,229
Midwives	35	1 : 7,560
Medical Technologists	1	1 : 264,589
Sanitation Inspectors	12	1 : 22,049
Nutritionist / Pharmacist	1	1 : 264,589
Administrative	7	1 : 37,798
Active Barangay Health Workers	99	1 : 2,673
Total	189	1:1,389

Source: City Health Office

*Number is applicable only to City Health Office

¹Based on 2013 projected population by CPDO

4.2.1.2 Health Facilities and Services Rendered

City Health Office

The City Health Office is the City Government's frontline health facility. It is located at the ground floor of the 8-storey building with main access through Mabini Street in Brgy. V-A. The office is composed of three (3) divisions, namely; Technical Division, City Cemetery Division and the Administrative Division.



Figure 19. City Health Office

The Technical Division plans, supervises and monitors the implementation of programs/projects. It provides technical support to the field implementation which is manned by the District Health Offices Staff. The City Cemetery Division manages and operates the two (2) public cemeteries, San Pablo Municipal Cemetery (old cemetery) and Himlayang San Pablëña. The Administrative Division on the other hand provides support services to various units of the organization. These services include personnel property, supply management and records keeping. To bring more effective and efficient health service, a City Health Extension Office was constructed in 2009 in Brgy. San Jose.

Hospitals

At present, there are seven (7) hospitals operating in San Pablo City, two (2) of which are government-owned while the rest are private hospitals. The two (2) public hospitals are the San Pablo City District Hospital in Brgy. IV-A and the San Pablo City General Hospital in San Jose. San Pablo Colleges Medical Center is the biggest among them in terms of capacity (number of beds). It can accommodate up to 118 patients. Immaculate Concepcion has the least capacity of only 25 beds.

The five (5) private hospitals, Sts. Francis and Paul General Hospital, Immaculate Concepcion Hospital, Community General Hospital, San Pablo Colleges Medical Center and Sas Pablo Doctors Hospital have a combined capacity of 332 beds. Together with the two government hospitals, the total number of hospital beds in the City is 464 beds. It translates to a bed-to-population ratio of 1:587 (Table 57). Figures 20-25 show the hospitals in the City.



District Health Offices and Barangay Health Centers

The City has six (6) District Health Offices and 80 Barangay Health Centers located in various urban and rural barangays. As shown in Figures 26-31, the District Health Offices are located in populated barangays in the Poblacion area. Aside from the provision of basic health services, other health centers provide other services such as Family Planning and Counseling, Maternal Child Care, Management of Infectious Diseases among others. Some health centers serve also as Social Hygiene Clinic and TB DOTS Center/Animal Bite Treatment Center (Figure 32 -Figure 37).

Table 58 shows the summary of the existing medical facilities and the number of health personnel assigned in each facility. The seven hospitals in the City of San Pablo have a total capacity of 464 beds. All of these hospitals have a total of 1815 health personnel which includes doctors, nurses, midwives, sanitary inspectors, and other administrative personnel. There are a total of 604 doctors providing medical care to the population and 421 nurses aiding them. Specifically, the San Pablo City General Hospital has only 32 bed capacity with 242 personnel. With the expected increase in population in the coming years, there is a need to expand its bed capacity and other medical facilities in order to adequately serve the public particularly the poor households of the City.

The barangay health station is manned by either nurses or midwives who deliver basic health services such as provision of vaccination and health monitoring of vulnerable groups such as mothers and children. In order to boost the health services at the barangay level, there is a need to increase the manpower, medical supplies particularly medical storage equipment vaccinations and increase the knowledge and capacity of the health personnel about cold chain management.



Figure 20. Panlalawigan Pagamutan Ng Laguna



Figure 21. SPC General Hospital



Figure 22. San Pablo Doctors Hospital



Figure 23. San Pablo Medical Center



Figure 24. Community General Hospital



Figure 25. STS. Francis & Paul Hospital



Figure 26. Bagong Pook MHC



Figure 27. Del Remedio MHC



Figure 28. Barangay II-D MHC



Figure 29. Concepcion MHC



Figure 30. Sto. Cristo MHC



Figure 31. Sta. Maria MHC



Figure 32. Sta. Maria BEMONC Facility



Figure 33. City Health Extension



Figure 34. Social Hygiene Clinic



Figure 35. TB Dots Facility



Figure 36. Animal Bite Treatment Center



Figure 37. Patria BEMONC Facility

Table 58. Medical Facilities and Health Personnel in San Pablo City

Name of Facility	Location	Ownership	Capacity (No. of Beds)	Personnel (No.)						Physical Condition
				D	N	M	SI	Others	Total	
Hospital										
Laguna Province Hospital-San Pablo City District Hospital	Brgy. IV-A	Government	100	38	70	6	0	124	238	Operational
San Pablo City General Hospital	San Jose	Government	32	14	46	6	0	176	242	Operational
Sts. Francis and Paul General Hospital	San Francisco	Private	30	15	13	0	2	10	40	Operational
Immaculate Concepcion Hospital	Brgy. VII-A	Private	25	40	8	4	0	26	78	Operational
Community General Hospital	San Roque	Private	99	209	112	13	0	103	437	Operational
San Pablo Colleges Medical Center	San Rafael	Private	118	154	108	32	3	227	524	Operational
San Pablo Doctors Hospital	Brgy. IV-A	Private	60	134	64	0	0	58	256	Operational
Total			464	604	421	61	5	724	1815	
City Health Office										
City Health Office-Main	V-A	Government	N/A	2	6	2	3	7	20	
City Health Extension Facility	San Jose	Government	N/A	2	3	0	0	4	9	
Bagong Pook Main Health Center	VI-C	Government	N/A	1	4	0	1	3	9	
Barangay II-D Main Health Center	II-D	Government	N/A	0	1	0	2	1	4	
Concepcion (A) Main Health Center	Concepcion	Government	N/A	1	0	1	1	1	4	
Del Remedio (A) Main Health Center	Del Remedio	Government	N/A	1	1	1	2	1	6	
Sta. Maria Main Health Center	Sta. Maria	Government	N/A	0	0	1	1	1	3	



Name of Facility	Location	Ownership	Capacity (No. of Beds)	Personnel (No.)						Physical Condition
				D	N	M	SI	Others	Total	
San Jose Main Health Center	San Jose	Government	N/A	0	1	0	1	0	2	
Barangay Health Station										
I-A	I-A	Government	N/A	0	0	1	0	0	1	
I-B	I-B,	Government	N/A	0	0	1	0	0	1	
I-C	Bagong Bayan	Government	N/A	0	0	1	0	0	1	
IV-B	IV-B	Government	N/A	0	1	0	0	0	1	
IV-C	IV-C	Government	N/A	0	1	0	0	0	1	
V-A	V-A	Government	N/A	0	1	0	0	0	1	
V-B	V-B	Government	N/A	0	1	0	0	0	1	
V-C	V-C	Government	N/A	0	1	0	0	0	1	
V-D	V-D	Government	N/A	0	1	0	0	0	1	
VI-A	VI-A	Government	N/A	0	1	0	0	0	1	
VI-B	VI-B	Government	N/A	0	0	1	0	0	1	
VI-E	VI-E	Government	N/A							
VI-D	VI-D	Government	N/A	0	0	1	0	0	1	
San Lucas II	San Lucas II	Government	N/A							
San Lucas I	San Lucas I	Government	N/A	0	0	1	0	0	1	
San Pedro	San Pedro	Government	N/A	0	0	1	0	0	1	
Dolores	Dolores	Government	N/A							
Sta. Catalina	Sta. Catalina	Government	N/A	0	0	1	0	0	1	
San Buenaventura	San Buenaventura	Government	N/A	0	0	1	0	0	1	
II-A	II-A	Government	N/A	0	1	0	0	0	1	
II-B	II-B	Government	N/A	0	1	0	0	0	1	
II-C	II-C	Government	N/A	0	0	1	0	0	1	
II-E	II-E	Government	N/A	0	0	1	0	0	1	
II-F	II-F	Government	N/A	0	0	1	0	0	1	
VII-A	VII-A	Government	N/A	0	1	0	0	0	1	
VII-B	VII-B	Government	N/A	0	1	0	0	0	1	
VII-C	VII-C	Government	N/A	0	1	0	0	0	1	
VII-D	VII-D	Government	N/A	0	1	0	0	0	1	
VII-E	VII-E	Government	N/A	0	1	0	0	0	1	
San Gabriel	San Gabriel	Government	N/A	0	0	1	0	0	1	
San Miguel	San Miguel	Government	N/A	0	0	1	0	0	1	
San Bartolome	San Bartolome	Government	N/A	0	0	1	0	0	1	
Santiago I	Santiago I	Government	N/A	0	0	1	0	0	1	
Santiago II	Santiago II	Government	N/A	0	0	1	0	0	1	
Bautista	Bautista	Government	N/A	0	0	1	0	0	1	
San Lorenzo	San Lorenzo	Government	N/A	0	0	1	0	0	1	
Sto. Angel (B)	Sto. Angel	Government	N/A	0	0	1	0	0	1	
Sto. Angel (A)	Sto. Angel	Government	N/A	0	0	1	0	0	1	
San Diego	San Diego	Government	N/A	0	1	0	0	0	1	
Sta. Isabel	Sta. Isabel	Government	N/A	0	1	0	0	0	1	
Concepcion (B)	Concepcion	Government	N/A	0	0	1	0	0	1	
III-A	III-A	Government	N/A	0	0	1	0	0	1	



Name of Facility	Location	Ownership	Capacity (No. of Beds)	Personnel (No.)						Physical Condition
				D	N	M	SI	Others	Total	
III-B	III-B	Government	N/A	0	0	1	0	0	1	
III-C	III-C	Government	N/A	0	0	1	0	0	1	
III-D	III-D	Government	N/A	0	0	1	0	0	1	
III-E	III-E	Government	N/A	0	0	1	0	0	1	
III-F	III-F	Government	N/A	0	0	1	0	0	1	
IV-A	IV-A	Government	N/A	0	0	1	0	0	1	
San Rafael	San Rafael	Government	N/A	0	0	1	0	0	1	
San Crispin	San Crispin	Government	N/A	0	0	1	0	0	1	
Sta. Filomena	Sta. Filomena	Government	N/A	0	1	0	0	0	1	
Sta. Monica	Sta. Monica	Government	N/A	0	0	1	0	0	1	
San Nicolas	San Nicolas	Government	N/A	0	0	1	0	0	1	
Sta. Veronica	Sta. Veronica	Government	N/A	0	1	0	0	0	1	
San Roque	San Roque	Government	N/A	0	1	0	0	0	1	
San Marcos	San Marcos	Government	N/A	0	1	0	0	0	1	
San Mateo	San Mateo	Government	N/A	0	1	0	0	0	1	
Sta. Maria Magdalena	Sta. Maria Magdalena	Government	N/A	0	0	1	0	0	1	
San Juan	San Juan	Government	N/A	0	0	1	0	0	1	
Del Remedio (B)	Del Remedio	Government	N/A	0	0	1	0	0	1	
Soledad	Soledad	Government	N/A	0	0	1	0	0	1	
Santisimo Rosario	Stmo. Rosario	Government	N/A	0	0	1	0	0	1	
Atisan	Atisan	Government	N/A	0	0	1	0	0	1	
San Vicente	San Vicente	Government	N/A	0	0	1	0	0	1	
Sta. Cruz	Sta. Cruz	Government	N/A	0	0	1	0	0	1	
San Joaquin	San Joaquin	Government	N/A	0	0	1	0	0	1	
San Isidro	San Isidro	Government	N/A	0	0	1	0	0	1	
Sta. Ana	Sta. Ana	Government	N/A	0	0	1	0	0	1	
San Antonio I	San Antonio I	Government	N/A	0	0	1	0	0	1	
San Antonio II	San Antonio II	Government	N/A	0	0	1	0	0	1	
San Francisco (A)	San Francisco	Government	N/A	0	0	1	0	0	1	
San Francisco (B)	San Francisco	Government	N/A	0	0	1	0	0	1	
Sto. Cristo	Sto. Cristo	Government	N/A	0	0	1	0	0	1	
San Cristobal	San Cristobal	Government	N/A	0	0	1	0	0	1	
Sto. Niño	Sto. Niño	Government	N/A	0	1	0	0	0	1	
San Ignacio	San Ignacio	Government	N/A	0	1	0	0	0	1	
San Gregorio	San Gregorio	Government	N/A	0	0	1	0	0	1	
Sta. Elena	Sta. Elena	Government	N/A	0	0	1	0	0	1	
Soledad	Soledad	Government	N/A	0	0	1	0	0	1	

Source: City Health Office

D – Doctors N – Nurses

M – Midwives SI – Sanitary Inspectors

Physical Condition – Operational (O), Needs Repair (NR), Not Operational (NO)



4.2.1.3 Leading Causes of Morbidity and Mortality

The leading causes of morbidity recorded in the City are illnesses of the respiratory, hypertension, UTI, digestive system as well as dermatitis (Table 59). Families living in cluster with poor environmental sanitation are more likely to be prone to different forms of viruses and bacteria that might lead to specific infectious diseases like measles, pneumonia and respiratory diseases, dermatitis and parasitism as well as diarrheal diseases.

Table 59. Top Causes of Morbidity in San Pablo City, 2009 -2014

2010		2011		2012		2013		2014	
Causes	No.	Causes	No.	Causes	No.	Causes	No.	Causes	No.
Upper respiratory Tract Infection	12,551	Upper respiratory Tract Infection	9,940	Upper respiratory Tract Infection	9,635	Acute Upper Respiratory Tract Infection	9,484	Acute Upper Respiratory Tract Infection	6,453
Lower Respiratory Tract Infection	1,764	Essential Hypertension	1,402	Essential Hypertension	1,328	Essential (Primary) Hypertension	1,712	Acute Lower Respiratory Infection	1,183
Essential Primary Hypertension	1,610	Urinary Tract Infection	984	Urinary Tract Infection	1,188	Acute Lower Respiratory Infection	1,584	Urinary Tract Infection	1,109
Acute Bronchitis	928	Lower Respiratory Tract Infection	754	Lower Respiratory Tract Infection	894	Urinary Tract Infection	1,418	Essential (Primary) Hypertension	945
Urinary tract Infection	859	Infectious Gastroenteritis	480	Infectious Gastroenteritis	488	Infectious Gastroenteritis	598	Infectious Gastroenteritis	600
Other Acquired deformities of Musculoskeletal System	779	Asthma, unspecified	354	Primary Respiratory Tuberculosis	425	Acute Bronchitis	469	Acute Bronchitis	369
Dermatitis, unspecified	710	Dermatitis, unspecified	307	Asthma, unspecified	322	Asthma, unspecified	451	Asthma, unspecified	319
Infectious Gastroenteritis & Colitis	665	Primary respiratory Tuberculosis	303	Injury of unspecified region	297	Injury of unspecified region	390	Injury of unspecified region	206
Respiratory Tuberculosis	279	Open Wound	226	Dermatitis, unspecified	275	Dermatitis, unspecified	253	Dermatitis, unspecified	197
Unspecified Intestinal Parasitism	228	Primary Complex	219	Pneumonia	186	Pneumonia	252	Other Anemias	176
Total	20,373	Total	14,969	Total	15,038	Total	16,611	Total	11,557

Source: City Health Office

Similarly, the top causes of mortality in San Pablo City are related to the people's lifestyle (Table 60). Always on the top spots are cardiovascular vascular diseases and cancer. This suggests that most deaths that occur in the City are mostly due to unhealthy diet and lack of exercise. This may attributed due to the emergence of the age of information and increasing availability of



fast food. Making healthy decisions should be promoted by the City health office in order to bring down its manifestation. Ironically, violence and accidents still persist in the top causes of mortality in San Pablo City. This calls for action from the local police headquarters to trim down its occurrence.

Table 60. Top Causes of Mortality in San Pablo, 2009-2014

2010		2011		2012		2013		2014	
Causes	No.	Causes	No.	Causes	No.	Causes	No.	Causes	No.
Coronary Artery Disease	305	Coronary Artery Disease	318	Coronary Artery Disease	309	Coronary Artery Dis.	367	Coronary Artery Disease	384
Hypertensive Vascular Disease	208	Pneumonia	183	Malignant Neoplasm	185	Pneumonia	207	Malignant Neoplasm, All types	204
Pneumonia	178	Cancer	172	Pneumonia	160	Malignant Neoplasm, All types	187	Pneumonia	170
Malignant Neoplasm, All types	152	Hypertensive Vascular Disease	162	Accidents & Violence	148	Cerebro Vascular Accident	162	Hypertensive Vascular Disease	160
Accidents & Violence	151	Accidents & Violence	152	Hypertensive HD	140	Accidents & Violence	138	Cerebrovascular Accident	127
Cerebrovascular Disease	101	Cerebrovascular Accidents	96	Cerebrovascular Accident	105	Hypertensive Vascular Disease	126	Accidents & Violence	125
Diabetes Mellitus	87	Diabetes Mellitus	93	PTB, respiratory	98	Tuberculosis	95	Diabetes Mellitus	83
Tuberculosis	82	PTB, Respiratory	81	Diabetes Mellitus	81	Diabetes Mellitus	82	Tuberculosis	78
Chronic Renal Failure	61	Chronic Obstructive Pulmonary Dis.	65	Septicemia	65	Renal Failure	68	Renal Failure	74
Septicemia	45	Septicemia	50	Malnutrition	48	Other Septicemia	66	Septicemia, unspecified	62
Total	1,370	Total	1,372	Total	1,339	Total	1,498		1,467

Source: City Health Office

4.2.1.4 Mortality and Morbidity Rate

The three classifications of death rate are described in Table 61 – the crude death rate (CDR) which describes a general picture of mortality in the City and infant mortality rate (IMR) and maternal mortality rate (MMR) which are more specific for newborns and mothers.

From 2010 to 2014, the number of deaths has continuously increased. But this increase in number of deaths has not generally affected the crude death rate which still amounts to roughly eight deaths per 1,000 population. Looking into the infant mortality, there is no clear trend that can be derived from the given information as it is oscillating over the years. The previous year 2014 has tallied a total of 79 recorded infant deaths, equivalent to an IMR of 10.7 (11



infant deaths per 1,000 live births). This is better than 2011's IMR of 13 but worse than 2012's IMR of nine (9). Similarly, maternal mortality has demonstrated the same oscillating manner as that of the infant's. In 2010, there were only three (3) maternal deaths while the previous year has recorded nine (9). The year 2014 has a maternal mortality rate of 13 deaths per 1,000 live births. Though the IMR and MMR of the City is relatively low, still, there need to improve maternal care in the City to achieve zero casualties during labor. This can be done through strengthening information education campaign regarding maternal health during pregnancy and technical medical assistance during labor.

Table 61. Mortality Rate for the Past Five Years in San Pablo City, 2010-2014

Health Indicator	San Pablo City									
	2010		2011		2012		2013		2014	
	No.	%	No.	%	No.	%	No.	%	No.	%
Crude Death Rate (CDR)	1,890	7.45	1,888	7.32	1,924	7.33	2,052	7.8	2,093	7.91
Infant Mortality Rate (IMR)	94	11.8	98	13	68	8.7	74	9.76	79	10.7
Maternal Mortality Rate (MMR)	3	3.76	8	10.6	6	7.7	4	5.27	9	12.2

Source: City Health Office

As shown in Table 62, the top ten leading causes of illness in the San Pablo is described with the corresponding number of causes and prevalence per 100,00 population.

In a consistent manner, upper respiratory tract infection is the most common cause of sickness among the population. This affects the demography regardless of age. The said illness is not directly related to lifestyle which is why the number of recorded cases and its prevalence has continuously decreased. From a rate of 4,949 in 2010, its occurrence has gone down to 2,439 per 100,000 people in 2014 and is expected to go down in the coming years. Shifting between the second, third, and fourth place over the past five years are lower respiratory tract infection, hypertension, and urinary tract infection. The prevalence of hypertension in in the City is alarming as it is related to an unhealthy and stationary lifestyle. The occurrence of hypertension is only a symptom of an illness. Meanwhile, urinary tract infection is mostly due to the consumption of food with high-sodium content which is commonly unhealthy. These lifestyle-related illnesses should be toned down by the City Health Office as they affect the people for their whole lifetime, potentially affecting the role of the population to be productive and efficient citizens of the locality.



Table 62. Leading Causes of Morbidity per 100,000 Population in San Pablo City, 2010-2014

2010			2011			2012			2013			2014		
Causes	No.	%	Causes	No.	%	Causes	No.	%	Causes	No.	%	Causes	No.	%
Upper Resp Tract Infection	1255	4.94	Upper Resp Tract Infection	994	3.85	Upper Resp Tract Infection	963	3.67	Acute Upper Resp Tract Infection	948	3.60	Acute Upper Resp Tract Infection	645	2.43
Lower Resp Tract Infection	176	0.69	Essential Hypertension	140	0.54	Essential Hypertension	132	0.50	Essential (Primary) Hypertension	17	0.06	Acute Lower Resp Tract Infection	118	0.44
Essential (Primary) Hypertension	16	0.06	Urinary Tract Infection	98	0.38	Urinary Tract Infection	118	0.45	Acute Lower Resp Tract Infection	158	0.60	Urinary Tract Infection	110	0.42
Acute Bronchitis	92	0.36	Lower Resp Tract Infection	75	0.29	Lower Resp Tract Infection	89	0.34	Urinary Tract Infection	14	0.05	Essential (Primary) Hypertension	94	0.35
Urinary Tract Infection	85	0.33	Infectious Gastroenteritis	48	0.18	Infectious Gastroenteritis	48	0.18	Infectious Gastroenteritis	59	0.22	Infectious Gastroenteritis	60	0.22
Other Acquired Deformities of Musculoskeletal System	77	0.30	Asthma, unspecified	35	0.13	Primary Respiratory Tuberculosis	42	0.16	Acute Bronchitis	46	0.17	Acute Bronchitis	36	0.14
Dermatitis, unspecified	7	0.02	Dermatitis, unspecified	30	0.11	Asthma, unspecified	32	0.12	Asthma, unspecified	45	0.17	Asthma, unspecified	31	0.12
Infectious Gastroenteritis and Colitis	66	0.26	Primary Respiratory Tuberculosis	30	0.11	Injury of Unspecified Region	29	0.11	Injury of Unspecified Region	39	0.14	Injury of Unspecified Region	20	0.07
Respiratory Tuberculosis	27	0.10	Open Wound	22	0.08	Dermatitis, unspecified	27	0.10	Dermatitis, unspecified	25	0.09	Dermatitis, unspecified	19	0.07
Unspecified Intestinal Parasitism	22	0.09	Primary Complex	2	0.01	Pneumonia	18	0.07	Pneumonia, unspecified	25	0.09	Other Anemias	17	0.06

Source: City Health Office

4.2.1.5 Nutritional Status

Table 63 shows the nutritional status of children in a San Pablo City. The last three years have shown a steady increase in children with normal weight after a 6% drop in 2013. Majority of the children in San Pablo City have normal weights. They usually make up 94% of the annual nutritional status survey but the current year shows a percentage of almost 99%.

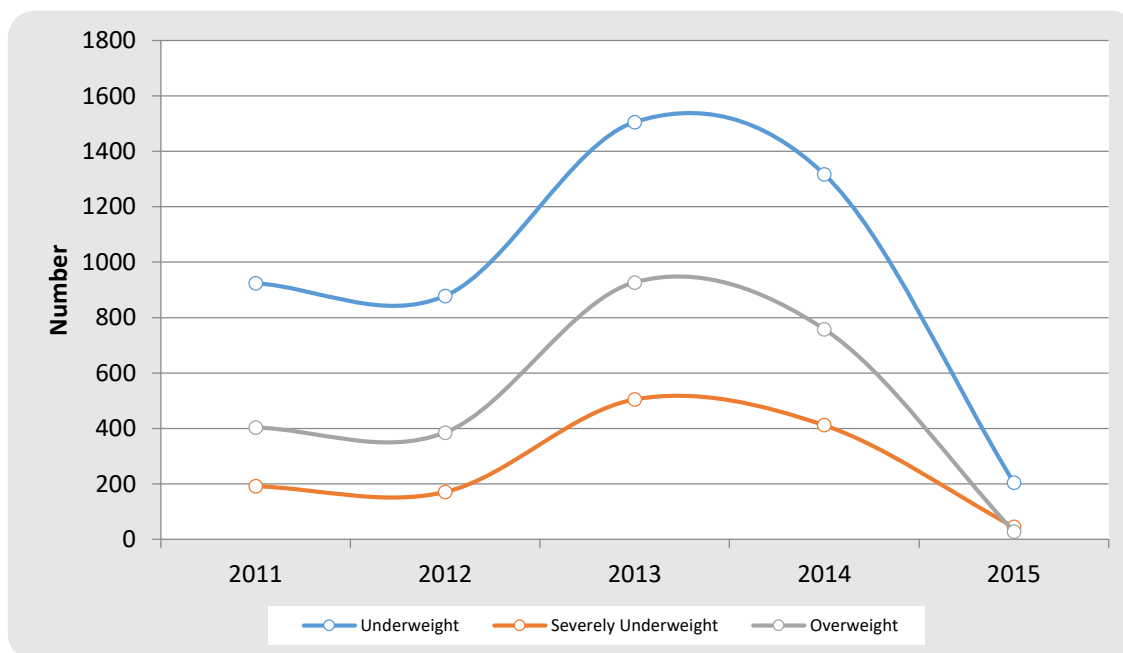
Table 63. Nutritional Status of San Pablo City, 2011-2015

Nutritional Status	2011	%	2012	%	2013	%	2014	%	2015	%
Normal	23,630	93.96	27,233	95	25,297	89.6	26,132	91.31	26,191	98.95
Underweight	924	3.67	878	3.06	1,505	5.33	1,317	4.6	205	0.77
Severely Underweight	192	0.76	171	0.6	505	1.79	412	1.44	45	0.17
Overweight	403	1.6	385	1.34	927	3.28	758	2.65	28	0.11
Total	25,149	100	28,667	100	28,234	100	28,619	100	26,469	100

Source: City Nutrition Action Office



A fluctuating trend is reflected by underweight children. Among the five years, 2015 has shown the least percentage of underweight children with less than 1% of the population while 2013 has the most with 5.33%. Severely underweight children usually make up less than 1% but the years 2013 and 2014 show otherwise. The current year 2015 also reflect the least severely underweight children. The percentage of overweight children has steadily been declining over the last three years after a great spike in 2013.



Source: City Nutrition Action Office

Figure 38. Malnourished Children in San Pablo City, 2011-2015

Figure 38 depicts that over the last five years, 2015 reflects the best nutritional status of San Pablo City while 2013 shows the worst. This improvement of the nutritional status of the City may be attributed to the increase in food supply and its accessibility. However, nutrition officers should still monitor the nutrition status of the City as this increase in food availability pose a threat of easily becoming overweight.

4.2.1.6 Projected Requirements for Barangay Health Facilities

Every barangay in San Pablo City has one (1) barangay health facility for the current year 2015. HLURB prescribes that there corresponds one (1) barangay health facility per 5,000 population in a barangay. Described in



Table 64 is the summary of projected requirements for barangay health facilities in the City.

Due to population growth, three (3) barangays will need three (3) barangay health facilities in the future: Concepcion, Del Remedio, and San Francisco. In addition, 17 barangays will need two (2) barangay health facilities each, namely, Barangay I-B, I-C, San Gabriel, San Gregorio, San Jose, San Lucas I, San Lucas II, San Antonio I, San Cristobal, San Diego, San Ignacio, San Nicolas, Sta. Elena, Sta. Monica, Stmo. Rosario and Sto. Angel. The rest of the 60 barangays will not need any additional health facility for the next ten years. It should be noted however, that there are some Health Office that are within or near the said barangays. For instance, there are Health Office in Concepcion, Del Remedio and San Jose. This indicates that establishment of additional barangay health station such barangays is not necessary as the Health Office can accommodate the population needing health services. Also, people of San Lucas I and San Lucas II can visit the Health Office near them such as in Del Remedio and Sta. Maria.

Meanwhile, a Health Office can be establish instead somewhere in adjacent barangays such as San Francisco, San Gregorio, San Ignacio and Sto. Niño as well as in adjacent barangays like San Gabriel and Sta. Monica. However, for rural barangays especially in the outermost part of the City, additional health station are needed such as in San Cristobal, Sta. Elena, San Diego, Sto. Angel San Antonio I, and Santisimo Rosario.

Table 64. Projected Requirements for Barangay Health Facilities in San Pablo City

Barangay	Base Year	Projected Number of Barangay Health Station									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
URBAN BARANGAYS											
I-A	1	1	1	1	1	1	1	1	1	1	1
I-B	1	1	1	2	2	2	2	2	2	2	2
I-C	1	2	2	2	2	2	2	2	2	2	2
II-A	1	1	1	1	1	1	1	1	1	1	1
II-B	1	1	1	1	1	1	1	1	1	1	1
II-C	1	1	1	1	1	1	1	1	1	1	1
II-D	1	1	1	1	1	1	1	1	1	1	1
II-E	1	1	1	1	1	1	1	1	1	1	1
II-F	1	1	1	1	1	1	1	1	1	1	1
III-A	1	1	1	1	1	1	1	1	1	1	1
III-B	1	1	1	1	1	1	1	1	1	1	1
III-C	1	1	1	1	1	1	1	1	1	1	1
III-D	1	1	1	1	1	1	1	1	1	1	1
III-E	1	1	1	1	1	1	1	1	1	1	1
III-F	1	1	1	1	1	1	1	1	1	1	1



Barangay	Base Year	Projected Number of Barangay Health Station									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
IV-A	1	1	1	1	1	1	1	1	1	1	1
IV-B	1	1	1	1	1	1	1	1	1	1	1
IV-C	1	1	1	1	1	1	1	1	1	1	1
V-A	1	1	1	1	1	1	1	1	1	1	1
V-B	1	1	1	1	1	1	1	1	1	1	1
V-C	1	1	1	1	1	1	1	1	1	1	1
V-D	1	1	1	1	1	1	1	1	1	1	1
VI-A	1	1	1	1	1	1	1	1	1	1	1
VI-B	1	1	1	1	1	1	1	1	1	1	1
VI-C	1	1	1	1	1	1	1	1	1	1	1
VI-D	1	1	1	1	1	1	1	1	1	1	1
VI-E	1	1	1	1	1	1	1	1	1	1	1
VII-A	1	1	1	1	1	1	1	1	1	1	1
VII-B	1	1	1	1	1	1	1	1	1	1	1
VII-C	1	1	1	1	1	1	1	1	1	1	1
VII-D	1	1	1	1	1	1	1	1	1	1	1
VII-E	1	1	1	1	1	1	1	1	1	1	1
Concepcion	1	2	2	2	2	2	2	2	3	3	3
Del Remedio	1	3	3	3	3	3	3	3	3	3	3
San Francisco	1	3	3	3	3	3	3	3	3	3	3
San Gabriel	1	2	2	2	2	2	2	2	2	2	2
San Gregorio	1	2	2	2	2	2	2	2	2	2	2
San Jose	1	2	2	2	2	2	2	2	2	2	2
San Lucas I	1	2	2	2	2	2	2	2	2	2	2
San Lucas II	1	2	2	2	2	2	2	2	2	2	2
San Rafael	1	1	1	1	1	1	1	1	1	1	1
San Roque	1	1	1	1	1	1	1	1	1	1	1
Sto Cristo	1	1	1	1	1	1	1	1	1	1	1
Soledad	1	1	1	1	1	1	1	1	1	1	1
RURAL BARANGAYS											
Atisan	1	1	1	1	1	1	1	1	1	1	1
Bautista	1	1	1	1	1	1	1	1	1	1	1
Dolores	1	1	1	1	1	1	1	1	1	1	1
San Antonio I	1	2	2	2	2	2	2	2	2	2	2
San Antonio II	1	1	1	1	1	1	1	1	1	1	1
San Bartolome	1	1	1	1	1	1	1	1	1	1	1
San Buenaventura	1	1	1	1	1	1	1	1	1	1	1
San Crispin	1	1	1	1	1	1	1	1	1	1	1
San Cristobal	1	2	2	2	2	2	2	2	2	2	2
San Diego	1	2	2	2	2	2	2	2	2	2	2
San Ignacio	1	2	2	2	2	2	2	2	2	2	2
San Isidro	1	1	1	1	1	1	1	1	1	1	1
San Joaquin	1	1	1	1	1	1	1	1	1	1	1
San Juan	1	1	1	1	1	1	1	1	1	1	1
San Lorenzo	1	1	1	1	1	1	1	1	1	1	1
San Marcos	1	1	1	1	1	1	1	1	1	1	1



Barangay	Base Year	Projected Number of Barangay Health Station									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
San Mateo	1	1	1	1	1	1	1	1	1	1	1
San Miguel	1	1	1	1	1	1	1	1	1	1	1
San Nicolas	1	1	2	2	2	2	2	2	2	2	2
San Pedro	1	1	1	1	1	1	1	1	1	1	1
San Vicente	1	1	1	1	1	1	1	1	1	1	1
Santiago I	1	1	1	1	1	1	1	1	1	1	1
Santiago II	1	1	1	1	1	1	1	1	1	1	1
Sta. Ana	1	1	1	1	1	1	1	1	1	1	1
Sta. Catalina	1	1	1	1	1	1	1	1	1	1	1
Sta. Cruz	1	1	1	1	1	1	1	1	1	1	1
Sta. Elena	1	1	2	2	2	2	2	2	2	2	2
Sta. Filomena	1	1	1	1	1	1	1	1	1	1	1
Sta. Isabel	1	1	1	1	1	1	1	1	1	1	1
Sta. Ma. Magdalena	1	1	1	1	1	1	1	1	1	1	1
Sta. Maria	1	1	1	1	1	1	1	1	1	1	1
Sta. Monica	1	2	2	2	2	2	2	2	2	2	2
Sta. Veronica	1	1	1	1	1	1	1	1	1	1	1
Stmo. Rosario	1	2	2	2	2	2	2	2	2	2	2
Sto. Angel	1	2	2	2	2	2	2	2	2	2	2
Sto. Niño	1	1	1	1	1	1	2	2	2	2	2

Source: City Planning and Development Office; Projected by GIS, Co.

4.2.2 Sanitation

Sanitation is another major concern of the community that needs to be given enough attention by the City Government. Services such as the provision of toilet facilities, burial grounds, and waste management should be given priority in order to have a healthy and clean community.

4.2.2.1 Household Distribution by Type of Toilet Facility

More than three quarters of all the households in the City already have their own water-sealed sewer septic tank (Table 65). Seven percent have their septic tanks shared with other households. Eight percent have other water-sealed depositories while 3% of the households share with one or more households. Closed pit, open pit, and other types of toilet facility are classified as unsanitary by the City Health Office. Overall, these unsanitary toilet facilities constitute 5.81% of all households. The CHO promotes the use of appropriate sanitary toilet facilities in every household across all barangays. Those who are still using closed pit, open pit and other means of excreta disposal are



encouraged to shift/construct a sanitary toilet facility. On the other hand the City Health Office with the assistance of Provincial Health Office is providing toilet bowls for those households without toilet and those households that need toilet improvement.

Table 65. Household Distribution by Type of Toilet Facility in San Pablo City, 2010

Type of Toilet Facility	No. of Households	Percentage (%)
Water-sealed Sewer Septic Tank Used Exclusively by Household	43,171	76.73
Water-sealed Sewer Septic Tank Used Exclusively with Other Households	3,660	6.51
Water-sealed Other Depository Used Exclusively by Household	4,484	7.97
Water-sealed Other Depository Used Exclusively with Other Households	1,679	2.98
Closed Pit	1,354	2.41
Open Pit	529	0.94
Others (Pail system and others)	940	1.67
None	444	0.79
Total	56,261	100.00

Source: 2010 Census of Population and Housing, Philippine Statistics Authority

4.2.3 Burial Ground

4.2.3.1 Existing Cemeteries and Memorial Parks

There are three (3) cemeteries, three (3) memorial parks and two (2) cemeteries for nuns in San Pablo City. Six are privately owned while two cemeteries belong to the City Government, San Pablo Municipal Cemetery and Himlayan San Pableña (Table 66). In addition, a memorial park is being constructed in Barangay Sto. Niño. The existing burial grounds indicate that the City Government adequately provides several options as where its people bury their dead. However, for poor individuals that cannot afford to buy lots in Memorial parks, they have no choice but to bury their dead loved ones in the congested public cemeteries.

**Table 66. Existing Cemeteries and Memorial Parks in San Pablo City**

Name	Location	Ownership	Area (ha)	Capacity	Remarks
San Pablo City Cemetery	M. Leonor St., Brgy. II-F	Government	3.34	approx. 50,000	Congested
Himlayan San Pableña	Brgy. Del Remedio	Government	4.28	approx. 10,000	
San Pablo Memorial Park	Brgy. San Gabriel	Private	9.56		
San Gabriel Memorial Garden	Brgy. San Gabriel	Private	7.58		
Eternal Glory Memorial Garden	Brgy. San Vicente	Private	4.91		
Chinese Cemetery	Brgy. II-F Maharlika Highway	Private	2.24		
(New Cemetery in San Ignacio)	San Ignacio		1.82		
Carmelite Monastery	Brgy. Concepcion	Private	120 sq. m.		For Carmelite sisters only
Canossa College	Lakeside Park Subd.	Private	144 sq. m.		For Canossian sisters only

Source: City Health Office

4.2.3.2 Projected Number of Deaths and Area Requirements for Burial Grounds

Table 67 shows the projected number of deaths each year until 2025 and the corresponding area requirement of burial grounds. It should be noted that in computing the area requirement, a minimum plot size of 1.0 meter by 2.44 meters was used.

Table 67. Projected Number of Deaths and Area Requirements For Burial Grounds in San Pablo City

Year	Number of Deaths	Area Requirement (m ²)
2015	2,110	5,149.29
2016	2,149	5,242.72
2017	2,188	5,337.86
2018	2,227	5,434.72
2019	2,268	5,533.31
2020	2,309	5,633.72
2021	2,351	5,735.95
2022	2,393	5,840.03
2023	2,437	5,945.98
2024	2,481	6,053.89
2025	2,526	6,163.73

Number of Deaths=CDR*Population

Area Requirement=Number of Deaths*1.0*2.44



Using a crude death rate of 7.75 from the year 2014, it is computed that there will be more than 2,000 deaths every year. In ten years, the total number of deaths will be 25,439, with the number of deaths increasing by an average of 41 every year. In relation to this, in 2025 a total of 6,163.73 m² of burial grounds for the projected total number of deaths is expected. Each year, an average of 100.57 m² of burial grounds is expected to be allotted by the City Government under the assumption that all are buried within the municipality. The existing burial grounds are more than enough for the future burial grounds needs of the City for the next 10 years.

4.2.4 Solid Waste and Waste Water Facilities

Solid waste management and the provision of solid waste facilities are the major task of the Solid Waste Management Office of the City Government of San Pablo. Waste water facilities, on the other hand, are available in private industries. Commercial establishments and industries are being monitored by DENR and LLDA when it comes to their waste disposal and potential hazards these industries may produce.

4.2.4.1 Solid Waste Management

Executive Order no. 04-52003 provided the composition of the City Solid Waste Management Board of 14 officers and members based on DENR of R.A. 9003, and the passing of City Ordinance 2006-15. Section 22 of this Ordinance created an independent Solid Waste Management Office which will implement and adopt the program of the Board in carrying out its duties and responsibilities. The Solid Waste Management Office is responsible for the delivery of the City's services on Solid Waste Management as well as the operation of facilities related to sanitation. The City Solid Waste Management Office caters to 45 out of 80 (56%) barangays in collecting waste while the remaining manage and collect their own waste.

The City Ordinance 2006-15 amending City Ordinance 2003-15 (the Generic Ordinance on Solid Waste Management of San Pablo City) further strengthen the functions of the City Solid Waste Management Office in managing the City's solid waste problems and operation of the City Sanitary Landfill and Material Recovery Facility located at Sitio Baloc, Brgy. Sto. Niño, San Pablo City. Moreover, the City Environment and Natural Resources Office (CENRO) together with the City General Services Office (CGSO) collaborate in



the implementation and enforcement of environmental ordinances within the City.

The annual budget for the City Solid Waste Management Office for the year 2013 is P35,596,281.92, comprising of P20,752,281.92 for the Personnel Services and P14,844,000.00 for the maintenance and operating expenses of the sanitary landfill and equipment.

Source Reduction

Based on Rule IX Section I Department Administrative Order (DAO) in support to R.A. 9003, volume reduction at source is the main objective of the Integrated Ecological Solid Waste Management System. All constituents shall promote and be responsible for sorting and segregating of biodegradable, non-biodegradable and recyclable waste at the household and barangay levels and all other sources such as market, commercial institutions, schools, hospital and industries. The City is currently exercising segregation at source with its policy "No Segregation No Collection" program which aims to discipline the public. There is also an Ordinance requiring PUV, PUJ, PUB and tricycles operating in the City to install or provide trash receptacle or garbage bin on their vehicles to avoid improper waste disposal on City streets and drainage systems. Through City Ordinance 2009-14, the prohibition of styro foam and regulation on plastic use is strictly implemented. Moreover, in relation to waste reduction, there is also an existing anti-littering ordinance. With the segregation policy and ordinances in place, the public is expected to follow these laws; however, there were reports of non-compliance and weak implementation of the abovementioned ordinances.

Collection

The total collecting fleet of the City Solid Waste Management Office is 10 units. Ten (10) units are running alongside 35 mini dump trucks/compactors which are operated by the barangay. The present total collection is assessed at 70-80 metric tons per day depending on the season. The operation of the operating fleet is 2 shifts (Morning/Night) per day, 1 trip per shift for 7 days a week. The manning of the units consist of driver plus the collectors as follows: 2-3 collectors for compactor truck; and 4-5 collectors for dump trucks, the actual number of collectors need to be varied to suit loading conditions of the trucks. Segregated wastes are collected at different schedule. Biodegradables (Nabubulok) are collected every Monday, Wednesday, Friday and Sunday. While the non-biodegradables (Di-Nabubulok) are collected every Tuesday, Thursday and Saturday. Table 68 shows the schedule



of collection of garbage in the City. Although there are regular schedule to be followed, there were reports of delayed garbage collection.

Table 68. Schedule of Collection of Garbage in San Pablo City, 2014

Barangay	Type of Truck	Plate No.	Schedule of Collection	
			Biodegradable	Non-biodegradable
San Antonio II	Mini- Dump truck	SGR 584	Sunday	Saturday
Bagong Bayan	Mini- Dump truck	SGS 622	M.W.F.	T. Th. Sat.
Del Remedio	Dump truck	SFZ 224	M.W. F. S.	T. Th. Sat
Brgy. I-B	Mini- Dump truck	SFZ 730	M.W.F.	T. Th.
Brgy. III-C	Mini- Dump truck	SHP 171	Fri., Sun.	Saturday
Brgy. V-A	Mini- Dump truck	SFZ 728	M. W.	Th. Sat.
Sta. Monica	Mini- Dump truck	WLA 560	Wednesday	Th. Sat.
Sto. Angel	Mini- Dump truck	SGZ 709	Wednesday	Th. Sat.
San Lucas I	Compactor	SJN 864	Monday	T. Th. Sat.
San Roque	Mini- Dump truck	SJD 143	Sun., Wed.	Th. Sat.
San Francisco	Dump truck	URM 706	Friday	T. Th. Sat.
San Francisco	Mini- Dump truck	SKF 854	M,W,F,S	Saturday
Sta. Ana	Compactor	RJM 192	M.W.F.S.	Tuesday
San Rafael	Mini- Dump truck	SJM 228	Monday	Thursday
Sta. Isabel	Mini- Dump truck	SJB 384	Sunday	Saturday
Sta. Cruz	Mini- Dump truck	SHS 141	Friday	Saturday
Brgy. II-E	Mini- Dump truck	SFD 215	Friday	Saturday
Sta. Elena	Mini- Dump truck	WJK 453	Wednesday	Saturday
San Gabriel	Mini- Dump truck		Monday	Saturday
San Ignacio	Mini- Dump truck	SJV 510	Wednesday	Saturday
San Buenaventura	Mini- Dump truck	SGY 396	Wednesday	Saturday
Brgy. VI-E	Mini- Dump truck	SHP 925	Friday	Saturday
Brgy. VI-B	Mini- Dump truck	SJV 515	Friday	Saturday
Brgy. III-D	Mini- Dump truck	SFW 158	Friday	Saturday
Concepcion	Dump truck	SGS 669	Sunday	Saturday
San Isidro	Compactor	SJJ 762		Saturday
San Nicolas	Mini- Dump truck	SKU 644		Saturday
San Juan	Mini- Dump truck	SFZ 753	Sunday	Saturday
San Marcos	Mini- Dump truck	SGR 558	Monday	Tuesday
San Joaquin	Mini- Dump truck	SJV 527	Friday	Saturday
San Antonio I	Mini- Dump truck	SJX 141	Sunday	Saturday
Sto. Cristo	Mini- Dump truck	RKB 268	Monday	Thursday
San Gregorio	Mini- Dump truck	SGB 387	Mon., Sun.	Saturday
San Diego	Mini- Dump truck	SFZ 803	Sunday	Saturday
Brgy. IV-A	Compactor	SJN 103	Wednesday	Saturday
Brgy. III-A	Mini- Dump truck	SGB 179	Friday	Saturday
San Vicente	Mini- Dump truck		Sunday	Saturday
Soledad	Compactor		Wednesday	Saturday
Sto. Niño	Mini- Dump truck	ULP 276	Wednesday	Saturday
Brgy. II-A	Mini- Dump truck	SFB 978	M,W,F,S	Sat., Tues.
Brgy. III-F	Compactor	SHX 522	M.W. F. S	T.Th. Sat



Barangay	Type of Truck	Plate No.	Schedule of Collection	
			Biodegradable	Non-biodegradable
Sta. Maria	Compactor	SHX 522	Wednesday	Saturday
Sta. Catalina	Compactor	SHX 523	Friday	Tuesday
Dolores	Compactor	SHX 523	Friday	Tuesday
San Lucas II	Compactor	SHX 523	Monday	Thursday
Brgy. VI-B	Compactor	SHX 523	Monday	Thursday
Stmo. Rosario	Compactor	SHX 523	Wednesday	Saturday
San Cristobal			Friday	Tuesday
San Crispin	Compactor	SJL 914	Wednesday	Saturday
Fule Sahagun	Compactor	SJL 914	Mon., Fri.	Tuesday
San Pedro	Compactor	SJL 914	Monday	Thursday
Brgy. II-B	Compactor	SHS 192	M.W.F. S	T.Th.Sat
Brgy. II-D	Compactor	SHS 192	M.W.F. S	T.Th.Sat
Brgy. II-F	Compactor	SHS 192	M.W.F. S	T.Th.Sat
San Jose	Mini Dump truck	SHG 252	Friday	Tuesday

Source: Solid Waste Management Office

Meanwhile, unsanitary condition of dump trucks was observed before and after garbage collection. Although these trucks are for waste collection, still, cleaning and maintaining these trucks are necessary to prevent the spread of diseases and for the safety of public particularly of the garbage personnel. Another concern identified was unregulated sanitation procedures among night market vendors. The CSWMO should ensure that wastes generated from markets are properly disposed and CHO should regularly inspect that these vendors are complying with the sanitation requirements.

Table 69 further shows the frequency of collection and the number of population served in each barangay. Only barangays such as Bautista, San Bartolome, San Lorenzo, San Miguel, Santiago I and II, and Atisan are not part of garbage collection system of the City. These barangays are in the southwestern part of the City that is far from the Poblacion. Thus, the barangays have their own garbage disposal system. Given these, 93.75% collection efficiency is assumed.

**Table 69. Frequency and Efficiency of Garbage Collection in San Pablo City, 2014**

Barangay	Population	Frequency of Collection
Barangay I-A	586	Daily (7 times)
Barangay I-B	4,862	Week days (5 times)
Barangay I-C	6,060	Daily (7 times)
Barangay II-A	2,894	Twice a week (2 Times)
Barangay II-B	2,424	Daily (7 times)
Barangay II-C	1,178	Week days (5 times)
Barangay II-D	1,310	Daily (7 times)
Barangay II-E	3,064	Twice a week (2 Times)
Barangay II-F	2,262	Daily (7 times)
Barangay III-A	432	Twice a week (2 Times)
Barangay III-B	961	Daily (7 times)
Barangay III-C	3,159	Thrice a week (3 times)
Barangay III-D	1,409	Twice a week (2 Times)
Barangay III-E	647	Daily (7 times)
Barangay III-F	331	Daily (7 times)
Barangay IV-A	840	Twice a week (2 Times)
Barangay IV-B	498	Daily (7 times)
Barangay IV-C	881	Daily (7 times)
Barangay V-A	521	Five times a week (5 times)
Barangay V-B	978	Daily (7 times)
Barangay V-C	508	Daily (7 times)
Barangay V-D	438	Daily (7 times)
Barangay VI-A	534	Daily (7 times)
Barangay VI-B	927	Twice a week (2 times)
Barangay VI-C	2,064	Daily (7 times)
Barangay VI-D	2,076	Daily (7 times)
Barangay VI-E	2,807	Twice a week (2 times)
Barangay VII-A	1,832	Daily (7 times)
Barangay VII-B	560	Daily (7 times)
Barangay VII-C	179	Daily (7 times)
Barangay VII-D	87	Daily (7 times)
Barangay VII-E	163	Daily (7 times)
Bautista	2,628	-
Concepcion	8,367	Twice a week (2 times)
Del Remedio	14,817	Daily (7 times)
Dolores	2,420	Twice a week (2 times)
San Antonio I	5,172	Twice a week (2 times)
San Antonio II	3,752	Twice a week (2 times)
San Bartolome	3,396	-
San Buenaventura	3,972	Once a week (1 time)
San Crispin	4,078	Twice a week (2 times)
San Cristobal	5,857	Twice a week (2 times)
San Diego	5,564	Twice a week (2 times)
San Francisco	15,928	Four times a week (4 times)
San Gabriel	8,380	Once a week (1 time)
San Gregorio	5,918	Thrice a week (3 times)
San Ignacio	4,872	Twice a week (2 times)
San Isidro	3,790	Once a week (1 time)



Barangay	Population	Frequency of Collection
San Joaquin	1,576	Twice a week (2 times)
San Jose	7,513	Twice a week (2 times)
San Juan	3,709	Twice a week (2 times)
San Lorenzo	2,044	-
San Lucas I	5,740	Thrice a week (3 times)
San Lucas II	6,199	Twice a week (2 times)
San Marcos	3,009	Twice a week (2 times)
San Mateo	3,127	Twice a week (2 times)
San Miguel	3,196	-
San Nicolas	4,814	Once a week (1time)
San Pedro	2,581	Twice a week (2 times)
San Rafael	3,725	Twice a week (2 times)
San Roque	3,316	Four times a week (4 times)
San Vicente	3,405	Twice a week (2 times)
Sta. Ana	2,306	Five times a week (5 times)
Sta. Catalina	2,554	Twice a week (2 times)
Sta. Cruz	2,541	Twice a week (2 times)
Sta. Filomena	3,687	Once a week (1time)
Sta. Isabel	3,502	Twice a week (2 times)
Sta. Maria Magdalena	2,608	Once a week (1time)
Sta. Veronica	1,656	Twice a week (2 times)
Santiago I	2,223	-
Santiago II	3,258	-
Stmo. Rosario	4,865	Twice a week (2 times)
Sto. Angel	9,428	Thrice a week (3 times)
Sto Cristo	3,317	Twice a week (2 times)
Sto. Niño	4,474	Twice a week (2 times)
Soledad	2,661	Once a week (1 time)
Atisan	1,318	-
Sta. Elena	4,754	Twice a week (2 times)
Sta. Maria	3,539	Twice a week (2 times)
Sta. Monica	7,808	Thrice a week (3 times)
Total	266,835	93.75% efficiency

Source: City Solid Waste Management Office

Processing Facilities

The City operates a central MRF with a capacity of 10 metric tons per hour (10mt/hour) and an eight-hour-a-day operation every day located at Sitio Baloc, Barangay Sto. Niño where wastes collected daily are segregated and processed through its ten-meter conveyor belt where recyclables are recovered and biodegradables are processed in an in-vessel and vermiculture composting facilities.



Final Disposal

Residual wastes are disposed at the City Sanitary Landfill (Category 3). This landfill has a maximum daily disposal capacity of eighty (80) metric tons of wastes and materials recovery facility (MRF) with a total floor area of 1,050 square meters which can process ten (10) metric tons of wastes every hour. All components of this sanitary landfill are within a total lot area of 6.154 hectares. Out this total area, 33,157.065 sq. m/3.316 hectares is active.

Special Wastes

The San Pablo City Sanitary Landfill does not have the capacity to treat and dispose special waste (medical and hazardous) from the hospital and other major industries. The burden of disposing and treating it lies on the operator and management of hospital or industry by means of getting a third party with specialization in disposing and treating hazardous waste. Although private entities are disposing their special wastes with their own capacity, still, the City Government needs to provide special waste processing facility to ensure that these wastes are properly treated and disposed for the safety of its people and the environment.

General waste from hospital and other health care establishment are treated as ordinary waste, while medical waste are treated as special and hazardous waste which will be handled by licensed transport and disposal companies that specialize in the disposal of such wastes.

The household/domestic waste shall be processed at the Central Material Recovery Facility. However, in the temporary absence of a facility for special waste, the SWMO has partnered with accredited business entities that specialize in handling special waste to manage and dispose of them. The hazardous industrial waste shall be handled by the concerned establishment in a special waste management area within their premises or properties, in accordance with the requirement of the R.A. 6969 (Toxic Chemicals and Hazardous Waste Management Act) imposed by Department of Environment and Natural Resources (DENR) and will be strictly monitored by the City Environment Office and City Health Office.



Information, Education and Campaign (IEC)

As part of the SWMP, the objective is to launch information and education campaign to explain the solid waste management plans and programs. The City initiated a comprehensive advocacy campaign for the implementation of R.A. 9003 in the 80 barangays of the City, encouraging each barangay to organize the residents to support the objective of the project through Individual Barangay Solid Waste Management Committee (BSWMC). It aims to urge every person to practice solid waste management at the household and barangay level through advocacy, dissemination, and motivation of IEC activity. The objective of the IEC is to impart awareness and understanding on the mandatory provisions of R.A. 9003 which is geared towards implementation of systematic, comprehensive and ecological solid waste management program for the City.

4.2.4.2 Volume of Solid Waste Generation by Source

The solid waste being generated from different sources are being assessed by the CSWMO. Based on the 2013 data reflected in Table 70, domestic sources generate the most solid waste in the City at 91.938 tons/day. However, only 43.211 tons/day are being collected by the CSWMO. This is due to the fact that recycling and composting are being practiced by the households in all barangays. Commercially-generated waste is the next big contributor of solid waste in the City with 38.039 tons/day. In some way, commercial establishments are mandated by the City Government to practice recycling and composting. Moreover, industries and hospitals also generate solid waste but as mentioned in the previous section, industries and hospitals are obligated to dispose their own wastes especially their hazardous wastes.

**Table 70. Solid Waste Generation by Source in San Pablo City, 2013**

Source	Types of Waste	Volume of Solid Waste Generated (Tons/day)	Volume of Solid Waste Collected (Tons/day)	Disposal Methods/Treatment Facilities	Disposal Site
Domestic	Kitchen wastes, Garden wastes, Plastics, Candy wrappers, Linoleum, bulbs, Papers, Wood, Sanitary Napkins, Diapers, Rags, Plastic Bottle, Old Shoes, and Slippers, Clothes, and Stuffed Toys	91.938	43.211	Recycling and Composting	Sanitary Landfill/Materials Recovery Facility (MRF)
Commercial	Plastic Bags, Paper, Foil Wrappers, Kitchen Wastes, Plastic Container, Plastic Soda Bottle, Plastic Cups, Empty Bottles, Cartons, Aluminium Cans, Tetrapak, Wires, Labels, Rods, Feather, PVC Scrap, bulbs	38.089	17.902	Recycling and Composting	Sanitary Landfill/Materials Recovery Facility (MRF)
Industrial	Cartoons, Sacks, Paper, Pet Bottle, Coconut Saw Dust, Wood, Plastic Bags, Label, scrap, G.I Scrap Pipes, Rubber Tires	.919	0.432	Recycling	Sanitary Landfill/Materials Recovery Facility (MRF)
Hospital	Dextrose Bottle & Hose, Empty Bottles, Surgical gloves, Syringe, Empty Vials,	.394	0.185	Collected through Private Contractor	
Total		131.34	61.73		

Source: City Solid Waste Management Office



4.2.4.3 Methods of Solid Waste Disposal/Treatment

Table 71 further describes the solid waste disposal of the City from, 2011-2013. Around 47-50% is being disposed in sanitary landfill while the rest are being dumped in open or controlled dumpsites, in some households' backyards, and in barangays where garbage is not being collected. A small portion of their solid wastes are being composted at a declining rate, from 2,563 to 478.15.

Table 71. Methods of Solid Waste Disposal/Treatment in San Pablo City

Method	Quantity (Total Municipal Solid Waste Generated) (tons/year)						Responsible Agency
	2011	%	2012	%	2013	%	
Collected and Disposed to: Sanitary Landfill	25,367.5	50.52	21,244.75	46.42	22,531.45	47.00	City Solid Waste Management Office
Composting	2,563.75	5.11	1,365.05	2.98	478.15	1.00	
Recycling	5,073.50	10.10	3,164.11	6.91	3,358	7.00	
Not Collected							
Burned	4,520.16	9.00	5,073.50	11.09	4,792.45	10.00	
Dumped in individual open pit	12,683.75	25.26	14,916.53	32.59	16,779.05	35.00	
Total (tons/year)	50,208.66	100.00	45,763.94	100.00	47,939.10	100.00	
Total (tons/day)		137.56		125.38		131.34	

Source: City Solid Waste Management Office

Note: Number of households: 54,293 (2011), 52,390 (2012), 59,566 (2013)

4.2.4.4 Wastewater Generation by Source and Treatment/Disposal Methods

It is estimated that the total waste water generated by San Pablo is 10,741,676.52 cubic meters. Ninety percent (9,676,764 cu. m.) of wastewater comes from domestic sources while commercial establishments contribute 6% of the waste generated. Government institutions/offices contribute 2.5% to it (Table 72). San Pablo City Water District (SPCWD) is yet to install water treatment facilities and only Franklin Baker Co. has its own waste water treatment plant in the City.



Table 72. Wastewater Generation by Source and Treatment/Disposal Methods in San Pablo City, 2015

Source	Volume of Wastewater Generated* (cu. m.)	Percentage
Domestic	9,676,764.00	90.09
Commercial	668,858.40	6.23
(Commercial A)	(164,131.20)	(1.53)
(Commercial B)	(133,644.48)	(1.24)
(Commercial C)	(17,617.08)	(0.16)
Industrial	61,098.12	0.57
Government	274,895.04	2.56
Free Water	11,736.96	0.11
Bulk	48,324.00	0.45
Total	10,741,676.52	100.00

Source: San Pablo City Water District; Computed by GIS Co.

*Note: It assumed that amount of water consumed is equal to amount of wastewater generated.

4.2.4.5 Projected Waste Generated and Area Requirement for Solid Waste Management

Shown in Table 73 is the projected waste generated by the City in a span of ten years and the area required to accommodate those generated waste. For the current year 2015, there is a computed waste generation of 108,059 kg/day by a population of 272,305. This will consume 6.71 ha of land for waste disposal with only 55% target waste disposal.

Considering the year 2024, it is expected that the daily waste will rise due to the increase in population, however, the City Government is targeting to increase its waste diversion to 86.41% thereby decreasing the total waste for disposal at 21,419 kg/day.

Assuming that the City Government will be able to implement the targeted waste diversion by 2024, the total area requirement for the disposal of the solid waste to be generated will only be 3.57 hectares. According to the CSWMO, they are currently using three (3) hectares of the total sanitary area meaning that the existing facility can still accommodate the solid wastes in the coming years. Moreover, based on the 10 Year Solid Waste Management Plan of San Pablo City, the sanitary landfill disposal site is utilizing 1,050 square meters for Material Recovery processing facility with a maximum 10 ton/hour capacity. The project plan is to merge the existing two (2) cells into one (1) large cell which could expand its lifespan up to five (5) more years of usage



this will solve the current garbage disposal problem of our almost filled-up Sanitary Landfill. With the current trend in technologies on waste recovery, recycling, and composting. With the help of interested investor City Governments planning to put up waste to energy plant (Biomass Gasification) which convert the solid waste to syngas which in turn used as fuel to electric generators producing electricity. This aims to solve the current solid waste problems of the City and other neighboring municipalities.

Table 73. Projected Waste Generated and Area Requirement for Solid Waste Management in San Pablo City

Year	Waste Gen/Capita/Day Based on WACS (kg/day)	Projected Population	Daily Waste Gen Based on Population (kg/day)	Target Waste Diversion	Weight to be Diverted (kg/day)	Target Waste Disposal (%)	Weight to be Disposed (kg/day)	Area Requirement (ha)
2015	0.405	272,305	108,059	45.00%	48,626	55.00%	59,432	6.71
2016	0.4104	277,246	111,702	50.00%	55,851	50.00%	55,851	6.29
2017	0.4119	282,277	114,337	55.00%	62,886	45.00%	51,452	5.79
2018	0.4152	287,399	117,572	60.00%	70,543	40.00%	47,029	5.28
2019	0.4206	292,613	121,488	65.00%	78,967	35.00%	42,521	4.76
2020	0.4284	297,923	126,207	70.00%	88,345	30.00%	37,862	4.24
2021	0.4389	303,329	131,896	75.00%	98,922	25.00%	32,974	3.68
2022	0.4528	308,833	138,789	80.00%	111,032	20.00%	27,758	3.09
2024	0.4709	314,436	147,209	85.00%	125,127	15.00%	22,081	2.46
2024	0.4942	320,142	157,596	86.41%	136,176	13.59%	21,419	2.38
Total Area Requirement								3.57

Source: Basic Data from CSWMO; Projected by GIS, Co.

Waste Density=330 kg/m³

Height=10m

Area = (Waste generated (kg/year)/330)*(10/10) 10000)*1.5

Total area= area requirement x 50% increase to allow daily cover, roads, receiving area, fencing and etc.

4.2.5 Health and Sanitation Analysis Matrix

Table 74. Health and Sanitation Matrix fo San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Limited storage facility for special wastes	<ul style="list-style-type: none"> - High exposure to hazardous chemicals - High volume of solid waste for disposal - Prone to sickness and diseases 	<ul style="list-style-type: none"> - Allocate funds for the establishment of different facilities
Lack of central waste water facilities	<ul style="list-style-type: none"> - Increase water pollution - Higher exposure to water borne diseases 	<ul style="list-style-type: none"> - Allocate funds for the establishment of waste water facilities



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Delayed collection of garbage in rural and urban areas in the City	- Health hazards	- Ensure logistics needed in timely collection of garbage
Weak compliance in segregation of solid waste	- Encouraging scavengers that may cause them illness and costly disposal of waste - Increased morbidity rate	- Close monitoring by the bray. officials/ strict compliance to bray ordinance regarding segregation of solid waste
Anti-littering ordinance not strictly implemented	- Dirty and unsanitary environment - High incidence of water borne diseases	- Strict implementation of finding of alternative ways for less waste (e.g. recycling, decomposing, reusing) generation RA 8749
Regulation of sanitation status of night market vendors	- Ensure food safety for the consumers	- Regular monitoring on the status of night market
Lack of manpower in Brgy. Health Centres	- Limited focus on health programs in a certain barangay. - Immediate needs can't be addressed	- Lobbying to the SP (Local Health Board) for additional manpower/personnel
Need to have equipment (refrigerator per barangay for storing vaccines) and; and increase knowledge on Cold Chain Management (vaccine-related)	- May alter or decrease the potency of the vaccines	- Strengthen partnership between health officers and barangays officials - Request for enough medical supplies and vaccines-allocation of fund for medical supplies - Train Rural Health Midwives (RHMs) and Public Health Nurses (PHNs) and barangay public officials on how to manage the vaccines
Lack of funding and manpower, specifically at least 10 medical doctors, in SPCGH	- Unutilized available facilities and equipment	- Additional funding and hire additional 3 medical doctors

4.3 Housing

Housing is one of the basic services that the City Government needs to provide especially to underprivileged population of the City. Good quality housing entails proper allocation of spaces and inclusion of required facilities which indicates a good living condition. Services related to housing needs are being catered by the Housing and Urban Development Office.



4.3.1 Housing Situation for the Last Three Censal Years

Table 75 summarizes the housing situation in San Pablo City for the years 2000, 2007, and 2010. In 2007, there were 51,653 households, recording an increase of over 7,000 households since 2000. After three years, the census in 2010 recorded an increase in household number of 4,608, resulting to a total of 56,261. In terms of household population, there was an increase of 29,481 people in 2007 resulting to a household population of 237,200. There was only an increase of 11,120 in 2010 for a total household population of 248,320.

There were a total of 42,147 housing units in 2000, 40,461 of which are occupied while 1,686 are vacant. There is a 1:1 ratio between household and occupied housing unit meaning a household occupies one housing unit. Household population to housing unit suggests that the average household size occupying a housing unit is five (5). This implies a general composition of the parents and three (3) offsprings. The years 2007 and 2010 has seen similar ratios. Due to the absence of data, it was assumed that there is a 1:1 ratio of household to occupied housing unit. Household population to occupied housing unit ratio suggests that for every housing unit, there occupy five (5) people.

Table 75. Housing Situation for the Last Three Censal Years in San Pablo City

	2000	2007		2010	
	No. of Households	No. of Households	Increase/ Decrease	No. of Households	Increase/ Decrease
Households (HH)	44,166	51,653	7,487	56,261	4,608
Household Population	207,719	237,200	29,481	248,320	11,120
Housing Units (HU)	42,147	50,546*	20,058	55,173	4,627
Occupied HU	40,461	50,546	40,434	55,173	4,627
Vacant HU	1,686	0	0	0	0
Ratio of HH to Occupied HU	1:01	1:01		1:01	
Ratio of HH Population to Occupied HU	1:05	1:05		1:05	

Source: Various Years, Census of Population and Housing, Philippine Statistics Authority

Note: *-There is no data available, thus, it is assumed that the number of housing units is the same with occupied housing units.

4.3.2 Housing Backlog

According to the Urban Development and Housing Office (UDHO), as of 2015, there were a total of 7,132 housing backlogs in the City. In determining this figure, the Office collected the number of informal settlers per barangay which are classified as households living in danger zone/hazard areas (941);



households to be affected by infrastructure project (4,767); households with court order for demolition eviction (20); households with pending threat of demolition (208) and households occupying land whose owners are willing to sell the property to the occupants (164) (Table 76). The identified housing backlog by UDHO includes only informal settlers and excludes the doubled-up households³. In 2010, the number of doubled-up household is 1,088. However, this number cannot be accounted since some households have been able to acquire their own dwelling unit in the span of five years. This should be confirmed with the PSA based on the latest Census of Population (2015).

Table 76. Housing Backlog in San Pablo City

Backlog	2015	
	Number	Percentage
Households living in danger zone/hazard areas	941	13.19
Households to be affected by infrastructure project	4,767	66.84
Households with court order for demolition eviction	20	0.28
Households with pending threat of demolition	208	2.92
Households that will be displaced by other situation	1,032	14.47
Households occupying a land whose owner are willing to sell the property to the occupants	164	2.30
Total Backlog	7,132	100.00

Source: Housing and Urban Development Office

Table 77 further describes the construction materials used in dwelling units in 2010. Most houses (6,420 units) are made of concrete/brick stone and wood while 268 dwellings are made up of makeshift or improvised materials. These households/makeshift houses are prone to displacement in case the City is struck by calamity such as typhoons, earthquakes, etc. These are commonly seen among households in informal settlements that really need assistance of the City Government.

³Doubled-up households exist when one dwelling unit is shared by two or more households. DHHT = total number of household in (2010)- total housing unit in (2010)



4.3.1 Informal Settlements Areas

There were a total of 7,132 families that are informally settling in specific areas in San Pablo City. These families occupy public lands and are classified as residential zones. The families are either from Bicol or from the Visayas region. They have occupied these lands as early as 1973 and as late as 2000.

The Housing and Urban Development Office of the City have identified 40 barangays that were occupied by informal settlers. As expected informal settlers flocked in urban areas mostly located along the roads where infrastructure projects will be implemented.

**Table 77. Inventory of Dwelling Units by Type of Construction Material in San Pablo City, 2010**

San Pablo City	Total	Concrete/ Brick Stone Wood	Stone Wood	Half concrete/ Brick Stone and Half Wood	Galvanized Iron Aluminum	Bamboo/ Sawali Cogon/ Nipa	Asbestos	Glass	Make-shift/ Salvage Improvised Materials	Others	No walls	Not Reported
Total	60776	40698	6420	9795	335	2991	20	1	268	29	10	209
Single House	51790	34201	5688	8284	306	2989	18	1	267	26	10	0
Duplex	4831	3386	410	896	11	0	2	0	0	2	0	124
Multi-unit Residential	4003	3032	316	587	15	0	0	0	0	0	0	53
Commercial/ Industrial/ Agricultural	113	73	6	28	3	1	0	0	1	1	0	0
Institutional Living Quarter	1	1	0	0	0	0	0	0	0	0	0	0
Other Housing Unit	5	4	0	0	0	1	0	0	0	0	0	0
Not Reported	32	1	0	0	0	0	0	0	0	0	0	32

Source: 2010 Census of Population and Housing, Philippine Statistics Authority



4.3.2 Inventory of Residential Subdivision

Currently, there are 104 residential subdivisions in the City. Of these, 21 are Economic Housing ventures mandated by BP 220. Eight (8) are Socialized Housing projects mandated by Republic Act 7279 which offer cheaper housing units. Seventy-one (71) are Open Market Housing or residential housing units available to the free market. Four (4) residential subdivisions are unclassified. The table below (Table 78) shows the summary of all residential subdivisions in San Pablo City with their area and location. Aside from the listed subdivisions, new subdivisions (e.g. Camilla, Lynville, etc.) are currently being developed with the City. A large number of these subdivisions is established by private developers. Non-compliance with the approved housing plan by some developers was noted.

Table 78. Inventory of Residential Subdivisions in San Pablo City, 2013

Name of Subdivision/Condominium	Barangay	Area (sq m)	No. of lots/units
SOCIALIZED HOUSING			
Amaia Scapes San Pablo	San Lucas II	123,287	
Arandia Residences	San Jose	22,674	
Barangay San Ignacio Homeowners Subdivision	Sitio Balok	35,053	
Bella Vita San Pablo	San Bartolome	12 hectares	
Coco Villa Mass Housing	San Miguel	67,380	530
Cocoland Village Subdivision	Del Remedio	40,671	689
Sta. Ana Homes	Sta. Ana	107,328	497
Lynville Homes	Santa Monica	28,847	
Lynville Residences	Del Remedio	47,619	
San Nicolas Village	San Nicolas	19,956	
Sto. Niño Homes	Sto. Niño	31,756	396
Pope Puis Village	Concepcion	38,700	202
Soledad Housing Project (Coop. H/L package)	Soledad	86,806	786
Clapson Homes I,II Rena Francia Compound	Brgy. San Nicolas	16,969	
OPEN MARKET HOUSING			
Subdivision Open Market Housing	San Nicolas	80,000	253
BLTB Co. Employees Association Village	Del Remedio	8,133	146
Subdivision (ADB)	Del Remedio	46,657	121
Consuelo Village Subdivision	Concepcion	20,000	67
Crispina Park Subdivision	Bagong Bayan I-C	57,419	147
Efarca Subdivision	Concepcion	26,233	48
Farconville Subdivision	San Francisco	40,820	93
Farmer's Village	San Lucas		
Floremar and Eusebia A. Roque Subdivision	Concepcion	147,210	406



Name of Subdivision/Condominium	Barangay	Area (sq m)	No. of lots/units
(Formerly Carpio Subdivision)		34,575	
Green Valley Subdivision	San Francisco	40,005	110
Guadalupe Subdivision	II-A	21,832	247
Laurel Ville Subdivision I and II	San Rafael, San Roque	8,512	39
Israel Village I	San Antonio I	23,123	91
Jean Village Subdivision I	Sto. Angel	13,190	49
Jean Village Subdivision II	Concepcion	63,647	127
Lake City Village	San Gregorio	121,462	297
		8,473	25
Vesco Subdivision	III-E	11,088	43
Villa Antonio Subdivision	San Gabriel	9,104	63
Villa Lozada Subdivision	Concepcion	13,104	41
San Marcos Subdivision	San Marcos	14,641	313
Lina Compound	Marasigan St. Brgy. VII-B	52,384	211
Manhattan Village I	San Francisco, San Gregorio	24,518	75
Manhattan Village II	San Gregorio	146,074	435
Medex Subdivision	San Francisco	270,266	957
Kingsrow Subdivision	San Francisco	75,875	201
Sampaloc Lake Court Subdivision	Concepcion	20,181	55
Teomora Subdivision Phase I & II	San Gabriel	24,091	70
Teomora Subdivision Phase III	San Gabriel	38,700	202
New City Subdivision	San Roque	83,462	235
Orillaza Subdivision	Poblacion	75,273	388
Pook Kasiyahan	Poblacion, Brgy. VI-D	24,518	75
Pope Puis Village	Concepcion	38,700	102
Richwood	San Francisco	83,462	85
Villa Sta. Monica	Sta. Monica	75,273	131
Sampaloc Lake Resort	Concepcion	24,518	
Villa San Gregorio	San Gregorio	19,014	
Buncayo Subdivision IV	San Roque	18,666	
Buncayo Subdivision V	San Roque	18,631	
Alcantara-Cornista Subdivision	Dapdapan (Poblacion)	11,189	
Amar Corporation	San Miguel	47,168	
		85,509	
		89,000	
Azores Court Subdivision	Sta. Maria	20,724	
Banahaw Compound	Bagong Bayan I-C	37,070	
Cardil Subdivision	Del Remedio	97,317	
Dona Eusebia Village II	Del Remedio	35,590	
Dona Maria Ville Subdivision	Bagong Bayan I-C	119,673	
El Rey Subdivision	San Ignacio	2,393	
Jose Tour Subdivision	San Rafael	50,000	
S.A.G Subdivision	San Francisco	6,682	
San Francisco Terrace Subdivision	San Francisco	43,449	
San Pablo City Subdivision	I-B	101,854	



Name of Subdivision/Condominium	Barangay	Area (sq m)	No. of lots/units
Magcaseville Subdivision	Sto. Cristo		
Maryland Subdivision	San Vicente	11,115	
Maryflor Village	Del Remedio		
Lakeview Subdivision	Concepcion		
Marino Subdivision	San Lucas I	25,565	
Holmspale Subdivision	San Rafael		
Sta. Isabel Subdivision	Sta. Isabel	18,631	
South East Meadows	San Roque		
Penafrancia Subdivision	San Rafael		
Villongco Subdivision	III-B		
Banaad Compound	I-B		
Buncayo Subdivision	San Roque		
Crisjorville & Harejun Subdivision	San Francisco		
Pamela Park & Leonila Park Subdivision	Del Remedio		
Patria Village	Del Remedio		
Dona Maria Village II	San Jose	453,200 sq.m	3,211
Phoenix Village 2	San Francisco	126,452 sq.m	240
Valbuena Subdivision	Del Remedio		
Dona Eusebia Village III	Del Remedio		
Guevarra Subdivision	San Buenaventura		
Lakeside Park Subdivision	Brgy. VI-D		
Lakeside Country	San Buenaventura		
Metropolis Subdivision	Maharlika Highway		
ECONOMIC HOUSING			
NHA	Sto. Angel	70,000	645
NHA	San Jose	72,000	246/173
Alvan Homes	Barleta St. (Poblacion)	3,900	33
Samahang Anak Bayan	Del Remedio	19,616	50
San Pablo Colleges Teacher's Village	San Rafael	86,806	921
		62,406	305
Sipag	Soledad	19,014	102
Spring Leaf Height Subdivision w/ H/L	San Lucas II	25,000	54
Villa San Gregorio Subdivision	Soledad	27,533	75
Bliss	San Lucas II		
San Pablo Housing and Poultry Raising Subdivision	San Gregorio	15,262	56
	San Lucas I	35,519	125
	III-F		
St. Johnville Subdivision	San Juan	31,831	170
Opendoor Christian Subdivision (w/o housing)	Sto. Niño	24,000	112
Philippine Postal Homeowners	I-B	3,900.	
	San Pedro	7,072	
Alcaraz Subdivision	Sto. Niño	3,689	
		38,000	



Name of Subdivision/Condominium	Barangay	Area (sq m)	No. of lots/units
Crystal Ville Subdivision	San Roque	41,772	
Sta. Barbara Housing	San Roque		
	Del Remedio		
Kapit Bisig (Coop)	IV-C		
Mountain View Village Subdivision	Sto. Angel		
Tropical Park Subdivision	Concepcion		

Source: Sangguniang Panglungsod

4.3.3 Resettlement Areas

The City Government of San Pablo City has three (3) areas suitable for resettlement. Two of these areas are found in Brgy. San Lucas I, Bagong Lipunan Sites and Services (BLISS) and Gawad Kalinga, Brgy. San Lucas II. One is found in Brgy. Sta. Monica which is considered as an on-site resettlement area of DSWD and has the largest capacity with over 850 housing units and 1,041 families occupying the said area (Table 79).

The one found at Bagong Silang, Brgy. San Nicolas is an actual occupant proposed on-site resettlement area based on Executive Order No. 048 (s.2001) of President Gloria Macapagal-Arroyo, declaring the non-core properties of PNR as Socialized Housing Sites and providing for its disposition to bonafide occupants. However, Department of Transportation and Communication (DOTC) Department Order No. 2009-37 of the present administration call for "The Preservation/Protection of Existing Railways Right-of-way (ROW) hence, disposal of Philippine National Railways (PNR) right-of-way is held in abeyance.

Table 79. Resettlement Areas in San Pablo City, 2013

Barangay	Ownership	No. of Families	No. of Housing Units	Utilities/Facilities/	Administration
Bagong Lipunan Sites & Services (BLISS)-Brgy. San Lucas	Gov't	50	50	Water, Electricity, Basketball Court,Roads, TelephoneLines	Homeowners Association
Bagong Lipunan Sta. Monica	Gov't	1,041	852	Water, Electricity, Basketball Court,Roads, Telephone Lines	Brgy. Council
Bagong Silang - Brgy. San Nicolas	Gov't	507	453	Water, Electricity, Basketball Court,Roads, Telephone Lines	Brgy. Council



Barangay	Ownership	No. of Families	No. of Housing Units	Utilities/Facilities/	Administration
Gawad Kalinga - Brgy. San Lucas	Gov't	99	99	Water, Electricity, Basketball Court, Roads, Telephone Lines	Homeowners Assn, DSWD, LGU
Southrail Project Phase 1	Gov't		3,325	Water, Electricity, Basketball Court, Roads, Telephone Lines	Homeowners Assn, DSWD, LGU

Source: Housing and Urban Development Office

The Southrail Project Phase 1 is a joint inter-agency committee project of the National Housing Authority, Presidential Commission for the Urban Poor, The City Government of San Pablo and PNR. The 3,325 number of housing units as surveyed in 2007 comprises of the informal dwellers living along the railways of Brgy. San Crispin up to Brgy. San Antonio II. They are considered as PNR Core Properties whose actual occupants have to be relocated to an identified free hazard prone area to give way for PNR Modernization Project.

4.3.4 Housing Facilities and Utilities Situation

Aside from the provision of housing units to poor households, basic utilities such as water supply, electricity, water-sealed toilets and garbage collection system must be provided in the existing residential areas and potentials areas for resettlement. For these basic services, 100% percent of the 59,566 total households have access to electricity. About 86.89% have water sealed/ and other depository toilets facilities, 95% of households used faucet and avail services of community water system to tubed piped deep and shallow wells. The following table show the number of households, housing facilities and utilities situation (Table 80).

Table 80. Number of Households With Basic Facilities/Utilities in San Pablo City, 2013

Facilities/Utilities	Number of Households			
	Served	Percentage	Unserved	Percentage
Water Supply	59,566	95%		5%
Electricity	59,566	100%		
Water - Sealed Toilets*	51,757	86.89%	1,203	2.02%
Garbage Collection System	59,566	93%		

Sources: City Health Office, Water District, Meralco, Philippine Statistics Authority

Note: *2010 Census of Population and Housing



4.3.5 Owner of Households in Occupied Housing Units by Tenure Status of Housing Units and Lots

Considering the 56,261 dwelling units, 60% (33,510) own the lots they occupy, 12% (6,782) rent the house, and 25% (14,047) are lodging without the consent of the owner and without paying, while there are 1,663 households who occupy a housing unit with the owner's consent (Table 81). Given that around 40% of the households do not have their own houses, many are still susceptible to eviction when economic crisis occurs to households. In response to this, the City Government should tap different government programs such as Pag-IBIG Fund's Housing Program and Social Housing Finance Corporation (SHFC)'s Localized Community Mortgage Program (CMP) to assist the households in securing their own housing units at affordable financing rates.

In terms of type of building, the most prevalent type of housing unit in San Pablo City is single houses and the majority of these belong to those who occupy it. A third of those single houses are being occupied by families without paying for it but with consent from the owner. Single houses (48,274) are the most numerous type of building because of the heavy presence of subdivisions. Second to single houses are duplex ones which are also mostly owned by the occupants.

Table 81. Tenure of Occupied Housing Tenure or Lots in San Pablo City, 2010

Type of Building	Tenure Status					
	Total	Owned/Being Amortized	Rented	Rent-free With Consent from the Owner	Rent-free Without Consent from the Owner	Not Applicable
Single House	48,274	29,751	4,328	12,500	1,464	231
Duplex	4,463	2,357	994	968	129	15
Multi-unit Residential	3,385	1,342	1,431	545	59	8
Commercial/Industrial/Agriculture	101	44	25	25	7	0
Institutional Living Quarter	1	0	1	0	0	0
Other Housing Unit	5	0	0	0	0	5
Not reported	32	16	3	9	4	0
Total	56,261	33,510	6,782	14,047	1,663	259

Source: 2010 Census of Population and Housing, Philippine Statistics Authority



4.3.6 Occupied Housing Units by Condition (State of Repair) of the Building and Year Built

Based on Table 82, there were a total of 55,173 occupied housing units in San Pablo City. Based on the condition of the building, 85% (46,978) of the occupied housing units in the City do not need repair or in any case, needs only minor repair. Eleven percent (6,255) of the housing units need major repair. The remaining 3.5% are dilapidated, being repaired, under construction, unfinished or are unreported. As observed on the table, there is a decreasing amount of houses that need repair through time. From 14,376 during 1991-2000, there were only 871 in 2010.

Table 82. Occupied Housing Units by Condition of Building and Year Built

Year Built	Total Occupied Housing Unit	Housing Unit							
		Needs no repair/ minor repair	Need major repair	Dilapidated/ condemned	Under- renovation/ being repaired	Under Construction	Unfinished Construction	Not Applicable	Not Reported
2010	871	641	13	7	9	49	34	-	8
2009	1,850	1,408	265	14	17	53	88	-	5
2008	1,858	1,427	275	16	10	32	88	-	10
2007	1,927	1,505	307	12	9	24	61	-	9
2006	2,184	1,735	316	21	12	28	58	-	14
2001-2005	9,238	7,713	1,109	35	39	59	243	-	40
1991-2000	14,376	12,591	1,357	38	46	52	231	-	61
1981-1990	10,112	8,914	1,009	10	39	13	95	-	32
1971-1980	5,453	4,781	591	8	22	10	26	-	15
1970 or earlier	5,550	4,806	673	14	18	7	20	-	12
Not Applicable	5	-	-	-	-	-	-	-	-
Unreported	1,749	1,457	230	18	1	1	29	5	13
Total	55,173	46,978	6,255	193	222	328	973	5	219

Source: 2010 Census of Population and Housing, Philippine Statistics Authority

4.3.7 Inventory of Potential Lands for Socialized Housing

There are two (2) areas identified by the Housing and Urban Development Office of San Pablo City that have potentials for socialized housing. These areas are Gawad Kalinga in Barangay San Lucas II and in Barangay San Gregorio. The area in Gawad Kalinga is only 8,733 sqm while the other one in San Gregorio is very much larger (89,240). All these areas have utilities such as water, power, road, transportation, and communication. They



only lack sewerage facilities and waste disposal which are also important in housing (Table 83).

Table 83. Inventory of Potential Lands for Housing in San Pablo City

Owner	TCT No.	Brgy.	Area (ha)	Classification	Fair Market Value	Actual Land Use	Utilities Present					
							W	P	S	R	T	C
SPC Gov't	TD#02-062-1832	Brgy. San Lucas II (Gawad Kalinga)	8,733 sq m	Residential Land	P436,650.00	Residential	/	/		/	/	/
SPC Gov't	TD#97-053-1277	Brgy. San Gregorio	89,240 sq m	Residential Land	P11,966.400	Residential	/	/		/	/	/

Source: Housing and Urban Development Office, City Government of San Pablo

Note: No data for Zoning Classification

Water (W)
Power (P)

Sewerage facilities and waste disposal (S)
Road (R)

Transportation (T)
Communication (C)

4.3.8 Current and Projected Housing Need

For the planning period of 2015-2025, housing backlog is computed to be resolved by 648 housing units each year. As housing backlog is due to informal settling, socialized housing is needed to resolve the housing backlog. Also, housing needs due to increase in population was also estimated. Each passing year, the number of households is expected to increase. On the average, 1,188 households are projected to be added every year. The City has various subdivision that can accommodate the expected additional housing needs due to population increase. Table 84 shows the number of projected housing needs to be addressed within the planning period. This accounts for the housing backlog and increase in household formation due to increase in population.

Table 84. Current and Projected Housing Need for San Pablo City, 2015-2025

Housing Needs	Present needs (2010)	Future Housing Need										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Housing Backlog	6,739	6,126	5,514	4,901	4,288	3,676	3,063	2,451	1,838	1,225	613	0
Household Formation due to Increase in Population	-	1,094	1,114	1,134	1,155	1,175	1,197	1,218	1,240	1,263	1,286	0
Upgrading	-	-	-	-	-	-	-	-	-	-	-	-
Total	6,739	7,220	6,628	6,035	5,443	4,851	4,260	3,669	3,078	2,488	1,898	0

Source: Projected by GIS, Co.

Note: Household formation is based on projected household number using 1.81% growth rate



4.3.9 Housing Analysis Matrix

Table 85. Housing Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
High housing backlog	<ul style="list-style-type: none"> - Inadequate living condition - Households are more susceptible to natural hazards, diseases and dangers (crimes/violence) - Higher crime incidence 	<ul style="list-style-type: none"> - Increasing the tagging number of the 2007 NHA and railroad project - Institutionalizing the Housing Office Formulation of Local Shelter Plan to determine new housing needs/site relocation needs land req. financial req. - Provide resettlement areas through Resettlement Assistance Program for Local Government Units of the National Housing Authority
Low home ownership	<ul style="list-style-type: none"> - Households are prone to eviction - Unsecured housing condition 	<ul style="list-style-type: none"> - Encourage the public to PABAHAY CARAVAN of Housing Urban development Council and other Housing Seminars to increase their awareness to different government housing programs - Tap different government programs such as Pag-IBIG Fund's Housing Program and Social Housing Finance Corporation (SHFC)'s Localized Community Mortgage Program (CMP) to assist the households in securing their own housing units at affordable financing rates.
Increasing number of informal settlers particularly in railroad areas in San Crispin to boundary of Tiaong and along the lakeshore of Sampaloc Lake	<ul style="list-style-type: none"> - Informal settlers are prone to hazardous environment - High exposure to natural calamities 	<ul style="list-style-type: none"> - Identify suitable relocation sites for settlers along rail road track with livelihood potentials for them to have a motivation to re settle - Relocate settlements in high risks areas to safer areas through core shelter assistance program from DSWD
Inadequate potable water supply in rural areas	<ul style="list-style-type: none"> - Occurrences of water borne diseases 	<ul style="list-style-type: none"> - Monitoring/ treatment of potable water supply. Health education and promotion on how to prevent water borne diseases

4.4 Social Welfare Services

The Office of the Social Welfare and Development (OSWD) spearhead the provision of basic social welfare services in the City. OSWD is mandated to take charge of the promotion of social welfare and development for economic prosperity of the inhabitants within the City. The OSWD performs functions necessary to ensure the delivery of basic services and provision of adequate facilities relative to social welfare and development services. These



include identification of the basic needs of the youth, the needy, and the disadvantaged; and implementation of appropriate measures to alleviate their problems and improve their living conditions. Fund allocation also goes through them before reaching social welfare institutions such as DSWD. With regards to manpower, the OSWD has limited staff to carry-out tasks in the implementation of the programs and services of the agency. The office has two (2) social workers, Social Welfare Officer IV (1) and Social Welfare Officer III (1), Social Welfare Assistant (3), clerk, security guard also functioning as a driver, and Day Care Worker Coordinators.

Various programs are being implemented by the OSWD on a regular basis which include:

Day Care Service

The Day Care Service Program of the COSWD is supervising all Day Care Centers that cover all the barangays of San Pablo City. Children, ages 3-4 years old, are being catered to by the Day Care Centers. Barangays with bigger population and land area are provided with more than one day care center. Less populated barangays like in the Regidor area do not have a day care center in as much the same as in commercial area. There are rural barangays that are clustered. Hence, they share the same day care center.

There was an increase in the number of children from 2,207 in 2012 to 3,784 in 2013 enrolled in the Day Care Program because of the Supplementary Feeding Program of the DSWD Field Office IV-A (Table 86). The Supplementary Feeding Program is the provision of food in addition to regular meals, which is a part of DSWD's contribution to the Early Childhood Care and Development (ECCD) program of the government in 2012. The food supplementation is in the form of hot meals served during snack/meal time to children five (5) days a week for 120 days. The feeding program is being managed by parents on prepared meal cycle using available indigenous food supplies. Beneficiaries are weighed at the start of the feeding program and three months after the completion of the 120 feeding days to determine improvement and sustenance of their nutritional status.

Table 86. Clienteles Aged 3-6 Years Old Served by Day Care Centers in San Pablo City, 2013

Year	Total Surveyed (ECCD)	No. of Clients Served
2011	4,558	1,931
2012	4,932	2,207
2013	4,764	3,784

Source: Office of Social Welfare and Development



St. Martin De Porres

St. Martin de Porres is a private institution in Barangay Concepcion for boys aged 4-12 years old who were abandoned or orphaned children. For the years 2011, 2012, and 2013, the institution served 14, 12, and 7 children respectively.

The institution conducts an assessment and evaluation on the cases of these children. Once they reach the age of 12, possible family reintegration is done for children with identified families. Others are being referred to other institutions that have programs and services that will respond to their needs, hence, the decrease in number of children being served.



Face the Children Frontline Ministries

The Face the Children Frontline Ministries is a private institution located in Barangay Sto. Niño for abandoned and neglected street children who are 1-22 years old girls and boys. For the years 2011, 2012, and 2013, the institution has catered 25, 32, and 34 children respectively. It is now accredited by DSWD FO IV-A as a Child Welfare Institution. It became fully operational in 2013 in collaboration with DSWD after they finished the construction of the new facilities. Children are being assessed in a holistic approach aside from the provision of basic needs so that they can have the chance to develop intellectually, morally, spiritually, socially, and physically through programs and services of the institution.



Bahay Nazareth Home for the Aged

Bahay Nazareth Home for the Aged, better known as “Bahay Pag-ibig”, is the only private institution in the City that caters for the elderly. It is located beside the San Pablo Cathedral and strictly implements the rules and

regulations in accepting the elderlies. From 2011 up to the present, the institution has been attending to 18 aged individuals. Referred clients who still have relatives are not qualified. At present, the institution prefers the females because of some problems encountered in attending to males such as limited bed sheets.



Center for the Welfare and Protection of Children (CWPC)

The Center for the Welfare and Protection of Children is attending to abandoned, surrendered, orphaned children, rape victims, and mentally disabled female children ages 1-22 years old and 1-12 year old males. It operates in Calihan, Brgy. San Francisco under the management of DSWD in partnership with the Office of Social Welfare and Development. It serves an average of 26 children since 2011. The children catered to are with special needs and in need of protection. Most of them are enrolled in schools while children who are mentally challenged and need special care are enrolled to "Pag-ibig at Pag-asa." Possible family re-integration is also considered by the center with some cases after the assessment on the capability of the parents are done. However, the best interest of the child is still the primary concern of the CWPC. Providing 24 hour residential service to children in need of special protection will help lessen the crime rate.

Expansion of the Center for the Welfare and Protection of Children is located at Terrace Subdivision in Brgy. San Francisco which has already started in June 2015 and has an estimated date of completion of December 2015.



Center for the Street Children

The Center for the Street Children is a public institution managed by the Office of Social Welfare and Development which caters for boys and girls dwelling the streets specifically those who are addicted to solvent. It is located in Cardil Village in Barangay Del Remedio. Although the building is already built, there is on-going rehabilitation to restore its integrity to keep the children safe. They are temporarily occupying the Senior Citizen Center of the barangay. Currently, there are 22 boys and seven (7) girls in the center.

4.4.1 Social Welfare Facilities, Services and Clientele

Summarized in Table 87 are the list of social services offered by the Office of Social Welfare and Development in San Pablo City. As of 2014, a total of 9,977 clienteles are being serviced by the social welfare office. These clienteles include children aged 3-4 years old in day care centers, senior citizens (60 years old and above), women who were victims of violations against RA 9262, and children who are crime victims against RA 7610.

Currently, there are 5,732 registered senior citizens in the City. Although unspecified if all are actively participating, they receive social pension from the government in a monthly basis. 3,784 children are being served by the office through supplemental feeding and non-formal education. Women and children who were victims of abuse and crime are specially catered to by the



office with exceptional care and support. A more detailed look into the social services can be found in the Appendix Table 1.

Table 87. Social Welfare Services Offered in San Pablo City, 2014

Social Welfare Services	Number of Clientele
Day Care Center	3,784
Senior Citizen Social Pension	5,732
Women with Special Needs	186
Children with Special Needs	275
Total	9,977

Source: City Social Welfare and Development Office

4.4.2 Historical Number of Population Served by Type of Clientele System

Clienteles served by Social Welfare Services in San Pablo City are increasing over the years as shown by Table 88. Day Care Children have been increasing from 1,931 in 2011 to 3,805 in 2014. This indicates that parents are increasingly partnering with the government when it comes to the early development of their children. Face the Children Frontline Ministries have increased their clients from 25 children in 2011 to 34 in 2014. The number of clients served by other social welfare institutions can be seen below.

Table 88. Historical Number of Population Served by Social Welfare Services in San Pablo City, 2011-2014

Type of Clientele	2011	2012	2013	2014
Day Care Children – Non formal Education (3-4 yr. old boys and girls)	1,931	2,207	3,784	3,805
St. Martin De Porres – Institution for Children (4-12 year old boys)	14	12	7	7
Face the Children Frontline Ministries (Institution for Abandoned, Neglected Children, 1-22 year old girls and boys)	25	32	34	34
Bahay Nazareth (Home for the Aged 60-90 year old female & male)	18	18	18	13
Center for the Welfare and Protection of Children (CWPC ages 1-22 year old female & male)	28	27	25	27

Source: City Social Welfare and Development Office, NGOs/POs



4.4.3 Social Welfare Related Projects, Approved/Funded for Implementation

As of 2014, there is only one (1) project pertaining to social welfare services in the City. Already in progress, the expansion of Center for the Welfare and Protection of Children started in June 2015 and will be estimated to have been completed by December of the same year. The Center is under management of the Department of Social Welfare and Development in partnership with the Office of Social Welfare and Development of the City (Table 89).

Table 89. Social Welfare Related Projects in San Pablo City, 2014

Name/ Location of Project	Location	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
Expansion of Center for the Welfare and Protection of Children	Terrace, Brgy. San Francisco, San Pablo City	Two Storey Bldg.	Government	June,2015	December,2015

Source: City Social Welfare and Development Office, NGOs/ POs

4.4.4 Current and Projected Needs

Based on the set guidelines of the HLURB according to related laws in relation to social welfare services, following are the needed facilities, personnel and services must be available:

1. Day Care:

As shown in the previous section, the City of San Pablo has adequate number of day care center. However, Barangays 1-A, III-A, III-E, III-F, IV-A, IV-B, IV-C, V-A, V-B, V-D, VII-B, VII-C, VII-D, and VII-E do not have day care centers which should cater the children residing in the aforementioned barangays.

2. Senior Citizen Care Center:

There are already Senior Citizen Centers located in various barangay, where elderlies can hold their programs for their benefits. The City Social Development and Welfare Office, however, needs to ensure that there are adequate recreational, educational, health and social programs and facilities available for the full employment and benefit of the senior citizens of the City.



3. Day Center for Street Children:

The City must have a Day Center for street children who are 7 to 15 years old and have a family to go home to everyday. This is aside from the DSWD Lingap Center or other non-government agencies available in the cities for street children with families. The Day Center for Street Children will cater the social, emotional, spiritual needs of the children while their parents are busy working but they cannot afford to go to School.

4. AO No.82. S.2003 Standards on Social Welfare and Development Service Delivery System in the Local Government Units

a. Staffing

- One (1) Registered Social Worker (RSW) as SWD Officer
- One (1) RSW as Assitant OSWD for City Level
- Direct or support personnel at City level:
 - Project Development Officer (PDO)
 - Livelihood Evaluation Officer (LEO)
 - Youth Development Officer (YDO)
 - Social Welfare Assistant (SWA)
 - Social Welfare Aide (SW Aide)
 - Manpower Development Officer (MDO) Nutritionist
 - Statistician
 - Information Communication Technology Officer (ICTO) Clerk
 - Driver
 - Utility Worker
 - One (1) Day Care Officer in a City to supervise Day Care Workers (DCWs)
 - One (1) qualified Daycare Social Worker (DSW) for every barangay in a City

Based on the above staffing personnel, the City needs to have at least 14 excluding the DSW assigned in each barangays. Currently, the OSWD has fourteen (14) staff, which means the Office has adequate staffing. However, reorganization should be done so that one staff is directed as support personnel in the aforementioned positions.

b. Facilities

Apart from the current office space the City needs to have:

- Space/room for interview and counseling



- Conference room
- Separate living quarters for male and female personnel in times of disaster or emergency operations
- Ample space/room for receiving clients
- Exclusive space/room for conducting intake interview
- Storage room for stockpiling during relief operations

4.4.5 Social Welfare Services Analysis Matrix

Table 90. Social Welfare Services Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Absence of personnel assigned in Day Center for Street Children	<ul style="list-style-type: none"> - OSWD had conducted regular clearing operations/rescue to the group of solvent boys/street children but since there is no center to place and cater them they only conducted counseling sessions; Solvent boys may still roam around the City and continuing their activity 	<ul style="list-style-type: none"> - Establishment/construction of center for rehabilitation of solvent boys/ street children; - Train personnel such as social workers, psychologist, house parent, security guards should be hired to supervise the center; - Implement programs and services to address the issues/needs of the solvent boys/ street children for their gradual recovery/re-formation.
Increasing number of minors who engaged in theft, robbery, rape case	<ul style="list-style-type: none"> - Psychosocial developments of victims will be affected. - Traumatic experiences are hardly coped by the victims. 	<ul style="list-style-type: none"> - Conduct regular IEC in different schools, together with PNP to tackle R.A.7610, R.A 9262 and R.A.9344; - Referral to Child Protection Unit-Philippine General Hospital (CPU-PGH) for proper intervention - Coordination with DEPED about Alternative Learning System(ALS) for OSY; - Conduct family life seminars,i.e, responsible parenthood, parent and children relationships, conduct of family week celebration
Barangay I-A, III-A, III-E, III-F, IV-A, IV-C, V-A, V-B, V-D, VII-B, VII-C, VII-D, VII-Edo not have Day Care Centers	<ul style="list-style-type: none"> - Children will have to attend classes in adjacent barangay 	<ul style="list-style-type: none"> - Allocate budget for Day Care Center
Need to enhance capacity of Day Care Centers and increase compensation of Day Care teachers	<ul style="list-style-type: none"> - Day Care Centers will be congested - Less compensation and incentive for day care teachers 	<ul style="list-style-type: none"> - Provide training for Day Care teachers - Allocate budget for additional compensation of teachers
Need to improve “Enhancement of Social Welfare and Development Service Delivery System” (refer to page 171)	<ul style="list-style-type: none"> - Office cannot provide basic services to clients 	<ul style="list-style-type: none"> - Provide funds and space



4.5 Protective Services

4.5.1 Police Protective Services

The Police Headquarters is strategically located at the Capitol site with an area of 169 square meters. It is being supported by COPS on the Block with three (3) locations, namely: Station I at P. Paterno St., Station II located at the City Shopping Mall, and the District Headquarters at Tomas Dizon Avenue. It is headed by a Police Superintendent with a total force of six (6) officers and eighty-eight (88) PNCOs. It maintains its operational efficiency through the proportionate distribution and proper utilization of personnel based on the prevailing peace and order situation.

4.5.1.1 Number of Personnel, Personnel to Population Ratio, Facilities/Equipment

As of the current year 2015, there are 104 police officers in the City resulting to a police-population ratio is 1:2,619 with 272,305 inhabitants.

In terms of ammunitions, the station has thirty-one (31) 5.56 M-16 rifles, four (4) 12-gauge shot guns, two (2) .45 caliber pistols, three (3) 187 caliber .38 revolvers, thirty-nine (39) 9MM pistol and one (1) super .38 pistols.

In terms of mobility, the station has six (6) mobile cars, one (1) L-300 and one (1) Mini Cruiser. All vehicles are serviceable but needs a lot of maintenance considering that they are already old. The fleet needs a total gasoline allowance of nine hundred liters per month (Table 91).

Table 91. Number of Police Personnel and Facilities/Equipment in San Pablo City, 2014

Type of Services	Location	Area (sq. m)	No. of Personnel	Personnel to Population Ratio	Facilities/Equipment		Condition
					Vehicles	Vehicles	
Headquarter	Brgy. V-B	169.	37	1:2390	1 Mobile Car 2 Motorcycle	9 PC unit 5 aircon	Serviceable
Sub-Station	Doña Leonila	70	12				
Outpost	Brgy. II-D		4		1 L300 Van		Serviceable
Traffic	Anywhere		45				

Source: San Pablo City Police Station



4.5.1.2 *Barangay Tanod by Type of Service*

Supporting the Police Force in terms of maintenance of peace and order, maintenance at the barangay level are the 872 Barangay Tanods serving the 80 barangays in the City. These Barangay Tanods also act as the Barangay Brigades in time of disaster.

Some Barangay Tanods are equipped with the following: uniform, night stick, and flashlight, generator, base radio, whistle, hand-held radio, raincoats and boots, ladder, megaphone, hand cuffs, stretcher, first aid kit, tear gas, ropes, power saw, and mowers. Some also have Shotgun, 9mm Cal. Pistol. In terms of mobility, some barangays have an L-300 vehicle and multicab. Table 92 provides the summary of the number of barangay security force while Appendix Table 2 provides detailed information about the type of services provided, facilities available and it condition according to barangays. However, two (2) barangays do not have their own barangay halls, namely, Barangay III-A and VII-D. In order to fully carry out their function, barangay officials need additional compensation from the local government.

An additional force is contributed by the seven (7) registered Security Agencies. Employees or security guards of these security agencies are guarding most of the commercial establishments operating within San Pablo.

The City Traffic Management Office which is under the City Mayor's Office assists in the regulation of traffic across the City, in schools, shopping malls and the main avenues of the Poblacion.

Table 92. *Barangay Security Force and Volunteers by Type of Service in San Pablo City*

Type of Services	Number of Security Force/Volunteer	Facilities/Equipment
Traffic	349	whistle, raincoat, vest
Peace and Order	1,405	night stick, flashlight, hand cuffs, vest
Disaster	756	transistor radio, rope, ladder, flashlight, raincoat, megaphone, power saw, generator, fire extinguisher, stretcher, vest
Auxiliary Services	49	
Others	36	
Total	2,519	

Source: Primary Data Collection by CPDO



4.5.1.3 Crime Incidence by Barangay by Type, by Sex of Offender for the Last 5 Years

In a span of five years (2010-2014), there were a total of 900 crimes recorded in the City. As frequently observed in society, the majority of crimes in San Pablo were committed by males, contributing ninety one percent (820) to the total crime count while 20% (80) were charged against women offenders. Barangay San Francisco has the most crimes recorded in the City with a total of 86. The next big contributors to the overall crime count in the City are San Rafael and San Lucas II with 46 and 30 recorded crimes respectively. Barangay San Francisco has the most male offenders and female offenders for the entire City (Table 93). The most prevalent crimes committed in the City are violations against Republic Act 9262 (Violence against Women and Children) and Republic Act 7610 (Child Abuse), more detailed summary of the crimes recorded in the City can be found in the Appendix Table 3.

Table 93. Number of Crimes by Barangay and Sex in San Pablo City 2010-2014

Barangay	Male	Female	Total	Barangay	Male	Female	Total
Atisan	2	0	2				
Bagon Bayan (I-C)	24	1	25	Sta. Maria	1	1	2
Bagong Pook	1	0	1	Sta. Ma. Magdalena	7	1	8
Bautista	2	0	2	Sta. Monica	8	0	8
Concepcion	21	1	22	Sta. Veronica	8	0	8
Del Remedio	12	4	16	Sto. Angel	24	2	26
Dolores	3	0	3	Sto. Cristo	13	0	13
San Antonio I	6	2	8	Sto. Niño	4	3	7
San Antonio II	11	1	12	I-A	9	4	13
San Bartolome	2	0	2	I-B	20	0	20
San Buenaventura	9	1	10	II-A	7	0	7
San Crispin	10	0	10	II-B	13	3	16
San Cristobal	8	1	9	II-C	13	0	13
San Diego	5	1	6	II-D	9	1	10
San Francisco	79	7	86	II-E	13	1	14
San Gabriel	9	1	10	II-F	4	1	5
San Gregorio	18	2	20	III-A	27	0	27
San Ignacio	25	3	28	III-B	4	1	5
San Isidro	6	0	6	III-C	22	2	24
San Joaquin	3	0	3	III-D	7	2	9
San Jose	21	3	24	III-E	3	0	3
San Juan	4	1	5	III-F	3	0	3
San Lorenzo	3	0	3	IV-A	4	1	5
San Lucas I	23	1	24	IV-B	3	0	3
San Lucas II	30	0	30	IV-C	10	0	10
San Marcos	11	0	11	IV-D	1	0	1
San Mateo	4	0	4	V-A	10	3	13



Barangay	Male	Female	Total	Barangay	Male	Female	Total
San Miguel	9	1	10	V-B	2	0	2
San Nicolas	12	0	12	V-C	2	0	2
San Pedro	5	0	5	V-D	8	0	8
San Rafael	40	6	46	VI-A	8	1	9
San Roque	14	2	16	VI-B	4	0	4
Santiago I	1	0	1	VI-C	6	0	6
Santiago II	9	0	9	VI-D	8	3	11
Stmo Rosario	3	1	4	VI-E	7	1	8
San Vicente	8	0	8	VII-A	12	0	12
Soledad	3	0	3	VII-B	12	3	15
Sta Ana	4	0	4	VII-C	4	2	6
Sta Catalina	8	0	8	VII-D	7	0	7
Sta Cruz	1	0	1	VII-E	8	4	12
Sta Elena	2	1	3	Balagtas Blvd.	1	0	1
Sta Isabel	4	0	4	Colago Avenue	2	0	
Sta Filomena	8	0	8	Total	820	80	900

Source: Philippine National Police, San Pablo City

4.5.2 Fire Protective Services

San Pablo City Fire Station was constructed in 1940s and is considered as one of the oldest stations constructed within the CALABARZON Region. At present, most of the portion of the said station building is already dilapidated and risky for the occupants due to the possibility of the 2nd floor collapsing. Unfinished rehabilitation left some portion of the building improperly supported with concrete foundation (dining area and kitchen area) which basically needs immediate repair and restoration.

Presently, there are only 23 organic personnel manning the said office headed by an officer and likewise the City Fire Marshall has 21 organic members and 2 LGU Fire Volunteer (Table 94).

The station performs primarily two (2) basic functions both in Administrative and Operational aspects. The former covers the mandate of the agency on matters of fire safety and prevention which includes fire safety inspection of all building structures, imposition of compliance to fire safety, conduct of fire prevention activities like regular fire seminars, drills and trainings to include the involvement/participation of all barangays in the conduct of fire brigade trainings as its target clientele and the enforcement of RA 9514. With regards, to the operational capability of the station, currently there are five (5) trucks in possession of BFP San Pablo; four (4) fire trucks from the national government; and one (1) from the local government; of which four (4) are completely serviceable in status, while the other one (1)(Nissan fire truck) is presently undergoing repair. Moreover, most of their present rescue equipment are unserviceable which needs immediate replacement. On



matters of response to different calls such as fire and other related emergencies, the office is still adhering to its standard ideal response time of not more than seven (7) minutes. Emergency response duration depends on the location of the (fire) incident, traffic situation during response and the time when the emergency call was received by the responding personnel.

Table 94. Number of Fire Personnel and Facilities/Equipment in San Pablo City, 2014

Type of Services	Location	Area (Sq. M)	No. of Personnel	Personnel to Population Ratio	Facilities/ Equipment	Condition
					Vehicles	
Headquarters	Barleta Street, Brgy. IV-C, SPC	300	18 uniformed 3 non-uniformed 2 Local Fire Aide	1:11,347	Anos Fire Truck	Serviceable
					FMC	Serviceable
					Nissan Fire Truck	Ongoing rehabilitation & repair
					ROSENBAUER Tank Fire Fighting Vehicle TLF 4000	Serviceable
					1 LGU Fire Truck	Serviceable
Sub-station	Del Remedio				1 LGU Fire Truck	Serviceable
Fil-Chinese Fire Volunteer	P. Alcantara Street				2 Fire Truck	Serviceable

Source: Bureau of Fire Protection-San Pablo City

Continuous coordination and barangay visitation within the area are some of the primary programs of the agency to establish linkages during fire emergency activities and for future creation of their own Barangay fire brigade to act as frontline responder during fire occurrence and other emergency related response.

There has been an increasing trend in the occurrence of fire in the City. The most common cause of fire incidence is accidental or due to faulty electrical systems. Open flames rank second in causing fire in the City which is then followed by grass fires. In 2014, there was a prevalence of grass fire in the City. This may be due to a very dry weather and live cigarettes being thrown unto grass. (Table 95)

**Table 95. Fire Incidence for the Last Five Years in San Pablo City, 2010-2015**

Type According to Origin/Cause	Frequency of Occurrence					
	2010	2011	2012	2013	2014	Total
Gas Tank Leak		2	2	2	1	7
Acetylene Tank Leak		1		1		2
Forest Fire					1	1
Open Flames	5	4	8	13	5	35
Accidental/Electrical	8	9	9	14	7	47
Intentional			1	2		3
Toppled Candle		2	4	2	1	9
Grass Fire					15	15
Flammable Liquid						0
Unattended Cooking	1	1			2	4
Vehicular Fire	2		1		2	5
Fireworks			1			1
Post Fire				2	1	3
Rubbish Fire					4	4
Children Playing Matches	1				1	2
Total	17	19	26	36	40	138

Source: Bureau of Fire Protection-San Pablo City

4.5.3 Bureau of Jail Management and Penology

Complementing San Pablo City PNP Station is the San Pablo City District Jail (BJMP San Pablo City). It is providing professional Jail Services to San Pablo City and other neighboring towns such as Alaminos, Rizal and Nagcarlan, Laguna. The Jail Facility is situated in a 534.2 sq. m. lot along A. Mabini St., Brgy. V-B, San Pablo City, and manned by 31 jail officers including the Jail Warden as its Head of Office. It has ten (10) dormitories (9 male dormitories and 1 female dormitory), including one (1) infirmary which is utilized as Isolation for Sick and Old/Elderly Inmates.

The Jail Facility is equipped with one Prisoner's Van (Foton Tornado). It also has 19 units of 9mm Cal. Pistol, 5 Shotguns, 1 Sub-Machine Gun, 38 Hand cuffs, 20 Probatons, Office Computers, printers, scanners and other office equipment including furniture and fixtures (Table 96).

At present, the Jail Facility is housing 657 Detention Prisoners (595 male and 62 female) in a 145-man capacity jail facility. It is now more than 400% congested thereby aggravating the agony of inmates. The health conditions of the inmates are now at risk in view of the present congested condition. It has now become imperative for the BJMP, in collaboration with the Local Government to implement Jail Expansion projects to address the congestion



problem. For this purpose, the Local Government headed by Honorable City Mayor Loreto “Amben” S. Amante, in cooperation with Hon. Congresswomen Sol Aragon, and BJMP San Pablo City, has initiated the construction of new Administrative building within the vicinity of the barangay hall of Barangay V-B, so that existing Administrative building shall be converted into an additional male dormitory. This will, nevertheless, address the congestion problem even for a limited extent.

In addition to congestion problem, the BJMP is also dealing with insufficient manpower. The Jail Facility is manned by 31 Jail Officers safeguarding a total of 657 detention prisoners with a ratio of at least 1:31 (1 Jail Officer per 31 inmates), whereas the ideal ratio is 1:7. This predicament is vital to security and control of the entire jail facility. For this reason, it is necessary to assign additional personnel to San Pablo City District Jail to augment its custodial capability.

Table 96. Number of Jail Personnel and Facilities/Equipment in San Pablo City, 2014

Type of Services	Location	Area (sq. m)	No. of Personnel	Personnel to Population Ratio	Facilities/Equipment	Condition
District Jail	A. Mabini St., Brgy. V-B, SPC	534.20 – land area 263.14 – floor area	32	1:20	1 Foton Tornado (Prisoner's Van) 9MM Cal. Pistol, Shotguns, Sub-Machine Gun Hand Cuffs Probatons , Fire Extinguishers Office Computers Printers, Scanners	Functional
Prison Cells						
-9 Male Dorms						
-1 Female Dorm						

Source: San Pablo City BJMP

4.5.4 Current and Projected Requirement for Police and Firemen (Personnel)

Currently, there are 104 police officers and 24 fire officers in San Pablo City. The police force currently lacks 168 more officers to achieve the desirable 1:1000 police-population ratio. They will need 200 more in 2021 and by 2025, they will need additional 222. Meanwhile, there are 24 fire officers in the City (Table 97). The desirable fire officer-population ratio is 1:2000. To achieve this ratio, the City will need 112 more fire officer for the current year. By year 2025,



the city will have an additional demand of 139 fire officers based, on the projected increase in population. (Table 95)

Table 97. Current and Projected Requirements for Police and Firemen in San Pablo City

Year	Projected Population	Police Force Requirement	Firemen Requirement
2015	272,305	168	112
2016	277,246	173	115
2017	282,277	178	117
2018	287,399	183	120
2019	292,613	189	122
2020	297,923	194	125
2021	303,329	199	128
2022	308,833	205	130
2023	314,436	210	133
2024	320,142	216	136
2025	325,951	222	139

Source: Projected by GIS Co.

4.5.5 Protective Services Analysis Matrix

Table 98. Protective Services Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
PNP		
Need to increase PNP personnel	<ul style="list-style-type: none"> - Inefficient response to emergencies and crime prevention 	<ul style="list-style-type: none"> - Additional personnel to all units; - Specific assignment/task to each and every personnel, in every unit/department - Strong coordination with barangay officials/tanod to help monitor the security of their locale
Lack of Investigative Equipment	<ul style="list-style-type: none"> - Delayed response to emergencies - Impaired information dissemination 	<ul style="list-style-type: none"> - Level-up transportation facilities; - Upgrade office gadgets to speed up information dissemination; - Complete personal PNP gadgets for each personal for faster information dissemination
Lack of Training	<ul style="list-style-type: none"> - Personnel without knowledge in police matters and procedure particularly in disaster; - Low self-confidence; - Personnel without knowledge execute badly - Lack of trust and reliance of people to police personnel 	<ul style="list-style-type: none"> - Provide all PNP personnel with trainings on different field of expertise; - Give high regard on good manners and right conduct by allowing PNP personnel to undergo seminar on moral recovery program. - Training of police personnel on Anti-Red Tape Act (ARTA) and Civil Service rules and regulations.



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
		<ul style="list-style-type: none"> - Sending the PNP personnel for training by batch
Station not conducive for work	<ul style="list-style-type: none"> - Poor image presentation; - Too much mess due to small spaces - Too much people in a crowded places provoke irritation 	<ul style="list-style-type: none"> - Prepare specific layout and space - Provide bigger space of at least 2,500 sq.m based on minimum standard - Allocate each personnel with an ideal space for work - Provide clean and healthy environment for the station - Transfer PNP Station to another a bigger space - Acquire lots for station
Barangay III-A and VII-D do not have their own barangay halls	<ul style="list-style-type: none"> - Delayed provision of public services 	<ul style="list-style-type: none"> - Allocate fund for establishment of barangay halls or if not look, for possible space to rent
Need additional compensation for barangay security force	<ul style="list-style-type: none"> - Function is not carried out by security force 	<ul style="list-style-type: none"> - Additional budget for barangay security force
BJMP		
Overcrowded jail facility	<ul style="list-style-type: none"> - Inmates welfare and development are adversely affected 	<ul style="list-style-type: none"> - Relocation of the jail facility to a bigger area or other jail expansion projects such as the administrative building converted into a jail facility with an area of at least 1 hectare
Insufficient number of jail personnel	<ul style="list-style-type: none"> - Jail security is compromised 	<ul style="list-style-type: none"> - Promotion of Penology Profession to intensify public awareness of opportunities offered by BJMP - Coordinate with the PNP to allocate more jail guard (at least 93 jail guard, according to 1:7 ideal ratio)
BFP		
Need to increase BFP personnel	<ul style="list-style-type: none"> - Delayed response in case of simultaneous fire incidences or similar emergencies 	<ul style="list-style-type: none"> - Encourage more volunteers to join and offer intensive seminars and trainings for the purpose
Poor condition of the building	<ul style="list-style-type: none"> - Unconducive working environment 	<ul style="list-style-type: none"> - Possible provision of additional sub-station - Transfer to another station with bigger space - Acquire lots for new station
Lack of rescue equipment/fire fighting equipment (breathing apparatus)	<ul style="list-style-type: none"> - Inefficient and delayed response to fire incidences and emergencies 	<ul style="list-style-type: none"> - Renovation and proper maintenance of facilities and equipment
Unserviceable equipment	<ul style="list-style-type: none"> - Delayed and poor response to fire accidents and emergencies 	<ul style="list-style-type: none"> - Immediate replacement of equipment



4.6 Sports and Recreation

San Pablo City has been known to have much potential in sports. Proof is the many award winning individuals excelling in their respective fields. However, athletes are making their names representing other towns instead of their hometown because, sports is not being prioritized as much as other programs. The chance to bring honor to the City in the field of swimming is left only to those who can afford membership fees and dues to private organizations utilizing a privately owned facility. Moreover, there is a lack of facilities and mismanagement and or misuse of some facilities. Consequently, tax collection from sports and recreation facilities is low.

For the above reasons, the LGU has come up with recommendations to somehow improve the present scenario in the field of sports and recreation, which are presented towards the end of discussion of this sector.

An on-going program offered is the Physical Fitness Program for the employees which are being held every Thursday afternoon at the PAMANA Hall, City Hall Grounds. It is in compliance with the Civil Service Commission's MC No. 8 Series of 2011 – Reiteration of the "Great Filipino Work-Out".

Pending programs of Sports Division for this period is the Free Martial Arts training to children ages 4 and above and Basic Arnis training for the Barangay Tanods. However, implementation is difficult due to lack of safety equipment, specifically rubber mats for the purpose.

4.6.1 Existing Sports and Recreational Facilities by Barangay

Open space is not limited to the form of parks and open fields only. This may also come in the form of sports facilities in which people can take part in meaningful activities such as sports and social gatherings. Table 99 shows the number of sports facilities in the City as well as their ownership and physical condition.

**Table 99. Existing Sports and Recreational Facilities in San Pablo City, 2014**

Sports Facilities	Ownership		Physical Condition		
	Public	Private	Good	Poor	Critical
Basketball Court	73	12	80	2	3
Tennis Court	1	2	3	0	0
Badminton Court	0	2	2	0	0
Multi-purpose Court	2	0	2	0	0
Billiard Hall	0	1	1	0	0
Track and Field	1	0	0	1	0
Softball Diamond	1	0	0	1	0
Volleyball Court	4	1	4	1	0
Golf Driving Range	0	1	1	0	0
Swimming Pool	1	1			
Jail Facility: Half court Table Tennis					

Source: City Planning and Development Office

Of the existing facilities, most of which are covered multipurpose courts/halls, only a few are well maintained enough to accommodate a basketball/volleyball game. Private facilities, such as tennis/badminton courts and swimming pools, offer fees which limit recreation and sports to those who can afford these services. The most common form of sports facilities in San Pablo City are basketball courts. There are 85 basketball courts, 73 of which are public while 12 are private. Almost all (80) of the basketball courts are in good physical condition. Other sports facilities present in the City are tennis courts, badminton courts, and track and field. Detailed information about the existing sports and recreation facilities are shown in Appendix 4.

4.6.2 Current and Projected Area Requirement for Recreational Area

Open space plays an important role in creating sustainable cities. Spaces such as parks, open fields, sports complexes provide a venue for citizens to breathe, relax, and divert their attention from a week's work through physical activity. It also caters a time and place for events and gatherings which allows for active social interaction and participation which may help in molding the population's identity as citizens of the City. Open spaces also help in enhancing family relations and strengthening the roles of families as the basic unit of society.



In 2014, a total of 2.43 hectares of parks and playfield is recorded in the City. The San Pablo City Central Oval is the single biggest playfield in the City (1.38 hectares). According to the HLURB guideline, for every 1,000 population, there should be a minimum of 0.5 hectares worth of playfield. It should accommodate the basic components such as a standard oval tract, baseball/softball diamond, football field, basketball court, volleyball court, lawn tennis, and a perimeter space for a grandstand and bleachers. Adhering to the standard, the city should allocate 163 hectares worth of open/playfield for a population of more than 325,000. In addition, parks have a minimum standard of 500 sqm per 1,000 population. It is recommended that the City strategically allocate 16.28 hectares for parks around the City (Table 100).

Table 100. Current and Projected Area Requirement for Recreational Area in San Pablo City

Recreational Area	Existing Area (ha)	2014 Area Requirement (ha)	Current Area Requirement (ha)	Future Area Requirement (ha)
Park	1.05	13.37	11.39	16.28
Playfield	1.38	133.72	132.34	162.98
Total	2.43	147.09	143.73	179.26

Source: Projected by GIS, Co.

Note: Allocation for open fields were not calculated due to difficulty in identifying such

4.6.3 Sports and Recreation Analysis Matrix

Table 101. Sports and Recreation Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Non-accreditation of active sports clubs/organizations and lack of regulations/ policies for the conduct of sports /recreational activities	<ul style="list-style-type: none"> - Sports activities are being used for fund raising activities and government /public facilities are being used to the prejudice of the government 	<ul style="list-style-type: none"> - Accreditation of sports club and organizations of the Sangguniang Panlungsod and adaptation/creation of technical guidelines for the conduct of activities so that facilities to be utilized may also benefit from their programs especially those of which are intended to raise fund
Misuse and mismanagement of facilities leading to poor imposition of the necessary tax	<ul style="list-style-type: none"> - No income source for the maintenance and operating expenses of multi-purpose facilities including identified sports facilities - Multi-purpose facilities intended for activities such as sports/recreational activities are used as parking spaces - Some facilities intended for public use is being 	<ul style="list-style-type: none"> - Setting up of new and more appropriate brackets for tax collection - Designation of accountable in-charge of every existing government-owned facilities - Setting up of rules/regulations for the use of facilities - Review of existing MOA's to ensure that the government is not prejudiced



	exclusively governed/managed by private organizations and being used as means for the clubs/organizations income generation	<ul style="list-style-type: none"> - Appointment of managers/administrators for the same - Allotment of fund and exploring some income-generating programs for sports /recreation
Few sports and recreation facilities aside from basketball courts available for use of the public	<ul style="list-style-type: none"> - Limits the people to develop their skills and talents in other sports aside from basketball 	<ul style="list-style-type: none"> - Review of the existing MOA (memorandum of agreement) with entities utilizing a government facility and revising its stipulations making sure that a potential public can also enjoy the privileges of those who can afford - Promote other sports and recreational activities
Poor attention to sports and recreation program	<ul style="list-style-type: none"> - Limited opportunity to engage in different sport and recreational activities - Limits the social, mental and physical development of the people 	<ul style="list-style-type: none"> - Including sports and recreation programs to priority programs since almost all of the beneficiaries of which are increasing number of youth in the community; - Allocate additional funding for sports and recreation programs - Properly monitor the use of allocated fund for the sports and recreation programs.
Lack recognition of Sports Division (Mayor's Office)	<ul style="list-style-type: none"> - Sporting activities and programs are not centralized 	<ul style="list-style-type: none"> - Involve the office in all sports and recreational activities of the City Government and all the activities that will be implemented within the jurisdiction of the City

4.7 Integrated Social Sector Analysis Matrix

Table 102. Integrated Social Sector Analysis Matrix for San Pablo City

Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
EDUCATION SECTOR		
Inadequate water supply on certain public school	Improvement of City water supply facilities	DepEd and Local School Board, School Superintendent/Principal in coordination, City Water District
Dilapidated school buildings	Inventory and status of building Replacement of school buildings through SEF	Dep-Ed, DPWH, City Government
Ambray Elementary School does not meet the standard area requirement for elementary school	Provision of high rise buildings (2 to 3 storey) Acquisition of additional land area	NGOs, POs, City School Board, Dep-Ed to look for donor or include lot acquisition in the 2016 DepEd Budget, City Engineering Office



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
There are 84 classroom requirements in secondary schools	Provision of high rise buildings (2 to 3 storey) Scheduling of classes in schools where there is inadequate number of classrooms	NGOs, POs, City School Board, DepEd to look for donor or include lot acquisition in the 2016 Dep-Ed Budget, City Engineering Office
Some schools do not have their own school clinics	Provision of health facilities to at least 50% of the schools	City School Board and DOH, NGOs and POs to conduct medical mission
Only one (1) Special Education School serving special children of the City and neighboring municipalities.	Mainstreaming of special education in Central school and other private institutions Organization of special education classes in the central schools of the 7 districts	DepEd, City School Board utilizing the Special Educ. Fund
Implementation of K-12 System by June 2016	Explore the possibility to acquire land to establish additional school buildings Coordinate with DepEd on how to prepare for the K-12 System in terms of the facilities needed and manpower capacity	DepEd, City School Board, POs and NGOs to purchase and/or look for donors of land
Capability and Compensation of Day Care Teacher	Increase salaries and wages, enhance the capabilities of day care teachers	School Authorities coordinate with SUC for practice teaching students
HEALTH AND SANITATION SECTOR		
Limited storage facility for special wastes	Allocate funds for the establishment of different facilities	City Solid Waste Office
Lack waste water facilities	Allocate funds for the establishment of waste water facilities	City Solid Waste Office
Delayed collection of garbage in rural and urban areas in the City	Ensure logistics needed in timely collection of garbage	CENRO Personnel to ensure regular garbage collection
Segregation of solid waste not properly implemented/ followed by the public	Close monitoring by the brgy. officials/ strict compliance to brgy. ordinance regarding segregation of solid waste	Brgy. Officials to impose sanctions for non-compliant residents, Provide incentives to press with valid best practices
Anti-littering ordinance not strictly implemented	Strict implementation of finding of alternative ways for less waste (e.g. recycling, decomposing, reusing) generation RA 8749	Sanitary inspector and traffic police or aid to enforce the law



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
Unsanitary conditions of dump trucks before and after garbage collections and after reloading of garbage to the sanitary landfill	Close monitoring and supervision by the Solid waste management	CENRO to impose/sanctions or discontinue the services of private contractors
Regulation of sanitation status of night market vendors	Regular monitoring on the status of night market	Sanitary Inspector, Bus. Permit Personnel
Lack of manpower in Brgy. Health Centers, insufficient number of health personnel	Lobbying to the SP (Local Health Board) for additional manpower/personnel	DOH, City Health Office
Need to have equipment (refrigerator per barangay for storing vaccines) and; and increase knowledge on Cold Chain Management (vaccine-related)	Strengthen partnership between health officers and barangays officials Request for enough medical supplies and vaccines- allocation of fund for medical supplies Train Rural Health Midwives (RHMs) and Public Health Nurses (PHNs) and barangay public officials on how to manage the vaccines	DOH, City Health Office
Lack of funding and manpower, specifically at least 10 medical doctors, in SPCGH	Additional funding and hire additional 3 medical doctors	DOH, City Health Office
HOUSING SECTOR		
High housing backlog	Institutionalizing the Housing Office Formulation of Local shelter plan to determine new housing needs/site relocation needs land req. financial reg. Provide resettlement areas through Resettlement Assistance Program for Local Government Units of the National Housing Authority	Housing and Urban Development Office
40% of the households do not have their own housing units	Encourage the public to PABAHAY CARAVAN of Housing Urban development Council and other Housing Seminars to increase their awareness to different government housing programs Tap different government programs such as Pag-IBIG Fund's Housing Program and	Housing and Urban Development Office, Pag-IBIG, SHFC



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
	Social Housing Finance Corporation (SHFC)s Localized Community Mortgage Program (CMP) to assist the households in securing their own housing units at affordable financing rates.	
Increasing number of informal settlers particularly in railroad areas in San Crispin to boundary of Tiaong and along the lakeshore of Sampaloc Lake	Identify suitable relocation sites for settlers along rail road track with livelihood potentials for them to have a motivation to re settle Relocate settlements in high risks areas to safer areas through core shelter assistance program from DSWD	Housing and Urban Development Office
Non-compliance with the approve housing plan by the developer	Strict implementation of the building code	Housing and Urban Development Office
Inadequate potable water supply in rural areas	Monitoring/ treatment of potable water supply. Health education and promotion on how to prevent water borne diseases	Housing and Urban Development Office, San Pablo Water District
SOCIAL SERVICES SECTOR		
Absence of personnel assigned in Day Center for Street Children	Establishment/construction of center for rehabilitation of solvent boys/ street children; Train personnel such as social workers, psychologist, house parent, security guards should be hired to supervise the center; Implement programs and services to address the issues/needs of the solvent boys/ street children for their gradual recovery/re-formation.	Office of the City Social Welfare and Development
Increasing number of minors who engaged in theft, robbery, rape case	Conduct regular IEC in different schools, together with PNP to tackle R.A.7610, R.A 9262 and R.A.9344; Referral to Child Protection Unit- Philippine General	Office of the City Social Welfare and Development, PGH, DepEd



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
	Hospital (CPU-PGH) for proper intervention Coordination with DEPED about Alternative Learning System(ALS) for OSY; Conduct family life seminar like responsible parenthood, parent and children relationship seminar during family week celebration	
Barangay I-A, III-A, III-E, III-F, IV-A, IV-C, V-A, V-B, V-D, VII-B, VII-C, VII-D, VII-E do not have Day Care Centers	Allocate budget for Day Care Center	City Government
Need to enhance capacity of Day Care Centers and increase compensation of Day Care teachers	Provide training for Day Care teachers Allocate budget for additional compensation of teachers	City Government
Need to improve "Enhancement of Social Welfare and Development Service Delivery System" (refer to page 171)	Provide funds and space	City Government, OSWD
PROTECTIVE SERVICES SECTOR		
PNP		
Need to increase PNP Personnel	Additional personnel to all units; Specific assignment/task to each and every personnel, in every unit or department Strong coordination with barangay officials/tanod to help monitor the security of their locale.	PNP
Lack of Investigative Equipment	Level-up transportation facilities; Upgrade office gadgets to speed up information dissemination; Complete personal PNP gadgets for each personnel for faster information dissemination	PNP



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
Lack of Training	Provide all PNP personnel with trainings on different field of expertise; Give high regard on good manners and right conduct by allowing PNP personnel seminar on moral recovery program. Training of police personnel on Anti Red Tape Act (ARTA) and Civil Service rules and regulations. Sending the PNP personnel for training by batch	PNP, Civil Service Commission
Station not conducive for work	Prepare specific layout and space Provide bigger space of at least 2,500 sqm based on minimum standard Allocate each personnel with an ideal space for work Provide clean and healthy environment for the station Transfer PNP Station to another a bigger space Acquire lots for station	PNP, City Engineering Office
Barangays III-A and VII-D do not have their own barangay halls.	Allocate fund for establishment of barangay halls or if not possible, look for temporary space to rent	City Government (LGU)
Need additional compensation for barangay security force	Additional budget for barangay security force	City Government
BJMP		
Overcrowded jail facility	Relocation of the jail facility to a bigger area or other jail expansion projects such as the administrative building converted into a jail facility with an area of at least 1 hectare	PNP, City Engineering Office
Insufficient number of jail personnel	Promotion of Penology Profession to intensify public awareness of opportunities offered by BJMP	BJMP



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
	Coordinate with the PNP to allocate more jail guard (at least 93 jail guard, according to 1:7 ideal ratio)	
BFP		
Need to increase personnel	Encourage more volunteers to join and offer intensive seminars and trainings for the purpose	BFP
Poor condition of the building	Possible provision of additional sub-station Transfer to another station with bigger space Acquire lots for new station	BFP, City Engineering Office
Lack of rescue equipment/fire fighting equipment	Renovation and proper maintenance of facilities and equipment	BFP
Unserviceable equipment	Immediate replacement of equipment	City Government and NBFP
SPORTS AND RECREATION SECTOR		
Non-accreditation of active sports clubs/organizations and lack of regulations/policies for the conduct of sports /recreational activities	Accreditation of sports club and organizations of the Sangguniang Panlungsod and adaptation/creation of technical guidelines for the conduct of activities so that facilities to be utilized may also benefit from their programs especially those of which are intended to raise fund	Sangguniang Panglungsod; Sports and Development Office
Poor imposition of necessary tax/es	Setting up of new and more appropriate brackets for tax collection Designation of accountable in-charge of every existing government-owned facilities	City Treasurer, City Assessor's Office; Sports and Development Office
Misuse of facilities	Setting up of rules/regulations for the use of facilities	Sports and Development Office
Mismanagement of facilities	Review of existing MOA's to ensure that the government is not prejudiced Appointment of managers/administrators for the same	Sangguniang Panglungsod; Sports and Development Office



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects	Responsibility Center
	Allotment of fund and exploring some income-generating programs for sports /recreation	
Few sports and recreation facilities aside from basketball courts available for use of the public	Review of the existing MOA (memorandum of agreement) with entities utilizing a government facility and revising its stipulations making sure that a potential public can also enjoy the privileges of those who can afford Promote other sports and recreational activities	Sports and Development Office
Poor attention to sports and recreation program	Including sports and recreation programs to priority programs since almost all of the beneficiaries of which are increasing number of youth in the community; Allocate additional funding for sports and recreation programs Properly monitor the use of allocated fund for the sports and recreation programs.	Sports and Development Office
Lack recognition of Sports Division (Mayor’s Office)	Involve the office in all sports and recreational activities of the City Government and all the activities that will be implemented within the jurisdiction of the City	City Government



5. ECONOMIC SECTOR

5.1 Agriculture

5.1.1 Agricultural Production

Agriculture plays a crucial role in the economy of a community. It does not only provide food and raw materials, but also employment opportunities to a large proportion of the population. Although established as a city, San Pablo has a vast area for agricultural production occupying 14,305.74 hectares or 72.41% of the total land area. Coco land intercropped with other fruit trees such as lanzones, rambutan, banana, papaya, and pineapple, occupies the largest portion with 9,973.16 hectares or 50.48% of the total land area. Rice lands which are all irrigated account to 549.17 hectares, 2.78% of the total land area. Other crops include green corn (223.45 ha.), assorted vegetables (750.09 ha.) and root crops (26.5 ha) (Table 103).

Table 103. Area Devoted to Agricultural production in San Pablo City, 2014

Crop	Area (has.)	% to Total Agriculture Land Devoted to Crop Production	% of Crop Production Area to Total Land Area
Rice Irrigated	549.17	3.84	2.78
Corn	223.45	1.56	1.13
Fruits, Intercropped	2,809.87	19.64	14.22
Lanzones	1447.74	10.12	7.33
Rambutan	635.89	4.44	3.22
Banana	238.8	1.67	1.21
Papaya	110.44	0.77	0.56
Pineapple	377	2.64	1.91
Roots crops	26.5	0.19	0.13
Vegetables, assorted	750.09	5.24	3.80
Coconut Intercropped with other perennials*	9,973.16	69.71	50.48
Total*	14,305.74	100.00	72.41

Source: Office of the City Agriculturist, Note: *-GIS computed area

5.1.1.1 Crop Production

In San Pablo City, rice is planted in about 549.17 hectares or 3.13% of the total agricultural land area devoted to crop production. The largest area devoted to rice production is in Stmo. Rosario. In the year 2013, the average yield of rice was 4.38 MT/ha in one cropping and the total annual production



for 2013 was 4,805.76 MT or 96,115.20 cavans with a value of Php 71,699,560.00 (Table 104).

Moreover, there are 223.45 ha of land devoted for corn production. In 2013, San Pablo has seen a total volume of 942.20 MT of corn produced with a value of Php 18,844,000. While the standard yield of corn was recorded at 6 MT/hectares, some hectares only plant corn in one season as they plant other crops and vegetables and due to climate change, soil condition and poor quality of seed, corn yield is relatively low (2.10 MT/ha).

Among the fruit trees, lanzones dominates with 1,447.70 hectares (59.51% of the total land area planted to fruit trees) followed by rambutan, Banana, and Papaya (635.89 has, 26.14%; 238.8 has, 9.82%; and 110.44 has, 4.54%, respectively). There was a total production of 4,833.14 MT from fruit trees. Similarly a total of 4,486.14 MT of vegetables were produced out of 750 hectares devoted to it (Table 104).

Table 104. Existing Agricultural Crops in San Pablo City, 2013

Major Crop	Barangay	Area		Production		Product Market	
		Hectares	%	Volume (MT)	Value (Php)	Local	Export
Irrigated Rice	San Antonio II	49.00	8.92	434.24	6,079,360.00	✓	
	San Diego	17.5	3.20	149.62	1,945,060.00	✓	
	San Isidro	129.50	23.6	1,127.28	15,781,920.00	✓	
	Sta. Veronica	12.15	2.2	105.29	1,263,480.00	✓	
	Sta. Maria	48.90	8.90	514.45	8,231,200.00	✓	
	Stmo. Rosario	195.38	35.57	1,800.23	28,803,680.00	✓	
	Sta. Isabel	15.58	2.83	40.94*	491,280.00	✓	
	San Lorenzo	22.00	4.00	170.43	2,386,020.00	✓	
	Sto. Angel	59.16	10.77	463.28	6,717,560.00	✓	
Total area		549.17	100	4,805.76	71,699,560.00		
Corn	San Marcos	4.50	2.014	27.00	540,000	✓	
	Sta Magdalena	7.00	3.133	42.00	840,000	✓	
	San Mateo	4.50	2.014	27.00	540,000	✓	
	San Juan	2.50	1.119	5.00	100,000	✓	
	Sta. Filomena	5.00	2.238	30.0	600,000	✓	
	Del Remedio	8.00	3.580	48.0	960,000	✓	
	Sta. Catalina	2.00	0.895	12.00	240,000	✓	
	San Buenaventura	3.00	1.343	18.00	360,000	✓	
	Dolores	2.00	0.895	12.00	240,000	✓	
	San Lucas I	1.00	0.448	6.00	120,000	✓	
	San LucasII	1.25	0.559	7.50	150,000	✓	
	San Pedro	5.00	2.238	30.00	600,000	✓	
	Sta. Isabel	12.00	5.370	72.00	1,440,000	✓	
	San Diego	11.00	4.923	35.00	700,000	✓	



Major Crop	Barangay	Area		Production		Product Market	
		Hectares	%	Volume (MT)	Value (Php)	Local	Export
	Sto. Angel	5.50	2.461	25.00	500,000	✓	
	Concepcion	7.50	3.356	45.00	900,000	✓	
	San Lorenzo	3.00	1.343	10	200,000	✓	
	San Nicolas	10.00	4.475	30.00	600,000	✓	
	San Crispin	10.00	4.475	45.00	900,000	✓	
	Sta. Monica	8.00	2.685	46.70	934,000	✓	
	San Rafael	1.50	0.671	2.00	40,000	✓	
	San Ignacio	4.00	1.790	15.00	300,000	✓	
	San Vicente	1.00	0.448	4.00	80,000	✓	
	Sta. Ana	3.00	1.343	13.00	260,000	✓	
	Soledad	6.00	2.685	20.00	400,000	✓	
	Sta. Cruz, Putol	2.20	0.984	10.00	200,000	✓	
	Calihan	7.00	2.238	28.00	560,000	✓	
	San Gregorio	2.00	0.895	8.00	160,000	✓	
	San Miguel	5.00	2.238	21.00	420,100	✓	
	San Bartolome	3.00	1.343	11.00	220,000	✓	
	Santiago I	1.50	0.671	8.50	170,000	✓	
	Santiago II	6.00	2.238	29.50	590,00	✓	
	Bautista	5.00	0.895	22.00	440,000	✓	
	Atisan	4.00	1.790	10.00	200,000	✓	
	Sta. Elena	6.00	2.685	15.00	300,000	✓	
	San Joaquin	2.00	0.895	8.00	160,000	✓	
	San Jose	45.00	20.139	100.00	2,000,000	✓	
	San Cristobal	2.50	2.238	9.00	180,000	✓	
	San Antonio I	4.00	1.790	15.00	300,000	✓	
	San Antonio II	2.00	0.895	5.00	100,000	✓	
	Sto. Niño	3.50	1.566	15.00	300,000	✓	
	Total	223.45	100.00	942.20	P18,844,000	✓	
FRUIT TREES							
	Lanzones	1447.74	59.51	2,328.27		✓	
	Rambutan	635.89	26.14	1,259.07		✓	
	Banana	238.8	9.82	916.50		✓	
	Papaya	110.44	4.54	329.30		✓	
	Total	2,432.87	100.00	4,833.14			
	Pineapple	377				✓	
VEGETABLES							
	Eggplant	194.45	25.92	1,817.86		✓	
	Squash	179.5	23.93	810.25		✓	
	String Beans	112.15	14.95	866.50		✓	
	nap Beans	87.79	11.7	286.80		✓	
	Pechay	45.55	6.07	97.50		✓	



Major Crop	Barangay	Area		Production		Product Market	
		Hectares	%	Volume (MT)	Value (Php)	Local	Export
Ampalaya		38.65	5.15	184.96		✓	
Upo		32.3	4.31	179.60		✓	
Mustard		28.7	3.83	114.00		✓	
Radish		21	2.8	78.00		✓	
Cucumber		10	1.34	50.67		✓	
Total		750.09	100.00	4,486.14			

Source: Office of the City Agriculturist

*No planting during Dry season due to water problem

Prices vary according to supply of corn in the area

1 Ha=6 M

1 Pc = Php 4.00- P20/ kilo

Looking closely at the rice area production, San Pablo City decreased its area for irrigated rice from 560.97 has in 2011 to 530.83 ha in 2012. There was no planting during the dry season in Brgy. Sta. Isabel due to irrigation problems (insufficient irrigation water). Also, some rice areas were planted for citrus and other crops, such as vegetables instead while other rice areas were under fallow period. Another reason was the conversion agricultural land to residential/commercial purposes. However, from 2012 to 2013, an increase in area for rice was observed, from 530.83 ha to 549.17 ha due to planting of rice in areas that were formerly planted for vegetables.

Table 105 also shows an increasing trend in the volume of rice production from 2011 to 2013 with 1,862.52MT to 4,805.76MT. This can be attributed to the use of high-yielding varieties, irrigation rehabilitation, good weather condition, and adoption of package of technology (POT) recommended in rice farming. Primary and exclusive producers of rice in San Pablo are depicted in Map 23.

Table 105. Irrigated Rice Production in San Pablo City, 2011-2013

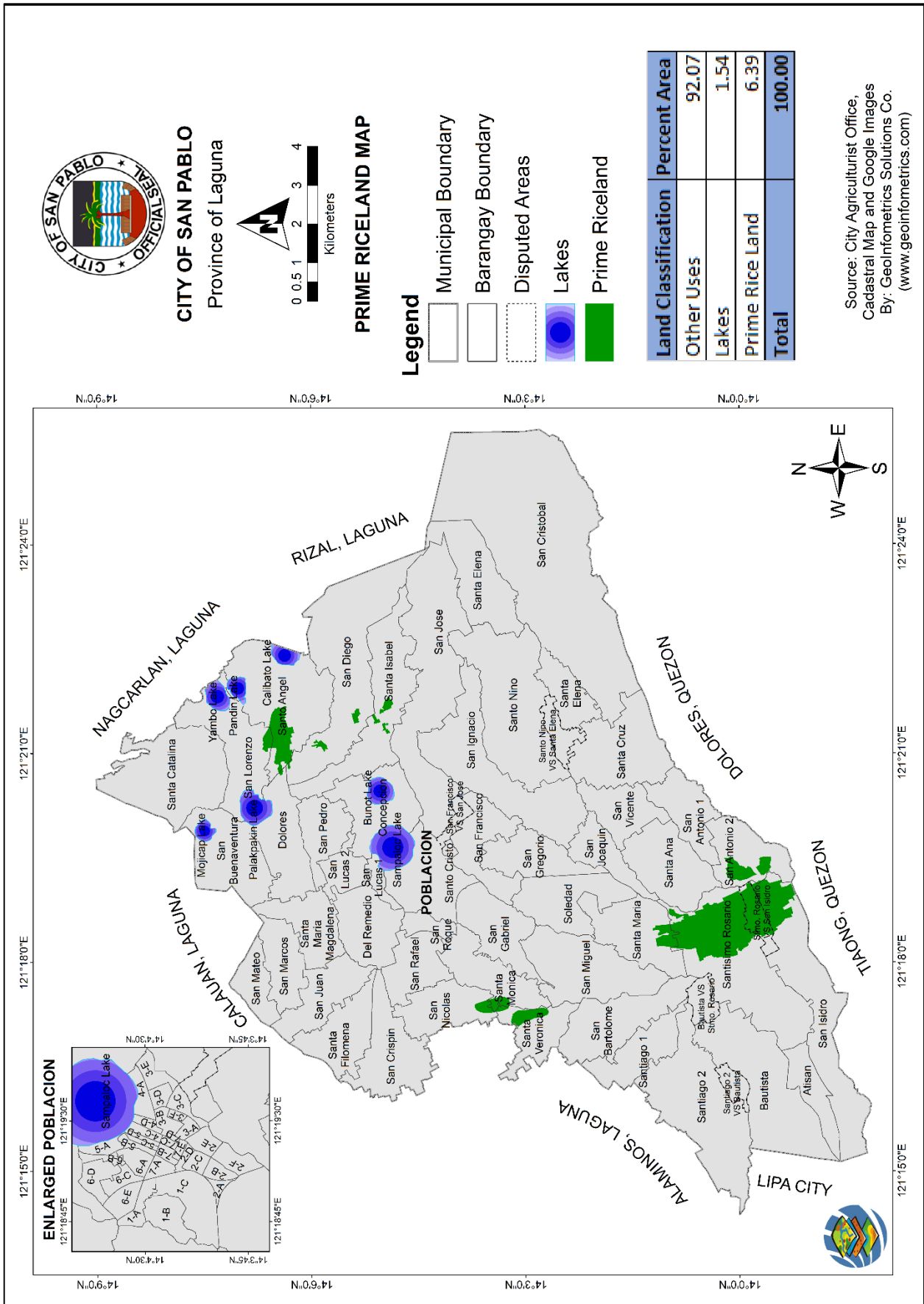
Barangay	Area			Volume of Production (MT)		
	2011	2012	2013	2011	2012	2013
San Antonio 2	49.0	47.0	49.0	118.44	236.52	434.24
San Isidro	129.50	124.00	129.50	311.22	530.87	1,127.28
Stmo. Rosario	195.63	185.08	195.38	670.25	724.20	1,800.23
Sta. Maria	48.90	48.36	48.90	215.77	193.86	514.45
San Lorenzo	22.00	22.00	22.00	78.90	84.70	170.43
Sta. Veronica	12.65	12.15	12.15	59.84	49.20	105.29
Sta. Isabel	21.54	15.58	15.58	83.36	48.66	40.94
San Diego	19.50	17.50	17.50	71.27	78.75	149.62
Sto. Angel	62.25	59.16	59.16	253.47	227.61	463.28
Total	560.97	530.83	549.17	1,862.52	2,174.37	4,805.76

Source: Office of the City Agriculturist



Aside from rice production, 35 barangays plant corn amounting to an area of 205.95 hectares and a production of 1,238.70 MT for 2011. From 2011-2012, there was an increase in area planted for corn, in support of the food security program of the government.

Farmers shifted from planting vegetables to corn by renting land (ariendo) because they found it more profitable. Consequently, there was an increase in the volume of production, from 1,238.70 MT to 1,285.70 MT. In 2012 to 2013, the same area was planted to corn. Yet, there was a decrease in production, 1,285.70 MT to 942.20 MT with a difference 342.28 MT. This was due to the bad weather condition and incidence of pests and diseases (Table 105).





Meanwhile, there was an increase in the area planted to fruit trees from 2011 to 2012 due to planting in expansion areas. That year, the Office of the City Agriculturist distributed fruit trees in the rural barangays. The decrease in the volume of production of lanzones and rambutan was due to adverse weather conditions. The said fruit trees are more vulnerable to changes in weather conditions. From 2012 to 2013, data showed a decrease in the area planted for fruit trees, but there was an increase in the volume of production. Conversion of some area and shifting of farmers to planting other crops were the factors why a decrease in the area was observed. However, the increase in production was attributed to the crop management.

Table 106 also shows that from 2011 to 2012, there was a decrease in area planted for vegetables. Same trend can be observed from 2012 to 2013. Consequently, there was a decrease in the volume of production. Factors affecting the decline in the area and production of vegetables were weather condition, incidence of pests and diseases, land conversion, and farmers shifting to other crops such as corn and cassava.

Table 106. Crop Production in San Pablo City, 2011-2013

Crop	Area			Volume of Production (MT)		
	2011	2012	2013	2011	2012	2013
Corn	205.95	223.45	223.45	1238.70	1285.70	942.20
Fruits						
Lanzones	1316.13	1447.74	1268.13	533.08	492.72	2328.27
Rambutan	578.08	635.89	578.08	1466.96	1281.57	1259.07
Banana	217.09	238.80	217.09	692.04	759.38	916.50
Papaya	106.44	110.44	106.44	64.68	67.11	329.5
Pineapple	382.87	377.00	172.86	1745.75	1718.98	2368.60
Total	2,600.61	2,809.87	2,342.6	4,502.51	4,319.76	7,201.94
Vegetables						
Eggplant	375.06	194.45	237.95	4518.44	1489.55	1817.86
Squash	231.60	179.50	158.45	2367.70	1124.00	810.25
String Beans	133.55	112.15	100.90	925.20	934.00	866.50
Snap beans	29.35	87.79	49.95	172.55	437.70	286.80
Pechay	108.00	45.55	18.75	828.00	341.62	97.50
Ampalaya	84.30	38.65	17.01	932.75	284.90	184.96
Upo	22.10	32.30	27.40	370.70	541.68	179.60
Mustard	67.39	28.70	21.50	245.85	109.20	114.00
Radish	76.00	21.00	17.00	274.50	112.00	78.00
Cucumber	0.50	10.00	9.00	6.00	52.00	50.67
Total	1,127.85	750.09	657.91	1,0641.69	5,426.65	4,486.14
Rootcrops						
Cassava		15.00	21.50		375.00	370.00
Ube		3.00	5.00		27.00	25.00
Total		18.00	26.50		402.00	395.00

Source: Office of the City Agriculturist



5.1.1.2 Livestock and Poultry Production

The progress of livestock and poultry industry in the City of San Pablo could be attributed to the combined efforts of all the stakeholders, and to the packages of technology (POT) being introduced by the Extension Workers which were adopted and applied by the livestock and poultry producers according to their needs, facilities, and capabilities under farm conditions. In many instances, the individual livestock producers initiated some researches to find out relevant information necessary for a more efficient production.

Production in 2011 could be considered low because no actual survey of animal population was conducted. Production only depended on the number of animals dewormed and vaccinated. In the year 2012-2013, an animal population survey was conducted. The same data in 2012 were observed in 2013 because livestock production in large animals was computed by 18 months per one head/offspring produced; while in swine production it was computed by the total number of sows x (10) ten piglets/sow x two(2) farrowing a year. In poultry production it was computed by the number of heads raised x six (6) cycles a year (Table 107).

Table 107. Livestock and Poultry Production in San Pablo City, 2011-2013

Livestock/Poultry	Heads		
	2011	2012	2013
Cattle	150	2,841	2,841
Carabao	-	570	570
Horse	-	462	462
Goat	130	886	886
Swine-sow	1,100	1,130	1,130
Swine-boar	300	30	30
Poultry – broiler	40,000	320,094	320,094
Poultry-layer	15,000	54,000	54,000

Source: Office of the City Agriculturist

Note: No data for production volume

Summarized in Table 108 are the barangays that contain homesteads for farm animals. As of 2013, there were 4,608 large farm animals in the City. San Pablo produces cattle meat the most as it constitutes a third of the population of the said animals. This also implies that there is a vast area for grazing. Goat meat is also produced in the City with over 600 heads in the City. Carabaos and horses are relatively of the same quantity which are useful in assisting human force in doing heavy farm labor.

**Table 108. Livestock Production in San Pablo City, 2013**

Barangay	Number of Heads					Production Market
	Carabao	Cattle	Goat	Horse	Sheep	
Sto. Angel	10					Local
San Buenaventura	10		18	25		Local
Dolores	43	68	28	42		Local
San Pedro	30	75	23	6		Local
San Lucas I		3	3			Local
San Lucas II	41	21	3	1		Local
Del Remedio	17	27	16			Local
Sta. Maria Mag.	20	80	11			Local
San Marcos	17	70	15	14		Local
San Mateo	15	2	5	26		Local
San Juan	18	16	7	17		Local
San Crispin	10	52	6	8		Local
San Nicolas	19	26	6			Local
Sta. Monica	32	86	10	5		Local
San Rafael	10	12	37			Local
San Roque		19	1			Local
Sta. Veronica	14	38	7			Local
San Miguel		54	10	3		Local
San Bartolome	36	230	17	13		Local
Santiago I	3	150	8	18		Local
San Gabriel	5	150	24	9		Local
Bautista	7	39	20	52		Local
San Isidro	28	162	57	23		Local
ATISAN		42	23	37		Local
Stmo. Rosario	17	84		9		Local
Sta. Maria	10	179	1	5		Local
Soledad	6	229	40	1		Local
San Gregorio	4	105	20			Local
San Joaquin	16	123	12		1	Local
San Cristobal	14	100	9	24		Local
San Antonio I	15	58	31			Local
San Antonio II	13	68				Local
Sta. Cruz (Putol)	9	37	2			Local
Sto. Niño	25	100	85	3		Local
Sta. Filomena	7	45		17		Local
San Vicente	7	104	15		13	Local
San Jose	20	59	28	8		Local
Conception	20	101	16	40		Local
San Diego	4	63	6	24		Local
Sta. Elena	2	55	6	32		Local
Total	574	2,932	626	462	14	4,608

Source: Office of the City Agriculturist

Note: No data for production volume



Broiler farms are located in Barangay Sto. Angel, San Nicolas, Sta. Monica, Sta. Veronica, Sta. Maria, San Cristobal, and San Diego with a total of 320,094 broiler heads and total production volume of 491,665. Additionally, there are four (4) layer farms located at Barangays Bautista, San Cristobal, Sta. Ana, and San Ignacio which have a total number of 51,300 layers and an equivalent production volume of 48,600 (Table 109).

Table 109. Production Volume for Poultry in San Pablo City, 2011-2013

Barangay	Heads		Production Volume			Production Market
	Broiler	Layer	2011	2012	2013	
Sto. Angel	350				537.6	Local
San Nicolas	18,000				27,648	Local
Sta. Monica	32,000				49,152	Local
Sta. Veronica	23,744				36,472	Local
Sta. Veronica	40,000				61,440	Local
Sta. Maria	30,000				46,080	Local
San Cristobal	30,000				46,080	Local
San Cristobal	12,000				18,432	Local
San Cristobal	20,000				30,720	Local
San Cristobal	20,000				30,720	Local
San Cristobal	20,000				30,720	Local
San Cristobal	24,000				36,864	Local
San Cristobal	14,000				21,504	Local
San Diego	6,000				9,216	Local
San Diego	30,000				46,080	Local
Total	320,094				491,665.60	
San Marcos		5,000	4,750	4,500	4,500	Local
Bautista		6,000	5,700	5,400	5,400	Local
San Cristobal		20,000	19,000	18,000	18,000	Local
Sta. Ana		3,000	2,850	2,700	2,700	Local
San Ignacio		20,000	19,000	18,000	18,000	Local
Total		54,000	51,300	48,600	48,600	

Source: City Agriculturist Office

Note: No data for production volume for heads for 2011 and 2012

Swine growers in the City collectively had a total number of heads of 9,944 for the year 2014. For the purpose of meat production, growers concentrate on growing fatteners than on other kinds such as boars. Table 110 summarizes the City's swine production by classification and barangay.

**Table 110. Swine Production in San Pablo City, 2014**

Barangay	Classification			Market
	Sow	Boar	Fattener	
Sto. Angel	5		6	Local
Sta. Catalina	8		50	Local
San Buenaventura	15	4	89	Local
Dolores	20		104	Local
San Pedro			48	Local
San Lucas I			18	Local
Del Remedio	8	7	59	Local
Sta. Maria Magdalena	42	5	185	Local
San Marcos	6		11	Local
San Mateo	2	8		Local
San Juan	310	11	3,092	Local
San Crispin	11	7	140	Local
San Nicolas	10		61	Local
Sta. Monica	9		131	Local
San Rafael			9	Local
San Roque			5	Local
Sta. Veronica	10		36	Local
San Bartolome			Unspecified	Local
Santiago I	16		46	Local
San Gabriel			12	Local
San Isidro	1		6	Local
Stmo. Rosario	96	3	402	Local
Sta. Maria	13	1	125	Local
Soledad	312	9	1,160	Local
San Gregorio	4		2	Local
San Joaquin	250	5	1,089	Local
San Cristobal	64		430	Local
San Antonio I			245	Local
San Antonio II	6		104	Local
Sta. Cruz			23	Local
Sto. Niño	1	10	15	Local
Sta. Filomena	31	1	46	Local
Concepcion	74		524	Local
Sta. Isabel	14		97	Local
San Diego	30		75	Local
Sta. Elena	30		30	Local
Total	1,398	71	8,475	9,944

Source: City Agriculturist Office

Livestock producers always search for new and better information related to their business. The knowledge they already acquired may not be adequate that is why they try adopting new technologies according to the ever changing conditions in the industry. The City Agriculturist Office supports the industry/producers by giving assistance through the provision of the new technologies.



5.1.1.3 Fisheries and Aquaculture

All of the seven lakes in San Pablo City are being utilized for aquaculture production. However, without Yambo Lake, only six have records for production. Overall, among the six lakes, Sampaloc Lake has produced the greatest from aquaculture with over 1,300,000 kilograms of fish which is equivalent to Php 110 Million. More than half of Sampaloc's produce, Palakpakin Lake is the second largest contributor to the City aquaculture with Php 58.5 Million pesos worth of fish. Lake Bunot produces Php 40.1 Million worth of fish while Lake Mohicap produces Php 12 Million. Lake Pandin produces the least with only 65,000 kg of fish (Table 111).

Table 111. Aquaculture Production in San Pablo City, 2013

Fishing grounds/Barangay		Production		Production Market	
		Volume (kg)	Value (Php)	Local	Export
Inland					
1. River					
2. Lakes					
Sampaloc	IV-A	129,456	10,356,480	✓	
	IV-C	211,072	16,885,760	✓	
	V-A	67,545	5,403,648	✓	
	San Lucas	802,104	64,168,320	✓	
	Concepcion	175,900	14,072,000	✓	
Total		1,386,077	110,886,208		
Bunot	Concepcion	502,400	40,192,000	✓	
Calibato	Sto. Angel	89,600	7,168,000	✓	
Pandin	Sto. Angel	65,600	5,248,000	✓	
Palakpakin	San Buenaventura	21,390	1,711,200	✓	
	San Lorenzo	47,200	3,776,000	✓	
	Dolores	4,800	384,000	✓	
Total		73,390	58,479,200		
Mohicap	San Buenaventura	150,400	12,032,000	✓	

Source: City Agriculturist Office
Average Stock Density= 4,000 fingerlings/100 sqm.
Average Yield= 5 per kilo
Average Cropping= 2x a year
Average Amount per Kilo= P80.00



5.1.1.4. Area Utilization of Significant Agriculture Activities

Based on the different crop production activities from 2011 to 2013, the High Value Commercial Development Program (HVCDP) occupied the largest area: 3,728.46 has, 3,559.96 has, and 3,027.01 has., respectively; next was the rice crop, 560.97 has., 530.83 has and 549.17 has., respectively and corn with the least areas utilized: 205.95 has to 223.45 has.

Inland fishery in the seven lakes of San Pablo City is a major source of income of the fisher folks in the area. Yambo Lake is occupied by the fisher folks of Nagcarlan while in Calibato Lake, only 5,600 sqm are occupied by fisher folks of San Pablo City.

Of the total lake area of the five lakes (212.5 has) namely Sampaloc, Pandin, Bunot, Mohicap, and Palakpakin, only 17.89 hectares are occupied by fish cages or 8.42% which is within the limit set forth by LLDA Resolution 70 which states that only 10-12% of the total surface area of the lakes shall be occupied (Tale 112).

Table 112. Comparative Area Utilization of Significant Agriculture Activities in San Pablo City, 2011-2013

Activity	2011		2012		2013	
	Area (ha)	(%)	Area (ha)	(%)	Area (ha)	(%)
Crop Production						
HVCDP	3,728.46	21.27	3,559.96	20.31	3027.01	17.27
Corn	205.95	1.175	223.4	1.275	223.45	1.275
Rice	560.97	3.201	530.83	3.029	549.17	3.133
Fishing						
Sampaloc	99.21	8.45	8.80	8.45	8.80	8.45
Bunot	38.16	11.47	3.14	10.29	3.14	10.29
Calibato	27.18	1.33	0.56	1.33	0.56	1.33
Pandin	23.54	2.0	0.41	2.0	0.41	2.0
Palakpakin	54.39	11.93	4.61	10.72	4.61	10.72
Mohicap	20.49	6.48	0.94	6.48	0.94	6.48

Source: City Agriculturist Office

5.1.2 Forestlands

The City's forestry profile could be well described by way of its land classification map of alienable and disposable land such as production and protection areas and Presidential Proclamation on its forest reservation and volume of economic activities.



5.1.2.1 Area and Location

The alienable and disposable land of San Pablo City covers an area of 17,665.82 hectares located in different parts of the City with the exception of some parts of barangays Santa Catalina, Santiago II, Bautista, Atisan, San Cristobal, San Jose, Santa Isabel, and San Diego. This is equivalent to 89.42% of the total land area of the City of 19,756 hectares (Table 113).

The City has a total forestland of 1,781.99 ha, composed of forest cover and protected forests. Forest cover are located in mountainous part of Barangays Santa Catalina, Santiago II, Bautista, Atisan, San Cristobal, San Jose, Santa Isabel, and San Diego with a total land area of 896.41 hectares or 4.54% of the total forestland. This forest cover is not under NIPAS which can be converted into other uses such as production forest. On the other hand, protected forest in San Cristobal (452.15 ha.) under the Mount Banahaw-San Cristobal Protected Landscape and under Malabanban Watershed Forest Reserve in Sto. Angel and San Diego (384.21 ha) cannot be converted into other land use and cutting of trees for timber production is not allowed.

Currently, San Pablo has no identified production forest, however, in the event that there are existing alienable and disposable lands 18% in slope or over which, by operation of law (C.A. No. 141, as amended by Public Land Act), has to be reverted to forestlands and can be classified as production forest within the City.

**Table 113. Area and Location of A/D Land and Forestland in San Pablo City**

Land Classification	Location	Area (ha)	Percentage
Alienable and Disposable Land (A & D) ^a	Situated in different parts of the City except in some parts of Barangays Santa Catalina, Santiago II, Bautista, Atisan, San Cristobal, San Jose, Santa Isabel, and San Diego	17,665.82	89.42%
Forestlands			
Forest cover ^a	Some parts of barangay Santa Catalina, Santiago II, Bautista, Atisan, San Cristobal, San Jose, Santa Isabel, San Diego	945.63	4.79%
Protection Forest ^b	San Cristobal	452.15	2.29%
Protection Forest ^c	Sto. Angel and San Diego	384.21	1.94%
Total Forestlands		1,781.99	9.02%

Sources of data: a-GIS computed area; b-as per Pres Proc. No.82, 1999; c-GIS computed based on PENRO, Los Baños Laguna.

Note: A & D: land suitable for different land uses and human activities except slope greater than 18% Forest cover: Non-NIPAS, can be converted into other uses

5.1.2.2 Volume of Production by Forest Concessionaire

Based on Table 114, there were no logging activities for forest concessionaires allowed in the forests of San Pablo City. Sitio Calo in Brgy. San Cristobal is under the domain of Mount San Cristobal. The said mountain is protected by the NIPAS Act which does not permit uncontrolled logging and harvesting exercises. The Malabanban Cabunsod Watershed is also secured from logging activities due to its importance in maintaining the water supply of the City.

Table 114. Volume of Forest Economic Activities in San Pablo City, 2013

Year	Location	Agency	Area Covered (Hectares)	Species Planted	Estimated Number Of Workers	Other Forest Products Derived	Remarks
2012	Sitio Calo Brgy. San Cristobal San Pablo City	CENRO/PENRO	100	Narra Molave Dao & other indigenous species	16		-For Protection - 80% of the Area covered planted this year affected by forest fire
	Malabanban Cabunsod Watershed	Different Sector of	80	Indigenous Species			-City Government offices and



Year	Location	Agency	Area Covered (Hectares)	Species Planted	Estimated Number Of Workers	Other Forest Products Derived	Remarks
		Society					private companies, civic organizations and academe
2013	Sitio Calo Brgy. San Cristobal	CENRO/PENRO	60	Indigenous Species	16		-For protection
2014	Sitio Calo Brgy. San Cristobal						-No establishment but continuous maintenance
	Malabanban Watershed	San Pablo City Water District					

Source: PENRO, Los Baños, Laguna

5.1.3 Support Systems

5.1.3.1 Physical Infrastructure

As of 2013, there are 18 agricultural support facilities being distributed to select beneficiaries in the City (Table 115). These select beneficiaries usually are farmers associations. This distribution is part of the administration's effort of farm mechanization which aims to minimize pre- and post-harvest in rice production losses due to manual and human processes. These projects implemented by the local government unit are in cooperation with the Department of Agriculture. Some of the post-harvest machineries and facilities are multi-purpose drying pavement, flatbed dryer, and *trapal*. Irrigational rehabilitation efforts were also carried out so that the utilization of water for agriculture is optimized. To increase access of consumers to farmers and vice versa, farm to market roads were also constructed. This also allows farmers to single handedly control the selling price of their products.

**Table 115. Existing Agricultural Support Facilities and Service in San Pablo, 2013**

Post-Harvest Facilities and Support Services	Location	No.	Type/Capacity	% Utilization	Remarks (whether operational, needs, repair, etc.)
Milling	San Ignacio		Rice Mill	100%	Operational
	Stmo. Rosario		Rice Mill	100%	Operational
	San Diego		Rice Mill	100%	Operational
Multi-Purpose drying pavement	Stmo. Rosario		Rice	100%	Operational
Flatbed Dryer	San Isidro		120 bags/load	70% seasonal	Operational
	Stmo. Rosario		120 bags/load	70% seasonal	Operational
Market Centers	Paterno St.			100%	Operational
Warehouse	San Ignacio		NFA Rice	100%	Operational
Granulator cum shredder	Del Remedio			100%	Operational
Collapsible Dryer	Sn. Diego, Sta. Maria	3			Operational
	Sn. Antonio 2				
Knapsack sprayer	Sta. Isabel				Operational
Hand Tractor	Sta. Maria	1			Operational
Drum Seeder	Sta. Maria				Operational
Shallow Tube Well	San Nicholas	2			Operational
Rice cutter/harvester	Sn. Antonio 2, Sta. Maria	3			Operational
	Sn. Diego, Sta. Maria				
Screen House	Sn. Crispin	1			Operational
Green House	Concepcion	10			Operational
	Sn. Juan	1			Operational
	Sn Crispin	1			Operational
Tractor	Sn. Jose	1			Operational
Irrigational Rehab	Sto. Angel, Sn. Lorenzo	5			Operational
	Sn. Isidro, San Antonio 2				
	Stmo. Rosario				
Farm to Market Road	San Antonio 2, Sto. Niño				
Trapal	Rice Area of San Pablo	50			Operational

Source: City Agriculturist Office



5.1.3.2 Credit and Finance

Currently, the City Agriculture Office has no credit and financial program being implemented for the benefit of its farmers. They only issue a certificate to the farmers which state that a particular farmer is a legitimate farmer of San Pablo City. This certificate is being used as supporting document when a farmer wants to apply loans to rural banks. Although there are other financial institutions such as commercial banks, cooperatives and microfinance in the City, there is no concrete data if farmers are also acquiring loans from these institutions. Given that financial capital is an important input in farming, the City Government should provide a more accessible and affordable credit and financial programs to its farmers.

5.1.3.3 Agricultural and Forest Support Program and Technical Assistance

In cooperation with the City Agricultural Office and the Department of Agriculture, the local government of San Pablo City has implemented several programs that seek to improve the agricultural production of the City since 2013. Most of these projects are still in progress as of 2014.

Such efforts in increasing agricultural production are the Plant Now-Pay Later scheme, providence of technical assistance in growing rice, corn, coffee, pineapple and the likes, and dispersal of seeds (e.g. vegetable, rice, and corn). Dispersal of essential crops such as garlic, ubi, and arrowroot were also implemented in rural areas. To aid production, agricultural facilities and equipment were also dispersed to farmers. Specific irrigation canals were also rehabilitated and constructed.

In addition to the dispersal of plant-based commodities in rural areas, farm animals were also dispersed. Programs such as deworming and vaccination can also be availed by growers who benefited from the animal dispersal program. To empower the farmers, there was the establishment of the Local Agricultural Board and the Farmers Information Services (FITS) Center. Trainings and seminars that aim to empower the farmers were also performed with topics related to coconut production, coffee production, organic vegetable growing, Food Always In The Home (FAITH), and malunggay processing.

Efforts that promote the integrity of the environment were also made such as clearing and cleaning of the seven lakes and tree planting. A more



detailed look into the Government's projects for agriculture is described in Table 116.

Table 116. Agricultural Related Projects Approved/Funded for Implementation in San Pablo, 2013

Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
Rice-Community Seed Banking*	Sto. Angel San Lorenzo Stmo. Rosario	Govt (CAO/DA-Reg. 4A)	Wet Season 2013	On-going
Rice-Plant Now Pay Later*	Sto. Angel San Lorenzo	Govt (CAO/DA-Reg. 4A)	Wet Season 2013	On-going
Promotion of Utilization of Certified Seeds*	In all rice producing barangays	Govt (CAO)	2013	On-going
Repair/rehab of irrigation canal	Sta. Veronica	Govt (CAO/DA-Reg. 4A)	2013	Jan 2014
A. Corn Production* (with inputs assistance-corn seeds) A) OPV Lagkitan a) Yellow Corn B. Green Corn Green Corn 575 Sweet Grande	Sta. Maria Magdalena Sta. Monica Santiago 2 San Diego Sta. Ana San Nicolas San Juan San Ignacio San Francisco San Jose San Ignacio San Nicolas	Govt (CAO/DA-Reg. 4A)	2013	On-going
Arrowroot planting materials dispersal and production*	San Diego	Govt (CAO/STIARC)	2013	On-going
Lanzones Rehab (with inputs assistance-fertilizers)*	Sta. Filomena Sta. Catalina San Pedro Sta. Isabel San Cristobal San Joaquin San Antonio 2 Sta. Maria	Govt (CAO/LAES)	2013	On-going



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
	San Miguel San Bartolome			
Coffee seedlings dispersal and production*	19 rural barangays	Govt (CAO/OPAg Laguna)	July 2013	On-going
Pineapple Production* (with inputs assistance-hose and drums for irrigation)	San Marcos San Mateo San Juan San Crispin San Pedro Del Remedio Sta. Filomena Sta. Maria Magdalena San Nicolas	Govt (CAO/DA-Reg. 4A)	2013	On-going
Ubi production* (with inputs assistance-ubi setts)	San Marcos Santiago I Santiago II	Govt (CAO)	2013	On-going
Garlic Production Demo* (with inputs assistance-seeds)	San Nicolas Sta. Catalina San Crispin	Govt (CAO/DA-Reg. 4A)	Nov. 2013	March 2014
Fruit Trees Dispersal* (lanzones, rambutan, guyabano) and production	Soledad Sta. Maria San Diego San Miguel San Rafael San Lucas II Sta. Filomena San Nicolas Sta. Catalina San Buenaventura San Vicente San Antonio II Concepcion San Marcos Sta. Maria Magdalena Sta. Isabel Sta. Cruz Putol San Joaquin Stmo. Rosario San Crispin Sta. Monica Sto. Niño San Bartolome Bagong Bayan San Jose	Govt (CAO/OPAg Laguna, DA-Reg. 4A)	2013	On-going



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
	Dolores Sta. Elena			
Vegetable seeds dispersal/distribution* (assorted vegetable seeds) and production	San Ignacio San Nicolas Soledad BJMP San Pablo San Isidro Del Remedio Sta. Elena San Nicolas San Roque Fule Sahagun San Juan San Rafael San Lucas I San Antonio II San Marcos Sta. Isabel Sta. Maria Magdalena San Pedro Dizon Natl High School San Cristobal Concepcion Sta. Maria Central Elem. School San Gabriel DOJ SPC San Crispin III-D Sto Cristo II-B Bautista San Ignacio	Govt (CAO/DA-Reg. IV-A/OPAg, Laguna)	2013	On-going
Fingerlings dispersal* (lake seeding)	In all 7 lakes	Govt (CAO/LLDA)	2013	On-going
Tree planting	Periphery of 7 lakes along eroding creeks of Sta. Isabel, mountain areas of San Mateo and upland farms in San Marcos and San Jose	Govt (CAO) Private (FARMC)	2013	On-going
		Govt (CAO)	2013	On-going



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
Vermicomposting	San Buenaventura	Govt (CAO)	2013	On-going
Hemosep Vaccination	San Gabriel	Govt (CAO)	2013	On-going
Hemosep Vaccination	San Diego Sta. Isabel San Lorenzo Sta. Maria Sta. Monica Sto. Niño Sta. Veronica Concepcion Soledad Del Remedio	Govt (CAO)	2013	On-going
Deworming of Large Ruminants	San Diego Sta. Isabel San Lorenzo Sta. Maria Sta. Catalina Sta. Veronica Concepcion Soledad San Gabriel	Govt (CAO)	2013	On-going
Conducted trainings/seminars		Govt (CAO)	2013	
-Palay Check Farmers Field School	Sto. Angel-venue			
-One day Coffee Production Seminar	One Stop Shop-venue			
-Uraro Production Seminar	San Diego-venue			
-Vermicomposting Seminar	San Pedro-venue			
-Organic Vegetable Production	BJMP San Pablo-venue			
-Food Always In The Home (FAITH) Seminar	San Marcos-venue			
-Malunggay Processing	San Marcos-venue			
-Bamboo Propagation	San Marcos-venue			



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
-Farmers Field School on Coffee	Sto. Angel			
Establishment of the Local Agriculture Organic Board	SPC	Govt (CAO)	2013	Maintained to 2014
Establishment of the Farmers Information Services (FITS) Center	CAO	Govt (CAO/ATI)	Sept. 21, 2012	Maintained to 2014
Riprap irrigation canal (boulder stone)	Purok 5, San Antonio 2	Govt (CAO/DA Reg. IV-A)	May 2013	June 2013
Construction/rehab of irrigation canal	Sto. Angel San Lorenzo	Govt (CAO/DA Reg. IV-A)	Sept. 2013	On-going
Construction of main open canal for irrigation (riprap)	Banadero Bridge, Stmo. Rosario	Govt (CAO/DA Reg. IV-A)	2013	
Vermiworm Distribution	Sta. Veronica San Diego Sta. Elena	Govt (CAO/ATI)	May 14, 2013	
Vermicomposting*	Sta. Veronica San Diego Sta. Elena San Lorenzo Balok, San Ignacio	Govt (CAO)	Jan. 2013	On-going
Assorted vegetable seeds distribution	In different rural barangays	Govt (CAO)	Jan. 2013	On-going
Vegetable production in greenhouse as given input*	San Crispin Concepcion	Govt (CAO/DA Reg. IV-A)	Jan. 2013	On-going
Vegetable production * (large scale)	Rural Barangays	Govt (CAO)	Jan. 2013	On-going
Vegetable production * (backyard-FAITH)	Rural & Urban	Govt (CAO)	Jan. 2013	On-going
Corn Seeds (Lagkitan) a.) Distribution for production b.) Corn production	31 rural brgys. (30 sacks @ 18k/sack)	Govt (CAO)	June 5, 2013 July 2013	July 18, 2013 On-going
Corn Derby Corn Field Day	Santiago 2	Govt (CAO/OPAg)	March 2013 May 9, 2013	May 2013
Corn FFS*	San Ignacio	Govt (CAO/OPAg)	Sept 2013	On-going
Coffee seedlings dispersal & production	In 6 barangays (750 seedlings)	Govt (CAO/DA Reg. IV-A)	2013	On-going
Animal Vaccination - Hemosep Vacc.	In rural barangays 231 heads	Govt (CAO) Govt (CAO)	2013	On-going



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
-Other treatments & castration	24 heads			
Animal Deworming	191 heads	Govt (CAO)	2013	On-going
Animal Dispersal* -4H Dispersal	Sta. Elena 4H Club	Govt (CAO/ATI)	Feb. 2013	On-going
-Cattle Fattening	BAFC Sta. Elena	Govt (CAO/ATI)	2013	
-Animal Redispersal	In Rural Barangays (Sta. Monica, Soledad, Stmo. Rosario, Sta. Maria, Sta. Veronica, San Antonio 2, San Isidro, San Miguel, San Nicolas, San Pedro, San Jose, Stmo. Rosario)	Govt (CAO)	2013	
Arbor Day	Sta. Catalina	Govt (CAO)	June 2013	
SLFARMC Tree Planting	Sampaloc-738 seedlings Palakpakin-1,050 Mohicap-400	Govt (CAO)	Jan. 08, 2013	
Seven (7) Lakes Clearing	7 Lakes	Govt (CAO)	Feb. 2013 Sept. 2013	June 2013
Lake seeding	7 Lakes	Govt (CAO)	May 10, 2013	
Tilapia Festival	Sampaloc Lake	Govt (LGU/CAO)	May 31, 2013	
Conducted Seminars/Trainings	CAO-venue	Govt (CAO)	Feb. 08, 2013	On-going
-Coconut Production Seminar	In 35 Barangays	Govt (CAO)	Feb. 2013 – Mar. 2013	
-Coconut Scale Insect Information Drive	San Antonio 2-Venue	Govt (CAO)	June 28, 2013	



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
-IPM Refresher Course in Rice Production	Frago's Farm, Sta. Elena-venue	Govt (CAO)	July 2013	
-FFS in Organic Inputs Production & Utilization	SPC General Hospital	Govt (CAO)	Feb. 13, 2013	
-Farmers Forum	Del Remedio	Govt (CAO)	Feb. 20, 2013	
-FAITH Seminar	Santaigo 2	Govt (CAO)	Feb. 27, 2013	
-Ubi production and Management	Sto. Angel	Govt (CAO)	Feb. 22, 2013	
-Pest Management Seminar on Coffee	CAO-venue	Govt (CAO)	May 22, 2013	
-Geo-tagging Seminar				
Expository Tour	Kahariam Farms, Batangas and BAI, Tiaong	Govt (CAO)	Apr. 23, 2013	
Talong and Pinakbet Festival	Brgy. VI-D	Govt (CAO)	June 24, 2013	
Other Livelihoods Projects* (Polvoron making, Buttered puto making)	Sta. Maria Sta. Elena RIC in San Nicolas & San Lorenzo	Govt (CAO)	2013	On-going
Rice Vending & Selling of food	San Cristobal	Govt (CAO)	April 2013	
Vegetable Gardening Project (with contest)	Rural & Urban Barangays	Govt (CAO)	Oct. 2013	
Mushroom Production				
Bignay Production Demo	San Lorenzo San Mateo Sta. Veronica Sta. Elena	Govt (CAO)	June 2013	On-going
Lanzones Rehab	Rural barangays	Govt (CAO/LGU)	Sept. 2013	On-going
Rambutan Rehab	Rural barangays	Govt (CAO/LGU)	Sept. 2013	On-going



Name/Type of Project	Location	Proponent (Gov't/Private/Others)	Estimate Start Date	Estimate Date of Completion
Rubber Trees Production Demo	San Diego	Govt (CAO/DA-Reg. IV-A)	Sept. 2013	On-going
FishR Program	7 Lakes	Govt (CAO/BFAR)	Sept. 2013	On-going

Source: Farmer Field School

Note: No data for Type

* With Technical Assistance

5.1.3.4 Employment and Income by Activity

Presented in Table 117 are the minor and major agricultural occupation groups in San Pablo City for the year 2013. There are 3,206 individuals who are employed under the agricultural sector of the City. The biggest chunk of employment in the agricultural sector is fruit tree farmers with 1,275 people who are residing in rural barangays. Some of their products are lanzones, rambutan, papaya, and citrus. The next four contributors to the agricultural sector are vegetable farmers (469), registered fish cage farmers/operators (408), rice farmers (374), and corn farmers (305). These five groups can be classified as the major groups in the agricultural sector of the City.

Table 117. Major and Minor Agricultural Occupations in San Pablo City, 2013

Major & Minor Occupation Groups	Location Rural	Number
Vegetable Farmers	Various barangays	469
Orchid Farmer	Various barangays	1
Ornamental & Other plant grower (Nursery)	Various barangays	3
Fruit trees grower(Nursery)	Various barangays	6
Fruit trees Farmers	Various barangays	1,275
Coffee Farmers	Various barangays	38
Corn Farmers	Various barangays	305
Root Crops farmer(cassava)	Various barangays	94
Gabi, Sweet potato,	Various barangays	16
Pineapple	Various barangays	173
Spices(garlic, sili ,ginger, spring onion)	Various barangays	43
Rice Farmers	San Antonio 2	43
	San Isidro	60
	Stmo. Rosario	121
	Sta. Maria	32
	San Lorenzo	21
	Sta. Veronica	8
	Sta. Isabel	19
	San Diego	21
	Sto. Angel	49
Total		374



Major & Minor Occupation Groups	Location Rural	Number
Fish cage farmers/operator (Registered only)	Palakpakin Lake	80
	Calibato Lake	49
	Mohicap Lake	20
	Yambo Lake	5
	Bunot Lake	75
	Sampaloc Lake	165
	Pandin Lake	14
Total		408
Fishpond farmer/operator	San Buenaventura	1
	Total	3,206

Source: City Agriculturist Office

Rice fields are spread across nine (9) barangays in San Pablo, namely, San Antonio 2, San Isidro, Sto. Rosario, Sta. Maria, San Lorenzo, Sta. Veronica, Sta. Isabel, San Diego and Sto. Angel. Combined, the nine (9) barangays have 374 active farmers. All seven (7) lakes are utilized for aquaculture. The largest aquaculture in San Pablo is Sampaloc Lake which has 408 workers in it. In contrast, the minor groups include ornamental plant growers, coffee farmers, root crop farmers, and growers of spices.

5.1.4 Areas Covered by National/Local Policies

5.1.4.1 Network of Protected Areas for Agricultural and Agro – Industrial Areas for Development (NPAAAD)

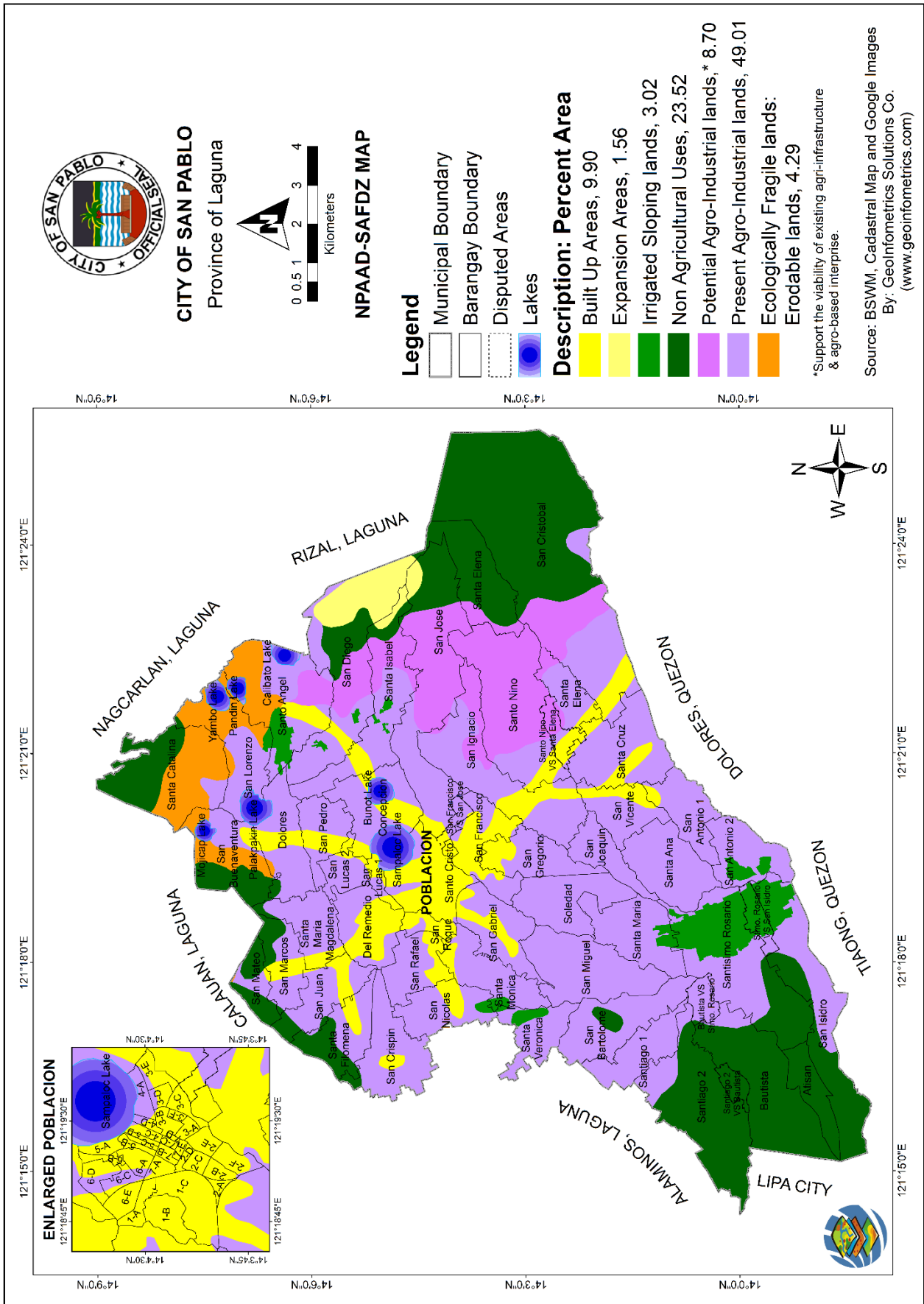
Republic Act (RA) 8435 or the Agriculture and Fisheries Modernization Act (AFMA) of 1997 mandated the identification of areas for agricultural and agro-industrial development. Collectively referred to as the NPAAAD, these areas were envisioned to promote efficient utilization of land for agriculture and agro industrial development and promote sustainable agricultural growth. More specifically, the NPAAAD covers: (1) all irrigated areas and all irrigable lands;(2) all alluvial flood plain lands; (3) agro-industrial croplands; (4) highland or areas located at an elevation of 500 meters or above and have the potential for growing semi-temperate and high value crops; (5) all ecologically fragile agricultural lands; and (6) mangrove areas and fish sanctuaries. Map 24 shows areas in the City with irrigated sloping land and ecologically fragile lands where careful land management is needed. Non-agricultural uses which



pertain to forestlands are also identified. This includes two protected forests in San Cristobal under the Mount Banahaw- San Cristobal Protected Landscape and in Sto. Angel and San Diego under Malabanban Watershed Forest Reserve with the purpose of protecting, maintaining and improving its water yield and providing restraining mechanism for inappropriate forest exploitation and disruptive land uses.

5.1.4.2 Strategic Agriculture and Fishery Development Zones (SAFDZs)

SAFDZs are areas within the Network of Protected Areas for Agricultural and Agro-Industrial Areas for Development (NPAAAD). These strategic zones look into improving the production, agro processing, and marketing activities to help develop and modernize, with support from the local government, the agriculture and fisheries sector of San Pablo in an environmentally and socio-culturally sound manner. Being major seven major surface water resources in the City, there are equivalent seven (7) SAFDZs located along the seven (7) lakes. The observance of aquaculture in every lake makes SAFDZs essential in mitigating the pollutive effects of anthropological activities. Areas under the said strategic zones are protected from land conversion as they help in the local government's undertaking in food self-sufficiency. Map 24, shows where present and potential agro-industrial lands can be strategically located.





5.1.4.3 CARPable Areas/Lands

Agrarian reform refers to the redistribution of lands, regardless of crops or fruits produced by farmers and regular farm workers who are landless, irrespective of tenurial arrangement, to include the totality of factors and support services designed to lift the economic status of the beneficiaries and all other arrangements alternative to the physical redistribution of lands, such as production or profit sharing, labor administration and the distribution of shares of stock, which will allow beneficiaries to receive a just share of the fruits of the lands on which they work.

On September 22, 1972, then President Ferdinand E. Marcos decreed and ordered the Emancipation of tenants from the bondage of the soil transferring to them the ownership of the land they till and provided therefore under PD No. 27.

Under this program, all tenants-farmers of private agricultural lands primarily devoted to rice and corn under the system of share-crop or lease-tenancy, whether classified as landed estate or not shall be deemed owner of a portion of land they till constituting a family-size farm of five hectares if not irrigated; and three (3) hectares if irrigated; and the landowner may retain an area of not more than seven hectares which he will now cultivate.

In the City of San Pablo, a total of 31 farmer beneficiaries benefitted from this program, wherein a total of 38.0650 hectares of rice land located at Brgy. Stmo. Rosario had been distributed.

After the Marcos administration when Mrs. Corazon C. Aquino won in the 1986 Presidential election, a relative program was launched called the Comprehensive Agrarian Reform Program (CARP) under the R.A. 6657 which aims to promote social justice and industrialization and provide the mechanism for its implementation and for other purposes by giving the right to farmers and regular farm workers to own a portion of the land they till which covers all public and private agricultural lands.

Farmer beneficiaries under this program have the right to own a maximum of three (3) hectares of agricultural land while land owners may retain not more than five (5) hectares to directly manage or till. Moreover three (3) hectares may be awarded to each child of the landowner, subject to the required qualifications. San Pablo City, under this program, has acquired and distributed a total of 623.3255 hectares of public and private lands to farmers-beneficiaries which totalled to 440 in 26 different barangays.



As of the latest data, there are a total of 1,924 farmer beneficiaries in San Pablo City equivalent to 1,972.54 hectares of CARPable lands spread across 44 barangays while there are 425.75 hectares of CARP areas being leased to 366 beneficiaries (Table 118).

Table 118. Barangays with CARP Areas in San Pablo City

Barangay	Total Area (has.)	No. of ARBs
Bagong Bayan	10.3335	6
Bautista	204.5744	135
Concepcion	13.2701	24
Dolores	17.1933	18
San Antonio 1	32.4491	46
San Antonio2	28.9951	107
San Bartolome	33.6954	58
San Buenaventura	15.6048	13
San Buenavista	1.397	2
San Crispin	1.0441	2
San Cristobal	491.5566	481
San Diego	4.2139	6
San Francisco	1.5560	3
San Gabriel	0.8487	1
San Gregorio	4.3879	4
San Ignacio	67.3922	96
San Isidro	66.3924	62
San Joaquin	10.666	6
San Jose	111.571	107
San Juan	4.657	10
San Lorenzo	23.312	36
San Marcos	7.0595	6
San Mateo	2.8163	5
San Miguel	98.7896	67
San Nicolas	12.9801	15
San Pedro	0.2915	1
San Rafael	1.4739	8
San Vicente	10.2627	12
Sta. Ana	55.7295	51
Sta. Catalina	28.9447	20
Sta. Cruz	27.8188	26
Sta. Elena	37.3175	26
Sta. Filomena	7.3664	13
Sta. Isabel	63.9918	50
Sta. Maria	36.9162	34
Sta. Maria Magdalena	4.5216	2
Sta. Monica	3.3311	7
Sta. Veronica	2.1947	3
Santiago 1	17.5322	18
Santiago II	16.4954	25
Stmo. Rosario	271.4264	198
Sto. Angel	56.7615	65



Barangay	Total Area (has.)	No. of ARBs
Sto. Niño	52.3816	37
Soledad	11.0229	12
Total	1,972.5364	1,924
Number of Leaseholders		
Barangay	Total Area (has.)	No. of ARBs
San Isidro	43.0300	34
Sto. Angel	29.1436	51
San Lorenzo	10.354	15
Stmo. Rosario	215.2164	160
Sta. Maria	47.5031	39
San Antonio	39.7378	42
San Diego	4.0244	3
Sta. Veronica	8.7000	6
San Lorenzo	1.9500	2
San Crispin	0.6000	2
Sta. Filomena	11.6838	9
San Gabriel	5.5000	1
Bautista	4.3045	1
San Jose	4.0000	1
Total	425.7476	366

Source: Provincial Agrarian Reform Office

5.1.5 Current and Projected Needs

Pressing Development Problems/Issues and Constraints

Several problems and issues in the agriculture were identified by the CPDO which to be considered and addressing in the coming years some of these are:

1. Decreasing land area for food production: Although the City is still predominantly an agricultural City, there was an observed decrease in productive land devoted to farming. This is due to increasing urbanization and commercialization in the City.

2. Continous illegal conversion of land: There are instances that land is being converted into other use without the permission of the City Government. Land conversion must be monitored particularly those agricultural land under NPAAAD, SAFDZ, and CARP as these land as strictly devoted to protection and production purposes.

3. Post-harvest losses: Given that agricultural products are highly perishable goods, high post-harvest losses is expected without adequate post-harvest facilities and sure market where products can be sold. Lack of Farm-to-market road is another constraint which causes delivery of produce to the targeted markets.



4. Old generation of farming sector: The agriculture sector has an ageing population which reveals that farming is no longer a chosen livelihood among young generation. Farming must be promoted among young adult in order to support the food requirements of the booming population of the City.

5. Climate change: Climate change is a global threat to farming. Mitigation and adaptation measures must be adopted by the agriculture sector in order to be resilient to the damaging impacts of climate change

6. Poor marketing strategy: Agricultural products must be marketed strategically in order to command a good price in the market. Farmers must be trained to be sellers of their own produce rather than relying on middlemen.

7. Lake resources depletion and degradation: Fish cages and its operations must be regulated in the lakes in order to about water pollution in the lake.

8. Lack of agricultural extension workers: Empowering the local farmers through knowledge dissemination is one way of inclusive growth. Without an adequate number of agricultural extension workers, the City cannot carry out its role in providing technical knowledge for the farmers.

9. Lack and absence of essential agricultural facilities: In aid of the agriculturists in the City, facilities such as vehicles to haul seeds and other equipment, office supplies, and a permanent office is in immediate need. This so the CAO can maximize its full function.

Production/Supply Projection

Based on Table 100, current production level of major crops such as rice and corn are estimated at 4,805.76 MT and 942.20 MT, respectively. The current production is relatively low. Comparing the projected production with the current volume of production of these two major crops, there is still around 30-37% unrealized production due to various constraints such climate change, soil condition, poor seed quality, and among others limit crop productivity. However, with right interventions and support to increase the farm productivity, the City can expect an increase in volume of production, given their existing area of production.

Production projection is as follows:

Rice: total area planted x potential rice yield x 2 cropping seasons

$$549/17 \text{ ha.} \times 7 \text{ MT/ha} \times 2 = 7,688.38 \text{ MT}$$



Corn: total area planted x potential rice yield x 2 cropping seasons

$$223.45 \text{ ha.} \times 6 \text{ MT/ha} \times 2 = 1,340 \text{ MT}$$

Demand Projection for Agricultural Products

The agriculture sector plays a very important task in keeping the demography healthy and productive by providing food on the tables of each household. It is imperative that the City's agricultural production not only satisfies the demand but also the standard. Food requirement or Recommended Dietary Allowances (RDAs) are the levels of intake of energy and essential nutrients considered adequate to maintain health and provide reasonable levels of reserves in body tissues of nearly all healthy persons in the population. Found in Table 119 is the standard requirement of food that should be produced in the City of San Pablo in order to meet the Food and Nutrition Council's criteria to keep the population functional and efficient.

As the Philippines is strategically placed in a location ideal for agriculture, Filipinos are geographically predisposed to consuming rice. It is the country's staple food. For that reason and as primary source of energy in doing work, cereals and cereal products should constitute 31% of our diet. To aid carbohydrates in providing the human body energy, sugar and other sugar products should take up 17% of our food intake. As alternative to rice, starchy roots and tubers (15%) should also be consumed. To aid muscle build-up, milk (along with milk products), eggs, and fish, meat and poultry, when combined, should constitute 18% of our annual consumption. Lastly as source of vitamins and fiber and as an agent for enhancing our immune system, fruits and vegetables should take 17%.

To help maintain, or in any case improve, the health of San Pablo City's population, the City should produce 112,839,122 kilograms of food for the whole year of 2016. Moreover, the percentages mentioned beforehand should constitute the whole production so that the standard need of the population is met. More or less, the projected standard production of the City increases by 2,183,392 kilograms every year. By 2025, the City must have had the agricultural capability to produce 132,662,057 kilograms of food.



Table 119. Projected Standard Food Requirement in San Pablo City

Food Requirement/ Agricultural Product	Projected Standard Food Requirement												
	Standard Requirement (kg/year)	%	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Population			272,305	277,246	282,277	287,399	292,613	297,923	303,329	308,833	314,436	320,142	325,951
Cereals & Cereal Products	124	31	33,765,820	34,378,504	35,002,348	35,637,476	36,284,012	36,942,452	37,612,796	38,295,292	38,990,064	39,697,608	40,417,924
Sugars & Syrups	70	17	19,061,350	19,407,220	19,759,390	20,117,930	20,482,910	20,854,610	21,233,030	21,618,310	22,010,520	22,409,940	22,816,570
Starchy Roots & Tubers	60	15	16,338,300	16,634,760	16,936,620	17,243,940	17,556,780	17,875,380	18,199,740	18,529,980	18,866,160	19,208,520	19,557,060
Vegetables	39	10	10,619,895	10,812,594	11,008,803	11,208,561	11,411,907	11,618,997	11,829,831	12,044,487	12,263,004	12,485,538	12,712,089
Fruits	28	7	7,624,540	7,762,888	7,903,756	8,047,172	8,193,164	8,341,844	8,493,212	8,647,324	8,804,208	8,963,976	9,126,628
Dried Beans, Nuts & Seeds	4	1	1,089,220	1,108,984	1,129,108	1,149,596	1,170,452	1,191,692	1,213,316	1,235,332	1,257,744	1,280,568	1,303,804
Milk & Milk Products	16	4	4,356,880	4,435,936	4,516,432	4,598,384	4,681,808	4,766,768	4,853,264	4,941,328	5,030,976	5,122,272	5,215,216
Eggs	4	1	1,089,220	1,108,984	1,129,108	1,149,596	1,170,452	1,191,692	1,213,316	1,235,332	1,257,744	1,280,568	1,303,804
Fish, Meat & Poultry	54	13	14,704,470	14,971,284	15,242,958	15,519,546	15,801,102	16,087,842	16,379,766	16,676,982	16,979,544	17,287,668	17,601,354
Miscellaneous	7	2	1,906,135	1,940,722	1,975,939	2,011,793	2,048,291	2,085,461	2,123,303	2,161,831	2,201,052	2,240,994	2,281,657
Total	406	100	110,828,135	112,839,122	114,886,739	116,971,393	119,093,491	121,254,661	123,454,903	125,695,031	127,975,452	130,297,794	132,662,057

Note:

- Cereals & Cereal Products – 124 kg/yr
- Sugars & Syrups – 70 kg/yr
- Starchy Roots & Tubers – 60 kg/yr
- Vegetables – 39 kg/yr
- Fruits – 28 kg/yr
- Dried Beans, Nuts & Seeds – 4 kg/yr
- Milk & Milk Products – 16 kg/yr
- Eggs – 4 kg/yr
- Fish, Meat & Poultry – 54 kg/yr
- Miscellaneous – 7 kg/yr

Source: Projected by GIS



In summary, given the projected production (rice and corn alone) and demand for food, the local agriculture sector cannot meet the demand for food of the whole population of San Pablo. However, the City is not alone on this challenge as the whole country is still struggling to achieve its food self-sufficiency. Nevertheless, the City Government still needs to enhance its agriculture sector as it is still predominantly an agricultural city.

5.1.6 Agriculture Analysis Matrix

Table 120. Agriculture Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Need to increase number of Agricultural Extension workers	- Incapacity to conduct trainings and seminars to farmers and distribute necessary agricultural equipment, facilities and products	- Allot budget for the said position
Lack and absence of essential facilities such as: <ul style="list-style-type: none"> • Farmer’s Training center/Conference or Training Room/Demo Room (Food Processing) • Trading Post • Greenhouse or screen house, irrigation system (drips), vermihouse • Video recorder, camera for documentation, xerox/photocopy machine • Gadgets for geo-tagging • Sufficient office equipment <ul style="list-style-type: none"> • Printer • Desktop computer • Laptops and projector • Need for vehicle in hauling seeds and equipment • 45 Hp tractor (if 90 Hp is not available) for land preparations • Proper and permanent agriculture office 	- Absence of trading post does not allow for farmers to trade their local produce and control the price. - The lack of facilities to conduct trainings and seminars does not allow for the dissemination of knowledge to the local farmers. Insufficiency in office equipment hinders data/knowledge management of the office, thus, slowing its ability to monitor and evaluate its programs and projects. - Agricultural equipment and seeds will not be distributed to the beneficiaries in the absence of vehicles. Lack of tractors also lengthens time for land preparations in the absence of farm mechanization. - Impermanence of the City Agricultural Office makes it difficult for the	- As part of the City’s thrust and strength in development, the local government should allot, allow, and prioritize for a comfortable budget in which the City Agriculture Office can maximize its function in providing technical assistance to the agricultural sector of San Pablo City.



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
	said agency to carry out its functions.	
Decrease in land area for food production	<ul style="list-style-type: none"> - Decrease in crop and livestock production - Decrease in income - Threat of food shortage 	<ul style="list-style-type: none"> - Intensify diversified integrated farming - Practice more intensive production (maximize use of land) - Farm mechanization - Repair and rehab of irrigation facilities to maximize production - Urban Gardening - Generate more livelihood projects - Conduct more appropriate trainings in crop production technologies
Continous illegal conversion of land	- Decrease in area intended for agriculture	- Preservation and conservation of agricultural land areas thru: a) strict implementation of ordinances in reclassification and conversion based on CLUP
Post-harvest losses	- High harvest wastage	<ul style="list-style-type: none"> - Provision of post-harvest machineries and facilities - Conduct of trainings on post-harvest technologies - Provision of more farm-to-market roads
Old generation of farming sector	- Decrease in farming population	- Encourage younger generation to engage in farming by: a) providing incentives in farming i.e. Lower land tax of productive agricultural lands, b) providing subsidies such as inputs and machineries
Climate change	<ul style="list-style-type: none"> - El Niño (drought) - La Nina (typhoons and heavy rains) - Pests outbreak 	<ul style="list-style-type: none"> - Farming ecosystem preservation and conservation <ul style="list-style-type: none"> a. Tree planting b. Proper crop cultivation technology along contours, slopes, hilly lands - Practice organic agriculture (Nutrient and crop residues management and utilization) - Water management (Rainwater harvesting, drip irrigation) - Crop farming management (Aerobic Rice Technology (ART), direct seeding technology, Zero tillage) - Insurance



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
		<ul style="list-style-type: none"> - Conduct seminars and trainings re: environment awareness and the climate change issue - Livestock management <ul style="list-style-type: none"> a. Improved feeding (silage production technology), b. Manure management (Organic fertilizer production, biogas digester with methane recovery)
<p>Poor marketing strategy</p>	<ul style="list-style-type: none"> - Low price of farm produce 	<ul style="list-style-type: none"> - Eliminate the presence of the middlemen by strengthening the group of farmers by organizing them into cooperatives - Develop market matching and networking - Eliminate the presence of middlemen - Establish a common trading post - Patronize our own Tilapia harvest
<p>Lake resources depletion and degradation</p>	<ul style="list-style-type: none"> - Low production - Low income of fisher folks - Lake pollution 	<ul style="list-style-type: none"> - Lake seeding - Establishment of fish sanctuary in every lake - Strict implementation of 10% carrying capacity of the lake - Compliance to BFAR Fish - Registration (Only registered fish cages are allowed) - Relocation of informal settlers around lake - Lakes cleaning and desilting - Stop illegal quarrying; seek permit from LLDA

5.2 Commerce and Trade

San Pablo City which is tagged as the City of Seven Lakes maybe considered as one of the most suitable area for commerce, trade and services not only for the City constituents but also for residents from its neighboring municipalities like Alaminos, Liliw, Nagcarlan, Calauan, Tiaong, Dolores and many others. Present businesses and commercial activities are geared and oriented towards the provision of goods and services not only to its populace but also to its environs as well.



Although an agriculture city, San Pablo is now ready to absorb any commercial development for it has already strengthened its infrastructure facilities such as road networks, telecommunication, and energy with a collateral concern for the environment.

The San Pablo Public Market popularly known as San Pablo Shopping Mall is located at the heart of the City and serves as the center of the central business district. It occupies a total land area of 1.7 hectares and a total floor area of 51,000 sq. m. It was established in 1993 after the old public market was gutted by fire some time in December 1992. The market is operated and administered by permanent and casual employees under the office of the City Treasurer. Market collection varies per operation and classification of establishment. Traffic congestion and the pressure of many ambulant vendors and peddlers cause problem to accessibility and inconvenience to the buying public.

It is worth mentioning that sari-sari stores have the biggest number of commercial establishments distributed among the eighty (80) barangays. These stores cater to the basic domestic needs especially in the rural area followed by dry goods /novelty store, marketing and cedera. Sari-sari stores are the most appealing commercial businesses for the locals, maybe because of its low capital requirement and simplicity in operation.

Commercial establishments are scattered mostly in the urban areas with a total area of roughly 144 hectares. However, little commercial businesses and activities flourish in different rural barangays.

5.2.1 Inventory of Commercial Areas by Type of Activity

As shown in Table 121, San Pablo City has a total aggregate of commercial areas of 338,396 sqm. It should be noted that this record from the Business Permits and Licensing Office only reflect commercial establishments in the City who opted to report the area they occupy. Thus, the record does not represent the whole commercial area of the City.

According to the 2000 version of the City's CLUP, commercial areas occupy 0.63% (135.3452 hectares) of the total land area. However, GIS computed area only shows that commercial areas occupy 0.53% or roughly 105.23 hectares of the total area of the City. Meanwhile, actual record from the CPDO shows that there are 23 barangays identified having commercial areas. Barangay San Rafael has the most commercial areas in it with a total of 78,691 sq m. Barangay II-D also adds the most with just below 30,000 sq m.



Barangays VII-E, VII-B, I-C, and I-A have over 20,000 sq m of commercial areas. Concepcion has the least commercial area with only 864 sq m.

Table 121. Inventory of Commercial Areas in San Pablo City, 2013

Type of Commercial Areas	Location	Area (sq.m.)	Percentage	Market Catered	
				Local	Export
Commercial	Brgy. I-A	27,564.00	8.15	/	
Commercial	Brgy. I-C	21,888.88	6.47	/	
Commercial	Brgy. II-B	3,674.59	1.09	/	
Commercial	Brgy. II-C	2,527.00	0.75	/	
Commercial	Brgy. II-D	29,653.60	8.76	/	
Commercial	Brgy. II-E	16,779.94	4.96	/	
Commercial	Brgy. II-F	5,802.08	1.71	/	
Commercial	Brgy. III-A	19,221.00	5.68	/	
Commercial	Brgy. III-B	8,650.00	2.56	/	
Commercial	Brgy. IV-B	8,692.48	2.57	/	
Commercial	Brgy. IV-C	2,855.88	0.84	/	
Commercial	Brgy. V-B	2,118.00	0.63	/	
Commercial	Brgy. V-C	1,297.78	0.38	/	
Commercial	Brgy. V-D	6,400.05	1.89	/	
Commercial	Brgy. VI-A	6,266.00	1.85	/	
Commercial	Brgy. VI-E	12,786.05	3.78	/	
Commercial	Brgy. VII-A	9,498.87	2.81	/	
Commercial	Brgy. VII-B	24,948.98	7.37	/	
Commercial	Brgy. VII-C	15,588.95	4.61	/	
Commercial	Brgy. VII-D	8,317.00	2.46	/	
Commercial	Brgy. VII-E	24,309.45	7.18	/	
Commercial	Brgy. Concepcion	864.00	0.26	/	
Commercial	Brgy. San Rafael	78,691.00	23.25	/	
Total Area		338,396.00	100.00		

Source: CPDO

5.2.2 Historical Data on Commercial Areas

There is no historical data on the commercial areas of the City. However, existing land use shows that commercial area occupies roughly 0.53% or 105.23 hectares of the total land area. Majority of the commercial areas of the City are located in urban areas and along Maharlika Highway.

5.2.3 Number of Business Permits Issued by Type

In 2014, there was a total of 5,860 business permits issued in the City. From 2010 to 2013, there has a steady increase in business permits issued. However, these were a decrease of 188 business permits in the latest year. Nevertheless,



this steady increase over the years indicates an improvement in the economic status of the residents of the City. With their socio-economic growth, they are free to compete in the free market. Currently, there are 63 business permits for primary economic activities which include agriculture, fisheries, and mining. Secondary economic activities include manufacturing, electricity, gas, and water supply, and construction. While known as an industrial City, there were 7 less secondary economic activities in San Pablo City in 2014 compared to the previous year. Increases were most significant in tertiary economic activities. This category includes wholesale and retail, general services, accommodations, and extra-territorial organizations and bodies (Table 122).

Table 122. Business Permits Issued in San Pablo City, 2014

Economic Activity	2010	2011	2012	2013	2014
Primary	56	49	53	57	63
Secondary	66	69	73	73	66
Tertiary	4576	4,858	5,339	5,918	5,731
Total	4,698	4,976	5,465	6,068	5,862

Source: Business Permit and Licensing Division

5.2.1 Inventory of Commercial Establishment by Economic Activities

In Table 123, it is depicted that there are 6,068 commercial establishments in San Pablo City. There is an increase of 11.03% or equivalent to 603 business establishments. In terms of economic activities, establishments providing communication has seen the greatest increase of 25%. This can be attributed to the prevalence and need to exchange communication through the internet. There were five more schools in the City in 2013. This implies a big market and demand for education in the City as the big chunk of the demography are school-goers. An increase of 255 establishments offering wholesale and retail trade was recorded in the same year symbolizing the ever-rising need for basic commodities such as food and clothing.



Table 123. Inventory of Commercial Establishments by Economic Activity in San Pablo City, 2012-2013

Economic Activities	No. of Establishments		Inc./Dec. (%)
	2012	2013	
Wholesale and Retail Trade	2,805	3,060	9.09%
Hotel and Restaurants, Transport and Storage	637	699	9.73%
Communication	120	150	25.00%
Financial Intermediation	98	99	1.02%
Real Estate Renting and Business Activities	538	607	12.83%
Education	22	27	22.73%
Health and Social Work	79	86	8.86%
Other Community Social and Personal Service Activities	12	14	16.67%
Manufacturer	61	68	11.48%
Services	1,093	1,238	13.27%
Total	5,465	6,068	11.03%

Source: LGU Business Permit and Licensing Division/Primary Survey

Note: No data for employment.

5.2.2 Revenue by Type of Business and Trade

Over the past five years, the revenue of San Pablo City has seen an oscillating trend. The revenue has increased by Php 8 Billion in 2010. However it decreased by Php 6 Billion in 2011. 2012 showed the greatest increase in revenue by Php 15 Billion. Wholesale and retail always has the greatest contribution to the revenue of the City. Having an unusually high number of banks in the City, banking and finance also greatly contributes to its revenue. Real estate and construction-related activities contribute the least to the revenue of the City (Table 124).

Table 124. Revenue by Type of Business and Trade in San Pablo City

Type of Business and Trade	Revenue (Pesos)					Market
	2009	2010	2011	2012	2013	
Wholesale and Retail	1,899,699,721.84	7,787,468,311.47	4,152,116,103.97	16,326,802,215.00	8,264,342,092.55	/
Banking and Finance	574,944,401.83	470,241,298.43	527,477,819.34	540,693,999.15	1,190,347,309.07	/
Real Estate/Construction	27,144,202.20	27,763,816.27	131,100,120.24	73,568,064.33	57,572,217.68	/
Services	313,248,391.43	756,744,288.83	445,429,775.58	2,802,187,638.38	4,915,343,738.99	/
Others	1,732,278,356.62	3,378,745,417.38	1,168,324,375.30	2,004,660,396.59	3,544,974,754.28	/
Total	4,547,315,073.92	12,420,963,132.30	6,424,448,214.43	21,747,858,313.20	17,972,580,112.40	/

Source: City Treasurer's Office/Mayor's Office

Note: Services include Hotel and Restaurant, Transport, Storage, Communication, Education, Health and Social Work public Administration and Defense (refer to PSIC) Philippine Standard Industrial Classification



5.2.3 Existing Programs and Plans for Commerce and Trade

Two programs to improve the commerce and trade sector of the City were implemented in 2013 by the Business Permit and Licensing Division and the Mayor’s Office with funds from the local government unit. One program is the improvement of the information system for all inputs to be electronic. This is so that data is easily managed and procured. This information system stores data regarding business permit and licensing, real property tax, revenue collection, and tricycle franchises. The improvement of information system will also provide convenience through online business application and renewal. Payments are made easier through G-Cash and Bayad Centers (Table 125).

Table 125. Existing Programs and Plans for Commerce and Trade in San Pablo City

Programs/Projects	Location	Schedule of Implementation	Funding Source	Implementing Agency
Re-Activation, Installation, Repair and Upgrade of the Computerized Information System <ul style="list-style-type: none"> - Business Permit and Licensing - Real Property Tax Information System - Revenue Collection System - Tricycle Franchising System (public transport) 	SPC Districts	2013	Local Fund	BPLD, Mayor’s Office
Online Business application and renewal <ul style="list-style-type: none"> - Payment maybe through G-CASH and Bayad Centers - Business number will be assigned after payment - Business plates/certificates can be secured at the clients convenience 	SPC Districts	2013	Local Fund	BPLD, Mayor’s Office

Source: Interview with MPDC, Peoples Economic Council (PEC)*Includes Capital credit schemes, Tax Holiday/Incentives and the Like, Commence and Trade Prioritization Plan



5.2.4 Current and Projected Needs

Factors/constraints that inhibit the growth of commerce and trade

Although the City of San Pablo has growing commerce and trade, still the City is faced with several constraints that can inhibit its growth. Following are some of these constraints identified which needs to be addressed by the City Government:

1. Scattered commercial establishments in urban and rural areas: Since land conversion and establishment of businesses are not closely monitored, commercial establishments are not clustered in designated areas in the urban and rural barangays. Thus, potential investors are not fully aware, where to establish their businesses. This is also difficult on the part of the government in terms of monitoring and providing services to businessmen and investors.

2. Congestion in some commercial areas: There are commercial areas where business establishments are not proportion of the carrying capacity of the commercial areas. Crowded commercial areas are not conducive and safe for shopping.

3. San Pablo City Shopping Mall is underutilized: Government-own establishment like the SPC Shopping Mall must be utilized efficiently to realize its potential income. Strategies must be set in order to attract potential investors to set-up their businesses in the shopping mall.

4. Lack of office mandated by LGU to facilitate inquiries of potential investors: The City Government must set-up an information desk that will respond to the queries of potential investors.

5. Increased volume of traffic: Due to increasing population and economic activities in the City particularly in the urban areas, volume of traffic was also observed. Traffic must be regulated so that economic activities will not be delayed or disrupted.

Projected needs

Area allocation for expansion of commercial area depends on the chosen development strategy and role of the commercial sector in promoting the City's vision, its comparative advantage over adjacent municipalities and by any planned vertical expansion.



5.2.5 Commerce and Trade Analysis Matrix

Table 126. Commerce and Trade Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Weak monitoring of establishment of commercial businesses causing growth in scattered patterns in urban and rural areas.	- Difficulty on the part of the investors in identifying areas where to establish their business	- Strict implementation of would be business zoning ordinances
Congestion in current commercial areas	- Uncontrolled development of commercial establishments - Traffic congestion	- Creation of new commercial area
Underutilized SPC Shopping Mall	- Losses on potential income - Area unavailable for possible investors	- Compromise on legal issues
Internal and external control on collection of fees	- Unachieved target for collection	- Establish strong internal and external control on collection
Increased volume in traffic flow and inadequate parking area	- Poor product/goods movement - Additional business overhead by investors	- Expansion, creation and/or relocation of new business area

5.3 Industry

In 1994, there is a total of 88 industrial establishments and in 2013, there was 63 existing industrial establishments recorded. Although there was a decrease in number in 2013, the CPDO reported that it has reached up to 140 showing an increase of 37.14% in 2014. The majority of the industries in the City are manufacturers and or processors of agricultural products such as coconut and bakeries comprise the bulk of industrial business in the city.

The increase in number of industries in the recent year can be attributed to the City's agricultural base and its strategic location induced agro-industrial development. However, given the fluctuating number of the business in industrial sector, establishment of light industries related to agriculture should be the main thrust of the City Government considering that the City is classified as agricultural city. In order to attract investors, industrial areas should be readily identified and sufficient and proper assistance should be extended to them. The City can sufficiently absorb any increase in industrial development it has adequate infrastructure, financial institutions, and a pool of human resources.



5.3.1 Historical Data on Industrial Areas for the Last Five Years

There is no consolidated data that can indicate the changes in industrial areas of the City. However, based on the GIS computed industrial area of major industries, industrial area currently covers 120.24 hectares or 0.10% of the City's total land area.

5.3.2 Inventory of Existing Establishments by Intensity, Capitalization and Employment

Out of 63 industrial establishments that operates in the City based on the record of Business Permit and Licensing Division, only five (5) have their intensity classification identified by the City Planning and Development Office. The single pollutive and hazardous industry identified in the City is Franklin Baker Corporation while the rest were recognized as non-pollutive and non-hazardous. Capitalization of these industries ranges from Php 0.8 Million (Pharmawealth Laboratories) to Php 502M (Franklin Baker Corp.) (Table 127).

Table 127. Existing Establishments by Intensity, Capitalization, and Employment in San Pablo City, 2013

Name of Industrial Establishment	Intensity Classification	Capitalization	Employment
Global Food Solutions Inc.	I1	182,719,497.96	50
Franklin Baker Corp	I2	502,364,660.84	78
Vitarich Corporation	I1	2,953,554.10	
Pharmawealth Laboratories	I1	81,564.272	50
Stalder	I1	25,000,000.00	60

Source: City Planning and Development Office

Intensity Classification: I1 – Non-pollutive/Non-Hazardous
I2 – Pollutive/Hazardous
I3 – Highly Pollutive/Highly Hazardous

5.3.3 Inventory of Existing Industrial Establishment by Manufacturing/Industrial Process; Raw Material Input; Production and Markets

The industries in San Pablo produce goods stretching from oil and drugs to food products such as soft drink and vegetable oil. Franklin Baker Corp manufactures the most with an equivalent of Php 591 Million. Below is the list of existing establishments in the City in 2013 with their raw material inputs, production value and product market (Table 128).



Table 128. Existing Establishments by Industrial Process, Raw Material Input, Production, and Market in San Pablo City, 2013

Establishment/ Owner	Industrial Process	Raw Material		Product	Production		Product Market
		Material	Source		Volume	Value	
Franklin Baker Co. of the Phils.	Manufacturer	Coconut	Locally Produced	Dessicated	-	591,370,237.16	Local/ Export
Atson Coco Inc./Tin Sing	Manufacturer	Coconut	Locally Produced	Coco Oil			Local
Tropicana Food Pro. Inc./Tin King	Manufacturer	Fruits	Locally Produced	Fruit Drinks	-		Local
Milmar Distillery Inc./Zubat M.	Manufacturer		Locally Produced	Wine			Local
Universal Robina Corp./Guia, G.	Manufacturer	Food	Locally Produced	Food Products	-	114,092,420.00	Local
Stalder Laboratories Inc./Stalder, D.	Manufacturer	Chemicals	Locally Produced	Drugs, Cosmetics	-	25,658,988.62	Local
Global Food Solution	Manufacturer	Food	Locally Produced	Food Products	-	218,811,728.00	Local/ Export
SPMM	Manufacturer	Metal	Locally Produced	Chasis	-	300,000.00	Local
NHO Oil Mill Corp./Ilagan, Heidi A.	Manufacturer	Coconut	Locally Produced	Coconut Oil	-	11,000,000.00	Local
Singapore Pharmawealth Life Science Inc.	Manufacturer	Chemicals	Locally Produced	Drugs	-	90,905,876.81	Local
Pepsi Cola Products Phils. Inc.	Manufacturer	Food	Locally Produced	Softdrinks	-	147,207,560.00	Local
CBB Corporation/Bisenio, Carlos B.	Manufacturer	Food	Locally Produced	Candies	-	1,600,000.00	Local
San Pablo Manufacturing Corp./Erming M.	Manufacturer	Vegetable/ Coconut Oil	Locally Produced	Vegetable/Coconut Oil	-	555,861,013.64	Local
Lasco, Rosita D.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Alcantara, Maria Iraida B.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Savares, Josefina S.	Manufacturer	Food	Locally Produced	Virgin Coco Oil	-		Local/ Eport
Alcantara, Winifredo L.	Manufacturer	Food	Locally Produced	Wine/ Distilled Spirits	-		Local
Manatili, Sofia A.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Reyes, Froilan B.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Mendoza, Francisco P.	Manufacturer	Food	Locally Produced	Ice	-		Local
Belen, Lamberto A.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Shang Piin Tofu Ent Inc./Bentitez R.	Manufacturer	Food	Locally Produced	Tofu	-		Local
Aquino, Felicidad U.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Escaba, Perla D.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Bautista, Renato A.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Guaranfood Mfg. Corp.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Natural Quantum Diversified Production Inc.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Lagurim, Josephine D.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Opalla, Niño Tierra Ardy B.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local



Establishment/ Owner	Industrial Process	Raw Material		Production			Product Market
		Material	Source	Product	Volume	Value	
Avila, Vilma R.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Avila, Gerardo A.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Broad Chem St Ambroce Int'l Limited Corp.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
De Mesa, Angela Ainie	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Reyes, May M.	Manufacturer	Food	Locally Produced	Fruit Drinks	-		Local
Pandinuela, Jogie C.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
De Mesa, Joy O.	Manufacturer	Food	Locally Produced	Food Supplement	-		Local
Borja, Rosemarie G.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
Bartolome, Maria Virginia C.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
3J Foods Processing Corp./Agoncillo J.	Manufacturer	Food	Locally Produced	Food Prodcuts	-		Local
DS Cosmecectical Mfg Lab/Mercado, C.	Manufacturer	Chemicals	Locally Produced	Cosmetics	-		Local
De Leon, Roselyn Jean A.	Manufacturer	Chemicals	Locally Produced	Fire Extinguisher	-		Local
Pilipinas Ecofiber Corp./Pascual, MT.	Manufacturer	Coconut	Locally Produced	Coco Fiber	-		Local/Eport
Body Light Dimension World Corp./Devara D.	Manufacturer		Locally Produced	Beauty Products	-		Local/Eport
Beauty Elements Ventures Mfg. Inc.	Manufacturer		Locally Produced	Beauty Products	-		Local
Alfonso, Alicia	Manufacturer	Chemicals	Locally Produced	Battery Solution	-		Local
Bee, Co Inc./Bonilla, R.	Manufacturer	Metal	Locally Produced	Mechanical Chemical Products	-		Local
Ramos, Rosette U.	Manufacturer	Metal	Locally Produced	Organic Herbal Products	-		Local
Gelizon, Artemio S.	Manufacturer	Metal	Locally Produced	Sash	-		Local
Odiame, Joey E.	Manufacturer	Cement	Locally Produced	Hollow Blocks	-		Local
Muños, Vener P.	Manufacturer	Cement	Locally Produced	Hollow Blocks	-		Local
Derequito, Noriel R.	Manufacturer	Metal	Locally Produced	Body Builder	-		Local
Shuhan Inc./Chua, S.	Manufacturer	Metal	Locally Produced	Body Builder	-		Local
Chua, Gordon Y.	Manufacturer	Metal	Locally Produced	Body Builder	-		Local
Armak Motors Corp/Lao, Edison T.	Manufacturer	Metal	Locally Produced	Body Builder	-		Local
Chavez, Chito III	Manufacturer	Metal	Locally Produced	Body Builder	-		Local
Hernandez, Ariston M.	Manufacturer	Metal	Locally Produced	Body Builder	-		Local

Source: Business Permit and Licensing Division

Note: Production Volume: (-) no data



5.3.4 Local Revenue and Industrial Establishment for the Last Five Years

There is no consolidated data for the local revenue and employment generated specific to industry sector. Although, the exact figures cannot be ascertained as of the moment, still the contribution of industry sector in the local economy of the City cannot be discounted. It has also employed substantial number of locales of San Pablo as well as residents of other nearby municipalities.

5.3.5 Product Flow

Figure 39 describes the product flow in San Pablo City. The chart is made general and non-specific to the City in order to assume all products coming out from the City. Before continuing to processing, raw materials first undergo a sorting process in which they are checked according to the industry's or the manufacturer's standards. Raw materials that do not pass the standards are left behind as rejects while those that meet the criteria proceed to the production stage. In the case of coconut oil production, this is where coconut flesh undergoes chemical and physical processes to produce the oil. Before packaging, or in some cases right after packaging, products undergo another quality control stage to determine if they meet the criteria set by the industry/manufacturer to ensure the consumer's satisfaction. When they pass quality control, they are stored or distributed to wholesale and retailers for consumers. Commonly, the market is mostly local but unique and exceptional products often get exported to another market.

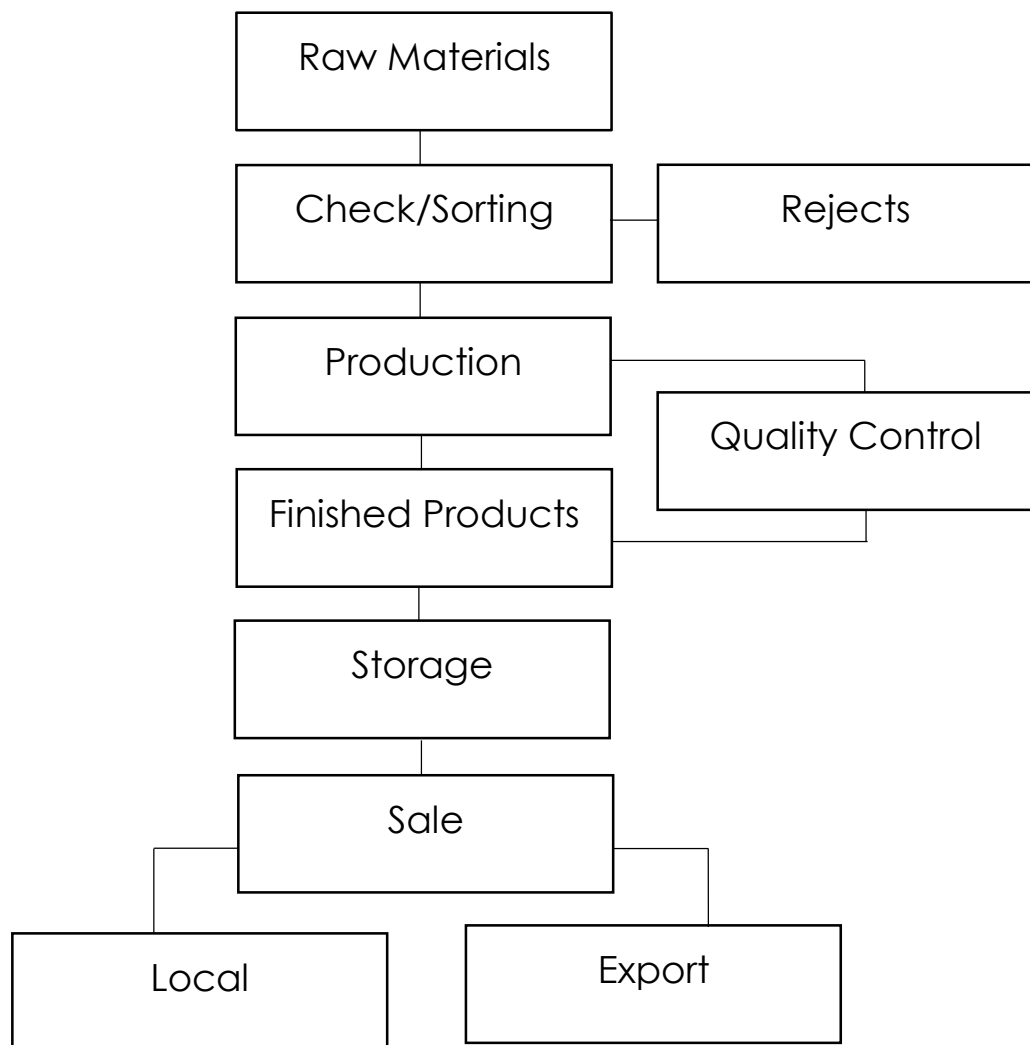


Figure 39. Product Flow in San Pablo City

5.3.6 Existing Hazardous and Pollutive Industries

Only one (1) industry is identified by the City Planning and Development Office as having potential environmental and social impacts in San Pablo City. Franklin Baker Corporation in Barangay II-C has an area of 0.583 hectares and is classified as hazardous pollutive. Under the HLURB guidelines, hazardous industries pose health hazards. This means that they discharge a large amount of combustible and toxic materials. When classified as pollutive, these industries are described as those discharging large amounts of air, water, and solid pollutants.



5.3.7 Natural Resources with Potential for Industrial Development

There are still natural, as well as built-up, resources that are yet to be fully tapped by San Pablo City that have potentials for economic contributions. Mineral resources such as white clay, limestone, and volcanic debris have marketable abundance around rural areas. River gravel, garden soil, and river sand are also identified as having potentials. But tapping river gravel and sand may compromise the integrity of riverbanks and may cause erosion, affecting quality of rivers and potentially lives of the people. Careful planning and analysis of how to tap these resources should be carried out before proceeding. The agricultural sector is a blooming part of the City's economy. With vast agricultural and A & D lands shaping most of the rural areas, it is one sector that can help the tourism aspirations of the City. Innovative and entrepreneurial solutions should be tapped by the City in order to extract ideas which may provide answers as to how to process agricultural produce (e.g. coconut, root crops, vegetables, corn, fruits, rice) into marketable ones. Industries may serve as partners in shaping the said agricultural produce into highly vendible commodities.

The strategic location of San Pablo draws a large market into its premises, promising a wide variety of choices compared to nearby municipalities. As a City, its commercial frontier should be advanced in order to keep its market attracted while having threats from a booming economy of Lipa City.

Excellent strategies must address the use of stagnant commercial, residential, and industrial establishments to entice more people into the City. Lastly, as the 'City of Seven Lakes', San Pablo should optimize the use of their lakes both in tourism and aquaculture. Minimizing the eyesore, relocating informal settlements along the lakes also reduces the degree of pollution caused by the former. The development of aquaculture will also provide cheap local produce for its citizens. Wisely tapping all these sectors while emphasizing on the involvement of the locals not only contributes to the overall image of the City, it also promotes inclusive development. Some of the natural resources with potential for industrial development are tabulated in Table 129.



**Table 129. Natural Resources With Potential for Industrial Development
in San Pablo City**

Mining/quarrying	Agricultural	Manufacturing	Infrastructure	Marine
White Clay	Coconut	Food Products	Commercial building	Tilapia
River gravel	Roots crops	Bakery	Residential Building	Shell Fish
Earth fill	Vegetables	Rice Mill	Industrial Building	Dalag
Garden soil	Corn	Coconut Oil	Roads and Bridges	
Lime stone	Fruits	Beauty Products	School Building	
River sand	Rice	Garments		
Volcanic debris		Mineral Water		

Source: CPDC

5.3.8 Current and Projected Needs

In view of the construction of the South Luzon Expressway (SLEX) Extension, that will be started in 2016, San Pablo City can expand not just its commerce and trade but as well as its industrial sector and industrial park can be established. However, in order to develop the industrial sector, the following must be noted:

- Capital financing for industry generation and/or expansion
- Required manpower skills and the corresponding training for such
- Marketing strategies and market for perceived surplus products or goods
- Power requirements of existing and projected industries
- Infrastructure support facilities
- Pollution control devices for pollutive and hazardous industries and economic activities
-

In addition, the City Government must address some of the issues identified by the CPDO such as:

1. No office that concentrates on the development and promotion of industries in the City: An office must be created whose function and task is to develop and promote the City for new industries.

2. No readily available data for policy guidelines: Creation of databank and policy guidelines are necessary for the government to develop and promote the industry sector and for the potential investors to be guided by the policies involved in establishing an industry within the City.

3. Conflicting line of businesses located in one area: Zoning ordinance must be strictly implemented.



4. Lack of experience and training on the available manpower source: Skill enhancement program must be promoted and implemented particularly to the young labor force.

Projected Industrial Requirement

San Pablo City only houses one heavy industry which is Franklin Baker Corporation. Most of the industries in the City are classified as light. Light industries are characterized as non-pollutive and can either be hazardous or non-hazardous. These type of industries emit little or negligible amount of pollutants. They can also either be producers of combustible or non-combustible and toxic or non-toxic wastes. To project the area requirement of industrial areas in the City, a constant (symbolizing area required for each person) is multiplied to the projected population of the City.

The main development thrust of the City is to become a tourist destination. If the development thrust of the City is not industrial, HLURB prescribes that projection is done addressing the area required for light industries. A constant of 0.0008 hectares per person is multiplied to the population to get the projected area requirement.

In 2015, given a population of 272,000, the City will require 218 hectares for the light industries. On average, the area required grows by an average of 4.3 hectares per year. To address the growing need, it is recommended that 261 hectares be allotted for light industries (Table 130).

Table 130. Projected Industrial Area Requirement in San Pablo City

Year	Population	Area Requirement
2015	272,305	217.84
2016	277,246	221.80
2017	282,277	225.82
2018	287,399	229.92
2019	292,613	234.09
2020	297,923	238.34
2021	303,329	242.66
2022	308,833	247.07
2023	314,436	251.55
2024	320,142	256.11
2025	325,951	260.76

Source: Projected by GIS, Co.



5.3.9 Industry Analysis Matrix

Table 131. Industry Analysis Matrix for San Pablo City

Technical Findings/Observations	Implications (Effects)	Policy Options/Recommendations
Conflicting line of businesses located in one area	-Substantial effect in the environment such as difficulty in controlling waste and pollutants -Hard to control and/or monitor because of not being contiguous and adjacent	Strict implementation of ordinances with regards to zoning
No readily available data for policy guidelines	Timely, relevant local legislation are not enacted	Establishment/creation of a data bank in coordination with different concerned offices
Conflicting line of businesses located in one area (piggery vs. resort)	-Will resort to legal conflict -Unsuccessful business	Strict implementation of zoning ordinance compliance of inappropriate business in the area according to the City ordinance
Mismatched of available employment with skills and talents of potential employees	-Unemployment -Under employment	Valid assistance and skill enhancement program

5.4 Tourism

The City of San Pablo is sandwiched between the provinces of Batangas and Quezon easily making it perfect gate away and stop, to and from these provinces and beyond. But its proximity to Manila makes San Pablo more than just a side trip. It is a destination by itself. The tourism potential of the City is fully realized and is being pursued to supplement San Pablo's economy and open the doors for further developments, business opportunities, and employment for San Pabloños.

5.4.1 Inventory of Tourism Establishments

Tourism establishments in the City includes: Restaurants, Food Chains, Hotels and Inns, Bed and Breakfast, Resorts, Spa, Coffee Shops, etc. Many of the establishments have contemporary designs while Patis Tito Garden Cafe, Bato Spring, Forestwood garden, and Ato Belen's Farm are bound on a natural setting. Tourism establishments are accessible to tourists and visitors. Mostly are in the vicinity of the City proper and could be reached by land transportation in which access roads are cemented and in good condition (Table 132).

5.4.1.1 Historical Sites

There are also historical sites within the City. Among these are the Church of St. Paul the First Hermit (1618); Old CFI Building and the Fule-Malvar Mansion. The San Pablo Cathedral was built in wood by the Augustinians (1586) in honor of Saint Paul the first hermit. Today it was rebuilt and renovated in stones and cemented. It became a Cathedral as the seat of Diocese of Saint Paul with Pedro Bantique as the first bishop in 1986.



Another historical gemstone brings back the romance of a by gone era – the Fule-Malvar Mansion. Built in 1915, it served as the home of spouses Eusebia Fule and Potenciano Malvar. Potenciano Malvar became Laguna Province's governor in 1912, and later became the first City Mayor of San Pablo when he took oath as Mayor after San Pablo became Laguna's first City on May 7, 1940.

5.4.1.2 Resort and Hotel



To provide the warm hospitable embrace of San Pablo, several hotels and resorts are located within the City proper and in its outskirts. Among these are Coco Palace Hotel, Casa San Pablo, Tahanan Ni Aling Meding, Auravel, etc., that serve as function halls and a venue for seminars, conferences or conventions

for limited durations. They also provide modern and convenient accommodations.

Another trending experience in San Pablo is one that is closest to the heart: somewhere right below it is the gastronomic experience of culinary

tourism. Several specialty restaurants have sprung up in and around the City, offering the very best from their kitchens from the traditional Filipino recipes, to heirloom specialties that only full-blooded San Pableños can passionately prepare. Famous among these artisan-restos are Patis Tito Garden Café, Palmeras Restaurant, and Sulyap Gallery & Café.

5.4.1.3 Festivals

San Pablo City is overflowing with its urban charms, verdant natural and man-made attractions, rich history and refined culture, and the beat of modern everyday life, but what better way to highlight all these through celebrations – the color and pageantry of fiestas.



TILAPIA MONUMENT

Every second week of January, San Pablo celebrates the feast of St. Paul the First Hermit. It is a one-week celebration highlighted by the famed Coconut Festival or mardi gras where street dancers

from different schools in the cities participated. Colorful and unique costumes made from parts of coconut trees and a float parade participated in by different establishments is also a boost to local tourism industry. This gained the accreditation and inclusion of San Pablo City Coco Festival in the annual activities of the Department of Tourism as it has been awarded as Best Tourism Event in the Philippines for three (3) consecutive years and now stands in the Hall of Fame. Good Friday procession, Tilapia festival and Balsa Regatta also attract local tourist.



5.4.1.4 The Seven Lakes

San Pablo City is known as the City of “Seven Lakes” because of its seven (7) scenic and legendary lakes that offer potentials for development of the local tourism industry. The only one of its kind in the Philippines and probably the world, these lakes are actually “maars” or low-relief volcanic craters. These craters were formed eons ago by eruptions resulting from ground water coming into contact with hot magma below the earth’s surface. Overtime, these crates eventually filled with water, which characteristically formed into relatively shallow Crater Lake.



At present, aside from their natural beauty, the lakes provide abundant catch of marine life such as *tilapia*, *carp*, *ayungin*, mudfish, some shellfish and fresh water shrimp to sustain the small fishing communities surrounding the lakes.



Among the seven (7) lakes of San Pablo, Sampaloc is the most popular. Located just inside the City proper and right behind the City hall, it is the biggest with an area of 99.21 hectares and has a maximum depth of 27 meters.

Civic organizations through the years, have built mini parks around the lake where on its highest point the Doña Leonila Park is situated. It offers a sizeable windy park for a slice of the City’s soothing calmness. People come here everyday to jog or to walk around the circumference of the waters. Food stalls are located around the lake.



Bunot Lake in Barangay Concepcion has a distance of 2.2 kilometers from the City proper 38.16 hectares and 23 meters maximum depth. Yambo Lake in Barangay San Lorenzo has a distance of 6.7 kilometers from the City proper with a maximum depth of 40 meters. This lake is Pandin's Twin Lake or known as "Magkasintahang Lawa" as local legend says, as only a bare strip of elevated land divides the two lakes. Its surface area is about 8 hectares larger than that of its twin, and has only about half of Pandin's depth. San Pablo shares Yambo with neighboring town of Nagcarlan. Pandin Lake at Barangay San Lorenzo has a 6.3 kilometers distance from the City proper, 23.54 hectares and 63 meters depth. With its secluded and pristine beauty, Pandin may very well be the most sought after of all the lakes. It is the smallest of the lakes, but it is the second deepest. Upon reaching the lake, lady paddlers await to take you across the blue-green waters of Pandin on board a bamboo raft. On the other side of the lake, a short 5 minute climb will take you to a commanding view of Yambo Lake. Calibato Lake at Barangay Sto. Angel is the deepest lake with a depth of 135 meters and 27.18 hectares (even a lot deeper than Laguna de bay). Calibato holds the most capacity of fresh water at 29,600 cubic meters. Palakpakin Lake at Barangay San Buenaventura is the shallowest of the 7 lakes at an average depth of 7.5 meters but with a surface of 54.39 hectares which makes it the second largest. Mohicap Lake at Barangay San Buenaventura is about 5.6 km. from the City proper with a depth of 27.5 meters and a surface area of 20.49 hectares.

Table 132. Inventory of Existing Tourism Establishments in San Pablo City

Name of Tourist Attraction	Location	Area (ha)	Tourism Products and Services	Description
Sampaloc Lake	Brgy IV-A, IV-C, V-A, Concepcion, San Lucas I	102.7	N, L	Lake
Pandin Lake	San Lorenzo and Sto. Angel	20.5	N, L	Lake
Yambo Lake	San Lorenzo	8	N, L	Lake
Mohicap Lake	San Buenaventura	28.5	N, L	Lake
Bunot Lake	Concepcion	30.5	N, L	Lake
Palakpakin Lake	San Buenaventura, San Lorenzo, and Dolores	43	N, L	Lake
Calibato Lake	Sto. Angel	42	N, L	Lake
Church of St. Paul the First Hermit	Rizal Avenue		C	Church
City Hall	Brgy V-A		C, M	Building



Name of Tourist Attraction	Location	Area (ha)	Tourism Products and Services	Description
Fule-Malvar Mansion (White Mansion)	Rizal Avenue, Brgy VI-A		C	House
Doña Leonila Park	Brgy V-A		N, L	Park
Andres Bonifacio Shrine	Trece Martires Street		C	Shrine
Hagdang Bato	Trece Martires Street		C, L	
Trece Martires Monument	Trece Martires Street		C	Monument
Monumento ng Kagitingan	Dona Leonila Park		C	Monument
Mabini Monument	Trece Martires Street		C	Monument
Pinaglabanan Shrine (Battle of Sta. Isabel)	Brgy Sta. Isabel		C	Shrine
Dambana ng mga Bayani (Guerilla War Monument)	Brgy San Mateo		C	Monument
Calibato Hydro Power Plant	Brgy Sto. Angel		C	Power Plant
Old CFI Building	Brgy IV-C		C	Building
City Plaza	Rizal Avenue (Circle)		C	Park
Conducto Mansion	Brgy III-E		C	
Casa San Pablo	San Roque		L	Accommodation
Tahanan ni Aling Meding	Dagatan Boulevard		L	Accommodation
Coco Palace Hotel	San Francisco	0.119	L	Accommodation
Auravel Garden Hotel and Restaurant	San Francisco Calihan		L	Accommodation
Casa Palmera Hotel and Resort	San Nicolas		L	Accommodation
Bamboo Inn	San Gregorio		L	Accommodation
Sulyap Gallery Café	Del Remedio		L	Accommodation
Casa de Alitagtag Bed and Breakfast Boutique Hotel	Del Remedio		L	Accommodation
Fine Rock Hotel	San Francisco		L	Accommodation
Lake City Hotel	San Lucas I		L	Accommodation
Platinum Hotel	Bagong Bayan		L	Accommodation
Motorist Inn	Concepcion		L	Accommodation
Ridgepark Hotel	San Vicente		L	Accommodation
Rivoli Hotel	A. Fule Street		L	Accommodation
San Francisco Inn	San Francisco Calihan		L	Accommodation
A & P Inn	Colago Avenue		L	Accommodation
Angel's Resort	Sta. Monica		L	Accommodation
Bato Springs Resort	San Cristobal		L	Accommodation
Bayview Resort	Sta. Veronica		L	Accommodation
Boying Resort	Sto. Angel		L	Accommodation
Bukid Garden Resort	Dona Eusebia Village, Concepcion		L	Accommodation
Calixihan Mini Resort	Sta. Ana		L	Accommodation
Carlos John Resort	Soledad		L	Accommodation
CDA Resort	Del Remedio		L	Accommodation
Countryside Farm Resort	Sto. Angel	3.8	L	Accommodation



Name of Tourist Attraction	Location	Area (ha)	Tourism Products and Services	Description
Cresta Monte Resort	Sto. Angel	0.5	L	Accommodation
Crisolaido Resort	Concepcion		L	Accommodation
Dioko Resort and Butterfly Farm	San Joaquin		N, L	Accommodation
Duminikaw Resort	Sto. Niño		L	Accommodation
EF Thalia Resort	San Gabriel		L	Accommodation
Garden of Eden	Sto. Angel		L	Accommodation
Hardin de San Vicente	San Vicente		L	Accommodation
Kusina de Sabang	Concepcion		L	Accommodation
La Residencia de Jesus Resort	Sta. Ana		L	Accommodation
Madrigal Resort	Sta. Ana		L	Accommodation
Maria Paz Royale Garden Resort	Sta. Filomena		L	Accommodation
Moonrise Mountain Resort	San Mateo		L	Accommodation
Sabang Hills Resort	Dagatan Boulevard		L	Accommodation
Sanctuario de San Pablo	San Francisco		L	Accommodation
Sitio de Amor Farm Resort	San Antonio I		L	Accommodation
Starlake Resort	San Buenaventura		L	Accommodation
Sta. Veronica Resort and Camp Site	Sta Veronica		L	Accommodation
Tierra de Oro Resort	San Antonio I	4.3	L	Accommodation
Villa Amante Garden Resort	San Juan		L	Accommodation
Villa Evanqueda	San Ignacio		L	Accommodation
Villa Munoz Lakeview Resort	Concepcion		L	Accommodation
Café Lago	Along Sampaloc Lake		L	Specialty Restaurant
Casa San Pablo	San Roque		L	Specialty Restaurant
Palaisdaan at Kamayan sa Ilog	San Ignacio		L	Specialty Restaurant
Palmera's Garden Restaurant	San Nicolas		L	Specialty Restaurant
Patis Tito Garden Café (Kusina Salud)	Sta. Cruz		L	Specialty Restaurant
Si Cristina Gaeau Sans Rival	Rizal Avenue		L	Specialty Restaurant
Sulyap Gallery Café and Restaurant	Del Remedio		L	Specialty Restaurant
Dang's Tilapia	San Roque		L	Specialty Restaurant
Ato Belen's Farm	San Juan		E,N,L	Agritourism
Hiking in Cabunsod Spring (Forest)	San Diego		E,N,L	Agritourism
Forest Wood Garden	Calihan		E,N,L	Agritourism
Julia's Orchard	Sta. Monica		E,N,L	Agritourism
Malabanban Watershed	Sto. Angel		E,N,L	Agritourism
Carlito's Workshop	Sta. Ana		E,L	Arts and Craft



Name of Tourist Attraction	Location	Area (ha)	Tourism Products and Services	Description
Museo ng San Pablo	San Pablo City Capitol Building		E,L,C	Arts and Craft
Museo ni Cipra 2	San Lucas I		E,L,C	Arts and Craft
Mga Likha ni Inay	CARD Bank Inc., 20 ML Quezon St., City Subdivision		E,L,C	Arts and Craft

Source: *Tourism Master Plan 2015-2020*

Note; No data for no. of visitors, accommodation and name of owner

N – Nature

C – Cultural

SB – Sun and Beach

L – Leisure and Entertainment

H – Health, wellness, and retirement

CN – Cruise and Nautical

DM – Diving and Marine sports

E – Education

M – Meetings, incentives, conferencing, and exhibitions (MICE) and events

5.4.2 Accessibility of Existing Tourism Establishments and Markets Catered

The only means of transportation in the city is on land by tricycle, jeepney, van, or private vehicle. As a city enclosed by adjacent municipalities, San Pablo has numerous entrances and exits. With this, the city is easily accessible by all means. If tourists are travelling by sea, the nearest port is the Batangas Seaport in Batangas City which is roughly 46 kilometers from the tourist destinations in the city. On instances when tourists are travelling through plane, the Ninoy Aquino International Airport is the closest as the city does not have its own airport. On average, NAIA is 60 kilometers away (Table 133).

Table 133. Accessibility of Tourism Establishments in San Pablo City

Name of Establishment	Means of Transportation	Distance to (km)			Access Road		Accessibility
		Airport	Seaport	Highway	Pavement	Condition	
Sampaloc Lake	Land	58.8	47.0	1.6	Paved	Good	1
Pandin Lake	Land	58.7	51.9	6.5	Unpaved	Fair	5
Yambo Lake	Land	58.7	51.9	6.5	Paved	Good	1
Mohicap Lake	Land	55.3	51.2	6.4	Paved	Good	1
Bunot Lake	Land	59.6	48.0	2.6	Paved	Good	1
Palakpakin Lake	Land	56.1	50.4	5.4	Paved	Good	1
Calibato Lake	Land	59.1	53.0	7.5	Unpaved	Poor	5
Cathedral	Land	59.3	46.1	0.7	Paved	Good	1
City Hall	Land	58.7	46.3	1.0	Paved	Good	1
Fule-Malvar Mansion (White Mansion)	Land	58.9	45.9	0.6	Paved	Good	1
Doña Leonila Park	Land	58.9	46.4	1.1	Paved	Good	1



Name of Establishment	Means of Transportation	Distance to (km)			Access Road		Accessibility
		Airport	Seaport	Highway	Pavement	Condition	
Andres Bonifacio Shrine	Land	58.8	46.4	1.1	Paved	Good	1
Hagdang Bato	Land				Paved	Good	1
Trece Martires Monument	Land	58.9	46.4	1.0	Paved	Good	1
Monumento ng Kagitingan	Land	58.9	46.4	1.1	Paved	Good	1
Mabini Monument	Land	59.2	46.0	0.6	Paved	Good	1
Pinaglabanan Shrine (Battle of Sta. Isabel)	Land	56.2	43.7	2.8	Unpaved	Fair	5
Dambana ng mga Bayani (Guerilla War Monument)	Land	59.5	49.1	1.0	Paved	Fair	1
Calibato Hydro Power Plant	Land	59.1	53.0	5.9	Paved	Fair	5
Old CFI Bldg.	Land	59.2	46.0	5.4	Paved	Good	1
City Plaza	Land	59.2	46.0	0.6	Paved	Good	1
Conducto Mansion	Land				Paved	Good	1
Casa San Pablo	Land	58.3	45.5		Paved	Good	1
Tahanan ni Aling Meding	Land	58.4	46.6	1.3	Paved	Good	1
Coco Palace Hotel	Land	60.8	45.3	0.1	Paved	Good	1
Auravel Garden Hotel and Restaurant	Land	60.1	45.2	0.2	Paved	Good	1
Casa Palmera Hotel and Resort	Land	56.8	43.4	0.2	Paved	Good	1
Bamboo Inn	Land	60.7	45.2	0.3	Paved	Good	1
Casa de Obando	Land			0.7	Paved	Good	1
Casa de Alitagtag Bed and Breakfast Boutique Hotel	Land				Paved	Good	1
Fine Rock Hotel	Land	59.8	45.4	0.0	Paved	Good	1
Lake City Hotel	Land	58.1	46.9	1.7	Paved	Good	1
Platinum Hotel	Land	59.0	45.1	0.2	Paved	Good	1
Motorist Inn	Land	59.2	47.6	2.3	Paved	Good	1
Ridgepark Hotel	Land	64.4	43.7	0.2	Paved	Good	1
Rivoli Hotel	Land				Paved	Good	1
San Francisco Inn	Land	60.9	45.4	0.0	Paved	Good	1
A & P Inn	Land	58.4	45.7	0.5	Paved	Good	1
Angel's Resort	Land				Paved	Good	1



Name of Establishment	Means of Transportation	Distance to (km)			Access Road		Accessibility
		Airport	Seaport	Highway	Pavement	Condition	
Bato Springs Resort	Land	59.6	46.2	0.7	Paved	Good	1
Bayview Resort	Land				Paved	Good	1
Boying Resort	Land	60.3	51.4	6.0	Unpaved	Fair	1
Bukid Garden Resort	Land	59.7	47.2	1.9	Paved	Good	1
Calixihan Mini Resort	Land	65.1	40.7	1.2	Paved	Good	1
Carlos John Resort	Land	61.4	42.9	2.6	Paved	Good	1
CDA Resort	Land	56.6	45.9	1.4	Paved	Good	1
Countryside Farm Resort	Land	60.1	51.1	5.6	Paved	Good	1
Cresta Monte Resort	Land	58.8	51.3	5.9	Paved	Good	1
Crisolaido Resort	Land	59.2	47.6	2.2	Paved	Good	1
Dioko Resort and Butterfly Farm	Land	62.9	43.7	1.4	Paved	Good	1
Duminikaw Resort	Land				Paved	Good	1
EF Thalia Resort	Land	60.0	44.3	1.1	Paved	Good	1
Garden of Eden	Land				Paved	Good	1
Hardin de San Vicente	Land	65.0	42.8	0.2	Paved	Good	1
Kusina de Sabang	Land	59.5	47.9	2.5	Unpaved	Good	1
La Residencia de Jesus Resort	Land	64.9	42.1	0.4	Paved	Good	1
Madrigal Resort	Land				Paved	Good	1
Maria Paz Royale Garden Resort	Land	55.0	44.7	2.4	Paved	Good	1
Moonrise Mountain Resort	Land	53.9	47.7	4.2	Paved	Good	1
Sabang Hills Resort	Land	CLOSED					
Sanctuario de San Pablo	Land	59.7	45.4	0.0	Paved	Good	1
Sitio de Amor Farm Resort	Land	65.1	43.1	0.2	Paved	Good	1
Starlake Resort	Land	55.9	49.6	6.4	Paved	Good	1
Sta. Veronica Resort and Camp Site	Land				Paved	Good	1
Tierra de Oro Resort	Land			0.2	Paved	Good	1



Name of Establishment	Means of Transportation	Distance to (km)			Access Road		Accessibility
		Airport	Seaport	Highway	Pavement	Condition	
Villa Amante Garden Resort	Land	65.5	42.2	2.2	Paved	Good	1
Villa Evanzueda	Land	55.6	46.3	1.1	Paved	Good	1
Villa Munoz Lakeview Resort	Land	61.9	46.6	3.2	Paved	Good	1
Café Lago	Land	59.0	48.6	1.2	Paved	Good	1
Casa San Pablo	Land	58.6	46.5	0.4	Paved	Good	1
Palaisdaan at Kamayan sa Ilog	Land	62.0	45.4	0.0	Paved	Good	1
Palmera's Garden Restaurant	Land	58.0	44.6	0.4	Paved	Good	1
Patis Tito Garden Café (Kusina Salud)	Land	65.1	44.5	1.3	Paved	Good	1
Si Cristina Gaeau Sans Rival	Land	59.2	46.0	0.7	Paved	Good	1
Sulyap Gallery Café and Restaurant	Land	57.8	45.6	0.7	Paved	Good	1
Dang's Tilapia	Land				Paved	Good	1
Ato Belen's Farm	Land	55.4	45.9	2.3	Paved	Good	1
Hiking in Cabunsod Spring (Forest)	Land	65.4	42.2		Unpaved	Good	5
Forest Wood Garden	Land			0.0	Unpaved	Fair	2
Julia's Orchard	Land				Paved	Good	1
Malabanban Watershed	Land	59.9	51.3	5.9	Unpaved	Fair	1
Carlito's Workshop	Land				Paved	Good	1
Museo ng San Pablo	Land	58.7	46.4	1.1	Paved	Good	1
Museo ni Cipra 2	Land	58.1	46.8	1.6	Paved	Good	1
Mga Likha ni Inay	Land			0.3	Paved	Good	1

Source: Tourism Master Plan 2015-2020 and GIS Co.

Access Road: Paved, Unpaved, No road access

Condition: good, fair, poor

Accessibility:

1- accessible all year round by ordinary vehicle

2- accessible only during dry season by ordinary vehicle

3- accessible all year round by 4-wheel drive vehicle only

4- accessible during the dry season by ordinary vehicle and by 4-wheel drive vehicle only during wet season

5- accessible by walking/trekking/climbing only

6- served by regular transport services (jeepney, tricycle, bus)

7- served by regular boat service or by contracted boat service



5.4.1 Facilities in Existing Tourism Establishment and Markets Catered

Tourist sites offer a wide range of services to visitors ranging from scenic natural landscapes to adventurous group activities. For tourists to get the most from their experience, facilities are placed to complement the tourist sites. Most of the tourist sites in San Pablo have accommodation facilities (af) which include cottages, toilets, dressing rooms, swimming pools, and parking spaces. These facilities are commonly found in hotels, inn, beds and breakfast, and resorts. Eating facilities (ef) are also made in order to support accommodation. These comprise restaurants and other food and beverage facilities which are ubiquitous (Table 134).

Table 134. Facilities in Existing Tourism Establishments in San Pablo City

Name of Establishment	Facilities Present						
	af	ff	cf	mf	ef	sf	others
Sampaloc Lake							
Pandin Lake							
Yambo Lake							
Mohicap Lake							
Bunot Lake							
Palakpakin Lake							
Calibato Lake							
Catherdral							/
City Hall							
Fule-Malvar Mansion (White Mansion)							
Doña Leonila Park							
Andres Bonifacio Shrine							
Hagdang Bato							
Trece Martires Monument							
Monumento ng Kagitingan							
Mabini Monument							
Pinaglabanan Shrine (Battle of Sta. Isabel)							
Dambana ng mga Bayani (Guerilla War Monument)							
Calibato Hydro Power Plant	/						
The Old Municipio							
City Plaza							
Conducto Mansion							
Casa San Pablo	/				/		Function Hall
Tahanan ni Aling Meding	/				/		
Coco Palace Hotel	/				/		Function Hall
Auravel Garden Hotel and Restaurant	/				/		Function Hall
Casa Palmera Hotel and Resort	/				/		Function Hall
Bamboo Inn	/				/		
Casa de Obando	/				/		



Name of Establishment	Facilities Present						
	af	ff	cf	mf	ef	sf	others
Casa de Alitagtag Bed and Breakfast Boutique Hotel	/				/		
Fine Rock Hotel	/				/		Function Hall
Lake City Hotel	/				/		
Platinum Hotel	/				/		
Motorist Inn	/				/		
Ridgepark Hotel	/				/		
Rivoli Hotel	/				/		
San Francisco Inn	/				/		
San Pablo City Inn	/				/		
Angel's Resort	/						Function Hall
Bato Springs Resort	/						Function Hall
Bayview Resort	/						
Boying Resort	/						
Bukid Garden Resort	/						Function Hall
Calixihan Mini Resort	/						
Carlos John Resort	/						Function Hall
CDA Resort	/						
Countryside Farm Resort	/						
Cresta Monte Resort	/						
Crisolaido Resort	/						
Dioko Resort and Butterfly Farm	/						/
Duminikaw Resort	/						
EF Thalia Resort	/						
Garden of Eden	/						
Hardin de San Vicente	/						
Kusina de Sabang	/						
La Residencia de Jesus Resort	/						
Madrigal Resort	/						
Maria Paz Royale Garden Resort	/						
Moonrise Mountain Resort	/						
Sanctuario de San Pablo	/						
Sitio de Amor Farm Resort	/						Lagoon, Function Hall, Pavilion
Starlake Resort	/						
Sta. Veronica Resort and Camp Site	/						
Tierra de Oro Resort	/						Function Hall
Villa Amante Garden Resort	/						
Villa Evanzueda	/						
Villa Munoz Lakeview Resort	/						
Café Lago	/				/		
Casa San Pablo					/		
Palaisdaan at Kamayan sa Ilog					/		
Palmera's Garden Restaurant					/		
Patis Tito Garden Café (Kusina Salud)					/		
Si Cristina Gaeau Sans Rival					/		
Sulyap Gallety Café and Restaurant					/		
Dang's Tilapia					/		



Name of Establishment	Facilities Present						
	af	ff	cf	mf	ef	sf	others
Ato Belen's Farm					/		
Hiking in Cabunsod Spring (Forest)							
Forest Wood Garden					/		
Julia's Orchard					/		
Malabanban Watershed							
Carlito's Workshop							
Museo ng San Pablo							
Museo ni Cipra 2					/		
Mga Likha ni Inay							

Source: 2014 Tourism Master Plan

Note: No data for number of employees and markets catered

af – accommodation facilities

ff – financial facilities

cf – communication facilities

mf – medical facilities

ef – restaurants and other eating facilities

s/f – shopping facilities

5.4.2 Inventory of Tourism Support Facilities and Services

There are 37 tourism support facilities in the City. These support facilities aid in the tourism activities in the area. Such facilities are travel and tours, personal services (e.g. spa, skin care, salon.), reception halls, sports facilities, and bars (resto) (Table 135).

Table 135. Inventory of Tourism Support Facilities and Services in San Pablo City

Name of Establishment	Facilities Present							
	af	ff	cf	mf	ef	sf	tr	other
7 Lakes International Travel & Tours			/				/	
ABCA Travel & Tours			/				/	
C.A. Gesmundo Travel & Tours			/				/	
Eskeepadre Travel & Tour Co			/				/	
Golden Alps Tours & Event			/				/	
Guru's Guide Travel & Tours			/				/	
Le VYGR International Travel			/				/	
Lipa City House of Travel & Tours			/				/	
Pinkmel Tourista Travel & Leisure			/				/	
Redmor Travel & Tours			/				/	
Skyquest Travel & Tours			/				/	
Tropicalle Travel & Tours			/				/	
Banahaw Heals Spa	/							
Belvchan Beauty Discovery Inc.	/							
Derma Care Professional Skin, Hair & Spa Inc.	/							
EHRN Salon & Spa	/							
First DLS Ventures Inc.	/							
Sanctuario San Pablo Resort & Spa	/							



Name of Establishment	Facilities Present							
	af	ff	cf	mf	ef	sf	tr	other
Heart Massage and Spa	/							
Nimthai Spa	/							
San Rafael Wonder Spa	/							
Spa, Nail & Salon	/							
Tots House of Spa	/							
Golden Star Ballroom & Reception Hall								
HS Sporting Goods & Services (VESCO)	/							
A Gym Fitness Center	/							
Diamond Sports Complex								
AERA Tennis Court								
Centro Resto Bar					/			
Goto Jo					/			
Quartz Bar & Grill					/			
WER u at Bar & Resto					/			
Enyitos					/			
Zylos Bar Restaurant					/			
Joefel Resto Bar					/			
Pupuntz Grid Bar					/			

Source: 2014 Tourism Master Plan

Note: af – accommodation facilities; ff – financial facilities;

cf – communication facilities; mf – medical facilities; ef – restaurants and other eating facilities;

sf – shopping facilities

5.4.3 Local Revenue and Employment by Tourism Activities

As per record of the City History, Arts, Culture and Tourism Office (CHACTO), they only started recording the arrival of tourist/visitors year 2012 but has not recorded yet of the Local Revenue the various tourism activities, likewise the City Treasurer's Office has no separate posting.

5.4.4 Inventory of Tourists by Origin

Out of the seven lakes in San Pablo, only Pandin Lake has a consistent record of tourists visiting the area. According to the City Tourism Office, they started recording the arrival of visitors in 2012. For the last three years, Pandin has been visited by 33,648 local and foreign tourists. It has at least 12,000 visitors each year (Table 136).

**Table 136. Number of Tourists/Visitors in San Pablo City, 2011-2013**

Tourist Attraction/ Establishment	Number of Tourists/Visitors														
	2011			2012			2013			2014			2015		
	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total
Museo ng San Pablo				9,582	99	9,681	5,636	20	5,656	2,434	48	2,482	2,840	205	3,045
Pandin Lake	11,893	114	12,007	8,910	103	9,013	12,362	266	12,628	20,976	51	21,027	20,962	139	21,101
Yambo Lake							2,435	0	2,435	1,241	387	1,628	21,047	54	21,101
Sampaloc Lake							2,732	0	2,735	2,527	387	2,914	355,648	619	356,267
Bunot Lake							2,435	0	2,435	2,163	387	2,550	12,090	19	12,109
Calibato Lake							2,435	0	2,435	1,316	387	1,703	0	0	0

Source: City History, Arts, Culture and Tourism Office (CHACTO)

5.4.5 Cultural and Tourism Activities

Yearly, tourists have a year-round opportunity to witness the culture and traditions of Filipinos, especially those that are practiced exclusively by San Pablens. Common to the Filipinos are the catering a place and event for the *Semana Santa* (Holy Week) which is highlighted by Via Cruxis by the Lake (Station of the Cross), Good Friday Procession, and the Salubong (Easter Sunday). The *Semana Santa* can be observed across all barangays in the City. Usually observed around the last week of May, a Grand Santa Cruzan is practiced wherein the most beautiful girls and women in the City are showcased as select female Catholic saints (Table 137).

Table 137. Cultural and Tourism Activities in San Pablo City

Activity	Frequency of Activity	Duration of Activity
COCO Festival	Annual	One week
Tilapia Festival	Annual	One day
Semana Santa	Annual	One week
Via Cruxis by the lake	Annual	One day
Good Friday Procession	Annual	One day
Salubong	Annual	One day
City Foundation Day	Annual	One day
Mutya ng San Pablo	Annual	One day
Grand Santa Cruzan	Annual	One day
Rambutan Festival	Annual	One month
Balsa Regatta	Annual	One day
Festival of Lights	Annual	-
Mayflower Festival*	Annual	-
Lao New Year Water Festival*	Annual	-
Market by the Lake*	Annual	-

Source: Tourism Master Plan (2014)

Note: * planned activities; not yet implemented



Festivals are also celebrated in order to display the City's major agricultural produce: COCO Festival to celebrate the abundance of coconut, Tilapia Festival to revel the fish's lavishness, and the Rambutan Festival. These festivals are complemented by the very much-anticipated Mutya ng San Pablo, Market by the Lake, Festival of Lights, and Music and Cultural Festival.

5.4.6 Potential Tourist Attractions in the Locality



San Pablo City regards itself as the City of Seven Lakes. Currently, Sampaloc Lake and Pandin Lake are the ones utilized for tourism purposes and they have already been removed from the list of potential tourist attractions. To fulfil its nickname, the five other lakes are pushed as tourism destinations which are Bunot, Yambo, Kalibato, Palakpakin, and Mohicap.

They are all within protected forestlands as well as alienable and disposable lands. As they are within protected forests, proper planning of tourism activities should be carried out so that the integrity of the environment especially the quality of the lake itself is not compromised (Table 138).

Table 138. Potential Tourist Attraction in San Pablo City

Barangay	Potential Attraction	Within Forest Land (Area in Ha.)	Within A&D Lands (Area in Ha.)
Brgy. Concepcion	Bunot Lake	Protection	A-30.5 m/D-23 m.
Brgy. San Lorenzo	Yambo Lake	Protection	A-28.5 m/D 40 m.
Brgy. Sto. Angel	Kalibato Lake	Protection	A-42 m/D-13.5 m.
Brgy. San Buenaventura	Palakpakin Lake	Protection	A-43 m./D-7.5 m.
Brgy. San Buenaventura	Mohicap Lake	Protection	

Source: Tourism Master Plan

5.4.7 Current and Projected Needs

Based on the Tourism Master Plan 2015-2020, if CHACTO targets at least 1% of the national inbound tourist, the City will expect at least 100,000 tourists in one year or by the end of 2016. Furthermore, fearless target of 5% of the national target would mean about 500,000 inbound tourists annually. In order to meet these targets, there is a need for a strong political will from local leadership and investments from private entrepreneurs to put in money for the establishment of much needed tourism facilities and infrastructure services.



However, existing issues and development needs must be addressed first in order for the City to continuously develop its tourism sector. Some issues identified by the CPDO are the following:

- 1. Underutilized natural attractions:** Due to inadequate access roads leading to the other six lakes such as Pandin, Yambo, Palakpakin, Calibato, Mohicap and Bunot, limited tourists have enjoyed the scenic views of the lakes. As facilities are underdeveloped in these tourist spots, specific guidelines are not yet set for the aesthetic designs and no specific areas for parking, establishments and other facilities.
- 2. Existence of informal dwellers along the lakeshore:** Informal settlers must be relocated particularly in Sampaloc Lake in order to develop the lakes into tourist attractions.
- 3. Limited tourism facilities and activities:** Existing tourist spots have limited facilities and activities to offer which them less attractive to tourist to spend some more time in their establishments.
- 4. Congested traffic flow around Sampaloc Lake:** Since Sampaloc Lake is situated in the City proper, the Lake is less accessible during peak hours and holidays due to congested traffic flow.
- 5. Limited parking space for tourists:** Ample parking space must be provided by tourist establishments in order to accommodate the influx of tourists especially during holidays.
- 6. Need to have zoning ordinance for use of Lakes:** Zoning Ordinance and zoning boundaries must be implemented in the lakes to regulate the use of lakes for aquaculture and tourism purposes.
- 7. Underdeveloped existing tourism project development plans:** Tourism project must be pursued and implemented in order to enhance the tourism facilities and activities in the existing tourism attractions in the City. Special attention must be given in the History, Arts and Culture.
- 8. Need for blue prints of specific tourism project development:** The Tourism Master Plan 2015-2020 has already set out the site development plans for different tourism projects. These should be allocated with funds and must be implemented.
- 9. Limited use and promotion of existing tourism products and services:** CHACTO must be the leading agency in the tourism products and services of the City. Promotional activities and other tourist-related events must be



coordinated and organized with the tourist establishment owners, local talents and interested organizations in order to boost the tourism industry. Moreover, information about different products and services must be visible including the directional signs going to the tourist destinations.

5.4.8 Tourism Analysis Matrix

Table 139. Tourism Analysis Matrix for San Pablo City

Technical Findings/Observations	Implications (Effects)	Policy Options/Recommendations
Underutilized natural attractions due to inadequate access roads going to other six lakes (Pandin, Yambo, Palakpakin, Calibato, Mohicap and Bunot)	<ul style="list-style-type: none"> - Decrease in tourism generated revenues. - Limited number of tourist in each lake - Pollution caused by tourist/visitor “environmental impact” - Eyesore designs; Landscapes* - Block the aesthetic view of the lake. 	<ul style="list-style-type: none"> - Request financial assistance and project through DPWH and DOT. - Negotiate with private lot owners to provide access roads leading to other lakes. - Institutionalize and adopt Tourism Master Plan - Create a local tourism code through an ordinance to set as a guideline for the tourism establishment owners and investors. - Formulate a Tourism Master Plan.
Existence of informal dwellers living along the lake shore.	<ul style="list-style-type: none"> - Decrease in number of tourist and corresponding revenue - Presence of stray animals - Eyesore 	<ul style="list-style-type: none"> - Implement the Tourism Master Plan for the 7 Lakes. - Continuous implementation of DSWD and CUDHO assisted relocation program. - Pass a local ordinance requiring all barangay in the area of seven lakes to prevent entry of illegal settlers. - Pass a local ordinance requiring all barangay in the area of seven lakes to secure their pets.
Limited tourism facilities and activities in 7 Lakes.	<ul style="list-style-type: none"> - Decrease in number of tourist and corresponding revenue. 	<ul style="list-style-type: none"> - Implement the Tourism Master Plan for the 7 Lakes. - Lamp post - Electrification - Water Facilities - Public toilets - Recreation Activities
Congested traffic flow around Sampaloc Lake.	<ul style="list-style-type: none"> - Tourists are having difficulty passing and moving around the lake. 	<ul style="list-style-type: none"> - Pass a City ordinance requiring in one way traffic flow around Sampaloc lake.
Limited parking space for tourist.	<ul style="list-style-type: none"> - Tourist cannot stay long and enjoy the place 	<ul style="list-style-type: none"> - Amend the traffic code ordinance for designated



Technical Findings/Observations	Implications (Effects)	Policy Options/Recommendations
		parking space. (Parking fee can be implemented.) Designated Parking space (Public or Private Lot)
Need to have a Zoning for the fish cages to give way for other tourism activities such as zip line, boating, kayaking, zorb ball and others.	<ul style="list-style-type: none"> - Fish cages are scattered. - Eyesore 	<ul style="list-style-type: none"> - Revised the Zo-Dep and seek for the approval of the LLDA.
Underdeveloped existing tourism project development plans.	<ul style="list-style-type: none"> - Lack of tangible materials in the aspect of History, Arts, and Culture. - Decrease number of tourists 	<ul style="list-style-type: none"> - Projects and programs to preserve existing tourists spots - Pass a local ordinance requiring all historical structures to be restored and preserved. - Declaring the City plaza as the heritage commercial zone of the City.
Need for blue prints of specific tourism project-development	<ul style="list-style-type: none"> - Uncontrolled development of establishments 	<ul style="list-style-type: none"> - The government official will have a clear picture and plan to be followed.
Need to strengthen the promotion of existing tourism products and services	<ul style="list-style-type: none"> - To have a tangible materials in the aspect of History, Arts and Culture. - Decreased number of tourist. - Unawareness of the public to produces and services 	<ul style="list-style-type: none"> - Organization of local producers or talents - Pass a local ordinance requiring all historical structures to be restored and preserved. - Declaring the City plaza as the heritage commercial zone of the City.
Inadequate directional signs and signages going to tourist destinations.	<ul style="list-style-type: none"> - Tourist destinations are not reached 	<ul style="list-style-type: none"> - The government official will have a clear picture and plan to be followed.
Restoration and conservation of City Plaza and City Hall Compound	<ul style="list-style-type: none"> - Damage to heritage 	<ul style="list-style-type: none"> - Implement the Tourism Master Plan - Aesthetic Designs - Landscape - Continue restoration of Historical Structures - Allocate funds for restoration and conservation projects
Need to have a tourist center for space for souvenirs and promotional products as well as accommodate and to serve as information desk for tourists	<ul style="list-style-type: none"> - Low tourist outcome 	<ul style="list-style-type: none"> - Identify and provide space



5.5 Integrated Economic Sector Analysis Matrix

Table 140. Integrated Economic Sector Analysis Matrix for San Pablo City

Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects)	Responsibility Center
AGRICULTURE SECTOR		
Need to increase number of Agricultural Extension workers	Allot budget for the said position	Sangguniang Panglungsod, Mayor's Office
Lack of facilities such as:	As part of the City's thrust and strength in development, the local government should allot, allow, and prioritize for a comfortable budget in which the City Agriculture Office can maximize its function in providing technical assistance to the agricultural sector of San Pablo City.	Sangguniang Panglungsod, Mayor's Office
Decrease in land area for food production	<p>Intensify diversified integrated farming</p> <p>Practice more intensive production (maximize use of land)</p> <p>Farm mechanization</p> <p>Repair and rehab of irrigation facilities to maximize production</p> <p>Urban Gardening</p> <p>Generate more livelihood projects</p> <p>Conduct more appropriate trainings in crop production technologies</p>	CAO, DA, ATI, NIA
Continous illegal conversion of land	Preservation and conservation of agricultural land areas thru: a) strict implementation of ordinances in reclassification and conversion based on CLUP	CAO, CPDO, SP
Post-harvest losses	Provision of post-harvest machineries and facilities	ATI, CAO, Engineering, DA



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects)	Responsibility Center
	Conduct of trainings on post-harvest technologies Provision of more farm-to-market roads	
Old generation of farming sector	Encourage younger generation to engage in farming by: a) providing incentives in farming i.e. Lower land tax of productive agricultural lands, b) providing subsidies such as inputs and machineries	CAO, Farmer' Associations
Climate change	Farming ecosystem preservation and conservation a. Tree planting b. Proper crop cultivation technology along contours, slopes, hilly lands Practice organic agriculture (Nutrient and crop residues management and utilization) Water management (Rainwater harvesting, drip irrigation) Crop farming management (Aerobic Rice Technology (ART), direct seeding technology, Zero tillage) Insurance Conduct seminars and trainings re: environment awareness and the climate change issue Livestock management a. Improved feeding (silage production technology), b. Manure management (Organic fertilizer production, biogas digester with methane recovery)	CAO, DENR, PhilRice, DA



Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects)	Responsibility Center
Poor marketing strategy	Eliminate the presence of the middlemen by strengthening the group of farmers by organizing them into cooperatives Develop market matching and networking Establish a common trading post Patronize our own Tilapia harvest	CAO, LGU, CAO-FARMC, MAYOR'S OFC-Housing LGU-SP
Lake resources depletion and degradation	Lake seeding Establishment of fish sanctuary in every lake Strict implementation of 10% carrying capacity of the lake Compliance to BFAR Fish Registration (Only registered fish cages are allowed) Relocation of informal settlers around lake Lakes cleaning and desilting Stop illegal quarrying; seek permit from LLDA	CAO, BFAR, LLDA
COMMERCE AND TRADE SECTOR		
Weak monitoring of establishment of commercial businesses causing growth in scattered patterns in urban and rural areas.	Strict implementation of would be business zoning ordinances	CPDO, City Assessor's Office
Congestion in current commercial areas	Creation of new commercial area	CPDO, City Assessor's Office, Sangguniang Panglungsod
Underutilized SPC Shopping Mall	Compromise on legal issues	City Treasurer's Office
Internal and external control on collection of fees	Establish strong internal and external control on collection	City Treasurer's Office
Increased volume in traffic flow and inadequate parking area	Expansion, creation and/or relocation of new business area	City Traffic and Management Office (CTMO)



INDUSTRY SECTOR		
Conflicting line of businesses located in one area	Strict implementation of zoning ordinances	CPDO, City Assessor's Office
No readily available data for policy guidelines	Establishment/creation of a data bank in coordination with different concerned offices	BPLD
Conflicting line of businesses located in one area (piggery vs. resort)	Strict implementation of zoning ordinance	CPDO
Limited skills available on the available manpower force	Valid assistance and skill enhancement program	Public Employment Service Office (PESO)
TOURISM SECTOR		
Underutilized natural attractions due to inadequate access roads going to other six lakes (Pandin, Yambo, Palakpakin, Calibato, Mohicap and Bunot)	<p>Request financial assistance and project through DPWH and DOT.</p> <p>Negotiate with private lot owners to provide access roads leading to other lakes.</p> <p>Institutionalize and adopt Tourism Master Plan</p> <p>Create a local tourism code through an ordinance to set as a guideline for the tourism establishment owners and investors.</p> <p>Formulate a Tourism Master Plan.</p>	CHACTO, DOT, DPWH, City Engineering
Existence of informal dwellers living along the lake shore.	<p>Implement the Tourism Master Plan for the 7 Lakes.</p> <p>Continue implementation of DSWD-and CUDHO-assisted relocations.</p> <p>Pass a local ordinance requiring all barangay in the area of seven lakes to prevent entry of illegal settlers.</p> <p>Pass a local ordinance requiring all barangay in the area of seven lakes to secure their pets.</p>	<p>CHACTO, Housing and Urban Development Office</p> <p>Sangguniang Panglungsod</p>
Limited tourism facilities and activities in 7 Lakes.	<p>Implement the Tourism Master Plan for the 7 Lakes.</p> <p>Provide facilities/utilities such as:</p> <p>Lamp post</p> <p>Electrification</p> <p>Water Facilities</p>	CHACTO, TIEZA, Philippine Road Board



	Public toilets	
	Recreation Activities	
Congested traffic flow around Sampaloc Lake.	Pass a City ordinance requiring in one way traffic flow around Sampaloc lake.	Sangguniang Panglungsod, CTMO
Limited parking space for tourist.	Amend the traffic code ordinance for designated parking space. (Parking fee can be implemented.) Designated Parking space (Public or Private Lot)	CTMO, Sangguniang Panglungsod Private Investors, LGU
Need to have a Zoning for the fish cages to give way for other tourism activities such as zip line, boating, kayaking, zorb ball and others.	Revised the Zoning Ordinance- Develop and seek for the approval of the LLDA.	Sangguniang Panglungsod Public/Private Partnership LGU DOT
Underdeveloped existing tourism project development plans.	Projects and programs to preserve existing tourists spots Pass a local ordinance requiring all historical structures to be restored and preserved. Declaring the City plaza as the heritage commercial zone of the City.	CHACTO Sangguniang Panglungsod
Need for blue prints of specific tourism project-development	The government official will have a clear picture and plan to be followed.	CHACTO
Limited use and promotion of existing tourism products and services.	Organization of local producers or talents	CHACTO, Civic Society Organizations (CSO), Tourism Establishment Owners
Inadequate directional signs and signage's going to tourist destinations.	The government official will have a clear picture and plan to be followed.	City Tourism Office
Restoration and conservation of City Plaza and City Hall Compound	Implement the Tourism Master Plan Aesthetic Designs Landscape Restoration of Historical Structures Pass a local ordinance requiring all historical	CHACTO, Sangguniang Panglungsod National Historical Commission of the Philippines (NHCP) and the National Museum (NM)



	structures to be restored and preserved. Declaring the City plaza as the heritage commercial zone of the City.	
Need to have a tourist center for space for souvenirs and promotional products as well as accommodate and to serve as information desk for tourists	Identify and provide space	City Government



6. INFRASTRUCTURE AND UTILITIES SECTOR

6.1 Transportation

Road Network

The present road network of San Pablo City has a total length of 284.374km which connects the different barangays. It is accessible to its neighboring municipalities in Laguna such as Rizal, Calauan, Alaminos, Nagcarlan and Dolores and Tiaong in Quezon. The roads are classified into national, provincial, city and barangay. Under the present condition, the roads are either paved or unpaved. Paved roads are those overlaid with concrete or asphalt while unpaved roads are compacted with gravel or earth fill.

National roads have a total length of 24.344 kms or 8.56% of the total road network where 79.5% is concrete and 20.5% is asphalt. Provincial roads span 83.322 km where 94.43% is concrete and 5.57% is asphalt representing 30% of the total road length. The total length of City roads is about 91.243 km wherein 97.51% is concrete, 2.49% asphalt, comprising 32% of the total road network. Barangay roads comprise 29.44% of the total road network spanning 85.467 kms. These are made up of concrete, asphalt and gravel.

Bridges

There are 28 existing road bridges in the City. Twenty five are in good condition and three (3) are in poor condition and needs concreting. Load capacity ranges from 5 to 20 tons. Most of these bridges are located in the rural areas.

Transport System

San Pablo City is located in the southern part of Luzon. It is about 87 km south-southwest of Manila with Rizal Park as reference point. The City is the center of other progressive cities in Southern Luzon like Manila in the northwest, Lucena City in the southeast, and Lipa City in the southwest. The City is accessible by road from seven (7) neighboring municipalities such as Calauan, Alaminos, Nagcarlan, Rizal, Dolores, and Tiaong in Quezon and Lipa in Batangas.

There are two (2) routes to Manila, via Alaminos and via Calauan. Most commuters travel by bus and jeepneys. Various bus lines ply the Maharlika Highway with routes going to Manila and Quezon Province. Some even reach as far as Bicol Regions. Private vehicles can also conveniently travel.



The SLTC or South Luzon Toll Way Corporation has entered into a contract with the Philippine Government through the Toll Regulatory Board (TRB) to improve the existing condition of the SLEX and to extend this expressway from Calamba City in Laguna to Tayabas in Quezon. This is one of the priority projects of the Philippine government. It is part of the recent study on High Standard Highway Network Development. The project will involve the construction and operation of a 57.325 km expressway interfacing in SLEX Phase 1 in Calamba. Section II and Section III of the project will pass through San Pablo. For Section II of the project from Makban to San Pablo, it will measure a total of 12.20km and for Section III from San Pablo to Tiaong Quezon it will measure 8.10km. Here in San Pablo, it will traverse through Brgy. Sta. Monica, San Miguel, Sta. Maria, Stmo. Rosario, San Isidro, and San Antonio 2 and exit in the boundary of Tiaong, Quezon. San Pablo exit, however, is yet to be determined.

Moreover, traffic moving to and from Manila, Laguna, and Batangas to Quezon is targeted to be diverted by opening of a by-pass road. Referred to as ASAP By-pass (Alaminos-San Pablo City Bypass Road) by the DPWH, this proposed road along the Alaminos-San Pablo City road section of the Pan Philippine Highway (PPH) will cover a total length of 12.30 kilometers. While passing a majority of agricultural areas, the road traverses the southern portions of Alaminos and San Pablo City. Starting point is at Junction Pan Philippine Highway in Barangay San Juan, Alaminos. Pointing at a southeastern direction, it then moves through plain terrains up to the junction of Alaminos-Lipa City Road. Ending point is at Junction Pan Philippine Highway (km. 87+100) in Barangay San Vicente, San Pablo City. The project is expected to start in 2016.

These projects will provide faster and safer access to Regions IV-A and V. It will also alleviate the worsening traffic congestions in the area and contribute to the economic development of the growth centers in those regions.

Meanwhile, public land transportation such as tricycles is normally used to nearby destinations. There are almost 7,500 units registered with franchise or permit to operate. Most operators join in drivers association called TODA (Tricycle Operators & Drivers Association) totaling to 81 TODAs with each having its own terminals. Public utility jeepneys are estimated to be 8,000 units operating throughout San Pablo and routes to nearby towns and cities.

Due to economic development, population increase and constant flow in the volume of vehicles, the City is experiencing frequent traffic problems. With the non-existence of a common terminal, busy City streets parked with



PUJs and tricycles cause traffic jams. Pay parking areas under the San Pablo Shopping Mall are not sufficient and effective because very few avail of them. Instead, undisciplined drivers park their vehicles along narrow streets especially in the central business district.

6.1.1 Inventory of Roads by System Classification and Type of Pavement

To service land transportation which is the primary means of travelling within the City and between municipalities, the government has identified and transformed select lands for roads. The City has a total length of 284 km of national, provincial, City, and barangay roads. More than 75% (259 km) of the roads in the City are already concrete, providing smooth travel for commuters and motorists. Twenty seven km are asphalt, which is an affordable alternative to concrete roads. A balance of only six (6) kilometers is gravel and earth which are traversed deep into barangay roads (Table 141). A more detailed description of roads is depicted in the Appendix Table 5.

Table 141. Inventory of Roads by System Classification and Type of Pavement

Roads	Right of Way	Total Length (km)	%	Road Surface Type							
				Concrete		Asphalt		Gravel		Earth	
				Length	Con	Length	Con	Length	Con	Length	Con
National	Variables	24.344	8.560	19.354	Good	4.990	Good	-	-	-	-
Provincial	Variables	83.320	29.300	78.682	Good	4.640	Good	-	-	-	-
City/ Municipal	Variables	91.243	32.090	88.975	Good	2.268	Good	-	-	-	-
Barangay Road	Variables	85.467	30.050	72.090	Good	0.504	Good	1.078	-	-	-
Alley											
Footpath											
Total		284.374	100.000	259.101		12.402		1.078		5.153	

Source: City Engineer's Office and DPWH Sub-District Office

6.1.2 Inventory of Bridges by Location, Type, Capacity and Condition

According to DPWH and the City Engineering Office, in 2015, there are a total 28 bridges in their inventory. However not all locations were identified (Table 142).

**Table 142. Inventory of Bridges in SanPablo City, 2015**

Bridge name	Location	Location	Type	Load Capacity (tons)	Physical Condition
Mag-ampon	San Rafael	Km 79+620	Concrete	20	Good
Balatuin	Del Remedio	Km 81+121	Concrete	20	Good
Banadero	II-E	Km 82+558	Concrete	20	Good
Banadero	San Francisco			20	Good
Malaunod	San Ignacio	Km 84+414	Concrete	20	Good
Kasayaan	Sta. Elena	Km 87+386	Concrete	20	Good
Nalhu	San Cristobal	Km 88+824	Concrete	20	Good
MRS		Km 87+234	Concrete		
Balatuin	Del Remedio	Km 82+1191	Concrete	20	Good
Balatuin	I-A			20	Good
Balatuin	San Miguel			10	Good
Patay na Tubig	Del Remedio	Km 83+374	Concrete	20	Good
Macopa	Soledad/Sta. Maria		Steel	5	Poor
Matanag	San Bartolome/Santiago I		Concrete	10	Good
Malinao	San Lucas		Concrete	10	Good
Palakpakin	San Buenaventura		Concrete	10	Good
Tarak	Sta. Veronica		Concrete	10	Good
Tarangka	Santiago II/Bautista		Concrete	10	Good
Sta. Ana	Sta. Ana		Steel	5	Poor
Paragusan	San Isidro		Concrete	10	Good
Patay na Tubig	San Isidro		Concrete	20	Good
(Going to Bliss)	San Lucas I		Steel	5	Poor
Kabaong	San Lucas I		Concrete	10	Good
Iyutin	Bautista		Concrete	10	Good
Nangka	Bautista		Concrete	10	Good
Bong-Bong	Santiago II		Concrete	5	Good
Sabang	San Lucas II		Concrete	5	Good
Malabanban	Del Remedio		Concrete	5	Good

Source: City Engineering Office, DPWH

6.1.3 Inventory of Ancillary Road Facilities

There are eight (8) pedestrian crossings laid on national roads while 12 are painted on City roads. Thirteen sidewalks are constructed beside City roads to aid pedestrians. Only two (2) overpasses were built in the City and are located in Del Remedio and Rizal Avenue. Eight (8) waiting sheds were erected along national highways while 36 were afforded along City roads. Only two (2) streetlights were taken into account as government property. To assist in managing traffic, there are two traffic lights stationed above national highways and three (3) around City roads, commonly found in the central business district (Table 143).



Table 143. Inventory of Ancillary Road Facilities in San Pablo City, 2013

Type of Ancillary Road Facilities	Location of Ancillary Road Facility												
	National Road		Provincial Road		City/Municipal Road		Barangay Road						
	Road Name	No.	Condition	Road Name	No.	Condition	Road Name	No.	Condition	Road Name	No.	Condition	
Pedestrian Crossing	Maharlika Highway	8	Good			Schetelig Ave.	2	Good					
						Rizal Ave.	6	Good					
						Colago Ave.	4	Good					
Sidewalk						Rizal Ave.	1	Good					
						Colago Ave.	1	Good					
						Mabini St.	1	Good					
						Schetelig Ave.	1	Good					
						Balagtas Blvd	1	Good					
						M. Paulino St.	1	Crowded					
						P. Burgos St.	1	Crowded					
						A. Bonifacio	1	Crowded					
						P. Zamora St.	1	Crowded					
						Lopez Jaena	1	Good					
						Regidor St.	1	Crowded					
						M. Basa St.	1	Crowded					
					P. Zulueta St.	1	Good						
Overpass	Brgy. Del Remedio	1	Good			Rizal Avenue	1	Good					
Waiting Sheds	Maharlika Hiway	8	Good			City Roads	36*	Good	Rural Roads	43*	Good/Poor		
						Rizal Avenue	1	Good					
Streetlights						Balagtas Blvd.	1	Good					
						Colago Ave.	2	Good					
Traffic Lights	Brgy. San Francisco	1	Good			Schetelig Ave	1	Good					
	Maharlika Hiway/M. Leonor St. Crossing	1	Good										
Road Signage													
Others													

Source: DPWH Laguna Sub-District Engineering Office (*estimate only)



Ancillary road facilities help to facilitate the safety and comfort of pedestrians who choose to walk instead of riding public transportation. Interconnectedness and walkability of destinations help to create a sustainable City as it lessens the use of transport even if they are public utility vehicles. It also helps to encourage fitness and physical activity among the citizens.

6.1.4 Land Transportation Terminals by Location and Condition

The only medium on which transportation takes place in San Pablo City is by land. According to the City Transportation Office, there are 117 land transportation terminals in the City spread across strategic locations. Only classified into two, the terminals are for tricycle and jeepneys – Tricycle Operators and Drivers Association and Jeepney Operators and Drivers Association. Thirty-six (36) terminals cater to locals for transportation within the City and visiting commuters from nearby municipalities (Table 144).

Table 144. Inventory of Land Transportation Terminals by Location and Condition in San Pablo City, 2013

Name	Barangay	Type of Public Utility	Physical Condition
Sambat TODA	I-A	Tricycle	Good
JTM TODA	San Rafael/I-A	Tricycle	Good
CGH TODA	San Roque	Tricycle	Fair
ELP TODA	Del Remedio	Tricycle	Fair
City Boys TODA	I-A	Tricycle	Fair
Petron TODA	VI-C	Tricycle	Good
BDO-Sioland TODA	VII-B	Tricycle	Good
RA TODA	VII-B	Tricycle	Good
Jollibee Day TODA	V-D	Tricycle	Good
Jollibee Night TODA		Tricycle	
L. Dizon TODA	V-C	Tricycle	Fair
Andoks Franks TODA	VII-C	Tricycle	Good
7-11 Plaza TODA	VII-D	Tricycle	Good
Central TODA	V-B	Tricycle	Good
DSP TODA	V-D	Tricycle	Good
SM TODA	IV-C	Tricycle	Good
Heritage TODA	V-B/VI-A	Tricycle	Fair
BS TODA	IV-B	Tricycle	Fair
Hospital TODA		Tricycle	
Centro TODA		Tricycle	
Canossa TODA		Tricycle	
City High TODA	VII-B/VII-C	Tricycle	Good
Fule Sahagun TODA		Tricycle	
SPC TODA	III-B	Tricycle	Fair
CI TODA		Tricycle	



Name	Barangay	Type of Public Utility	Physical Condition
Pasada TODA	III-A	Tricycle	Fair
Cris TODA	VII-D	Tricycle	Fair
LSP TODA	II-E	Tricycle	Fair
Sioland Paulino TODA	VII-E	Tricycle	Good
Sta. Lucia Angeles TODA	I-C	Tricycle	Good
Dagat TODA	VII-E	Tricycle	Fair
MLP TODA		Tricycle	
McDo Night Rider TODA		Tricycle	
Lake City TODA	VII-B	Tricycle	Fair
MLP TODA	VII-B	Tricycle	Fair
ASIL TODA	IV-A	Tricycle	Good
SC TODA	VII-D	Tricycle	Fair
ACBA TODA		Tricycle	
SJM TODA		Tricycle	
SJ TODA		Tricycle	
GM TODA		Tricycle	
CSG TODA		Tricycle	
Lianas TODA	VII-E	Tricycle	Good
San Isidro TODA		Tricycle	
SGD TODA		Tricycle	
Flores TODA		Tricycle	
BSP TODA		Tricycle	
SB TODA		Tricycle	
SOLMA TODA		Tricycle	
DI TODA		Tricycle	
McDo TODA-RV Cent.		Tricycle	
BSM Night TODA	VII-C	Tricycle	Good
AT TODA	II-D	Tricycle	Fair
HK TODA		Tricycle	
Soledad TODA		Tricycle	
Ultimart TODA	III-A	Tricycle	Good
SSS TODA	III-A	Tricycle	Good
14K TODA	VII-E	Tricycle	Good
San Jose Complex TODA	VII-D	Tricycle	Good
City Hall TODA	V-A	Tricycle	Good
Homeboys TODA	1-C	Tricycle	Fair
HWB TODA		Tricycle	
Aglipay-Hiway TODA		Tricycle	
7-11 Night TODA		Tricycle	
Medical TODA		Tricycle	
BIR TODA		Tricycle	
SASSIA TODA	Sta. Ana/San Ignacio	Tricycle	Fair
San Juan/Sta. Filomena TODA	San Juan	Tricycle	Fair
San Crispin TODA	San Nicolas	Tricycle	Fair
Ilog/Saluyan TODA	Sto. Angel	Tricycle	Fair



Name	Barangay	Type of Public Utility	Physical Condition
SITMA TODA	Sto. Angel	Tricycle	Fair
STCP TODA	Sta. Cruz-Putol	Tricycle	Good
Farconville TODA	San Francisco	Tricycle	Good
PNR-WAWA TODA	Del Remedio	Tricycle	Fair
SSCD TODA	San Cristobal	Tricycle	Fair
Cocoland TODA	Del Remedio	Tricycle	Good
Smart TODA	VII-C	Tricycle	Fair
Platinum Hotel TODA	I-C	Tricycle	Fair
SFIB TODA	San Francisco	Tricycle	Fair
Balverde TODA	II-D	Tricycle	Fair
SRRMV TODA	San Roque	Tricycle	Fair
LODA	V-C	Jeepney	Fair
# 3	V-C	Jeepney	Fair
SJSF JODA	V-C	Jeepney	Fair
SCODA 7	V-C	Jeepney	Fair
Night Riders 5	V-C	Jeepney	Fair
Seven Lakers #5	V-C	Jeepney	Fair
CSSDA #5	V-C	Jeepney	Fair
Eskirol	V-C	Jeepney	Fair
SCSP JODA #12	IV-C	Jeepney	Fair
JODAC #37	IV-C	Jeepney	Fair
SPASTODA 08	VII-B	Jeepney	Fair
SPCTODA	VII-B	Jeepney	Fair
SPODA	VII-B	Jeepney	Fair
ASPODA	VII-E	Jeepney	Fair
Sta. Monica JODA	VII-E	Jeepney	Fair
San Nicolas JODA	VII-B	Jeepney	Fair
TJODA	VII-E	Jeepney	Fair
SPWTGI	VII-E	Jeepney	Fair
SBODA	VII-E	Jeepney	Fair
#37	VII-C	Jeepney	Fair
#23 TASODA	VII-C	Jeepney	Fair
#18	VII-C	Jeepney	Fair
#5	VII-E	Jeepney	Fair
Atisan JODA	VII-E	Jeepney	Fair
SPIJODA	VII-D	Jeepney	Fair
SPLODA	IV-C	Jeepney	Fair
Rinalisa	IV-C	Jeepney	Fair
SPACADA	VII-D	Jeepney	Fair
SPACADA	II-E	Jeepney	Fair
SPACADA	III-A	Jeepney	Fair
Cristalino Assoc.	II-E	Jeepney	Fair
JIPDOA	II-E	Jeepney	Fair
DODA	II-D	Jeepney	Fair
STODA	II-D	Jeepney	Fair
Santiago JODA	II-D	Jeepney	Fair
Bautista JODA	II-D	Jeepney	Fair

Source: PSAF/CTMO

Note: No data on area occupied and terminal facilities



6.1.5 Inventory of Public Land Transportation Vehicles by Type and Service Routes

An estimated figure of 15,000 vehicles is servicing the City with public transportation. More than 70% of the jeepneys have a barangay to barangay route. The rest of them are providing passage towards the center or only within the barangay. In the same manner, most of the jeepneys have a route that ends in the Poblacion where goods and services are most available. Only a small percentage provides carriage between barangays (Table 145).

Table 145. Inventory of Public Land Transportation Vehicles by Type and Service Routes in San Pablo City, 2013

Type of Public Utility	Registered in City					From Other City/Municipality	
	Total	Route/Destination				Total Number	Route/Destination
		W/in Brgy	Brgy to Brgy	Brgy to Center	City/Muni /Center		
Jeepney	@8,000	-	@265	@4,255	-	@2,150	Calamba-San Pablo Tanauan-San Pablo Candelaria-San Pablo Sta. Cruz-San Pablo Alaminos-San Pablo Liliw-San Pablo
Tricycle	*7,000	@625	@5,200	@920	-	-	-
Total	15,000	@625	@5,465	@5,175			

Source: Land Transportation Office, Region IV/ PSAF/CTMO/TFRB/ JODA President

*With Franchise; @Estimate

6.1.6 Other Modes of Transport and Facilities

There is no other mode of transport and facilities identified in the City aside from the mentioned transportations. There was an old railway station within the city proper but it has ceased its operation.

6.1.7 Road Accidents by Nature, Location and Frequency for the Past 3 Years

Table 146 shows the number of road accidents in San Pablo City for the past three years by nature and location. During the past three years, there were a total of 104 road accidents and Year 2 has seen the most of it amounting to 44. Human error is the most common cause of road accidents in



the City. Reckless imprudence and driving under the influence of alcohol are also the two common causes.

Table 146. Road Accidents by Nature, Location, and Frequency in San Pablo City

Nature	Location	2011	2012	2013	Total	
Hit and Run	Zulueta St.	1			1	
	Maharlika Highway	1			1	
	Brgy. III-C	1			1	
	Brgy. Del Remedio	1			1	
	Brgy. San Lucas	1			1	
Subtotal		5			5	
Human Error	Brgy. San Roque	2	1	1	4	
	Brgy. San Antonio	2	1	2	5	
	Brgy. Del Remedio	1		2	3	
	Brgy. III-A	1			1	
	Schetelig Avenue	1			1	
	Brgy. San Francisco	2	4	1	7	
	Colago Avenue	1			1	
	Brgy. San Pedro	1	1		2	
	Brgy. IV-C	1			1	
	Brgy. V-B	1			1	
	Brgy. San Rafael	1	2	1	4	
	Brgy. San Miguel		2	1	3	
	Brgy. San Gabriel		2		2	
	Brgy. Sta. Monica		1		1	
	Maharlika Highway		1		1	
	Bagong Bayan		1		1	
	Brgy. I-B			2	2	
	Brgy. San Ignacio			5	5	
	Brgy. II-C			2	2	
	Brgy. II-F			1	1	
	Rizal Avenue			1	1	
	Brgy. VI-C			1	1	
	Brgy. Concepcion			1	1	
	Brgy. Sto. Angel			1	1	
		Cor. Paulino St. and Flores St. Cor P. Burgos St.				
		A. Flores St.		1		1
		Brgy. Sta. Maria		1		1
		Brgy. Sta. Elena		1		1
		M. Basa St.		2	1	3
		Brgy. Sto. Niño		1		1
	City Proper		1		1	
	Brgy. San Diego		1		1	
	M. Leonor St.		1		1	
	Brgy. San Mateo		1		1	
	Brgy. San Isidro		1		1	
	Cor Main Ave. and		1		1	
	Lacsamana St.			1	1	



Nature	Location	2011	2012	2013	Total
	Brgy. San Jose, Mabini St.			1	1
	Brgy. San Marcos		1		1
	Brgy. Bautista		1	1	2
	Brgy. Stmo. Rosario			1	1
Subtotal		14	44	13	71
Reckless Imprudence	Brgy. Sto. Angel	2	1		3
	Brgy. San Francisco	2			2
	Brgy. V-C	1			1
	Brgy. San Cristobal	1	1		2
	Brgy. San Rafael	1			1
	Maharlika Highway	1			1
	Brgy. III-C	1			1
	Brgy. III-D	1	1		2
	Brgy. Del Remedio		1		1
	Brgy. Concepcion		1		1
Subtotal		10	5	0	15
Positive in Liquor	Maharlika Highway	1			1
	Brgy. Concepcion	1	1		2
	City Plaza		1		1
	Brgy. Del Remedio		1		1
	Brgy. III-D		1		1
	Colago Avenue		1		1
	M. Leonor St.		1		1
	Brgy. San Ignacio			1	1
	Brgy. San Rafael			1	1
	San Antonio 1				
Subtotal		2	6	2	10
Brake Failure	Rizal Avenue and Mabini St.			1	1
	Brgy. Concepcion			1	1
Subtotal				2	2
Positive in AB Test	Brgy. III-C			1	1
Subtotal				1	1
Total		31	56	27	104

Source: Philippine National Police-San Pablo City Police Station

6.1.8 Transport Related Projects, Approved/Funded for Implementation

There are several on-going transport-related projects in the City for the present year. Concreting are under operation in three barangays, namely, San Cristobal, San Francisco, San Diego and Bagong Bayan. Rehabilitation and repair efforts are also being carried out in Bagong Pook, San Francisco, and San Jose (Table 147).



In response to the problem of congestion along the Alaminos-San Pablo City road section of the Pan Philippine Highway (PPH), an Alaminos-San Pablo City By-pass Road is proposed to be constructed by the DPWH. To ease the traffic situation in the specified location, various improvement measures are recommended such as (a) road widening of PPH into a four (4)-lane capacity, (b) construction of a bypass/diversion road, (c) A-grade separator scenario (fly-over structure or depressed highway), and (d) traffic management schemes. As of date of formulation of the City's CLUP, no date is specified for the start and completion of the said project. Documents provided by the DPWH did not specify the expected start and end date of the ASAP By-pass Road project but according to the personnel of the said agency, they expect to start the project by 2016.

Also, a major road project is already set to be implemented on October of the year 2016. The South Luzon Expressway Toll Road 4 will cover areas in San Pablo City which not only increases accessibility to the City but may have positive impacts on its economy. A private-public partnership, the major project is expected to be completed by 2018.



Table 147. Transport Related Projects, Approved/Funded for Implementation in San Pablo City, 2015

Name of Project	Location	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
South Luzon Expressway (SLEX) Toll Road 4 (TR-4)	Section II Makban to San Pablo	Road	PPP	1-Oct-16	31-Mar-18
	Section III San Pablo to Tiaong			1-Mar-17	30-Sep-18
Alaminos-San Pablo City Bypass (ASAP) Road	Alaminos-San Pablo City road section of Pan Philippine Highway (PPH), Laguna	Road and Bridges	Government	Unspecified	Unspecified
Repair of road at Sampaloc Lake at San Lucas I	San Lucas I	Road	Government	2015	22 calendar days
Concreting of road at San Cristobal	San Cristobal	Road	Government	2015	
Concreting of road at San Francisco	San Francisco	Road	Government	2015	26 calendar days
Concreting of road at Bagong Bayan	Bagong Bayan	Road	Government	2015	
Repair/ Rehabilitation of line canal at Bagong Pook	Bagong Pook	Line Canal	Government	2015	22 calendar days
Construction of farm to market road in San Catalina	San Catalina	Farm to Market Road	Government	2015	150 calendar days
Concreting of road at San Diego	San Diego	Road	Government	2015	48 calendar days
Proposed concreting of road and its related structures in San Francisco and San Jose	San Francisco and San Jose	Road	Government	2015	

Source: General Services Office



6.1.9 Current and Projected Needs

Based on the HLURB standard, urban areas require 2.4 kilometers of road per 1,000 population. Currently, urban barangays in the City have a total road area of 283.43 kilometers. For a projected population of 135,988 for 2015, urban areas should have 326.37 kilometers of road. This means that there is a lack of 42.94 kilometers of road. Gearing up for 2025, the City should allocate 64.30 kilometers of road networks.

On the other hand, the rural road requirement has already surpassed the standard of 1.5 km/100 hectare of area intended for agriculture lands (14,508.8 hectares). Rural roads have a total of 220.92 km compared to the 217.63 km required, thus an excess of 3.288 km (Table 148). However, this estimation should not be the sole basis for road construction as there are other farms that are far from the existing farm to market road or situated in steep areas. Further assessment still need to be conducted to ascertain the required roads in the rural areas.

Subdivision roads turned over to the local government should be given consideration for improvement and to serve as service roads to shorten the required urban and rural road length. There are also barangay roads that can be widened to serve as diversion roads going out of San Pablo to ease traffic congestion in the business district. Administrative policies should also be considered to let roads serve its purpose of conveying vehicular traffic and not parking areas for transport vehicles and tricycles.

Table 148. Projected Road Requirement for San Pablo City

Type	Existing Road Area	Current Road Requirement	Additional Road Requirement	Projected Road Requirement
Urban	283.43	326.37	42.94	64.30
Rural	220.92	217.63	none	-3.288

Source: Projected by GIS, Co., no estimate for arable land, thus added to road requirement

6.1.10 Transportation Analysis Matrix

Table 149. Transportation Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Poor road condition in some areas	<ul style="list-style-type: none"> - Time consuming - Delivery of goods delayed 	<ul style="list-style-type: none"> - Rehabilitation of roads including construction of drainage systems - Convert gravel roads to concrete or asphalt - Widening of barangay roads



Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Clogged drainage system in irrigation, city market, and city proper	<ul style="list-style-type: none"> - Flooding - Traffic - Destroys pavement 	<ul style="list-style-type: none"> - Regular maintenance of drainage system - Coordination with barangay officials to conduct operation linis every month
Need to retrofit old steel bridges	<ul style="list-style-type: none"> - Unsafe for vehicles - Delivery of goods and services delayed 	<ul style="list-style-type: none"> - Conversion to concrete to increase load capacity and wider lanes
Insufficient parking area	<ul style="list-style-type: none"> - Traffic congestion - Unsafe for commuters and pedestrians 	<ul style="list-style-type: none"> - Provide terminal for public utility vehicles, no terminal along public roads - Require business establishment to provide customer parking - No parking of private vehicles on public roads - Limit tricycles on major roads
Limited and inadequate common terminals	<ul style="list-style-type: none"> - Inefficient public transportation 	<ul style="list-style-type: none"> - Identify strategic terminals
Need for an administrative policy to clear roads of makeshift or temporary PUV terminals	<ul style="list-style-type: none"> - Contributes to traffic congestion - Narrows down right-of-way 	<ul style="list-style-type: none"> - Strictly implement City Ordinance concerning the issue

6.2 Power

San Pablo City is serviced by the Manila Electric Company (MERALCO) through the Botocan Hydro Electric Plant which is looped with the MERALCO grid through the Caliraya Hydro Electric Plant of NAPOCOR. The Philippine Power Development Corporation (PHILPODECO) located in Brgy. San Buenaventura which serves as an additional source of power is already operational.

The total number of households in San Pablo is 47,563 wherein 38,421 are in the rural areas and 9,142 are in the urban areas. Based on the data from the Regulatory Management Office of MERALCO in Pasig City, 100% of the total households are served by electricity.

As to the type of customers/users, there are 43,959 connections comprising the domestic users with 40,633 connections, while commercial users with 3,211 connections. Industrial and street lights (Public) have 82 and 33 connections, respectively. The monthly average consumption of these users is 22,631 kWh.



There is an average of 1.02% annual increase in projected power requirement (in KWH) from year 2012 to 2016 for domestic connections. On the other hand, Industrial users showed a 1.03% annual average decrease in power requirement. For commercial connections, the annual average will increase by 1.06% and streetlights (public) will increase by 1.00% for the next four (4) years.

6.2.1 Household Served and Unserved by Electricity

The Regulatory Management Office of MERALCO estimated that a household count of 62,571 for San Pablo City. Of this, 98.86% or 61,859 households is reported to be electrified by the power provider. Only 1.14% is not served and is presumed to be those in far-flung barangays (Table 150).

Table 150. Number of Households Served by Electricity in San Pablo City, 2013

Population	Number of Households	Percentage
Served	61,859	98.86
Unserved	712	1.14
Total	62,571	100.00

Source: Regulatory Management Office, MERALCO, Ortigas Avenue, Pasig City 0300

6.2.2 Number of Connections by Type of Users and Average Consumption (KWH/Mo.)

In usual manner, residential users are the most numerous customers of electricity in the City (47,954). They have an average monthly consumption of 122 KWh. Industrial establishments consume the most with over 25,456 KWh per month coming from only 62 registered connections. Publicly funded facilities such as streetlights are the second biggest consumers of electricity with 4,617 KWh per month. Taking all connections into account, the City consumes an average of 240 KWh in a month (Table 151).

Table 151. Type of User and Average Consumption of Electricity of San Pablo City, 2014

Type of User	No. of Connections	Average Monthly Consumption (KWh)
Residential	47,954	122
Commercial	3,548	1,354
Industrial	62	25,456
Streetlights	32	4,617
Total (San Pablo City)	51,596	240

Source: Regulatory Management Office, MERALCO, Ortigas Avenue, Pasig City 0300



6.2.3 Current and Projected Needs

Population growth is the main force that increases the City's consumption in natural resources and energy. As seen in Table 152, the power requirement in the City has been steadily rising. From a consumption of 118,000,000 KW in 2012, it is estimated that the City will consume 152,811,830 KW in 2016. This increase calls for additional power facilities so that there is power security in the City and everybody has access to it. Renewable and sustainable energy sources are highly encouraged in providing power for poor households.

Table 152. Projected Power Requirement of San Pablo City

Connection	Projected Power Requirement (KW)				
	2016	2017	2018	2019	2020
Residential	71,191,920	72,343,936	73,514,594	74,704,196	75,913,047
Commercial	60,871,348	64,283,250	67,886,352	71,691,410	75,709,743
Industrial	18,948,252	18,957,141	18,966,035	18,974,932	18,983,834
Streetlights (Public)	1,800,274	1,828,183	1,856,525	1,885,306	1,914,533
Total	152,811,830	157,412,510	162,223,506	167,255,844	172,521,157

Source: Regulatory Management Office, MERALCO, Ortigas Avenue, Pasig City 0300

6.2.4 Power Analysis Matrix

In a visioning workshop carried out by the consultancy firm and in partnership with the CPDO, it was found out that there are no pressing issues concerning the power supply of the City. Power interruptions and the cost of electricity were concluded to be non-priority issues.

6.3 Water

The San Pablo City Water District (SPCWD), a government-owned and controlled corporation that is self-liquidating and autonomous from the local government, has been providing piped water service to the City since 1974. A corporation duly organized under PD 198 (as amended), it is tasked to contribute to the improvement of the quality of life of the residents of San Pablo City by providing potable, adequate and affordable water supply in the entire City while remaining to be a self-reliant and financially viable water district. The existing water supply sources consist of eight springs and 13 production wells. The production wells are designed to augment supply on its existing service area when production from the spring sources significantly decline due to drought. The first piped water system for San Pablo was initiated in 1912 by the



late Hon. Potenciano Malvar, then Governor of Laguna, when he enlisted the services of experts to conduct a feasibility study of tapping Cabunsod Spring to supply through gravity pipeline potable water to the 8,000 residents of San Pablo which was only a municipality then. Additional water sources for San Pablo were not developed until the early 1960's. When Malabanban and Lubigan Springs were tapped by the National Waterworks and Sewerage Administration (NAWASA), Cabunsod was also rehabilitated. These developments provided the City more than 10,000 cubic meters of water daily, but this was not adequate to cope with the demand of the growing population and expanding economy of the City. In 1971, NAWASA was dissolved and this paved way for the return of control of the water system to the local government. This water system was eventually turned over to SPCWD which assumed complete control and administration in order to guarantee continuous maintenance and development.

The improved water system for the City was inaugurated on July 21, 1979. Soon after another spring source was developed. Malamig Spring, with a daily rated production capacity of more than 6,000 cubic meters, was added to the system in 1986. By that time the total service connections of SPCWD had risen to more than 11,000 which doubled the total service connections during the water district's initial year of operation. Meanwhile, the onset of the 90's saw the population of the City rising to more than 160,000 which was a significant increase from the 1975 figure of 116,607. Sensitive to this factor, SPCWD began implementing its modified Phase II-B Project in 1993. Main features of this project are as follow: Development of Balanga Spring sources; construction of two timber tanks with a capacity to store 1,700 cubic meters each; and pipe laying of transmission pipes from Medex Subdivision in Brgy. San Francisco to Brgy. San Cristobal, which included three bridge crossings.

Under normal conditions, the Balanga Spring source, which was put in service in 1996, can provide approximately 10,000 cubic meters of water daily. Due to the El Niño episode of 1997-98, the SPCWD constructed five production wells on strategic locations. The total capacity of these production wells is 7,920 cubic meters daily.

The main storage reservoir of the water supply system is Sampaloc, a circular single cell reinforced concrete reservoir on the side of Sampaloc Lake. It has a storage capacity of 6,390 cubic meters and a ground elevation of 146 meters above sea level. It is fed by Cabunsod, Malamig, Malaunod and Malabanban springs. Two (2) additional reservoirs made of timber with outer cable wire support and inner plastic lining were constructed in Brgy. San Cristobal in 1996. The ground elevation of these reservoirs is 160m. Each of



these timber tanks has a storage capacity of 1,700 cu. m. It is fed by Balanga Pumping Station.

The District still utilizes seven (7) small tanks which are pre-World War II vintage. Four (4) of these 40 cu. m. tanks served as storage for San Mateo production well, the other are storage for Sta. Catalina production well. The San Cristobal and Concepcion production wells have been specifically designed to fill the timber tanks and Sampaloc reservoir respectively. These ensure both storage facilities, which are critical components in the supply distribution system, have adequate level of water stored that can be drawn specially during daily peak usage.

In 2010, the average daily per capita consumption of residential users was 180 liters or an average monthly consumption of 27 cubic meters per household connection with five (5) members. By the end of 2010 the total number of active connections served by the water district stood at 31,107 of which 28,950 were residential or domestic connections. The estimated population served was 144,750 or 58% of the total population of 248,890 (based on PSA 2010 Census). This also represented 64% of the population within the service area estimated at 226,735

In 2012, SPCWD set another milestone. From mid-2011 to the first two (2) quarters of 2012, it extended its distribution network to seven barangays. With only Brgy Atisan not covered by its service, SPCWD is at the threshold of achieving 100% service coverage of its franchise area. The District is more than ever dedicated to achieving its goal: "Malinis na tubig sa bawat tahanan...Serbisyo na aming gagampanan."

As per certification issued by the San Pablo City Water District, there is no available data pertaining to Other Water Sources and Existing Surface Water Resources by Type and Classification. Likewise, there is no more data with regards to Level I and Level II since the District is only providing piped water now.

The following table will show the distribution into different categories of the 35,496 active connections attained by December 2013. As discussed earlier the current service area of SPCWD covers 79 of the 80 barangays of the City. At the end of 2012, the estimated population served was 212,976 or 60% of the total population projected at 257,931.



6.3.1 Level III Local Waterworks System by Type and Number of Consumers and Average Water Consumption

Only one (1) barangay is not served by the San Pablo Water District. A far-flung barangay, Atisan is yet to receive services from the said provider as it continues to utilize untreated water coming out of springs and rivers. Laundry activities in rivers located in rural areas are observed in an alarming number. It is recommended that adequate water connections are made in far-flung barangays so that rivers are not polluted by various chemicals used in cleaning.

Like electricity, most of the connections can be attributed to domestic sources which have an average consumption of 24.23 cu. m. per month. The largest consumer of water in the City is classified as a bulk connection. SM, the only establishment which can be organized under the said classification, consumes a monthly average of 4,807 cu.m. While industries consume almost 100 cu. m. per month, government institutions are just a little behind with an average of 90 cu.m (Table 153).

Table 153. Level 3 Local Waterworks System by Type and Number of Consumers

Description	Type of Consumer								Total
	Domestic	Commercial	Com A	Com B	Com C	Ind'al	Gov'tal	Bulk	
No. of Connections	32,993	1,122	625	427	19	47	262	1	35,496
Ave. Consumption (cu. m.)	24.23	48.66	22.85	27.59	60.72	99	89.91	4,807.42	5,180.38
Barangays Served	79	75	72	75	8	72	75	0	

Source: San Pablo City Water District

Com A = Commercial A
 Com B = Commercial B
 Com C = Commercial C
 Ind'al = Industrial
 Gov'tal = Governmental

6.3.2 Other Water Sources

According to the 2010 census, other sources of water are being used in the City aside from faucets which are commonly owned by individual households. Seen in Table 154, consumers use it for drinking, cooking, and household use such as cleaning and bathing. A big portion of the total number of households uses a communal faucet. However, still, numerous people still utilize deep wells especially for household use. The construction of shallow and deep wells is illegal and highly discouraged as it directly sources water from



the water table and may cause a shortage in the supply. Some unconventional sources of water in San Pablo are lakes, rivers, or rain water and springs.

Table 154. Other Water Sources in San Pablo City

Source of Water	Number of Households	
	Drinking	Household Use
Shared Faucet Community Water System	4,390	3,896
Piped Deep Well (Own Use)	4,722	5,209
Piped Deep Well (Shared Use)	6,810	7,007
Tubed/Piped Shallow Well	1,424	1,566
Dug Well	650	714
Protected Spring	876	748
Unprotected Spring	527	351
Lake/River/Rain/Others	245	1,187
Peddler	130	60
Bottled Water	1,901	0
Others	39	25
Total	21,714	20,763

Source: Philippine Statistics Authority

6.3.3 Existing Surface Water Resources by Type and Classification

The seven (7) lakes are the major surface water resources in the city. These lakes are all utilized for aquaculture and have tourism potentials. Description and technical characterization of the seven lakes are heavily discussed in Table 13.

Table 155. Existing Surface Water Resources by Type and Classification in San Pablo City

Surface Water	Location	Classification
Sampaloc Lake	City Proper	C
Bunot Lake	Brgy. Concepcion	C
Calibato Lake	Brgy. Sto. Angel (San Pablo City) and Brgys. Tala and Antipolo (Rizal, Laguna)	C
Mohicap Lake	Brgy. San Buenaventura	C
Palakpakin Lake	Brgy. San Buenaventura, San Lorenzo and Dolores	C
Pandin Lake	Brgy. San Lorenzo and Barangay Sto. Angel	C
Yambo Lake	Brgy. San Lorenzo (San Pablo) and Brgy. Sulsugin (Nagcarlan)	A

Source: City Environment and Natural Resources Office (Based on the latest Laguna Lake Development Authority (LLDA) Water Quality Test)



6.3.4 Current and Projected Needs

Water consumers as describe by the local water district were divided in five (5) basic groups. They are domestic connections, commercial, industries, governmental and bulk water supply (SM San Pablo). Domestic connections have an average consumption of 9,593,044.68 cu. m. per year, 1,052,508.42 cu. m. for commercial establishments, 282,677.04 cu. m. for governmental, industries consume 55,836 and SM requires 57,684, for a total of 10,984,123.82 cu. m. per year (based on current service connections). The total annual consumption is below the rated capacity of SPCWD which has an average of 14,258,676 cubic meters per year. Given the surplus in water supply the SPCWD should look into improving their water system to some areas experiencing low water pressure. They should also look into reaching 100% coverage of their area by extending their service to the only barangay not being served which also has the need for stable and safe water supply.

Given a projected population of 325,951 in 2025, 100% service coverage and using LWUA standard requirement of 110lpcd per connection the annual water demand will be an approximate 13,086,932.65 cu. m. This value is still below the present yearly average capacity of SPCWD.

Aside from spring, the SPCWD plans to put up deep wells particularly in Sta. Veronica and San Crispin.

6.3.5 Water Analysis Matrix

Table 156. Water Analysis Matrix for San Pablo City

Technical Findings/ Observations	Implications (Effects)	Policy Options/Recommendations
Level 1 water system in some barangays. Unsafe for human consumption	<ul style="list-style-type: none"> - Health risk to household especially children - Unstable water supply 	<ul style="list-style-type: none"> - Upgrading to level 3 water supply system through an independent piped water system by SPCWD
Some areas experience water interruption due to low water pressure	<ul style="list-style-type: none"> - Residents unable to finish household chores such as laundry, cooking, etc. - Business establishments is limited on the quantity of production 	<ul style="list-style-type: none"> - Coordination with water district to improve water system to maintain minimum required pressure for residential and commercial establishments
Many rural areas do their laundry activities in rivers	<ul style="list-style-type: none"> - Water pollution in many rivers 	<ul style="list-style-type: none"> - Draft ordinance regulating the use of rivers
Need for additional source of water in Sta. Veronica and San Crispin	<ul style="list-style-type: none"> - Poor and unsafe source of water 	<ul style="list-style-type: none"> - Development of deep well



6.4 Information and Communication Technology

Communication is the activity of conveying information through the exchange of thoughts, messages, or information as by speech, visuals, signals, writing, or behavior with consciousness. There are modern means of communication: mobile phones and the internet. These have introduced relevant changes in our life. Mobile phones give us an opportunity to stay in touch and to be reachable everywhere. Now it's difficult to imagine how people lived without mobile phones in the past. It is a very useful device because it can access the internet. It offers the possibility of texting in the most convenient and the cheapest form of communication.

Telephones are no longer the only device used to communicate with other people. For example, using new software applications like Skype is undoubtedly one of the popular ways for communication. In this way, we can surf the internet and chat with our friends at the same time. Another advantage is convenience for those who cannot go outdoors to meet up with someone.

E-mails have replaced letters and postcards almost completely. People prefer emails, which are quicker to write and send and more sure to reach the addressee. People use it to stay in touch with friends worldwide. A lot of people especially teenagers communicate in social networks such as facebook, twitter, and the like. They share the news, pictures, funny videos, jokes, songs and so on.

People cannot live without any means of communication. Many can't live without the Internet. The Internet is a great source of information and entertainment for many people. It has made possible new forms of social interaction and has become a major source of leisure. It is so useful, there are lots of different sites for students, businessmen, engineers, for people who fond of music, cinema, theatre, sports and even for disabled people. The Internet has revolutionized the way people communicate. Sending electronic text messages is much faster and easier than writing letters.

People watch television to relax. Through cable television, many programs like the Discovery Channel and Viasat History Channel are viewed and even special programs about cats and dogs on Animal Planet Channel. There are many programs about education & culture, movies and sports. Cable television is a system of distributing television programs to subscribers via radio frequency (RF) signals transmitted through coaxial cables or light pulses through fiber-optic cables. In most common system, multiple television



channels are distributed to subscribers. The abbreviation CATV is often used for cable television. It originally stood for Community Access Television or Community Antenna Television, from cable television's origins in 1948: in areas where over-the-air reception was limited by distance from transmitters or mountainous terrain. The origins of cable broadcasting are even older as radio programming as far back as 1924.

Telecommunications are specialized technologies and organizations that circulate information and communications over a distance through electronic forms and instruments. Telephone companies which purpose is to link major points nationwide via telephone network, have played a major role in telecommunication. Cellular networks or mobile networks is a radio network distributed over land areas called cells, each served by at least one fixed-location transceiver known as base station. With this therefore, mobile phones are able to communicate even if the equipment is moving through cells during transmission.

Another important mode of communication is postal services which is defined as the system whereby messages are transmitted via the post office; "the mail handles millions of items every day." Public toll calling stations, although not so popular nowadays, still are very reliable device for communication. It is a non-exclusive facility at which the public may, by the payment of appropriate fees, place as well as receive telephone calls and/or telegrams or other messages.

Newspapers are a daily source of news, education and entertainment. Print media has also helped inform the public on different issues. Daily, our opinions are shaped not only by television news, but also by the national dailies. Whether we admit it or not, media, print media in particular, is still a strong channel of information.

Postal Services

The Philippine Postal Corporation is a government-owned and controlled corporation responsible for providing postal services in the City. The Philpost has 2,000 post offices nationwide. Different postal stations and mailing centers are located in some barangays, schools, department stores, private residence, and in different establishments. The main post office is situated at the City Hall Complex with 34 personnel more or less.

Through money transfer, Western Union can provide this service, sending money in fast, reliable way on-line nationwide and around the world. LBC Express also offers such service and other services like courier and cargo by



sending documents and packages for personal and business use, guaranteed on time domestic and international deliveries. Via its express solutions, whether partial, combination, or full service, LBC solutions can find the right fit of solution regardless of the size of the business.

Internet Providers

An internet café or cybercafé is a place which provides internet access to the public, usually for a fee. These businesses usually provide snacks and drinks, hence, the café in the name. The fee for using a computer is usually charged as a time-based rate. The concept of a café with full internet access was invented in early 1994. In San Pablo, many places have computer shops due to increasing demand of students, particularly, for easy access on research and assignments. A variation of internet café, called PC bang (gaming centers) became extremely popular also to young people who play multiplayer games.

There are also internet kiosks, internet access points in public places. Hotels and resorts offer internet access for the convenience of their guests. This can take various forms, such as in-room wireless access, or a web browser that uses the in-room television set for its display or computers that guests can use either in the lobby or in business centers like malls.

Telephone Services

PLDT, the leading telecommunication provider in the Philippines was established on November 28, 1928 by an act of the Philippine Legislature and approved by then Gov.-General Henry L. Stinson by means of a merger of four (4) telephone companies under operation of the American Telephone Company GTE. Known as Act 3436, the bill granted PLDT a 50-year charter and the right to establish a Philippine telephone network linking major points nationwide.

Cellular network or mobile network is a radio network distributed over land areas called cells, each served by at least one fixed location transceiver known as base station. Using equipment such as mobile phones, people are able to communicate even if the equipment is moving through cells during transmission.

SMART Communication, a wholly owned mobile phone and internet service subsidiary of the PLDT, was organized in January 24, 1991. It was incorporated with its major stockholders at the time being certain Philippine companies and other affiliates of First Pacific, as well as NTT Com. Capital



Limited. Other subsidiaries and assets are Philcom, Piltel, Infocom Tech, Signal Digital TV, Sun Cellular, Talk & Text, Digitel, and many more.

Globe is one of the leading telecommunications company in the Philippines whose mission is to transform and enrich lives through communication by way of making great things possible.

Cell Sites

Cell site is a cellular telephone site where antennas and electronic communications equipment are placed, usually on a radio mast, tower or other high place, to create a cell (or adjacent cells) in a cellular network. The elevated structure typically supports antennas, and one more sets of transmitters/receivers, transceivers, digital signal processors, control electronics, a GPS receiver for timing (for GSM) primary and back-up electrical power sources and sheltering.

In practice, cell sites are installed in areas of high population density with the most potential users. At Barangay San Francisco, the cell site of Globe and Smart Communications are constructed and multiple base stations are installed in the urban and rural areas depending on the operator's technology. The cell site of Digitel is located at Colago Avenue, Brgy. VI-E.

Public Calling Stations

Payphones are public telephone, often located in a telephone booth or a privacy hood, with pre-payment by inserting money (usually coins), a credit or debit card, or a telephone card. Payphones are often found in public places, beside transportation hubs, convenience stores, malls, schools, hospitals and on street corners. Payphone revenues have sharply declined in many places, largely due to the increased usage of mobile phones.

Broadcast and Television Networks

Broadcasting is the distribution of audio and video content to a dispersed audience via any audio or visual mass communication medium, but usually one using electromagnetic radiation (radio waves). The DWJY-FM radio station in Barangay VII-E is the only radio station operating in the City. The most common and popular system in San Pablo, the Celestron and Telmarc Cable Stations providing multiple TV channels and distributed to subscribers through a coaxial cable which come from a trunk line supported on utility poles originating at the cable company's local distribution facility called the head end.



Print Media

An important trend is the emergence of a chain of local newspapers circulating in the City. These have served as an effective forum for dialogue on local issues. It has succeeded in ventilating these issues into regional consciousness.

6.4.1 Postal Service: Postal Service Personnel and Equipment Communication Services Facilities

The government-owned Philippine Postal Corporation is the single operating public postal service provider in the City. With over 800 permanent and contractual personnel, the post office caters the whole 80 barangays of the City. No data is provided from private postal service providers (Table 157).

Table 157. Postal Service Personnel and Equipment Communication Services Facilities

Postal Services	Number of Personnel	Equipment/Services	Vehicles
Philippine Postal Corporation	517 Permanent 297 Contractual	7 pcs, 2-way handheld radios	15 unit small van 3 Units Suzuki Van 4 Units L300 Van 2 Units 4 Wheeler Truck 3 Units 6 Wheeler Truck 1 Unit 10 Wheeler Truck

Source: Philippine Postal Corporation

6.4.2 Communication Services Facilities

In the age of information, internet connection is one of the essentials of people's lives nowadays. Based on Table 158, the most common and in-demand type of communication is the internet with over 219 internet service providers (e.g. internet café, Wi-Fi) in various barangays. Yet to become obsolete, there are still 116 public calling stations in numerous barangays. An easy means of entertainment for Filipinos is viewing cabled TV shows. However, based on the data provided by the City Planning and Development Office, only 58 out of 80 barangays are served by cabled televisions. Given the proximity to the commercial area and central business district, the all urban barangays are served by the local cable service providers. The 22 barangays unserved by cabled television are the following: Soledad, Atisan, Bautista,



Dolores, San Antonio I and II, San Bartolome, San Buenaventura, San Crispin, San Isidro, San Joaquin, San Lorenzo, San Miguel, Santiago I and II, Sta. Ana, Sta. Cruz, Sta. Isabel, Sta. Maria, Sta. Veronica, and Stmo. Rosario.

Table 158. Communication Services Facilities in San Pablo City, 2013

Type	Barangay	Ownership	
		Public	Private
Internet Services	Bagong Bayan		5
	Bagong Pook		3
	Concepcion		2
	Del Remedio		16
	Dolores		2
	San Antonio I		4
	San Antonio II		1
	San Buenaventura		2
	San Crispin		2
	San Cristobal		2
	San Diego		2
	San Francisco		6
	San Gabriel		4
	San Gregorio		2
	San Isidro		1
	San Jose		3
	San Juan		3
	San Lucas I		3
	San Lucas II		2
	San Marcos		1
	San Mateo		1
	San Nicolas		2
	San Rafael		11
	San Roque		2
	Soledad		1
	Sta. Monica		5
	Sto. Angel		6
	Sto. Cristo		3
	Sto. Niño		1
	I-A		3
	I-B		5
	II-B		3
	II-C		2
	II-D		1
	II-F		1
	III-A		20
	III-B		2
	III-C		1
	III-D		3
	III-F		2
IV-A		2	



Type	Barangay	Ownership	
		Public	Private
	IV-B		1
	IV-C		16
	V-A		1
	V-B		5
	V-C		3
	V-D		18
	VI-A		4
	VI-D		1
	VI-E		1
	VII-A		3
	VII-B		3
	VII-C		12
	VII-D		3
	VII-E		5
		Sub-total	219
Telephone Service Providers	I-C		1
	VI-E		1
		Sub-total	2
Public Calling Stations	Bagong Bayan		3
	Bagong Pook		1
	Concepcion		2
	Del Remedio		4
	San Antonio I		1
	San Buenaventura		1
	San Cristobal		1
	San Francisco		9
	San Gabriel		3
	San Gregorio		1
	San Ignacio		3
	San Joaquin		1
	San Jose		1
	San Juan		1
	San Lucas I		1
	San Mateo		1
	San Nicolas		3
	San Rafael		19
	San Roque		4
	San Vicente		2
	Sta. Cruz		1
	Sta. Filomena		1
	Sta. Monica		1
	Sto. Angel		2
	I-B		1
	II-B		1
	II-E		1
	II-F		1
	III-A		6
	III-D		1



Type	Barangay	Ownership	
		Public	Private
	III-F		3
	IV-A		2
	IV-B		1
	IV-C		1
	V-A		1
	V-B		3
	V-C		1
	V-D		6
	VI-A		2
	VI-D		1
	VI-E		5
	VII-A		3
	VII-B		4
	VII-C		2
	VII-D		1
	VII-E		2
		Sub-total	116

Source: Business Permit and Licensing Division

Note: No data available for year constructed and area occupied

In 2013, there are 14 printed media providing the latest information and news. Usually, these printed media revolve on local issues and news may it be related to everyday happenings, special announcements, religion, and local events/gatherings. Around 1,000 copies are published on a weekly basis (Table 159).

Table 159. Type of Print Media Available in San Pablo City, 2013

Type of Print Media	Location	Area Coverage	Circulation	
			Type	Frequency
Amihan Weekly Newspaper	Brgy. San Lucas	CALABARZON	1,000	Weekly
Ang Dyaryo Natin Publication	Bagong Bayan	-do-	-do-	-do-
Free Times Journal	Brgy. Del Remedio	-do-	-do-	-do-
Laguna Courier Publication	Brgy. San Diego	-do-	-do-	-do-
Monday Times Laguna	Brgy. San Gregorio	-do-	-do-	-do-
Roman Catholic Bishop Newspaper	Magcase St, Brgy. III-B	-do-	-do-	-do-
Talahib Newspaper	Brgy. Del Remedio	-do-	-do-	-do-
The Barangay	Brgy. San Lucas 1	-do-	-do-	-do-
The Laguna Bulletin	Brgy. Sto. Cristo	-do-	-do-	-do-
The Laguna Express	Brgy. Del Remedio	-do-	-do-	-do-
The Monday Mail	Alcantara Subd. Brgy.III-D	-do-	-do-	-do-
The Morning Chronicle	Brgy. San Lucas 1	-do-	-do-	-do-
The Network News	M. Paulino St. Brgy. III-A	-do-	-do-	-do-
Wednesday Herald Newspaper				

Source: City Information Office

Note: no data for number of circulation



6.4.3 Telecommunication: Inventory of Communication Tower (Cell Sites)

Cell site networks are scattered across 26 barangays to provide signal for the major telecommunications service providers in the country. Based on Table 160, only SMART and GLOBE Telecom have cell sites in the City. In order to expand telecommunication services and to widen connectivity among citizens through sharing information, additional cell site networks should be strategically placed so that the catchment radius of the signal is optimized.

Table 160. Cell Site Networks in San Pablo City

Location	Area Occupied	Antenna Height	Date Installed	Catchment Radius (km)	Owner
Bautista					
Concepcion					
Del Remedio	1,634 sq m	120 ft	July 2012		SMART
San Antonio II					
San Buenaventura	426 sq m	45 m	August 2012		SMART
San Cristobal			December 2012		SMART
San Francisco			April 1997		GLOBE TELECOM
San Ignacio					
San Isidro					
San Lucas I					
San Lucas II					
San Marcos					
San Mateo					
San Miguel					
San Rafael		120 ft	July 2012		GLOBE TELECOM
San Roque					
San Vicente					
Sta. Elena	162 sq m	45 m	November 2011		SMART
Sta. Filomena					
Sta. Maria					
Sta. Maria Magdalena		150 ft	July 2012		SMART
Sta. Monica	659 sq m	45 m	May 2012		
Sto. Angel					
I-A					
IV-A		100 ft	July 2012		SMART
VII-E					

Source: Business Permit and Licensing Division



6.4.4 Current and Projected Needs

There are 116 public calling stations in San Pablo City. This is more than adequate for the population of the City. With the strength of how the internet and the social media connect society, the demand for public calling stations will decrease. Currently and for future needs, there is no need to add more public calling stations in the City.

There are two (2) public postal services operating in the City, one (1) in San Roque and the other in Barangay V-C. Amidst competition among private postal corporations, the Philippine Postal Corporation is still operational in the City (Table 161).

Table 161. Projected Requirements for Letter Carriers in San Pablo City

Year	Projected Population	Requirement for Letter Carrier
2015	272,305	55
2016	277,246	56
2017	282,277	57
2018	287,399	58
2019	292,613	59
2020	297,923	60
2021	303,329	61
2022	308,833	62
2023	314,436	63
2024	320,142	64
2025	325,951	65

Source: Projected by GIS, Co.

There are no areas that have urgent needs for future ITC services and facilities.

6.4.5 Information and Communication Technology Analysis Matrix

Table 162. Information and Communication Technology Analysis Matrix for San Pablo City

Technical Findings/Observations	Implications (Effects)	Policy Options/Recommendations
Remote rural barangays not accessible to cable television	Limited to local channels with poor content (ABS-CBN, GMA)	Coordination with cable companies to extend services in the area
Lack of cell sites/antenna towers in remote areas	Poor signal or no signal at all	Coordination with communication/network companies/contractor



6.5 Integrated Infrastructure and Utilities Sector Analysis Matrix

Table 163. Integrated Transportation Sector Analysis Matrics for San Pablo City

Priority Issues/Problems	Possible Intervention/Policies, Programs/Projects)	Responsibility Center
TRANSPORTATION SECTOR		
Poor road conditions in some areas. Parts of: - San Lucas 1 - Del Remedio - San Gabriel - Concepcion	- Rehabilitation of roads	LGU, Brgy. Officials
Insufficient parking areas in commercial areas (City proper)	- Provide terminal for public utility vehicles - Require business establishment to provide customer parking	LGU, Brgy. Officials
Narrow roads in some rural areas - San Juan - San Crispin - Sta. Filomena - San Joaquin - San Ignacio - Sta. Catalina - Sta. Cruz - Atisan	- Road widening	LGU, Brgy. Officials
Need to retrofit old steel bridges	- Conversion to Concrete	DPWH, LGU, Brgy. Officials
Traffic congestion	- Provision of food terminal/s for farm produce of local farmers - Remove terminal on or along public roads - Limit tricycle on major roads	LGU
Limited and inadequate common terminals	- Identify strategic terminals	CTMO, City Government, CPDO
Need for an administrative policy to clear roads of makeshift or temporary PUV terminals	- Strictly implement City Ordinance concerning the issue	Sangguniang Panglunsod, PNP, CTMO, Barangay Officials
WATER SECTOR		
Clogged Drainage System - City Proper areas - San Francisco - Bagong Bayan - Lakeside Subdivision	- Regular maintenance of drainage system - Operation Linis by Brgy. Officials	LGU, Brgy. Officials, CSWMO
Water system unsafe for human consumption - Brgy. Atisan	- Turn-over of a water system managed by the Barangay. - Water testing	LGU, SPCWD DOH, SPCWD
Level 1 water system in the barangay is unsafe for human consumption		



Water interruption due to low water pressure	- Coordination with local water district to increase water supply and maintain minimum required pressure.	LGU, SPCWD
Level 1 water system in some barangays.	- Upgrading to level 2 water supply system	SPCWD
Many rural areas do their laundry activities in rivers	- Draft ordinance regulating the use of rivers	Sangguniang Panglungsod
Need for additional source of water in Sta. Veronica and San Crispin	- Development of deep well	SPCWD, CPDO
INFORMATION AND COMMUNICATION TECHNOLOGY SECTOR		
Poor network signal in some barangays (Lack of cell sites/antenna towers in remote areas)	- Coordinate with telecommunication network.	LGU, Cell Site/Tower contractors
Remote rural barangays not accessible to cable television	- Coordinate with cable companies to extend service areas	Cable companies, Local Brgy. Officials
High cost of monthly bills on cable TV	- Promotion/Discounts	Cable companies

**Appendix Table 1. Social Welfare Facilities and Services in San Pablo City, 2014**

Barangay	Facilities	Physical Condition	Services	Type of Clientele	No. of Clientele
I-B	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	25
II-A	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	65
II-B	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	47
II-C	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	48
II-D	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	55
II-E	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	65
II-E	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	32
II-F	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	27
III-B	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	110
III-C	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	37
III-D	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
IV-C	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	26
Mahabang Parang, San Francisco	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	32
Medex, San Francisco	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	54
Patria Vill., Del Remedio	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	64
PNR, Del Remedio	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
Purok Isla, San Antonio I	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
Sabang, Concepcion	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	37
San Antonio II	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	46
San Bartolome	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	42
San Buenaventura	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	39
San Crispin	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	63
San Cristobal	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	48



Barangay	Facilities	Physical Condition	Services	Type of Clientele	No. of Clientele
San Diego	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	70
San Francisco	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	63
San Gabriel	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
San Gregorio	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	65
San Ignacio	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	37
San Isidro	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	38
San Jose	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	105
San Juan	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	45
San Lorenzo	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	18
San Lucas I	Day Care Center	Good	Non-formal Education and Supplemental Feeding	3-4 yrs. old	72
San Lucas II	Day Care Center	Good	Non-formal Education and Supplemental Feeding	3-4 yrs. old	110
San Lucas II	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	60
San Marcos	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	27
San Mateo	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
San Miguel	Day Care Center	Good/Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	39
San Nicolas	Day Care Center	Good/Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	78
San Pedro	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	38
San Rafael	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	41
San Roque	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	40
San Vicente	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	42
Santiago II	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	65
Santiago II	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	45
Soledad	Day Care Center	Good	Non-formal Education and Supplemental Feeding	3-4 yrs. old	42
Sta. Ana	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	55



Barangay	Facilities	Physical Condition	Services	Type of Clientele	No. of Clientele
Sta. Catalina	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	60
Sta. Cruz	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	40
Sta. Elena	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	37
Sta. Filomena	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	45
Sta. Isabel	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	55
Sta. Maria	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	35
Sta. Maria Magdalena	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	25
Sta. Monica	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	65
Sta. Veronica	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	55
Sta. Veronica	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	41
Stmo. Rosario	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	55
Sto. Angel	Day Care Center	Good	Non-formal Education and Supplemental Feeding	3-4 yrs. old	75
Sto. Cristo	Day Care Center	Well Maintained	Non-formal Education and Supplemental Feeding	3-4 yrs. old	75
Sto. Niño	Day Care Center	Needs Improvement	Non-formal Education and Supplemental Feeding	3-4 yrs. old	44
Terrace, San Francisco	Day Care Center	Serviceable	Non-formal Education and Supplemental Feeding	3-4 yrs. old	48
II-A	Senior Citizen Center		Social Pension	60 yrs. above	119
II-D	Senior Citizen Center		Social Pension	60 yrs. above	100
II-F	Senior Citizen Center		Social Pension	60 yrs. above	77
III-C	Senior Citizen Center		Social Pension	60 yrs. above	58
III-D	Senior Citizen Center		Social Pension	60 yrs. above	60
III-E	Senior Citizen Center		Social Pension	60 yrs. above	56
IV-C	Senior Citizen Center		Social Pension	60 yrs. above	43
V-A	Senior Citizen Center		Social Pension	60 yrs. above	36
V-D	Senior Citizen Center		Social Pension	60 yrs. above	



Barangay	Facilities	Physical Condition	Services	Type of Clientele	No. of Clientele
VI-B	Senior Citizen Center		Social Pension	60 yrs. above	38
VI-D	Senior Citizen Center		Social Pension	60 yrs. above	48
VI-E	Senior Citizen Center		Social Pension	60 yrs. above	89
San Antonio 2	Senior Citizen Center		Social Pension	60 yrs. above	109
San Antonio 1	Senior Citizen Center		Social Pension	60 yrs. above	149
San Bartolome	Senior Citizen Center		Social Pension	60 yrs. above	71
San Buenaventura	Senior Citizen Center		Social Pension	60 yrs. above	94
San Crispin	Senior Citizen Center		Social Pension	60 yrs. above	142
San Cristobal	Senior Citizen Center		Social Pension	60 yrs. above	227
San Diego	Senior Citizen Center		Social Pension	60 yrs. above	90
San Francisco	Senior Citizen Center		Social Pension	60 yrs. above	266
San Gabriel	Senior Citizen Center		Social Pension	60 yrs. above	97
San Ignacio	Senior Citizen Center		Social Pension	60 yrs. above	89
San Isidro	Senior Citizen Center		Social Pension	60 yrs. above	101
San Joaquin	Senior Citizen Center		Social Pension	60 yrs. above	40
San Jose	Senior Citizen Center		Social Pension	60 yrs. above	155
San Juan	Senior Citizen Center		Social Pension	60 yrs. above	124
San Lorenzo	Senior Citizen Center		Social Pension	60 yrs. above	54
San Lucas I	Senior Citizen Center		Social Pension	60 yrs. above	54
San Lucas II	Senior Citizen Center		Social Pension	60 yrs. above	85
San Marcos	Senior Citizen Center		Social Pension	60 yrs. above	87
San Mateo	Senior Citizen Center		Social Pension	60 yrs. above	113
San Miguel	Senior Citizen Center		Social Pension	60 yrs. above	67
San Nicolas	Senior Citizen Center		Social Pension	60 yrs. above	216



Barangay	Facilities	Physical Condition	Services	Type of Clientele	No. of Clientele
San Pedro	Senior Citizen Center		Social Pension	60 yrs. above	101
San Rafael	Senior Citizen Center		Social Pension	60 yrs. above	128
San Roque	Senior Citizen Center		Social Pension	60 yrs. above	38
San Vicente	Senior Citizen Center		Social Pension	60 yrs. above	50
Santiago I	Senior Citizen Center		Social Pension	60 yrs. above	79
Santiago II	Senior Citizen Center		Social Pension	60 yrs. above	47
Santisimo Rosario	Senior Citizen Center		Social Pension	60 yrs. above	99
Soledad	Senior Citizen Center		Social Pension	60 yrs. above	160
Sta. Ana	Senior Citizen Center		Social Pension	60 yrs. above	102
Sta. Catalina	Senior Citizen Center		Social Pension	60 yrs. above	144
Sta. Cruz	Senior Citizen Center		Social Pension	60 yrs. above	99
Sta. Elena	Senior Citizen Center		Social Pension	60 yrs. above	130
Sta. Isabel	Senior Citizen Center		Social Pension	60 yrs. above	106
Sta. Maria	Senior Citizen Center		Social Pension	60 yrs. above	119
Sta. Maria Magdalena	Senior Citizen Center		Social Pension	60 yrs. above	57
Sta. Monica	Senior Citizen Center		Social Pension	60 yrs. above	262
Sta. Veronica	Senior Citizen Center		Social Pension	60 yrs. above	60
Sto. Cristo	Senior Citizen Center		Social Pension	60 yrs. above	188
Sto. Niño	Senior Citizen Center		Social Pension	60 yrs. above	61



Appendix Table 2. Barangay Security Force and Volunteers by Type of Service in San Pablo City

Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
Brgy. I-A	Traffic			
	Peace and Order	10	Hand-held radio, megaphone, first aid kit, power saw, flashlight, raincoat and boots, handcuffs, mowers, generator, whistle, ladder, stretcher, ropes, firearms	
	Disaster			
	Auxiliary Services			
	Others			
Brgy. I-B	Traffic	1	Reflectorized Traffic Vest Whistle and Stop/Go Signal	Working Condition
	Peace and Order	17	Mini Patrol Tri-Bike Patrol 6 Units Handheld Radio 6 Pcs. Rattan Stick 6 Pcs. Arnis Stick (Cudgel) 5 Pcs. Handcuffs 4 Heavy Duty Flashlights	All in working condition
	Disaster	17	Mini Patrol Mini Patrol Tri-Bike Patrol Generator Set Power Saw Grass Cutter Foldable Stretcher Long Line Ropes 2 Medium Size Bolo 2 Medium Size Curved Bolo 2 Medium Size Axe 2 Spade 2 Fork Spade 6 Units Handheld Radio 1 Home Base Radio 4 Heavy Duty Flashlights 1 Unit Carmatilla 4 Evacuation Centers	Working condition
	Auxiliary Services	none	none	None
	Others	none	none	None
	Brgy. I-C	Traffic	2	Whistle
	Peace and Order	20	Flashlight, rain coats, boots, radio, baton or cudgel	In good condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Disaster	20	Portable generator, raincoats, boots, flashlight, radio	In good condition
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. II - A	Traffic	2	School; nightstick; handcuff	Serviceable
	Peace and Order	6	Brgy. Hall; patrol; handcuff; shotgun 9mm; nightstick; flashlight	Serviceable
	Disaster	15	Multi-purpose hall; basketball court; raincoats; boots; flashlight; ladder; ropes; spine board; medical kit	Serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. II - B	Traffic	11	2-way radio, megaphone, whistle	serviceable
	Peace and Order	11	2-way radio, megaphone, whistle	Good condition
	Disaster	Barangay tanod and volunteer	2-way radio, megaphone	Good condition
	Auxiliary Services	Barangay tanod and volunteers	2-way radio, megaphone	Good condition
	Others	Barangay tanod and volunteers	2-way radio, megaphone	Good condition
Brgy. II - C	Traffic	3	Whistle, radio, Patrol	Good condition
	Peace and Order	4	nightstick, Patrol	Good condition
	Disaster	10	Patrol, ropes, radio	Good condition
	Auxiliary Services		Stretcher, first Aid kit, Flashlight	
	Others		helmet	Good condition
Brgy. II - D	Traffic			serviceable
	Peace and Order	13	Night stick, hand held radio, megaphone, flashlight, raincoats, boots, whistle, vest, hand cuff	
	Disaster			
	Auxiliary Services			
	Others			
Brgy. II - E	Traffic	2	Whistle, Flashlight, Patrol	Working condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Peace and Order	6	Flashlight, Handheld radio, Patrol	Working condition
	Disaster	20	Generator megaphone Patrol, Flashlight, First aid kit	All in working condition
	Auxiliary Services	none		
	Others	none		
Brgy.II-F	Traffic			
	Peace and Order	13	Night stick, hand-held radio, megaphone, first aid kit, power saw, flashlight, uniform, raincoat, boots, hand cuffs, tear gas, mowers, generator, whistle, ladder, rope, firearms	
	Disaster			
	Auxiliary Services			
	Others			
Brgy.III-A	Traffic			
	Peace and Order	11	Hand-held radio, megaphone, first aid kit, flashlight, uniform, raincoats and boots, whistle, ladder, firearm, multi-cab	
	Disaster			
	Auxiliary Services			
	Others			
Brgy. III-B	Traffic	none	none	none
	Peace and Order	5	Tricycle Patrol	Good condition
	Disaster	none	none	none
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. III-C	Traffic	4	Whistle, nightsticks	Good condition
	Peace and Order	13	Brgy. Head quarter, 13 nightsticks, 13 whistles, 1 flashlight, 1 hand cuff, 1 multicab, 1 mutlicab	All in good condition For repair
	Disaster	22	Brgy. Hall/2 fire extinguisher, 1 stretcher, 1 extension ladder, 1 megaphone, flash light, 2 ropes	All in good condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. III-D	Traffic	None	none	none
	Peace and Order	10	Batuta	
	Disaster	4	Flashlight, Generator, Stretcher, Two-Way radio, 2 Multi cab	Serviceable
	Auxiliary services	none	none	none
	Others			
Brgy. III-E	Traffic		Multicab; Flashlight;	
	Peace and Order	7	Nightstick; uniform	Serviceable
	Disaster		Handcuff; radio	
	Auxiliary Services	none		
	Others	none		
Brgy. III-F	Traffic	4	Whistle	Good condition
	Peace and Order	7	Nightstick, Uniform, Flashlight	Good condition
	Disaster	5	NA	
	Auxiliary Services	NA	NA	
	Others	NA		
Brgy. IV-A	Traffic	3	Whistles/Radio	Serviceable
	Peace and Order	7	Multicab/Radio/ Flashlight	Serviceable
	Disaster	2	Covered Court/Radio/ladder	Serviceable
	Auxiliary Services	2	Axe/Radio Transistor	Serviceable
	Others			
Brgy. IV-B	Traffic		Nightstick; flashlight	
	Peace and Order	5	Radio; uniform	Serviceable
	Disaster		Raincoat; boots; handcuff	
	Auxiliary Services	none		
	Others	none		
Brgy. IV-C	Traffic		Basketball court; radio; nightstick; /baseball; flashlight; raincoat & boots; whistle; ropes;	
	Peace and Order	7	Uniform; handcuffs; caps; megaphone;	Serviceable
	Disaster		Patrol; 2 multicab; 1 tricycle	
	Auxiliary Services	none	none	none



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Others	none	none	none
Brgy. V-A	Traffic	5	Brgy. Patrol, Pito & nightstick	Good condition
	Peace and Order	5	Brgy. Patrol, flashlight & nightstick	Good condition
	Disaster	7	Brgy. Patrol, Pito, flashlight & 2-way radio	Good condition
	Auxiliary Services	NA	N/A	
	Others	NA	N/A	
Brgy. V-B	Traffic			
	Peace and Order	5	Night stick, hand-held radio	
	Disaster	10	Ladder, whistle, megaphone, first aid kit, radio, flashlight, brgy. patrol	
	Auxiliary Services			
	Others			
Brgy. V-C	Traffic			
	Peace and Order	4	Night stick, hand held radio, Megaphone, Flashlight, Hand cuffs, Generator, Whistle, Ladder	
	Disaster			
	Auxiliary Services			
	Others			
Brgy. V-D	Traffic	5	Whistle, Nightstick	Good condition
	Peace and Order	5	Whistle, Nightstick, handcuffs	Good condition
	Disaster	5	First Aid Kit/AY/ Fire extinguisher/Patrol	Good Condition
	Auxiliary Services	none		
	Others	None		
Brgy. VI-A	Traffic	5	Motorcyle w/ sidecar, Multi cab, whistles	Good working condition
	Peace and Order	5	Motorcycle w/sidecar, multicab, whistles, standard guard stick	Good working condtion
	Disaster	8	Motorcycle w/ side car, multicab, whistles, first aid kit, fire extinguisher, ladder, stretcher, flashlights, axes	Good working condition
	Auxiliary Services	3	Motorcycle w/ sidecar, multi cab, cellphones, CCTV cameras	Good working condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Others	2	Typewriter, desktop computer, printer, official barangay sealer	Functioning & in good working condition
Brgy. VI-B	Traffic	7	Whistle	Serviceable
	Peace and Order	14	2-way radio, Flashlight, nightstick	Serviceable
	Disaster	20	Transistor radio, Ladder, Bolo, rope	Serviceable
	Auxiliary Services	14	2 Multicab, dump truck	Serviceable
	Others			
Brgy. VI-C	Traffic	3	Night stick, Base Radio, Hand Held Radio, Megaphone, First Aid Kit, Power Saw, Flashlight, Uniform, Raincoat and Boots, Hand Cuffs, Mower, Whistle, Ladder, Stretcher, Rope, Patrol	
	Peace and Order	10		
	Disaster	10		
	Auxiliary Services			
	Others			
Brgy. VI-D	Traffic	4	Whistle; nightstick; flashlight	Serviceable
	Peace and Order	9	Whistle; nightstick; flashlight; multicab; hand held radio	Serviceable
	Disaster		Mower; ladder; evacuation center; patrol; multi cab; dump truck; axe; power saw; wheel borrow; boots	Serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. VI-E	Traffic	15	Whistle, Radio, Boots, Rain coat	Good condition
	Peace and Order	15	Nightstick, Radio, Flashlight	Good Condition
	Disaster	25	Generator, fire extinguisher, power saw, wheel borrow, grass cutter, spade, pico	Good condition
	Auxiliary Service	6	First aid kit	Good condition
Brgy. VII-A	Traffic	none	none	none
	Peace and Order	11	Hand held radio/night stick/Brgy. Patrol	Serviceable
	Disaster	11	Fire extinguisher/Fire hose/Brgy. Patrol	Serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
Brgy. VII-B	Traffic	None	none	none



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Peace and Order	10	Flashlight, Tear Gas, Multi	Serviceable
	Disaster	10	Flashlight, Tear Gas, Multi cab	Serviceable
	Auxiliary Services	n/a	n/a	n/a
	Others	n/a	n/a	n/a
Brgy. VII-C	Traffic	none	none	none
	Peace and Order	12	Nightstick, whistle, 2 way hand held radio, Patrol, Flashlight w/ stunned gun, Hand cuff,	Serviceable
	Disaster	5	Ladder, spine board, whistle, flashlight, bolo, generator, medicine kit, rain coat, boots	Serviceable
	Auxiliary Services	none	none	none
	Others	8(Fire volunteers)	Fire extinguisher, boots, raincoat Fire Water Pump	Serviceable Unserviceable
Brgy. VII-D	Traffic	6	Brgy. Patrol Whistle, traffic vest	Deteriorating Serviceable
	Peace and Order	9	Brgy. Patrol Whistle, Flashlight, two way radio	Deteriorating Serviceable
	Disaster	16	Helmets, boots, ax, headlights, flashlight, shovel, ladders, rope, springboard, fire extinguisher	Serviceable
	Auxiliary Services	None	none	none
	Others	16(Fire and rescue brigade)	Same as Disaster	
Brgy. VII-E	Traffic	5	Radio; nightstick; whistle; motor vehicle (Multicab)	Serviceable
	Peace and Order	10	Radio base/transistor; radio; nightstick; teargas; whistle; motor vehicle-multicab	Serviceable
	Disaster	16	Radio; spine board; fire extinguisher; flashlight; axe	Serviceable
	Auxiliary Services	3	Weighing scale; BP apparatus; nebulizer; glucometers	Serviceable
	Others	none	none	none
Concepcion	Traffic		Basketball covered court; megaphone; radio; uniform; nightstick; whistle;	



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Peace and Order	20	Raincoats & boots; caps;	Serviceable
	Disaster		Handcuffs; flashlight; 2 multicab& van; motor single; 1 dump truck	
	Auxiliary Services			
	Others			
Del Remedio	Traffic	4	Stop, Look & Listen signage, Whistle, Uniform & First aid kit	Good condition
	Peace and Order	20	Nightstick, Radio, Flashlight, Patrol, Bogy. Hall Bogy Outpost, power saw, hard hat, first aid kit, Uniform	Working condition
	Disaster	50	Fire truck, bolo, plastic chairs, stretcher, Generator, ax, fire extinguisher, schools first aid kit, covered court, oxygen, radio, ladder, Dump truck, transistor radio, Power spray, bolt cutter, grass cutter	Good working condition
	Auxiliary Services	4 groups (Guardians, Religious groups)	Church, Guardians headquarters, radios	Spacious and well ventilated
	Others	Driver`s Esso., (Jenney, Tricycle)	Vehicles	In good running condition
San Francisco	Traffic		Nightstick; base radio; hand held radio; megaphone; first aid kit;	
	Peace and Order	38	Power saw; firearms; flashlight; uniform; raincoats & boots; mowers; generator;	Serviceable
	Disaster		Ropes; 4 38 cal.; 2 shotgun; 1 9mm; Adventure; multicar; 2 dump truck	
	Auxiliary Services	none	none	none
	Others	none	none	none
San Gabriel	Traffic	n/a	n/a	n/a
	Peace and Order	14	Multi cab	Good condition
	Disaster	14	Multi cab/garbage truck	Good condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Auxiliary Services	n/a	n/a	n/a
	Others	n/a	n/a	n/a
San Gregorio	Traffic	3	Whistle; nightstick	Good condition
	Peace and Order	2	Nightstick; Radio	Good condition
	Disaster	5	Flashlight; Patrol; Radio; Power saw	Good condition
	Auxiliary Services	2	Generator; power saw;	
	Others			
San Jose	Traffic	13	Whistle, nightstick, cellphone, radio, patrol	Good condition
	Peace and Order	3	Patrol, radio, night stick, flashlight, cellphone	Good condition
	Disaster	27	Flashlights, radio, first aid kit	Good condition
	Auxiliary Services	6	First aid kit	Good condition
	Others	None	none	none
San Lucas I	Traffic	4	School/whistle	Good condition
	Peace and Order	5	Chapel site/whistle	Good condition
	Disaster	10	Flashlight, warning sign, emergency kit, rope, radio	Good condition
	Auxiliary Services	none		
	Others	1:10 tanod every purok	Medical kit (Medical mission, clean up activity, anti-rabies vaccination)	Good condition
San Lucas II	Traffic		Covered court; megaphone; flashlight; radio; uniforms a & coats; nightstick;	
	Peace and Order	16	Whistle; boots;	Serviceable
	Disaster		2 patrol	
	Auxiliary Services			
	Others			
San Rafael	Traffic		Nightstick; base radio; hand held radio; megaphone; first aid kit;	
	Peace and Order	28	Power saw; flashlight; uniform; raincoats & boots; handcuffs; mowers; generator;	Serviceable
	Disaster		Whistle; ladder; stretcher; ropes; 1 9mm gov't.issued; L300; 2 multicab; truck	



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Auxiliary Services			
	Others			
San Roque	Traffic		Nightstick; handheld radio; megaphone;	
	Peace and Order	12	First aid kit; flashlight; uniform; hand cuffs; whistle; ladder; ropes	Serviceable
	Disaster		Stretcher; 1 9mm; 1 multicab; 1 owner jeep*	*under repair
	Auxiliary Services	none	none	none
	Others	none	none	none
Sto. Cristo	Traffic		Nightstick; hand held radio; megaphone; first aid kit; flashlight;	
	Peace and Order	10	Uniform; raincoats & boots; handcuffs; tear gas, whistle; ladder;	Serviceable
	Disaster		Ropes; 1 45 cal.; motor services and multicab	
	Auxiliary Services	none	none	none
	Others	none	none	none
Soledad	Traffic	1	Traffic vest/whistle/stop/go signal	Working condition
	Peace and Order	10	Mini patrol/ bike, 5 units hand held radio, 5 pcs. Rattan stick, 2pcs hand cuff 5 heavy duty flashlight	All in working condition
	Disaster	10	2 mini patrol, bike, power saw, grass cutter, stretcher ropes, axe, 5 unit hand held radio, 1 home base radio, 5 heavy	
	Auxiliary Services			
	Others			
RURAL BRGY.				
Bautista	Traffic	17	School/whistle/ school parade/ funeral services	Good condition
	Peace and Order	13	Barangay Hall/ brgy. Patrol/ radio/ flashlight	-do-
	Disaster	10	School/ spine board/ medical equipment/ rope/ flashlight/ radio	-do-
	Auxiliary Services	none	none	none
	Others	none	none	none



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
Dolores	Traffic	9	Megaphone, two-way radio, flashlight, whistle, night stick	Good condition
	Peace and Order	9	-do	-do-
	Disaster	9	Ladder, Stretcher, First Aid Kit, Service Vehicles ropes, power saw	-do-
	Auxiliary Services	9	-do-	-do-
	Others	none	none	none
San Antonio I	Traffic	2	Nightstick; covered court; generator; radio	
	Peace and Order	18	Handcuff; megaphone	
	Disaster		Bicycle; shotgun;	
	Auxiliary Services			
	Others			
San Antonio II	Traffic	5	Whistle/ uniform	All in good condition
	Peace and Order	5	Uniform; radio	-do-
	Disaster	5	Generator/ power saw / radio	-do-
	Auxiliary Services	none	none	none
	Others	none	none	none
San Bartolome	Traffic	1	Vest, whistle, nightstick	Working condition
	Peace and Order	5	Handheld radio	-do-
	Disaster	10	Generator, power saw	-do-
	Auxiliary Services	none	none	none
	Others	none	none	none
San Buenaventura	Traffic	11	Hand held radio/ whistle	unserviceable/s erviceable
	Peace and Order	11	Hand held radio	unserviceable
	Disaster	11	Stretcher; chainsaw; axe	serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
San Crispin	Traffic	1	Nightstick; Flashlight; Traffic vest; Bicycle; Patrol	Working condition
	Peace and Order	4	3 units hand held radio; bicycle; 5 units heavy duty flashlights; 4 pcs Rattan sticks; Patrol	All in working condition



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Disaster	12	Generator set; patrol; bicycle; grass cutter; long line ropes; 3 units hand held radio; 1 home base radio; 5 units heavy duty flashlights; 1 stretcher; 5 evacuation center; first aid kit	All in working condition
	Auxiliary Services	none	none	none
	Others	none	none	none
	Auxiliary Services			
	Others			
San Cristobal	Traffic	20 regular	Covered court/basketball court	
	Peace and Order	10 volunteer	Flashlight; nightstick; boots; handcuff;	Serviceable
	Disaster		Uniform & vest; raincoat	
	Auxiliary Services	none		
	Others	none		
San Diego	Traffic	1	School/whistle; uniform	Good condition
	Peace and Order	19 Tanod Councilor	Barangay Hall	-do-
	Disaster	19 Tanod SB, BNS, BHW	Ladder; Medicine kit; Flashlight; Calamity Equipment; whistle; stretcher & Megaphone	-do-
	Auxiliary Services	none	none	none
	Others	none	none	none
San Ignacio	Traffic	5	Whistle; radio; uniform	Serviceable
	Peace and Order	4	Uniform; Radio, Hand cuff; cudgel	Serviceable
	Disaster	5	Radio; Power saw; Medical kit; Stretcher	Serviceable
	Auxiliary Services	None	none	none
	Others	none	none	none
San Isidro	Traffic	none	none	None
	Peace and Order	12	8 units Handheld radio, 1 home base radio, 2 multicab, 1 barangay patrol, 1 gun; 3 heavy duty flashlights; 3 pcs rattan sticks	All in Good Conditions
	Disaster	12	8 units handheld radio; 1 home base radio; 12 pcs	-do-



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
			hard hat; 1 mega phone; 1 emergency lights; 3 flashlights, 3 evacuation centers; 1 power saw; 2 grass cutter; 1 ladder; 1 multicab; 1 brgy. Patrol; ropes; 12 raincoats; 1 generator	
	Auxiliary Services	none	none	none
	Others	none	none	none
San Joaquin	Traffic	10	whistle	serviceable
	Peace and Order	10	Radio; nightstick; Flashlight; whistle	serviceable
	Disaster	20	Rope/stretcher/ raincoat/flashlight	serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
San Juan	Traffic		Nightstick; base radio; handheld radio; megaphone; first aid kit;	
	Peace and Order	15	Flashlight; uniform; hand cuffs; whistle; ropes;	Serviceable
	Disaster		Ladder;1 multicab; 2 van 1 ambulance; 1 patrol	
	Auxiliary Services	none	none	none
	Others	none	none	none
San Lorenzo	Traffic	3	Whistle; signing device	Serviceable
	Peace and Order	10	Nightstick; hand cuff	Serviceable
	Disaster	10	Stretcher; megaphone; tent; rain coat; ladder; boat	Serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
San Marcos	Traffic	7	Vests; whistle and megaphones	Still working
	Peace and Order	17	Radio; nightsticks	In good condition
	Disaster	17	Medical kit; stretcher	In good condition
	Auxiliary Services	none	none	none
	Others	none	none	none
San Mateo	Traffic			
	Peace and Order	10	Night stick, base radio, hand held radio,	



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
			megaphone, first aid kit, flashlight, raincoats and boots, hand cuffs, tear has, mowers, generator, whistle, ladder, stretcher, ropes, firearms	
	Disaster			
	Auxiliary Services			
	Others			
San Miguel	Traffic	1	Whistle; nightstick; traffic vest	Working condition
	Peace and Order	16	Multi-cab; flashlight; hand held radio	All in working condition
	Disaster	16	Mini patrol; grass cutter; power saw; hand held radio	All in working condition
	Auxiliary Services	none	none	none
	Others	none	none	none
San Nicolas	Traffic	2	Nightstick/ whistle / traffic vest	Working condition
	Peace and Order	17	Patrol/ flashlight/ multi cab/ radio	All in working condition
	Disaster	4	Patrol; radio; stretcher; wheelchair	All in working condition
	Auxiliary Services			
	Others			
San Pedro	Traffic	9	Traffic Vest; whistle, vehicles	Serviceable
	Peace and Order	9	Hand cuffs, nightsticks	Serviceable
	Disaster	9	Early warning device; handsaw (chain saw) mini; vehicles; flashlights; raincoat; shovel; pails; boots; hand held radios; transmitter radio; rope	Serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
San Vicente	Traffic		Nightstick; flashlight; ambulance L300; multicab	
	Peace and Order	14	Raincoats/boots; radio	Serviceable
	Disaster		Megaphone; uniform	
	Auxiliary Services	none	none	none
	Others	none	none	none



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
Sta. Ana	Traffic		Nightstick; base radio; handheld radio; first aid kit; flashlight; uniform;	
	Peace and Order	9	Handcuffs; tear gas; generator; whistle;	serviceable
	Disaster		Shotgun; mower; multicab	
	Auxiliary Services	none	none	none
	Others	none	none	none
Sta. Catalina	Traffic		Basketball court; boots flashlight; raincoats; 3 radio; nightsticks; ropes;	
	Peace and Order	13	Megaphone; first aid kit; handcuff; generator;	serviceable
	Disaster		1 multicab;* 1 L300 & multicab	*unserviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
Sta. Cruz	Traffic		Nightsticks; gun; generator; handcuffs	Serviceable
	Peace and Order	20	Megaphone; flashlight; emergency light; radio 1; handheld 8; uniforms; patrol; 2 multicab*; 1 L300*	*unserviceable *undermainten ance
	Disaster			
	Auxiliary Services	none	none	none
	Others	none	none	none-
Sta. Filomena	Traffic	none		
	Peace and Order	12	2 reinforced flashlights; 2 multicab; 1 L300 van; 1 Motorized Tricycle; 1 Bicycle; 12 probaton; 5 hand held radios; 6 high powered head lamp; 1 flashlight; 2 hand cuff baby jail; 1 home base radio	All in working condition
	Disaster	12	Stretcher; Power saw; power sprayer; 2 multicab 1 L300 van; 1 motorized tricycle; 1 bicycle; 5 hand held radios; 6 high powered head lamp; 1 flashlight; 1 base radio	All in working condition
	Auxiliary Services	None	None	none
	Others	none	none	none



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
Sta. Isabel	Traffic	1	Reflector vest; whistle	Working condition
	Peace and Order	14	PATROL; Mini Patrol; 5 units Hand held radio; 12 Flashlight, 12 Rattan Stick	Working Condition
	Disaster	17	Patrol; Mini Patrol, Power saw; Grass Cutter; axe; spine board; stretcher; 2 evacuation center	Working condition
	Auxiliary Services	none	none	none
	Others	none	none	none
Sta. Maria Magdalena	Traffic	2	School/whistle	Good condition
	Peace and Order	5	Barangay Hall	Good Condition
	Disaster	10	School/Spine board/Flashlight	Good Condition
	Auxiliary Services	none		
	Others	5	Barangay Hall, medical mission Medical Assistance	Good condition
Sta. Veronica	Traffic	20	Whistle/ nightstick	serviceable
	Peace and Order	10	Flashlight/ nightstick/boots	-do-
	Disaster	30	Stretcher/roof; flashlights/ brgy. Patrol/ 2 way radio/ transistor radio/ megaphone/ medicine kit; fire extinguisher	serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none
Santiago I	Traffic		Open basketball court; nightstick; handheld radio; first aid kit; flashlight; uniform;	
	Peace and Order	10	Generator; whistle; ladder; 2 mowers;	Serviceable
	Disaster		Multicab; brgy. ambulance	
	Auxiliary Services	none	none	none
	Others	none	none	none
Santiago II	Traffic	20	Hand Held Radio	Not functioning
	Peace and Order	20	Hand Held Radio/flashlight	-do-
	Disaster	34	Boots/flashlight/ raincoat	-do-
	Auxiliary Services	none	none	None
	Others	none	none	None



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
Stmo. Rosario	Traffic	12	Nightstick; Flashlight; Patrol; complete uniform	Working condition
	Peace and Order	2	12 units of Flashlights; 2 Brgy. Patrol; 8 handheld Radio	All in Working condition
	Disaster	14	2 Patrol; Grass cutter, ropes; 8 handheld radio; 2 heavy duty flash lights; 6 evacuation Center; First Aid Kit	All in working condition
	Auxiliary Services	none	none	none
	Others	none	none	none
Sto. Angel	Traffic	13	School/whistle/school parade/funeral services/patrol	Good condition
	Peace and Order	10	Barangay hall/patrol/flashlight/ radio	Good condition
	Disaster	20	School/spine board/medical equipment/rope/ flashlight/radio/ barangay hall/spine board/medical equipment/	Good condition
	Auxiliary Services	none	none	none
	Others	5 1:1 1 Bus 1 tanod	Barangay Hall (Medical Mission, Medical Assistance) Tanod Assistance as tourist guide to Lake Pandin	Good condition Good condition
Sto. Niño	Traffic	20	Radio; whistle; vest; brgy.outpost	serviceable
	Peace and Order	20	1 shot gun	serviceable
	Disaster	20	Rope; axe; ladder; fire extinguisher; patrol; medicine kit; flashlight	serviceable
	Auxiliary Services			
	Others			
Atisan	Traffic	2	Whistle/ brgy. Patrol/ nightstick	Good condition
	Peace and Order	12	16 units handheld radio/ handcuff/ brgy. hall	Good condition
	Disaster		(generator/ grass cutter/ropes/handheld radio/ flashlights/ evacuation center)	Good condition For repair



Barangay	Type of services	No. of volunteer/ Staff	Facilities/equipment	Condition of facilities/ Equipment
	Auxiliary Services	None	none	none
	Others	none	none	none
Sta. Elena	Traffic	20 regular	Covered court/ nightstick; radio; gun	
	Peace and Order	4 volunteer	45 cal; flashlight; mega	Serviceable
	Disaster		Phone; hand cuff	
	Auxiliary Services			
	Others			
Sta. Maria	Traffic	2	Whistle; Brgy. Patrol; nightstick	In Good condition
	Peace and Order	2	Nigh stick; Brgy.Patrol; brgy. hall	-do-
	Disaster	10	Brgy. Hall; patrol; flashlight, rope school	-do-
	Auxiliary Services	none	none	none
	Others	none	none	none
Sta. Monica	Traffic	15	Whistles; nightsticks	serviceable
	Peace and Order	1	Gun (4)	2 serviceable/2 unserviceable
	Disaster	35	Axe; rope; boots; helmet; medicines kit; transistor radio; flashlight; ladder; generator; stretcher; fire extinguisher; power saw; dump truck; patrol; motor vehicle; rain coat	serviceable
	Auxiliary Services	none	none	none
	Others	none	none	none



Appendix Table 3. Number of Crimes by Barangay in San Pablo City, 2010-2014

Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ATISAN	Rape in relation to RA 7610	1		1							
BAGONG BAYAN (I-C)	RA 9262 Physical Abuse	1									
	RA 7610 Physical Abuse			1							
	Rape in relation to RA 7610					2	1				
	RA 7610 (Rape)					1					
	RA 7610 Sexual Abuse					1					
	Violation of RA 9262 (VANC)							1			
	Murder					10		4			
	Attempted Robbery					2		1			
BAGONG POOK	RA 9262 Physical Injuries	3									
	RA 7610 Threat			1							
BAUTISTA	Violation of RA 7610					1					
	Violation of RA 7610 (Physical Violence)							1			
CONCEPCION	Sexual Abuse	1									
	RA 9262 Physical Violence			1							
	Rape			1							
	RA 7610 Sexual Abuse			1							
	RA 7610 Child Abuse					1					
	Rape in relation to 7610					1		1		3	
	Act of Lasciviousness & Trespass to dwelling										
	Act of Lasciviousness								2		
	Violation of RA 9262								3		
	Violation of RA 7610							1		2	1
	Incest Rape in relation to 7610									1	
DEL REMEDIO	RA 7610 (SA)	2									
	RA 7610 (PA)	1	1								
	RA 9208 (Anti-Trafficking)						1				
	Act of Lasciviousness						1				
	RA 7610 Child Sexual Abuse									1	



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Kidnapped					1					
	RA 9262 (Denial of Financial Support)					1					
	Rape in relation to RA 7610					1		1			
	RA 9262 (Economic Abuse)					1					
	Violation of RA 7610										1
	Attempted Homicide					8		5		2	
DOLORES	RA 9262 Physical Violence			1							
	Attempted Homicide			1							
	Reckless Imprudence resulting to homicide			1							
SAN ANTONIO 1	RA 7610	1									
	Rape					1					
	Theft						2	4			
SAN ANTONIO 2	Violation of RA 9262			1				1			1
	Rape					1					
	Rape in relation to 7610					4		1			
	RA 7610						1				
	RIRA								2		
SAN BARTOLOME	RA 7610 (Rape)			1							
	Violation RA 7610							1			
SAN BUENAVENTURA	RA 7610 (Physical Abuse)	2									
	Act of Lasciviousness	1									
	RA 9262	2									
	RA 7610 (Verbal Abuse)			1							
	Murder							1		2	
SAN CRISPIN	Rape in relation to RA 7610	2									
	Violation of RA 9262	1							1		
	Act of Lasciviousness	1									
	Violation of RA 9262 (Economic Abuse)										1
	Reckless Imprudence/Frustrated Murder						4		1		
SAN CRISTOBAL	Violation of RA 9262	1									
	Act of Lasciviousness	1									



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Attempted Rape & Physical Injuries			1							
	Rape in relation to RA 7610					1					
	RA 9262 Physical Violence					1					
	Act of Lasciviousness & Physical Injuries									1	
	Oral Defamation					2	1				
SAN DIEGO	Rape			1							
	Maltreated				1						
	Violation of RA 9262							2			
	RA 7610								1		
	RA 7610 (Sexual Abuse)								1		
SAN FRANCISCO	RA 7610 (Sexual Abuse)	4		2		2					
	RA 9262 (Verbal Abuse)	1									
	RA 9262 (PA / EA)	2									
	RA 9262 (Physical Injury/Threat)	1									
	Act of Lasciviousness	1								1	
	Rape			1		4					
	RA 9262 (Emotional Anguish)			1							
	Seduction				1						
	RA 9262 (Physical Violence)			4							
	Unjust Vexation			1							
	Attempted Parricide			1		1					
	RA 9262 (Concubinage)					1					
	Adultery						1				
	Violation of RA 9262					1		1		1	
	Sexual Abuse					1					
	RA 9262 (Financial Support)					1					
	Rape in relation to RA 7610								1		
	Violation of RA 7610										3
	RA 7610 (PA)	2			1						
	RA 9208/RA 7610										
	RA 4136							17	1	11	2
SAN GABRIEL	RA 9262 Physical Violence	1									1
	RA 7610 (Sexual Abuse)			1							
	Violation of RA 9262					1				1	1



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Unjust Vexation								1		
	Physically Abused								1		
	Violation of RA 7610										1
	Robbery					1				1	
SAN GREGORIO	RA 9262 Physical Violence	1									
	RA 7610 (Sexual Abuse)			1							
	RA 9262 Non Support			1							
	Violation of RA 9262					1					
	RA 7610					2					
	RA 7610 (Rape)								1		
	RA 9262 (Economic Abuse)								1		
	Violation of RA 8353 (Rape)										1
	Physical Injury					3		1	6		1
SAN IGNACIO	RA 7610 (Sexual Abuse)	1									
	RA 9262										
	RA 9262 (VAWC)					1					
	Violation of RA 7610			1				1	4		
	RA 7610 (Rape)					1					
	Rape in relation to RA 7610					1					
SAN IGNACIO	Physical & Psychological Abuse								1		
	Adultery							1			
	Concubinage							1			
	RA 4136							9	3		1
SAN ISIDRO	Unjust Vexation	1									
	RA 7610							1			
	Rape in relation to RA 7610							1			
	RA 9262 Physical Violence							1			1
	Violation of RA 7610										1
SAN JOAQUIN	RA 7610 (SA)	1									
	Unjust Vexation							2			
SAN JOSE	RA 7610 (Sexual Abuse)	1									
	Consented Abduction RA 7610		1								
	RA 9262 Physical Violence									1	



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	RA 9262 Physical Injuries			1	1						
	RA 7610 Physical Abuse			1							
	RA 7610					1			1		
	RA 7610 (Rape)					1					
	Violation of RA 9262							1			2
	Rape							1			
	RA 8353 Rape in relation to RA 7610							1			
	Rape in relation to RA 7610										2
	Murder						4				
SAN JUAN	Violation of RA 7610			1							1
	Act of Lasciviousness			1							
	Violation of RA 9262										1
	Rape in relation to RA 7610										1
	Estafa									1	
SAN LORENZO	Rape in relation to RA 7610									1	
	Violation of RA 7610										2
SAN LUCAS I	RA 7610 (Physical Abuse)	1									
	Theft	6									
	RA 9262 (Physical Violence)	1		3							
	Child Abuse			1							
	Rape						2				
	Violation of RA 7610						2				
	Sexual Abuse						1				1
	RA 9262						1				
	Reckless						2				
	RA 9231 Child Labor Code						1				
	Rape under Art. 226 (A) of RPC in rel to RA 7610						2				
	Rape in relation to RA 7610						1				
SAN LUCAS 2	Rape in relation to RA 7610	1									
	RA 7610 (PA)	1									
	Act of Lasciviousness	1									
	RA 9262 Physical Injuries			1							
	Rape										1
	RA 6539						4				



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SAN MARCOS	Physical Injury	1									
	Violation of RA 9262 (Economic Abuse)					1					
	RA 8353 (Rape)					1					
	Violation of RA 7610					1					
	RA 7610 (Sexual Abuse)					1					
	Reckless Imprudence/Theft					5			1		
	Rape	1									
	RA 7610			1							
	Attempted rape			1							
	RIR SPI					1					
SAN MIGUEL	RA 7610 (Rape)	2									
	RA 9262	1									
	Threats					3	1	3			
SAN NICOLAS	RA 7610 (Sexual Abuse)	1		1							
	Violation of RA 7610	1									
	Child Abuse			1							
	Unjust Vexation			1							
	Violation of RA 9262					2					
	Physical Injury					3		2			
	RA 7610 (Sexual Abuse)	1									
	RA 9262 (Physical Abuse)								1		
	Violation of RA 9262								1		
	Frustrated Murder					2					
SAN RAFAEL	Violation of RA 9262 (Physical Violence)	1				3					
	Threat	1									
	Seduction			1							
	Rape in relation to RA 7610			1		1					
	Act of Lasciviousness			1							
	Reckless Imprudence/Theft										
	Violation of RA 9262								2		
	Violation of RA 7610								1		
	RA 4139/Theft					20	1	6	5		
	Rape	1									
SAN ROQUE											



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	RA 9262 (Physical Injuries)			1							
	RA 7610 (Physical Violence)			1		1					
	Violation of RA 9262							1			
	RA 7610 (Sexual Abuse)									1	
	Qualified Theft					6	1	2	1		
SANTIAGO I	Violation of RA 9262 (Financial Support)	1									
SANTIAGO 2	RA 9262 (PA)	1									
	RA 9262			1							
	Violation of RA 7610					1					
	Theft & Violation of RA 7610								1		
	Rape in relation to RA 7610								1		
	Qualified Theft						2				
STMO. ROSARIO	RA 7610 (Physical Abuse)						1		1		
	Rape in relation to RA 7610										
	Attempted Homicide						1				
SAN VICENTE	RA 7610 (Sexual Abuse)	1									
	RA 7610 (PA)	1									
	Violation of RA 7610				2						
	Rape in relation to RA 7610				1						
	Maltreatment				1						
	RA 8353 (Rape)			1							
	RA 9262			1							
	Violation of RA 9262 (Financial Support)										
SOLEDAD	Threat	1									
	RA 9262 (Economic Abuse)						1				
	Violation of RA 9262								1		
	Art. 295						1				
STA. ANA	RA 9262 (Physical Violence)	2									
	Sexual Abuse						1				
	Rape in relation to RA 7610									1	
STA. CATALINA	RA 9262 (Denial of Financial Support)	1									
	RA 7610 (Physical Injuries)	1									



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	RA 7610 (Physical Abuse)			1							
	Rape in relation to RA 7610			1							
	Trespass to dwelling & Act of Lasciviousness					1					
	Violation of RA 7610									1	
	Frustrated Murder					2					
	Violation of RA 7610							1			
STA. CRUZ	Rape in relation to RA 7610					2	1				
STA. ELENA	RIRPL					1		1			
	Rape in relation to RA 7610										1
STA. ISABEL	Violation of RA 9262										1
	RIRSPI					1					1
	RA 6539 (Car napping)					4		4			
STA. FILOMENA	RA 7610 (Physical Violence)					1	1				
STA. MARIA	Sexual Abuse & Illegal Detention	1									
STA. MARIA MAGDALENA	Rape in relation to RA 7610	1							1		
	RA 9262 (Denial of Financial Support)			1							
	RA 7610			1						1	
	RA 9262								1		
	Violation of RA 9262 (Psychological Violence)							1			
Sub-Total		6		4		9	2	10	2	3	
STA. MONICA	Violation of RA 7610	1									
	RA 7610 (Sexual Abuse)			1							
	RA 9262 (Physical Violence)					1					
	RA 9262									1	
	SPI and MM					2		2			
STA. VERONICA	RA 7610 (Sexual Abuse)	1									
	RA 9262			1							
	Rape in relation to RA 7610								1		
	Violation of RA 7610										1
	Attempted Homicide/Parricide					2		2			
STO. ANGEL	Rape in relation to RA 7610	2					1				
	RA 7610 (Sexual Abuse)	4									



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	RA 7610 (Child Abuse)	2							1		
	RA 9262 (Physical Abuse)	1									
	RA 7610 (Verbal Abuse)	1									
	RA 9262 (Physical Violence)			1							
	RA 9262 (Denial of Financial Support)			1							
	RA 9262 (Physical Injuries)			1							
	Violation of RA 9262 (Economic Abuse)					1					
	RA 8363 (Rape)					1					
	RA 9262								1		
	RA 7610								1		
	Incest Rape in relation to RA 7610									1	
	RIRSPI								1	1	
STO. CRISTO	RA 9262 (Physical Abuse)	1									
	Violation of RA 7610	1									1
	RA 7610			2							
	RA 9262 (Financial Support)			1							
	RA 9262 (Physical Violence)			1					1		
	Unjust Vexation			1							
	Direct Assault, Serious Disobedience & Obstruction of Justice			1							
	RA 9262 (Death Threat)			1							
	Rape								1		
	Alarm and Scandal						1				
STO. NIÑO	Unjust Vexation		3								
	RA 7610 (Sexual Abuse)			1							
	Act of Lasciviousness in relation to RA 7610					1					
	RA 9262					1					
	Rape								1		
I-A	Abduction (consented)	1									
	Violation of RA 9262 (Economic Abuse)					1					
I-B	RITDP						6			4	
	RA 9262 (Sexual Abuse)	1									



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	RA 9262 (Physical Violence)			1							
	RA 9262 (Emotional Anguish)			1							
	RA 7610 (Sexual Abuse)			1							
	Violation of RA 7610							4		1	
	Violation of RA 9262							1		2	
	RA 10054					4					
II-A	RA 7610 (Physical Abuse)	2									
	Rape in relation to RA 7610	1									
	RA 7610 (Child Abduction)	1									
	Violation of RA 7610			1							
	Physical Injuries (Child Abuse)			1							
	Frustrated Homicide					1					
II-B	Threat	1									
	Violation of RA 7610			1							
	RA 7610 (Child Abuse)					2		1			
	Sexual Abuse					1					
	RA 9262					1					
	Violation of RA 8353 (Rape)									1	
	Theft					3		2			
II-C	Unjust Vexation		5								
	RA 9262 (Financial Support)										
	Rape in relation to RA 7610								1		
	Violation of RA 9262									1	
	Robbery/PD9					5					
II-D	RA 9262 (Physical Violence)			1							
	Attempted Parricide			1							
	Violation of RA 9262								1		1
	Violation of RA 7610										1
	Act of Lasciviousness in relation to 7610										1
II-E	PO1602					2					
	RA 9262 (Physical Abuse)	1									
	Theft	1									
	Attempted Homicide/Parricide			1							
	RA 9262 (Physical Violence)					1					



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Violation of RA 7610										1
	Reckless					6					
III-F	RA 7610	1						1			
	RA 9262 (Physical Abuse)			1							
	RIRSPI					2	1				
III-A	RA 4136					6		21			
III=B	RA 9262 (PA)	1									
	Violation of RA 7610	2	1								
	Child Abuse										1
III-C	Theft	1									
	Violation of RA 9262 (PA)	1									
	Civil Case				4						
	Consented Abduction				1						
	RA 7610 (Physical Abuse)				2						
	RA 9262 (Economic Abuse)					1					
	Severe Physical					10					1
	Act of Lasciviousness				1						
	RA 9262				1						
	Threat										1
III-D	RA 9262 (Physical Violence)	1									
	RA 9262	1				1					
	RA 7610	1									
	Act of Lasciviousness					1					
	Rape										1
	Theft					1		1			1
III-E	RA 9262 (Physical Abuse & Malicious Mischief)										1
	Allegedly Physically Abused										2
	Rape										
III-F	Reckless Imprudence					2					1
IV-A	Robbery/PD 9					4					1
IV-B	RA 9262					1					
	Unjust Vexation					2					
	RA 4136					6					1



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
IV-C	RA 9262			1				1			
	Act of Lasciviousness			1							
	RA 7610 (Sexual Abuse)					1					
	Theft					5		2			
IV-D	RA 4136					1					
	RA 7610 (Physical Abuse)					1					
V-A	RA 9262 (Physical Abuse)					1					
	RA 8353 & Act of Lasciviousness									1	
V-B	PH ISD					5	1	2	2		
	Act of Lasciviousness	2									
	Slightly PI					3		1			
	Violation of RA 9262							1			
V-C	Murder					2					
	Act of Lasciviousness			1							
V-D	RA 9262 (Physical Violence)			1							
	Violation of RA 7610										
VI-A	RIR SPI					2		4			
	Violation of RA 9262			1				2	2	1	
VI-B	Art. 201 Sec. 3					3		2	1		
	RA 7610 (Sexual Abuse)			1							
VI-C	Theft					1		2			
	RA 7610 (PA)	4									
VI-D	Robbery					1		1			
	Violation of RA 7610		1								
VI-E	RA 7610 (PA)		1								
	Child Abuse		1								
VI-E	Physical Injury			1							
	Violation of RA 9262							1			
VI-E	RA 7610							1			
	Robbery/Snatching					4		1			
VI-E	Threat			1							
	RA 7610 (Rape)					1					
VI-E	RA 7610					1					
	RA 7610 (Child Molestation)							1			



Barangay	Crime	2010		2011		2012		2013		2014	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
VII-A	Unjust Vexation					1	1				
	Rape in relation to RA 7610	1									
	Physical Injuries	1		1							
	RA 9262					1					
	Murder					5		3			
	Act of Lasciviousness	1									
	RA 9262 (Sexual / Physical Abuse)	1									
	Harassed/Threatened	1									
	Unjust Vexation			2							
	RA 9262			1							
VII-B	Murder/Reckless Imprudence					4	3	1	1		
	RA 7610	1									
	Sexual Abuse	1									
	Act of Lasciviousness				1						
	Violation of RA 7610 (Physical Abuse)								2		
	Violation of RA 7610									1	
	Rape			1							
	Unjust Vexation			1							
	Violation of RA 9262 (Physical Violence)									1	
	RA 4136					4					
VII-E	Violation of RA 9262								1		
	Murder/Carnapping					4	3			1	
	Physical Injury					1			2		
	Sexual Harrasment	1									
	Rape								2		
	RA 7610 (SA)	1									
	RA 9262 (PA)	1									
	Total	124	9	107	8	337	36	204	30	55	2
			133	115			373	234			57

Source: Philippine National Police. San Pablo City

**Appendix Table 4. Existing Sports and Recreational Facilities in San Pablo City**

Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Brgy. I - B		Basketball Court Basketball Court		Public Private	Good Good
Brgy. I - C		Basketball Court Basketball Court		Public Public	Good Good
Brgy. II - A	150 sq. m. 100 sq. m.	Covered Basketball Court Open Basketball Court		Public Public	Good Good
Brgy. II – B Jarina Brion Resort		Covered Basketball Court	Swimming Pool	Public Private	Good Good
Brgy. II - C and Brgy. II -D PNR Compound	125 sq. m.	Open Basketball Court		Public	Good
Brgy. II - E		Open Basketball Court		Public	Good
Brgy. II - F		Open Basketball Court		Public	Good
Brgy. III - A San Pablo Colleges		Basketball Court		Private	Good
Brgy. III – B Liceo de San Pablo	2397 sq. m.	Basketball Court		Private	Good
Brgy. III – C		Open Basketball Court		Private	Good
Brgy. III – D Villongco Subd. Schetelig Ave.		Covered Basketball Court	Body Smith Gym	Public Private	Good Good
Brgy. III - E Villa Lozada Subd.. Vesco Subd.		Basketball Half Court Badminton Court		Public Private	Good Good
Brgy. IV - A Efarca Village Schetelig Ave.	338 sq. m.	Covered Basketball Court AERA Tennis Court		Public Private	Good Good
Brgy. IV - B Barleta St.		Billard Hall		Private	Good
Brgy. IV - C Dagatan Boulevard Shoreline of Sampaloc Lake		Moveable Basketball Goal/ Temporary Basketball Court	Mini Parks	Public Public	Critical Good
Brgy. V - A Jesus Christ & the Latter Day Saint Compound Portion of Sampaloc Lake shoreline Sabang Hills Resort		Open Basketball Court	Doña Leonila Parks & playground Mini Park/mini playground/vi ew deck Swimming Pools	Public Private Private	Good Good Good
Brgy. V - C		Moveable Basketball Goal		Public	Critical



Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Brgy. V - D Hernandez St.		Basketball Goal		Public	Good
Brgy. VI - A					
San Pablo Central School	50 mtrs Olympic size	Basketball Court Track and Field Oval Softball Diamond Swimming Pool Tennis Court	Gymnasium	Public Public Public Public Public	Good Poor Poor Poor Poor Good
Brgy VI – D Brgy. Hall Cmpd., Pook Kasiyahan		Covered Basketball Court		Public	Good
			Playground	Public	Good
SPC Natl. High School	338 sq. m.	Basketball Court		Public	Poor
	162 sq. m.	Volleyball Court			Poor
Canossa College	850 sq. m.		Gymnasium	Private	Good
	500 sq. m.		Quadrangle	Private	Good
	1,100 sq. m.	Basketball Court		Private	Good
	324 sq. m.	Volleyball Court		Private	Good
Brgy. VI - E					
PNR Site		Open Basketball Court		Public	Good
		Covered Basketball Court		Private	Good
YMCA	50 m. Olympic size		Swimming Pool	Private	Poor
Brgy. VII - A					
P. Alcantara St.		Open Basketball Court		Public	Good
Open Door Christian Academy		Open Basketball Court		Private	Good
Brgy. Atisan		Open Basketball Court		Public	Good
Brgy. Bautista		Open Basketball Court		Public	Good
Brgy. Concepcion					
Doña Eusebisa Subd.		Open Basketball Court		Public	Good
Sampaloc Lake Court Subd.		Open Basketball Court		Public	Good
Jesus Christ & the Latter Day Saint Cmpd.		Open Basketball Court		Private	Good
St. Peter's Seminary		Open Basketball Court		Private	Good
Bukid Garden Resort			Swimming Pool	Private	Good



Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Sabang, Purok 2		Open Basketball Court		Public	Good
Brgy. Del Remedio					
LSPU		Aquino Sports Center		Public	Good
Del Remedio Elem. Sch.		Covered Basketball Court w/ Stage		Public	Good
ELP Subdivision		Open Basketball Court		Public	Good
Patria Village		Open Basketball Court		Public	Good
Brgy. Dolores		Covered Basketball Court		Public	Good
Brgy. San Antonio I		Multi- purpose Covered Court		Public	Good
Tierra de Oro Resort			Swimming Pools	Private	Good
Brgy. San Antonio II		Open Basketball Court		Private	Poor
Brgy. San Bartolone		Multi-Purpose Covered Court		Public	Good
Brgy. San Buenaventura		Covered Basketball Court		Public	Good
Mohicap Lake Resort			Swimming Pool	Private	Good
Star Lake Resort	23000 lot area		Swimming Pool	Private	Good
	60 sq. m.		Swimming Pool 1	Private	Good
	200 sq. m.		Swimming Pool 2	Private	Good
Brgy. San Crispin		Open Basketball Court		Public	Good
Brgy. San Cristobal					
		Open Basketball Court		Public	Good
		Covered Basketball Court		Public	Good
Bato Spring Resort			Swimming Pools	Private	Good
Brgy. San Diego					
		Covered Basketball Court		Public	Good
Boying's Resort			Swimming Pools	Private	Good
Brgy. San Francisco					
		4 Covered Basketball Court		Public	Good
		1 Open Basketball Court		Public	Good
Mary Help Subdivision		Covered Badminton Court		Private	Good
Maharlika Highway			Lucky Sports Complex (Cockpit Arena)	Private	Good



Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Brgy. San Gabriel					
		Covered Basketball Court		Public	Good
EF Thalia Resort			Swimming Pool	Private	Good
Brgy. San Gregorio		Covered Basketball Court		Public	Good
Brgy. San Ignacio					
El Rey Subd.		Open Basketball Court		Public	Good
Private Lots		2 Open Basketball Court			Good
El Rey Subd. Purok center		Tennis Court		Private	Good
Maharlika Highway/ Kamayan sa Palaisdaan			Swimming pool		Good
Brgy. San Isidro		Covered Basketball Court		Public	Good
Brgy. San Joaquin					
Near the railroad		Open Basketball Court		Public	Good
Dioko's Resort & Butterfly Farm			3 Swimming Pools Pavilion Hall w/ Videoke Butterfly Farm & Mini Zoo	Private	Good
Brgy. San Jose					
		Movable Basketball/Volleyball Court		Public	Good
AJ Resort			Swimming pool	Private	Good
Brgy. San Juan					
		Covered Basketball/Volleyball Court		Public	Good
Brgy. San Lorenzo					
		Open Basketball Court		Private	Poor
Brgy. San Lucas I					
		Open Basketball Court		Public	Good
			Swimming Pool	Private	Good
Brgy. San Lucas II					
		Covered Basketball Court		Public	Good
Brgy. San Marcos					
Purok 3		Covered Basketball Court		Public	Good
Mt. View Subd.		Concreted Basketball Court		Private	Good
Brgy. San Mateo		Covered Basketball Court		Public	Good



Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Brgy. San Miguel		Open Basketball Court		Public	Good
Brgy. San Nicolas					
Bagong Silang		Open Basketball Court		Public	Good
Prudencia Fule Memorial Nat'l HS			Covered Multi-purpose Court	Public	Good
Prudencia Fule Memorial Nat'l E/S			Covered Multi-purpose Court	Public	Good
Brgy. San Pedro		Basketball Court		Public	Good
			Covered Multi-purpose Court	Public	Good
Brgy. San Rafael					
Maharlika Highway		Covered Basketball Court		Public	Good
Brgy. San Roque					
		Covered Basketball Court		Public	Good
Casa de San Pablo Resort			Swimming pool	Private	Good
Brgy. San Vicente					
		Open Basketball Court		Public	Good
La Residencia De Jesus Resort			Swimming Pool	Private	Good
Brgy. Santiago I		Open Basketball Court		Public	Good
Brgy. Santiago II		Open Basketball Court		Public	Good
Brgy. Stmo. Rosario		Covered Basketball/ Volleyball Court		Public	Good
Brgy. Sta. Ana					
		Open Basketball Court		Public	Good
Water Color Resort			Swimming Pool	Private	Good
Madrigal Resort			Swimming Pool	Private	Good
Brgy. Sta. Cruz		Covered Basketball Court		Public	Good
Brgy. Sta. Catalina		Basketball Court		Public	Good
Brgy. Sta. Elena		Concreted Basketball/Volleyball Court		Public	Good
Brgy. Sta. Isabel		Open Basketball Court		Public	Good
Brgy. Sta. Filomena		Concreted Basketball Court		Public	Good
Deva Cruz Resort			Swimming Pools	Private	Good



Barangay	Area*	Sports Facilities	Recreation Facilities	Owner ship	Physical Condition
Maria Paz Garden Resort			Swimming Pools	Private	Good
Brgy. Sta. Maria		Covered Basketball Court		Public	Good
Brgy. Sta. Ma. Magdalena					
Brgy. Sta. Monica					
Sitio. Bagong Lipunan		Covered Basketball Court		Public	Good
Purok 1		Open Basketball Court		Public	Good
Julian Orchard Resort			Swimming pool	Private	Good
Brgy. Sta. Veronica		Open Basketball Court		Public	Good
Brgy. Sto. Angel					
NHA		Covered Basketball Court			Good
Sto. Angel E/S		Open Basketball Court			Good
Country Side Resort			Swimming Pools	Private	Good
Boying Ticzon Resort			Swimming Pools	Private	Good
Cresta Monte Resort			Swimming Pools	Private	Good
Brgy. Sto. Crtisto		Covered Basketball Court		Public	Good
Brgy. Sto. Niño		Concreted Basketball Court		Public	Good
		Golf Driving Range		Private	Good



Appendix Table 5. Inventory of Roads by System Classification and Type of Pavement

Road Type	Right of Way	Total Length (km)	Road Surface Type					
			Concrete			Asphalt		
			Length	%	Con	Length	%	Con
City Roads								
LOPEZ JAENA/M. FULE ST.	Variables		0.566	0.62				
P. ZAMORA/COL. DIZON ST.	Variables		0.651	0.71				
AN BONIFACIO/ PASEO DE ESCUDERO	Variables		0.644	0.71				
SAN PEDRO	Variables		0.286	0.31				
M. BRINO SR.	Variables		0.215	0.24				
M. BASA	Variables		0.242	0.27				
A. FLORES	Variables		0.250	0.27				
SGT. DE ROMA	Variables		0.240	0.26				
OLD AND NEW CREMATORY	Variables		0.810	0.89				
T. AZUCENA	Variables		0.390	0.43				
GEN LUNA	Variables		0.178	0.20				
MARCIAL ALMARIO SR.	Variables		0.404	0.44				
JUAN ESEO	Variables		0.750	0.82				
P. GOMEZ/F. BAUTISTA ST.	Variables			0.00		0.236	0.25865	
BAGONG BAYAN	Variables		3.230	3.54		0.514	0.563331	
ZULUETA	Variables		0.352	0.39				
GEN. MALVAR	Variables		0.356	0.39				
P. BURGOS	Variables		0.334	0.37				
A. REGIDOR	Variables		0.250	0.27				
C. BALVERDE	Variables		0.235	0.26				
PENALOZA	Variables		0.105	0.12				
BAGONG POOK EXT.	Variables		0.445	0.49		0.74	0.26	
EUSEBIA	Variables		0.065	0.07			0.56	
LT.R.T.P. BRION	Variables		0.140	0.15				
LT.R.T.P. BRION EXT.	Variables		0.120	0.13				
HERMANOS BELEN	Variables		0.130	0.14				
M. LEONOR	Variables		0.910	1.00				
MABINI SABANG	Variables		0.440	0.48				
FULE SAHAGUN	Variables		0.229	0.25				
TRES MARTIRES	Variables			0.00			0.81	
M.H. DEL PILAR	Variables		0.226	0.25		0.158	0	
POTENCIANO CABRERA	Variables		0.110	0.12				
ALVAREZ	Variables			0.00				
LT. EDUARDO ROELES	Variables		0.225	0.25		0.47	0.52	
C. BRION	Variables		0.200	0.22				
C. BRION EXT.	Variables		0.170	0.19				
G AQUINO	Variables		0.210	0.23				
I. ALVARAN	Variables		0.120	0.13				
I. ALVARAN EXT.	Variables		0.500	0.55				
SAN PABLO CITY SUBDIVISION	Variables		2.730	2.99		0.15	0.17	
RIVER VIEW SUBDIVISION	Variables		1.640	1.80				
SAN FRANCISCO TERRACE SUBDIVISION	Variables		0.540	0.59				
VILLA LOZA SUBD.	Variables		0.370	0.41				
LAKESIDE PARK SUBD.	Variables		1.315	1.44				
ALCANTARA-CORNISTA SUBD.	Variables		0.803	0.88				
FARCONVILLE SUBD.	Variables		1.440	1.58				



Road Type	Right of Way	Total Length (km)	Road Surface Type					
			Concrete			Asphalt		
			Length	%	Con	Length	%	Con
SPC HOUSING AND PULTRY RAISING	Variables		0.810	0.89				
CONSUELO VILLAGE SUBD	Variables		0.588	0.64				
CONSUELO VILLAGE SUBD(MEDEX)	Variables		1.710	1.87				
AZORES COURT	Variables		0.958	1.05				
SAMPALOC LAKE RESORT SUBD.	Variables		0.496	0.54				
BUNCAYO PARK SUBD.	Variables		1.125	1.23				
CITY MEMORIAL PARK SUBD	Variables		2.875	3.15				
CARPIO SUBD	Variables		1.005	1.10				
CARDIL VILLAGE CITY MEMORIAL PARK SUBD	Variables		0.674	0.74				
CARPIO SUBD	Variables		1.623	1.78				
FRANKLIN BAKER EMPLOYEES VILLAGE	Variables		0.815	0.89				
FARMERS VLLAGE SUBD	Variables		10.840	11.88				
GUADALUPE SUBD	Variables		0.665	0.73				
GUEVARRA BROS SUBD	Variables		0.884	0.97				
LAKEVIEW SUBD	Variables		0.382	0.42				
PAMELA PARK AND LEONILA PARK	Variables		0.788	0.86				
LTB CO. EMPLOYEES ASS. VILLAGE	Variables		1.227	1.34				
LAUREL VILLAGE SUBD	Variables		2.370	2.60				
PAUREL PARK SUBD	Variables		0.595	0.65				
MARIFLOR VILLAGE SUBD	Variables		2.015	2.21				
MAGCASE VILLE SUBD	Variables		0.260	0.28				
NEW CITY SUBD/MAGALANG	Variables		0.950	1.04				
ORILLAZA VILLAGE	Variables		1.950	2.14				
VESCO SUBD	Variables		0.340	0.37				
VILLONGCO SUBD	Variables		1.340	1.47				
JOEL TOWN SUBD	Variables		0.920	1.01				
VILLA ANTONIO SUBD0.183	Variables		1.205	1.32				
PILAR ALCANTARA SUBD	Variables		1.320	1.45				
EFARCA VILLAGE SUBD	Variables		0.680	0.75				
EL REY SUBD	Variables		0.587	0.64				
BANAAD SUBD	Variables		0.123	0.13				
BANAAD SUBD	Variables		0.595	0.65				
BANAAD SUBD	Variables		0.805	0.88				
PASTOR MARINO SUBD	Variables		2.810	3.08				
SPC TEACHERS SUBD	Variables		0.297	0.33				
COCONUT GROVE SUBD	Variables		1.206	1.32				
TEOMORA VILLAGE SUBD	Variables		7.472	8.19				
ANGELES HEIGHTS SUBD	Variables		3.080	3.38				
ADB SUBD	Variables		2.256	2.47				
STO CRISTO	Variables		1.866	2.05				
POOK KASIYAHAN	Variables		0.880	0.96				
NEWPORTVILLE SUBD	Variables		0.380	0.42				
TOTAL		91.243	88.975	97.51		2.268	2.49	
Barangay Roads								
ATISAN	Variables		2.68	3.14		0.504	0.59	
BAUTISTA	Variables		2.73	3.19				



Road Type	Right of Way	Total Length (km)	Road Surface Type					
			Concrete			Asphalt		
			Length	%	Con	Length	%	Con
CONCEPCION	Variables		3.04	3.56				
DOLORES	Variables		2.66	3.11				
SANTIAGO I	Variables		1.904	2.23				
SANTIAGO II	Variables		2.427	2.84				
SOLEDAD	Variables		3.264	3.82				
SAN BARTOLOME	Variables		3.1	3.63				
SAN BUENAVENTURA	Variables		2.147	2.51				
SAN CRISPIN	Variables		3.67	4.29				
SAN CRISTOBAL	Variables		1.74	2.04				
SAN FRANCISCO	Variables		3.349	3.92				
SAN GABRIEL	Variables		2.2	2.57				
SAN GREGORIO	Variables		2.681	3.14				
SAN IGNACIO	Variables		1.183	1.38				
SAN ISIDRO	Variables		6.455	7.55				
SAN JOAQUIN	Variables		2.144	2.51				
SAN JOSE	Variables		7.865	9.20				
SAN JUAN	Variables		1.5	1.76				
SAN LORENZO	Variables		2.569	3.01				
SAN LUCAS I	Variables		1.463	1.71				
SAN LUCAS II	Variables		1.28	1.50				
SAN MIGUEL	Variables		1.803	2.11				
SAN NICOLAS	Variables		1.647	1.93				
SAN PEDRO	Variables		1.037	1.21				
SAN ROQUE	Variables		0.8	0.94				
SAN VICENTE	Variables		1.857	2.17				
STA. ANA	Variables		3.42	4.00				
STA. CATALINA	Variables		1.05	1.23				
STA. CRUZ	Variables		2.56	3.00				
STA. ELENA	Variables		1.634	1.91				
STA. FILOMENA	Variables		1.6	1.87				
STA. MARIA	Variables		3.384	3.96				
STA. MARIA MAGDALENA	Variables		0.126	0.15				
STA. MONICA	Variables		4.2	4.91				
STA. VERONICA	Variables		2.582	3.02				
STO. ANGEL	Variables		0.515	0.60				
STO. NIÑO	Variables		1.585	1.85				
STMO. ROSARIO	Variables		5.8	6.79				
TOTAL		85.467	83.877	98.14		0.504	0.59	