### **E. ECONOMIC SERVICES**

# **Agriculture**

As of 2018, agricultural land devoted to crop production was 1,509.07 ha. or 16.97% of the City's total land area (**Map 10**). The total value of production for major crops in General Trias reached a total of PhP 258.54 million in 2018. Rice farming contributed the highest amount of production with a total of more than PhP 96.6 million. Total annual production of rice was estimated to be 5,006.95 metric tons for irrigated lands and 76.5 metric tons for rain fed lands (**Tables 47** and **Table 48**).

Decreasing production of *palay* caused the fluctuations in the total volume and value of production. Accordingly, these fluctuations are caused by typhoons and varying decisions of landowners. Also, conversion of prime agricultural lands to non-agricultural purposes triggered the general decrease in the cultivated area for crop production from 2010 to 2018. **Figure 8** shows the decreasing total production of crops from 2015-2018.

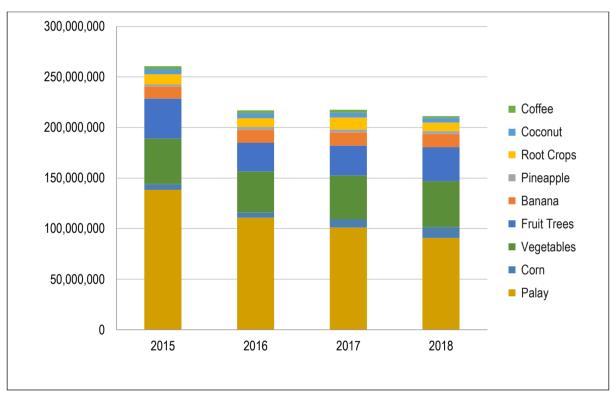


Figure 8. Total Amount of Crop Production (in PhP) (2015-2018), City of General Trias Source: City Agriculture Office (CAO), City of General Trias

Table 47. Existing Major Crops by Area and Production (2015-2018), City of General Trias, Cavite

Crono		Area Cultiv	ated (in ha)			Production per	r Hectare (mt.)		
Crops	2015	2016	2017	2018	2015	2016	2017	2018	
Palay:									
Irrigated	1,783	1,404	1,146	1,022.54	5	4	5	5	
Upland	17	25	22	30.60	2	3	3	3	
Corn	44	37	54	37.50	5	5	5	6	
Vegetables:									
Leafy	8	6	14	04.40	10	10	10	20	
Fruit	96	79	68	84.42		23	23	20	
Fruit Trees	102	71	71	86.60	15	15	15	14	
Banana	40	41	41	117.32	10	10	10	10	
Pineapple	5	7	7	8.20	30	30	30	30	
Root Crops	30	23	31	37.09	25	25	25	25	
Coconut	40	40	40	39.50	4	4	4	4	
Coffee	48	44	44	45.30	1	1	1	1	
Total	2,213.43	1,773.97	1,536.41	1,509.07					

Table 48. Existing Major Crops by Volume and Amount of Production (2015-2018), City of General Trias, Cavite

Crons	١	/olume of Pro	oduction (mt.	)		Value per	mt. (PhP)			Total Amount	of Production	
Crops	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
Palay												
Irrigated	8,096.86	6,271.07	5,265.51	5,006.95	17,000	17,500	19,000	19,000	137,646,620	109,743,725	100,044,690	95,132,050
Upland	39.33	62.50	54.25	76.5	17,000	17,500	19,000	19,000	668,610	1,093,750	1,030,750	1,453,500
Corn	231.30	200.07	292.68	206.5	25,000	25,000	28,000	28,000	5,782,500	5,001,750	8,195,040	5,782,000
Vegetables												
Leafy	82.50	55.00	140.00	1 701 22	28,000	30,000	35,000	35,000	1,650,000	1,650,000	4,900,000	E0 E46 200
Fruit	2,165.18	1,771.88	1,532.25	1,701.32	20,000	22,000	25,000	35,000	43,303,500	38,981,250	38,306,250	59,546,200
Fruit Trees	1,522.50	1,057.50	1,057.50	1,173.2	26,000	27,000	28,000	28,000	39,585,000	28,552,500	29,610,000	32,849,600
Banana	400.00	407.00	407.00	1,173.2	30,000	31,000	32,000	32,000	12,000,000	12,617,000	13,024,000	37,542,400
Pineapple	153.00	204.00	204.00	245	14,000	15,000	15,000	15,000	2,214,000	3,060,000	3,060,000	3,675,000
Root Crops	756.25	570.00	777.50	924.25	13,000	15,000	15,000	15,000	9,831,250	8,550,000	11,662,500	13,863,750
Coconut	165.90	165.90	165.90	165.9	30,000	35,000	35,000	35,000	4,977,000	4,977,000	4,977,000	5,806,500
Coffee	40.80	37.27	37.27	38.5	75,000	75,000	75,000	75,000	3,060,000	2,795,438	2,795,438	2,887,500
Total	13,653.62	10,802.19	9,933.86	10,714.07					260,718,480	217,022,413	217,605,668	258,538,500

Overall, the total production value of the primary sector steadily grew from 2015 (PhP4.280 Billion) up to 2017 (PhP4.580 Billing) but decreased in 2018 (PhP4.277 Billion) (**Table 49**).

Table 49. Production Value of Primary Sector Industries in PhP (2015-2018), City of General Trias, Cavite

Industry	2015	2016	2017	2018
Agriculture	260,718,480	217,022,413	217,605,668	258,538,500
Livestock	4,017,397,500	4,203,025,170	4,361,688,440	4,017,397,500
Fisheries	2,778,750	2,796,563	1,487,500	1,887,500
Total	4,280,894,730	4,422,844,145	4,580,781,608	4,277,823,500

Source: CAO, City of General Trias, Cavite

Sufficiency level for crop production, except root crops are declining. Production levels are continuously at deficit for crop production and only the production of root crops is at surplus. Similar to crop production, the sufficiency level for fisheries is also declining with deficit production level. On the other hand, livestock and poultry has increasing sufficiency level and production is at surplus. Nursery and Demo Farms, cooperatives, support facilities, and programs such as *Plant Now Pay Later* and Comprehensive Agrarian Reform are aids given to the farmers in addressing their difficult situation.

The irrigation service area is 3.595 ha. of which the firmed up service area is 2.447 ha. (Map 11).

# **Fisheries**

General Trias produces tilapia for local consumption. Fishpond operations in 2015, 2016 and 2017 to 2018 spanned a total of 49,400, 49,600 and 23,800 square meters (sq. m), respectively. In 2015 there were 57 fishpond operators, in 2016 there were 44, and in 2017 to 2018 there were 39. The total volume of production for 2015, 2016 and 2017 to 2018 was 30,875 kilos, 31,000 kilos and 14,875 kilos, respectively. While the total value of production in 2015, 2016 and 2017 to 2018 was PhP 2,778,750, PhP 2,945,000 and PhP 1,487,500, respectively. The production showed a 49.92% decrease from 2016. The largest fishpond in 2018 was in Barangay Buenavista I occupying 4,000 sq. m or more than 16.81% of the cumulative fishpond areas (**Table 50, 51 and 52**).

Table 50, Fishpond Production Sites (2015), City of General Trias, Cavite

Owners	Location	Area (sq.m)	Annual Production (kgs.)	Total Production (Php)
Edwin Culanding	Tapia	100	62.50	5,625.00
Luciano Columna	Tapia	1,000	625.00	56,250.00
Herminio Estanque	Tapia	2,000	1,250.00	112,500.00
Dalmacio Mugol	Tapia	500	312.50	28,125.00
Danilo Deseo	Tapia	500	312.50	28,125.00
Dennis Deseo	Tapia	1,000	625.00	56,250.00
Victor Quitquitan	Tapia	500	312.50	28,125.00
Ciriaco Tapawan	Pas. Camachile II	5,000	3,125.00	281,250.00
Osias Lumagui	Pas. Camachile I	300	187.50	16,875.00

Owners	Location	Area	Annual Production	Total Production	
Maximino Custodio	Pas. Camachile I	( <b>sq.m</b> ) 1,000	( <b>kgs.</b> ) 625.00	( <b>Php</b> ) 56,250.00	
Guillermo Tapawan	Pas. Camachile I	3,000	1,875.00	168,750.00	
Dante Collantes	Pasong Kawayan II	500	312.50	28,125.00	
Isabelo Francia	Pasong Kawayan II	2,000	1,250.00	112,500.00	
Gregorio Collantes	Pasong Kawayan II	1,000	625.00	56,250.00	
Librado Aquilino	Pasong Kawayan II	300	187.50	16,875.00	
Rufino Austria	• •	200	125.00	11,250.00	
Bernardo Alvarez	Pasong Kawayan II P. Kawayan I	800	500.00	45,000.00	
	-	400	250.00	22,500.00	
Bryan Ducha	P. Kawayan I			·	
Guillermo Columna	P. Kawayan I San Francisco	600	375.00	33,750.00	
Luis Santor		300	187.50	16,875.00	
Lamberto Ignaco	San Francisco	1,500	937.50	84,375.00	
Walter Martinez	San Francisco	1,000	625.00	56,250.00	
Luciano Mangaring	San Francisco	1,000	625.00	56,250.00	
Escolastico Martinez	San Francisco	1,000	625.00	56,250.00	
Bayani Santor	San Francisco	500	312.50	28,125.00	
Ariel Lapidario	San Juan	100	62.50	5,625.00	
Alejandro Potante	Buenavista I	5,000	3,125.00	281,250.00	
Bayani Lunas	Buenavista I	200	125.00	11,250.00	
Norberto Reyes	Buenavista I	200	125.00	11,250.00	
Felicisimo Potante	Buenavista I	300	187.50	16,875.00	
Exequel Potante	Buenavista I	200	125.00	11,250.00	
Rodolfo Commandante Jr.	Buenavista I	500	312.50	28,125.00	
Oni Porto	Buenavista I	100	62.50	5,625.00	
Ope Culapan	Buenavista I	100	62.50	5,625.00	
Hermes Ducha	Buenavista I	500	312.50	28,125.00	
Alvin Papa	Buenavista I	300	187.50	16,875.00	
Rufino Porto	Buenavista I	300	187.50	16,875.00	
Rolando Grepo	Buenavista III	500	312.50	28,125.00	
Remigio Padrigo	Buenavista III	2,000	1,250.00	112,500.00	
Nilo Grepo	Buenavista III	500	312.50	28,125.00	
Emilio Generoso	Buenavista III	300	187.50	16,875.00	
Leonardo					
Commandante	Buenavista II	300	187.50	16,875.00	
Hermie Luseco	Buenavista II	300	187.50	16,875.00	
Noli Potante	Buenavista II	500	312.50	28,125.00	
Osias Llorente	Buenavista II	500	312.50	28,125.00	
Jose Medina	Buenavista II	300	187.50	16,875.00	
Primo Cubcubin	Buenavista II	500	312.50	28,125.00	

Owners	Location	Area (sq.m)	Annual Production (kgs.)	Total Production (Php)	
Francisco Dua	Santiago	1,000	625.00	56,250.00	
Junaito Lopez	Santiago	1,000	625.00	56,250.00	
Jessie Madlangbayan	Santiago	500	312.50	28,125.00	
Marcelino Rosales	Santiago	1,500	937.50	84,375.00	
Ronaldo Santor	Santiago	200	125.00	11,250.00	
Maximo Lumagui	Santiago	2,000	1,250.00	112,500.00	
Rufino S. Vergara	Santiago	2,000	1,250.00	112,500.00	
Teteng Guyamin	Sta. Clara	200	125.00	11,250.00	
Jose Priel Olaes	Sta. Clara	500	312.50	28,125.00	
Rey Ferrer	Corregidor	1,000	625.00	56,250.00	
Total		49,400	30,875.00	2,778,750.00	

Note: Assumed price of Tilapia per kilo=Php 90.00/Kg. Source: CAO, City of General Trias, Cavite

Table 51. Fishpond Production Sites (2016), City of General Trias, Cavite

O		Area	Annual Production	Total Production	
Owners	Location	(sq.m.)	(kgs.)	(Php)	
Reynaldo Ferrer	Corregidor	1,000	625.00	59,375.00	
Ma. Sally	Sta. Clara	1,000	625.00	59,375.00	
Madlangbayan	Sta. Olara	1,000	025.00	59,375.00	
Jose Priel Olaes	Sta. Clara	1,000	625.00	59,375.00	
Marcelino Barcena	Pascam I	5,000	3,125.00	296,875.00	
Walter Martinez	San Francisco	2,000	1,250.00	118,750.00	
Luciano Mangaring	San Francisco	500	312.50	29,687.50	
Johnny Lopez	Santiago	1,000	625.00	59,375.00	
Rufino Guyamin	Santiago	1,000	625.00	59,375.00	
Francisco Dua	Santiago	2,000	1,250.00	118,750.00	
Anselmo Sinsay	Santiago	2,000	1,250.00	118,750.00	
Efren Reyes	Santiago	1,000	625.00	59,375.00	
Danilo Deseo	Tapia	1,000	625.00	59,375.00	
Dennis Deseo	Tapia	1,500	937.50	89,062.50	
Alfredo Mugol	Tapia	1,500	937.50	89,062.50	
Herminio Estanque	Tapia	2,000	1,250.00	118,750.00	
Edwin Culanding	Tapia	250	156.25	14,843.75	
Dalmacio Mugol	Tapia	1,500	937.50	89,062.50	
Victor Quitquitan	Tapia	1,000	625.00	59,375.00	
Luciano Columna	Tapia	2,000	1,250.00	118,750.00	
Andresito Nacu	Pinagtipunan	500	312.50	29,687.50	
Eden/Severo Patam	Pinagtipunan	150	93.75	8,906.25	
Joel Malazarte	Pinagtipunan	1,000	625.00	59,375.00	

Owners	Location	Area	Annual Production	Total Production
		(sq.m.)	(kgs.)	(Php)
Ariel Vergara	Pasong kawayan II	800	500.00	47,500.00
Dominga Ayala	Pasong kawayan II	600	375.00	35,625.00
Isabelo Francia	Pasong kawayan II	1,000	625.00	59,375.00
Hermes Ducha	Buenavista I	500	312.50	29,687.50
Rufino Porto	Buenavista I	300	187.50	17,812.50
Alejandro Potante	Buenavista I	4,000	2,500.00	237,500.00
Ogie Cervantes	Buenavista I	500	312.50	29,687.50
Remigio Padrigo	Buenavista I	500	312.50	29,687.50
Rodolfo Bandong	Buenavista I	500	312.50	29,687.50
Felipe Reyes	Buenavista I	500	312.50	29,687.50
Primo Cubcubin	Buenavista II	1,500	937.50	89,062.50
Hermie Luseco	Buenavista II	2,000	1,250.00	118,750.00
Samie Potante	Buenavista II	1,000	625.00	59,375.00
Severino Candare	Buenavista II	500	312.50	29,687.50
Lauro Commandante	Buenavista II	500	312.50	29,687.50
Remegio Rodrigo	Buenavista III	500	312.50	29,687.50
Emil Generoso	Buenavista III	500	312.50	29,687.50
Nilo Grepo	Buenavista III	1,000	625.00	59,375.00
Tina Aspuria	Buenavista III	1,000	625.00	59,375.00
Nelia Bondal	Tejero	500	312.50	29,687.50
Maximino Custodio	Pasong Camachile		312.50	29,687.50
Willie Torres	Navarro	1,000	625.00	59,375.00
Total		49,600	31,000.00	2,945,000.00

Note: Assumed price of Tilapia per kilo=Php 90.00/Kg. Source: CAO, City of General Trias, Cavite

Table 52. Fishpond Production Sites (2017-2018), City of General Trias, Cavite

Owners	Location	Area (sq.m)	Annual Production	Total Production	
OWIICIS	Location	Arca (3q.iii)	(Kgs.)	Total Troduction	
Guillermo Tapawan	Pas Cam I	2,000	1,250.00	125,000.00	
Marcelino Barcena	Pas Cam I	300	187.50	18,750.00	
Lamberto Ignaco	San Francisco	400	250.00	25,000.00	
Gaudioso Lumagui	San Francisco	600	375.00	37,500.00	
Escolastico Martinez	San Francisco	200	125.00	12,500.00	
Maximo Lumagui	San Francisco	1,000	625.00	62,500.00	
Luciano Mangaring	San Francisco	200	125.00	12,500.00	
Rey Ferrer	Corregidor	1,000	625.00	62,500.00	
Nolito Potante	Buenavista II	1,000	625.00	62,500.00	
Hermie Luseco	Buenavista II	2,000	1,250.00	125,000.00	
Lauro Comandante Sr.	Buenavista II	500	312.50	31,250.00	
Ramir Peñalba	Buenavista II	200	125.00	12,500.00	

77

Owners	Location	Area (sq.m)	Annual Production (Kgs.)	Total Production
Loreto Porto	Buenavista II	200	125.00	12,500.00
Crispulo Guyamin	Sta. Clara	500	312.50	31,250.00
Oliver Tecson	Santiago	500	312.50	31,250.00
Antonio Bautista	Santiago	800	500.00	50,000.00
Renato Barredo	Santiago	100	62.50	6,250.00
Romeo Alarcon	Santiago	200	125.00	12,500.00
Johnny Lopez	Santiago	500	312.50	31,250.00
Jessie Madlangbayan	Santiago	500	312.50	31,250.00
Dante Collantes	Pasong Kawayan II	1,000	625.00	62,500.00
Jefferson Collantes	Pasong Kawayan II	600	375.00	37,500.00
Isabelo Francia	Pasong Kawayan II	500	312.50	31,250.00
Bryan Ducha	Pasong Kawayan I	500	312.50	31,250.00
Estanislao Robledo	Bacao I	100	62.50	6,250.00
Hermes Ducha	Buenavista II	500	312.50	31,250.00
Felipe Reyes	Buenavista II	500	312.50	31,250.00
Dennis Deseo	Tapia	500	312.50	31,250.00
Danilo Deseo	Tapia	500	312.50	31,250.00
Jayson Estanque	Tapia	500	312.50	31,250.00
Edwin Culanding	Tapia	250	156.25	15,625.00
Herminio Estanque	Tapia	300	187.50	18,750.00
Andresito Nacu/Jimmy Pabia	Pinagtipunan	150	93.75	9,375.00
June Potante	Buenavista II	200	125.00	12,500.00
Oscar Ilada	Corregidor	200	125.00	12,500.00
Ernesto Lontoc	Corregidor	200	125.00	12,500.00
Ping Saliba	San Juan I	500	312.50	31,250.00
Arthur Lozares	96 <sup>th</sup>	100	62.50	6,250.00
Alejando Potante	Buenavista	4,000	2,500.00	250,000.00
Total		23,800	14,875.00	1,487,500.00

Note: Assumed price of Tilapia per kilo=Php 90.00/Kg.

Source: CAO, City of General Trias, Cavite

The City has aquaculture production involving inland fishing from rivers, which was estimated to produce 4,000 kilograms of fish per year (**Table 53**). The changes in the areas of fisheries production were summarized in **Table 54**.

Table 53. Fishing Grounds and Aquaculture Production (2015-2018), City of General Trias, Cavite

Fishing				F	Production				
Grounds		Volume	(Kilos)		Value (PHP)				
Inland	2015	2016	2017	2018	2015	2016	2017	2018	
Fishponds/ Cages	30,875	29,438	14,875	14,875	2,778,750	2,796,563	1,487,500	1,487,500	
River	4,000	4,000	4,000	4,000				400,000	
Total	34,875	33,438	18,875		2,778,750	2,796,563	1,487,500	1,887,500	

Table 54. Changes in Areas of Fisheries Production (2015-2018), City of General Trias, Cavite

Leastion		Area (	sq.m.)				uction (Kg	s.)		Total Produ	ction (Php)	
Location	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
96th	-	-	100	100	-	-	63	63	-	-	6,250	6,250
Bacao I	-	-	100	100	-	-	63	63	-	-	6,250	6,250
Buenavista I	7,700	6,800	4,000	4,000	4,813	4,250	2,500	2,500	433,125	403,750	250,000	250,000
Buenavista II	2,400	5,500	5,100	5.100	1,500	3,437	3,188	3,188	135,000	326,562	318,750	318,750
Buenavista III	3,300	3,000			2,063	1,875	-	-	185,625	178,125	-	-
Corregidor	1,000	1,000	1,400	1,400	625	625	875	875	56,250	59,375	87,500	87,500
Navarro	-	1,000	-	-	-	625	-	-	-	59,375	-	-
Pasong Camachile I	4,300	5,500	2,300	2,300	2,688	3,437	1,438	1,438	241,875	326,562	143,750	143,750
Pasong Camachile II	5,000	-	-	-	3,125	-	-	-	281,250	-	-	-
Pasong Kawayan I	1,800	-	500	500	1,125	-	312	312	101,250	-	31,250	31,250
Pasong Kawayan II	4,000	2,400	2,100	2,100	2,500	1,500	1,312	1,312	225,000	142,500	131,250	131,250
Pinagtipunan	-	1,650	150	150	ı	1,031	94	94	-	97,969	9,375	9,375
San Francisco	5,300	2,500	2,400	2,400	3,313	1,562	1,500	1,500	298,125	148,438	150,000	150,000
San Juan	100	-	500	500	63	-	312	312	5,625	-	31,250	31,250
Santiago	8,200	7,000	2,600	2,600	5,125	4,375	1,625	1,625	461,250	415,625	162,500	162,500
Sta. Clara	700	2,000	500	500	438	1,250	312	312	39,375	118,750	31,250	31,250
Tapia	5,600	10,750	2,050	2,050	3,500	6,718	1,281	1,281	315,000	638,281	128,125	128,125
Tejero	-	500	-	-	-	312	-	-	-	29,688	-	-
Total	49,400	49,600	23,800	23,800	30,875	31,000	14,875	14,875	2,778,750	2,945,000	1,487,500	1,487,500

Note: Assumed price of Tilapia per kilo=Php 90 (2015); Php 95 (2016); Php 100.00/Kg (2017).

A detailed demand analysis was conducted to determine the sufficiency level of fish production in General Trias (**Table 55**). In 2015, 2016 and 2017 there was a deficit of tilapia production of 9,605 MT, 10113.28 MT, and 10,660 MT. The sufficiency level in 2015 was 0.36 %, in 2016 0.33 % and in 2017 0.18 %. The sufficiency levels indicate that fish is being sourced outside of the City.

Table 55. Fish Production Supply and Demand Analysis (2015-2017), City of General Trias, Cavite

Fishing Grounds	T Production Volume (MT)			Population	1	Per Capita Consum		nption	Surplus / (Deficit)			Sufficiency (%)		Product Market			
Inland	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	Local	Export
Fishponds/ Cages	31	29	15	044.000	000 040	040404	0.000.50	40.440.70	40.075.50	(0.005.05)	(40,440,00)	(40,000,00)	2.22	2.22	0.40	1	
River	4	4	4	314,303	330,813	348,191	9,636.52	10,142.72	10,675.53	(9,605.65)	(10,113.28)	(10,660.66)	0.36	0.33	0.18		
TOTAL	35	33	19														

Note: Assumed an average person consumes 0.03066 MT or 30.66 kilograms of fish per year.

### **Commerce and Industries**

General Trias shifts the focus in its economy from agriculture to industry and real estate development by establishing industrial parks in the area. As of 2017, there are a total of 130 firms in the City, three (3) more firms were added in 2018. Most of these firms are located in five (5) major industrial estates and cover 528.41 hectares. About 18% of the City's total population is employed in these industrial estates. **Table 56** shows the number of firms per Industrial Estate.

Table 56. Number of Firms per Industrial Estate (2017-2018), City of General Trias, Cavite

Industrial Estate	Location	Number	of Firms	Employment
muustriai Estate	Location	2017	2018	Size
<b>EPZA Processing Zone Authority</b>		68	71	23,938
Stateland and other industrial firms	Along Governor's Drive, Manggahan and San Francisco	22	22	2,421
Gateway Business Park	Javalera	19	19	17,610
Golden Gate Business Park	Buenavista II; Panungyanan	15	15	263
Majestic Landscape Corporation	Bacao II	6	6	17,935
Total		130	133	62,218

Source: CPDO, City of General Trias, Cavite

The increase in the number of industrial firms from 2010 to 2011 resulted to 167.21% increase in the local revenue of the City.

In 2018, the number of registered commercial establishments was 19,338. This corresponds to 289% increase from 2015 to 2018. Likewise, the service industry grew by 28% within the same period. These commercial establishments provide employment to 24,642 individuals in 2018 (**Table 57**).

Table 57. Inventory of Commercial Establishments, By Economic Activity (2015-2018), City of General Trias, Cavite

Economic Activities	Numl	per of E	stablish	ments	Nu	mber of	Employe	es
Economic Activities	2015	2016	2017	2018	2015	2016	2017	2018
Wholesale and Retail Trade	2,672	3,057	3,346	5,870	5,078	5,870	7,582	6,017
Hotels and Restaurants,	76	125	166	1,242	775	1,242	1,393	1,274
Transport and Storage	70	125	100	1,242	113	1,242	1,000	1,214
Communications	16	13	15	13	22	13	18	10
Financial Intermediation	99	136	156	415	322	415	455	566
Real Estate Rental and	402	412	455	935	929	935	1,112	1,046
Business	402	412	455	900	323	300	1,112	1,040
Public Administration and	0	0	0	0	0	0	0	)
Defense	J	J	J	U	U	U	0	U
Education	82	69	77	774	859	774	1,289	1,222
Health and Social Work	57	69	64	628	800	628	634	1,616

Economic Activities	Numl	per of E	stablish	ments	Nu	mber of	Employe	es
LCOHOIIIC ACTIVITIES	2015	2016	2017	2018	2015	2016	2017	2018
Other Community, Social	130	163	190	387	339	387	473	653
and Personal Services	130	103	130	301	000	307	473	033
Private Household with	0	0	0	0	0	0	0	0
Employed Persons	U	U	U	0	U	U	U	U
Extra Territorial	0	٥	0	0	0	0	0	0
Organizations & Bodies	U	U	U	U	U	U	O	U
Others	1,432	1,723	1,881	9,074	7,758	9,074	10,923	12,238
Total	4,966	5,767	6,350	19,338	16,882	19,338	23,879	24,642

Source: Business Permit and Licensing Office (BPLO), City of General Trias, Cavite

# **Entrepreneurship Development**

The City has registered Micro, Small and Medium Enterprises (MSMEs) thru the Department of Trade and Industry (DTI) that oversees the registration of business names. A registered name distinguishes the products and services from those of competitors and helps establish its identity in the marketplace. A total of 1,444 local businesses in General Trias are registered through the business name registration of the DTI Cavite Office as of 2019. This number has increased by 18% from 1,225 in 2018; and is anticipated to further grow since several MSMEs are being set up due to the enabling market forces and business environment. It must be noted that the business names registered in Cavite in 2019 were all micro-level since registration was only available for single proprietorship type of business. Corporation, partnership, cooperative, and association were not included in the Business Name (BN) Registry under the DTI.

With the help of the Ease of Doing Business (EDB) and Business One Stop Shop (BOSS), MSMEs can easily start and have better chance to prosper. Further, the regular livelihood projects initiated by the LGU have proven helpful in the startup of small business owners. However, the economic potentials of MSMEs were not maximized due to, among others, lack of technical abilities to package their products in a way that will capture the interest of a larger market and inadequate investment capital and technology. These make their products less competitive compared to similar products in the region and national market. This is among the aspects that the LGU should focus on in providing technical assistance to ensure prosperity of MSMEs.

Nevertheless, the increase in the number of MSMEs resulting from the provision of assistance to the City's local entrepreneurs and implementation of sustainable livelihood projects is perceived to encourage new entrepreneurs. This will eventually raise the City's overall economic competitiveness.

#### One Town One Product

General Trias is currently supporting the "One Town, One Product" campaign of the national government to promote entrepreneurship and create jobs. This is a means by which traditional and contemporary products of a town which has a competitive advantage will be given a chance to develop and be attuned to the current demand trends, expand market base and tap export potentials. The program as well is giving emphasis in addressing the concerns of the SME's that include technical support, capitalization, access to markets, business accessibility, and product development.

In the City, the production of white cheese or native cheese (*kasilyo*), which also implies preservation of local heritage and tradition is currently being developed and marketed. The native *kasilyo* has been promoted in trade fairs and exhibitions sponsored by government agencies. Among the benefits of having a product exhibited at the national level is to increase brand awareness among industry professionals including potential buyers/ customers/ partners and expand network of business relation.

### **Tourism**

Despite the City's lack of natural tourism assets, General Trias strives to offer tourism and recreational facilities from its historical and religious landmarks to leisure resorts and hotels. Some of the known tourist destinations include the Eagle Ridge Golf and Country Club, Antel Grand Village Water Park, La Travieza Resort, The Bayleaf Hotel, The Geronimo Berenguer delos Reyes, Jr. Museum, General Mariano Trias Marker and Park, Relic Church, and Microtel Suites and Inns.

Besides the historical and tourist sites, the City also hosts major events such as Town Fiesta (every 4th of October), Gabi ng Parangal (every 1st week of May), Flores de Mayo/Santacruzan (every month of May), Holy Week Celebration (lenten season), Valenciana Festival (every Foundation Week/2nd week of December) and Hijas de Maria (whole month of May). Such events are filled with different activities highlighting the culture of the City. Feast celebrations in each barangay are also celebrated yearly.

# Culture, Arts and Way of Life in General Trias

### Religion and Faith

Gentriaseños are predominantly Roman Catholic people whose faith is outwardly demonstrated by celebrating fiestas to honor the saints like Saint Francis of Assisi, the City's patron whose feast day is celebrated every October 4 of the year. During this time, the people in General Trias also holds a *Karakol*, a dance movement that is performed collectively to express gratitude to the patron saint. During the month of May, procession and flower offering known as "Hijas en Hijos" is also celebrated to honor Mary, the mother of Christ.

In union with the Catholics in the whole country, the faithful in General Trias celebrates the dawn masses or "Misa de Gallo" on Christmas season. And, as the most regarded activities among the Catholics, "Cuaresma" is faithfully celebrated in the City during the lenten season.

### Livelihood

Before the industrialization of the City, the means of livelihood of the people of General Trias was rural farming. The Spanish and Americans built dams and irrigation canals to support agricultural production of rice, sugarcane, root crops, and fruits in the town. When the export processing zone industry boomed in the early 90s, the native farmers started to sell their lands and ventured in other means of livelihood.

### **Food and Delicacies**

General Trias is known for its kesong puti or kasilyo, a locally processed white cheese made from unskimmed carabao milk and salt curdled with vinegar and citrus juices. The old style of preparing the

cheese as observed before in Barangay Tapia, Santiago and San Francisco made the product popular among the local tourists. Today, the *kasilyo* is prepared thru a pasteurized process.

*Valenciana*, a local variation of the Spanish dish *paella* is also popular in the City. The ingredients include glutinous and ordinary rice, pork, chicken, potatoes, carrots, olive, raisins, laurel leaves, evaporated or coconut milk. Valenciana Festival is celebrated simultaneously with the Foundation Day of the City every 12<sup>th</sup> day of December each year. Another known dish in the locality is the *Sinigang na Tagalog na Manok sa Sampaloc*. While local dessert includes *halaya* which is made from ube, sweet tamarind, and *suman* (*saklob*) *sa lihiya* that is cooked in banana leaves.

#### Entertainment

Old forms of cards and coin games are played in the locality. *Pangginggue* and *Sakla* are the most common which are played using *barahang tagalog*. The latter is a card pairing game usually played during mourning by unlimited bettors which price is almost four times higher than the amount of money bet. Like *Cara y Cruz*, *sakla* are old forms of gambling that are now restricted by the government.

In recent years legalized gambling such as card games, bingo and horse racing are also played online. The *sabong* or cock fighting remains a gambling entertainment in the locality that is played only in an approved cockpit arena located in Barangays Tejero and Manggahan.

# Music, Arts and Other Heritage

In areas of music, there are several well-known family names who were famous during the Spanish-American Regime (1800-1900) like the Deseo, Clanor and Clamor. At present, there are four (4) major marching and concert bands that perform within the City and other towns during local events. These are Banda Kabataan, Sta. Cecilia Band, St. Francis Band and Banda Matanda 1888. The latter played the national anthem during the declaration of the first independence by General Aguinaldo in Kawit, Cavite. Their presence manifests that Gentriaseños are music loving community.

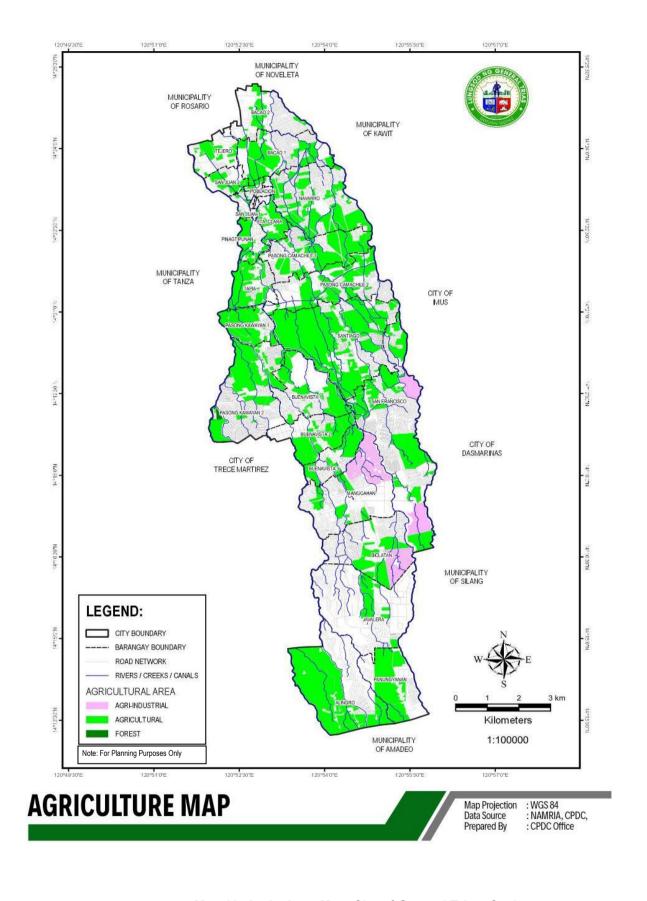
In the field of arts, the late Geronimo Berenguer de los Reyes Jr., an entrepreneur, guardian of historical records and philanthropy collected photos, arts and paintings that are displayed in the GBR museum. Mr. Ramon Caparas, a native of General Trias has been helping the GBR museum in promoting the art collection to the public.

In the field of architecture, the Sarayba house in General Trias was declared a heritage house by the National Historical Institute thru Resolution No. 6, s. 2005. The Sarayba ancestral house was the home of Maria Dolores Gomes-Trias, sister of Fr. Mariano Gomes, who was martyred in 1872 with Fr. Jose Burgos and Fr. Jacinto Zamora. The house, which was built sometime in the late 18th century is one of the oldest houses in General Trias, exemplifying the architecture of the Spanish colonial period. The house was used as a Japanese garrison during the Second World War and later as a temporary school during the immediate postwar years. The house remains to this day as one of the historico-cultural landmarks of General Trias.

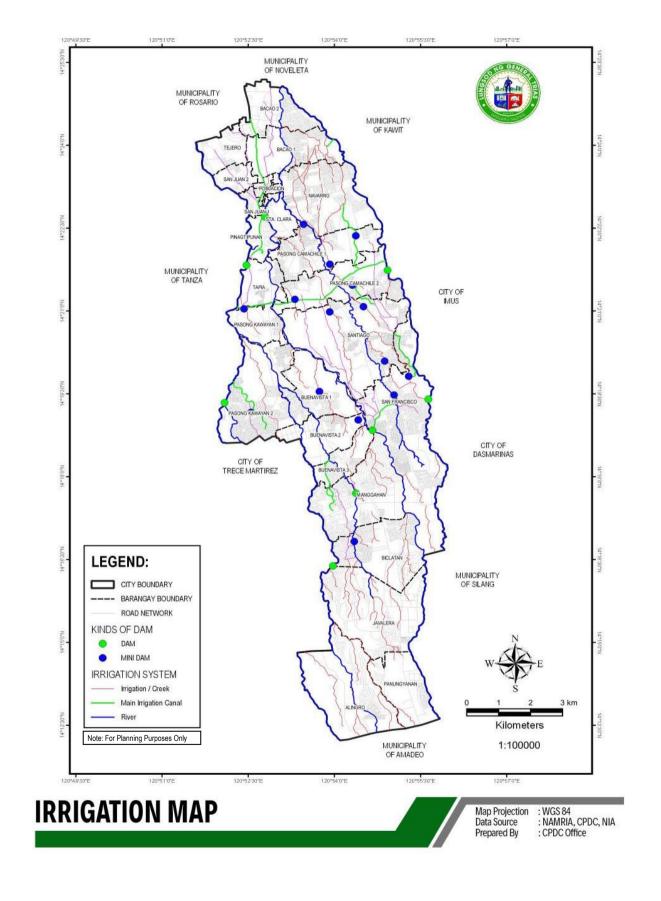


Source: NHCP Photo Collection, 2004

Other ancestral houses of some prominent families in the locality are the Aure's, Arnaldo's, Clanor's, Colmenar's, Deseo's, Ferrer's, Genuino's, Leano's, Medina's, Mojica's, Olimpo-Arcega's, Pascual's, Primero's, Potente-Valencia's, Saqui's, Sison's and Trias's depict the Spanish and American architecture. These old structures, however, are currently at risk from deterioration, thus require prompt intervention.



Map 10. Agriculture Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite



Map 11. Irrigation Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite

### F. INFRASTRUCTURE

# **Transportation and Utilities**

The City of General Trias is accessible via land travel with improved connectivity from all directions. If coming from the center of Metro Manila, the travel time to the City can range from one (1) to two (2) hours depending on traffic condition and time of day. However, with the construction of the C6 expressway and expanded service areas of LRT 1, travel time shall improve and increase accessibility of General Trias. Internally, areas within the City may be accessed through land travel via various transport carriers.

There are 82 land transportation terminals and parking facilities present in the City located in different barangays (**Table 58**). These terminals serve different modes of public transportation ranging from tricycles, jeepneys, pedicabs, and vans which provides both intra-city and inter-city linkages.

Table 58. Land Transportation Terminal and Parking Facilities (2018), City of General Trias, Cavite

No.	Terminal Location	Name of Association
1	Bacao 2 - near Gate 5	PEB TODA (Poblacion-EPZA-Bacao)
2	Bacao 2 - near Gate 3	PEB TODA (Poblacion-EPZA-Bacao) *Poblacion
	Bacao 2 - Hear Gate 3	route
3	Bacao 2 - near Gate 3	PEB TODA (Poblacion-EPZA-Bacao) *Tejero
	Bacao 2 - Hear Gate 3	route
4	Bacao 1 near - Gate 4	PEB TODA (Poblacion-EPZA-Bacao)
5	Governor Ferrer	PEB TODA (Poblacion-EPZA-Bacao)
6	Sampalucan - near Catholic Church	PEB TODA (Poblacion-EPZA-Bacao)
7	Sampalucan - New Public Market	PEB TODA (Poblacion-EPZA-Bacao)
	Terminal	TED TODA (TODIACION-LIZA-DACAO)
8	Bacao 2 - near Gate 5	NEBM TODA (Noveleta-EPZA-Bacao-Malabon)
	Bacao 2 - fical Gate o	*Tejero and Malabon route
9	Bacao 2 - near Gate 5	NEBM TODA (Noveleta-EPZA-Bacao-Malabon)
		*Noveleta route
10	Bacao 2 - near Police Sub-Station	NEBM TODA (Noveleta-EPZA-Bacao-Malabon)
11	Bacao 1 near - Gate 4	NEBM TODA (Noveleta-EPZA-Bacao-Malabon)
12	Bacao 2 - near Metrobank	BNR TODA (Bacao-Nia-Road)
13	Bacao 2 - near Lavanya Subd.	BNR TODA (Bacao-Nia-Road)
14	Bacao 1 near - Gate 4	Tejero TODA
15	Tejero - near Dream Homes	Tejero TODA
16	Tejero - near Robinson's Place	Tejero TODA
17	Tejero - near Guinto Property	Tejero TODA
18	Tejero - Sablan Property	Tejero TODA (Tejero-Rosario Sector) *ADOPTED
19	Tapia - near Bella Vita	PPTLB TODA (Poblacion-Prinza-Tapia-Lancaster-
13	Tapia - Ilcai Belia Vita	Bella Vita)

No.	Terminal Location	Name of Association
20	Prinza - near Puregold	PPTLB TODA (Poblacion-Prinza-Tapia-Lancaster-Bella Vita)
21	Sampalucan - New Public Market Terminal	PPTLB TODA (Poblacion-Prinza-Tapia-Lancaster-Bella Vita)
22	Pasong Kawayan 2 - near South Square Village	PK TODA (Pasong Kawayan)
23	Pasong Kawayan 2 - near Bolang Bilog	PK TODA (Pasong Kawayan)
24	Prinza - near Ultramega	PK TODA (Pasong Kawayan)
25	Sampalucan - New Public Market Terminal	PK TODA (Pasong Kawayan)
26	Pinagtipunan	PK TODA (Pasong Kawayan) *PARKING
27	Pasong Kawayan 2 - near Kaia Homes	PK TODA (Pasong Kawayan)
28	Pasong Kawayan 2 - near Heneral Uno Subd.	PK TODA (Pasong Kawayan)
29	Pasong Kawayan 2 - near Belmont Hills Subd.	PK 2 WEST TODA INC.
30	Pasong Kawayan 2 - near Belvedere Towne 3	PK 2 WEST TODA INC.
31	Pasong Kawayan 2 - near Pamayanan ng Bagong Caviteño	PK 2 WEST TODA INC.
32	Buenavista 1 - near II Giardino	BBM TODA Sector (Buenavista-Biclatan- Manggahan)
33	Buenavista 1 - near Villagio Ignatius Subd.	BBM TODA Sector (Buenavista-Biclatan- Manggahan)
34	Buenavista 1 - near Waiting Shed and Day Care Center	BBM TODA Sector (Buenavista-Biclatan- Manggahan)
35	Buenavista 2 - near Tahanang Yaman Homes	BBM TODA (Buenavista-Biclatan-Manggahan)
36	Manggahan - near Tierra Grande Subd.	BBM TODA (Buenavista-Biclatan-Manggahan)
37	Manggahan - near Mc Donalds	BBM TODA (Buenavista-Biclatan-Manggahan) Terminal
38	Manggahan - near Mc Donalds	BBM TODA (Buenavista-Biclatan-Manggahan) *PARKING
39	Panungyanan	ATODA (Alingaro)
40	Alingaro	ATODA (Alingaro)
41	Manggahan - Metro South Subd. Gate 1	MS TODA (Metro South)

No.	Terminal Location	Name of Association
42	Manggahan - Metro South Subd. Gate 5	MS TODA (Metro South)
43	San Francisco - facing Purefoods	TMCT SF TODA (Tropical-Maravilla-Country- Tantuco San Francisco)
44	San Francisco - near Tropical Village	TMCT SF TODA (Tropical-Maravilla-Country- Tantuco San Francisco)
45	San Francisco - facing Purefoods	SFA TODA (San Francisco Arnaldo)
46	San Francisco - near Sunny Brooke 1	SFA TODA (San Francisco Arnaldo)
47	San Francisco - near Sunny Brooke 2	SFA TODA (San Francisco Arnaldo)
48	San Francisco - Elang	SFA TODA (San Francisco Arnaldo)
49	Arnaldo	Pascam-Santiago TODA
50	Sampalucan - New Public Market Terminal	Pascam-Santiago TODA
51	Sta. Clara	NLAT (Navarro-Lancaster-ACM)
52	Sta. Clara	NLAT (Navarro-Lancaster-ACM) *PARKING
53	Sampalucan - New Public Market Terminal	NLAT (Navarro-Lancaster-ACM)
54	San Gabriel	San Gabriel TODA
55	Sampalucan - New Public Market Terminal	San Gabriel TODA
56	Sampalucan - New Public Market Terminal	GTPP TODA (General Trias-Poblacion-Palengke)
57	Santiago - Bella Vista	Bella Vista TODA
58	Pinagtipunan - near GFMNHS	Various TODA
59	Sampalucan - near Fire Station	Various TODA
60	Sampalucan - near Plaza	Various TODA
61	Sta. Clara - near Chooks To Go	Various TODA
62	Sampalucan - near Potente Building	Various TODA
63	Corregidor	Various TODA *PARKING
64	Manggahan - near Stateland Hills Subd.	Various TODA
65	Tejero - facing Alfamart	Various TODA
66	Pasong Kawayan 2 - near South Square Village	South Square Pedicab Association
67	Santiago - facing Sports Park	FIPDAI (Freedom Island Pedicab Driver's Association Inc.)
68	Manggahan - Sitio Santusan	AMODA (Amadeo-Manggahan Operators and Drivers Association)
69	Javalera - Phase 2	AMODA (Amadeo-Manggahan Operators and Drivers Association)

No.	Terminal Location	Name of Association
70	Manggahan - near Genstar	PMMB JODA (Panungyanan-Manggahan-
'0	Mangganan - near Genstal	Malabon-Bacao) Terminal
71	Manggahan - near Mc Donalds	PMMB JODA (Panungyanan-Manggahan-
''	Mangganan - near Mc Donaids	Malabon-Bacao) *PARKING
72	Prinza - near Puregold	PMMB JODA (Panungyanan-Manggahan-
'2	Filliza - lieai Fulegolu	Malabon-Bacao)
73	San Juan 1	PMMB JODA (Panungyanan-Manggahan-
'3	Sail Suali	Malabon-Bacao) *PARKING
74	Manggahan - behind Waltermart	Manggahan Transport Source Cooperative
'4	Mangganan - Dennid Waltermart	(Manggahan-Malabon JODA)
75	1896	Malabon-Cavite City JODA
76	Tejero - near Robinson's Place	Pala-Pala-Robinson JODA
77	Tejero - near Robinson's Place	Gentri Nasugbu Transport Service Cooperative
''	Tejero - Hear Robinson's Flace	*van terminal (Nasugbu)
78	Tejero - near Robinson's Place	General Trias Cavite Transport Service
10	Tejero - Hear Robinson's Flace	Cooperative *van terminal (Lucena)
79	Tejero - Sablan Property	CATIP (Calamba-Tejero) *van terminal
80	Toioro Sahlan Proporty	Filtao Multipurpose Coop *Legaspi-Bicol *van
00	Tejero - Sablan Property	terminal
81	Tejero - near Guinto Property	Alabang route *van terminal
82	Tejero - near Guinto Property	Mall of Asia route *van terminal

Source: CPDO (2018), City of General Trias, Cavite

# Roads

General Trias is accessible by two national roads, the Tejero Diversion Road which hails from Cavitex when coming from Manila and the Governor's Drive which directly connects the City of Dasmariñas and Trece Martires by passing through General Trias. These national roads, which totals to 29.10 km are intersected by the provincial roads – Governor Ferrer Drive and General Trias Drive (**Map 12**). In total, the City has 181.69 km of roads of which 97.29 km (53.55%) are concreted, 32.57 km (17.93%) are asphalted, and 50.34 km (27.71%) earth filled (**Table 59**).

Table 59. Road Network by Classification and Surface Type (2018), City of General Trias, Cavite

Road	Conc	rete	Asp	halt	Grav	el	Ear	th	Total
Classification	Length (km)	%	Length (km)	%	Length (km)	%	Length (km)	%	(km)
National	3.53	1.94	25.57	14.07	-		-	-	29.10
Provincial	12.60	6.93	3.25	1.79	-	1		-	15.85
City	8.44	4.65	3.19	1.76	-	1		-	11.63
Barangay	59.10	32.53	0.56	0.31	1.49	0.82	27.36	15.06	88.51
NIA Roads	13.62	7.50	-	-			22.98	12.65	36.60
Total	97.29	53.55	32.57	17.93	1.49	0.82	50.34	27.71	181.69

Source: Ecological Profile, City of General Trias, Cavite

# **Bridges**

Various bridges are present within General Trias to aid accessibility and connectivity. There are four (4) classifications of bridges in the City wherein Public Bridges is the longest with 875.88 km or 44.75% of the total bridges. This is followed by Private Bridges at 869.76 km or 44.44%, and finally by hanging bridges and culverts at 175 km (8.94%) and 36.50 (1.86%), respectively (**Map 13**).

With respect to condition, all bridges were rated as "good" except for the Javalera Reloc Ph 2 Bridge 3 (Public Bridge) located in Barangay Javalera and Bacao II Hanging Bridge (Purok 12) that were rated as "fair". All bridges are concrete paved except for the Hanging Bridges that are constructed using wood materials. Private bridges take a greater portion with a total length of 603.00 meters followed by National bridges at 551.80 meters (**Table 60**).

### Water Supply

The in-house supply of water in the City is with General Trias Water Corporation (GTWC), a private entity that is dedicated to supplying the whole city of General Trias. According to the latest water supply survey, there are still at least 5,766 (19.03%) HHs within General Trias that is still unserved by the GTWC. Possible scenarios include, they are operating their own deep well pump system, and/or they are dependent on the nearby towns water supply system (**Table 61**).

There are still areas in the City that are served with Level I water supply system (i.e., shallow well, deep well or improved spring). These are located in Barangays Buenavista I, Pasong Kawayan II, Navarro, Buenavista I, Pasong Camachile I, and Tapia.

### Flood Control and Drainage Facilities

General Trias relies on the six (6) major river basins for flood control and drain of water. The City has a number of major rivers flowing northward to Manila Bay. These include the Imus River (Ylang-Ylang River) located in the eastern part, Cañas River in the west, Rio Grande (Malabon River) in the north, Halang River in the southeast and Panaysayan and Pulonan Rivers in the southwest. The remaining drainage area of General Trias falls within the catchment areas of the municipalities of Rosario and Noveleta as well as the Cañas River of Tanza. Halang River is connected to Malabon River. Most projects involving flood control are usually improvement of detaining wall along river corridors and there was no special need for big drain facilities because General Trias is a naturally draining area (**Table 62** and **Map 14**).

### **Agricultural Support Facilities**

The City has six (6) irrigation facilities that serve a total area of 3,595 ha. of which the firmed up service area is 2,447 hectares. These facilities are functional, however, there are areas where the supply of irrigation water was deemed insufficient. On the other hand, all farm-to-market-roads of the City are passable, while it has two (2) outdoor storage facilities and five (5) rice mills with drying pavements.

### **Power Supply**

The power supply system of the City is provided by the Manila Electric Company (Meralco), which also serves nearby towns and is supplying the town through different substations given below. The year-end customer count totaled to 117,185 in 2018 (**Table 63**).

Table 60. Inventory of Bridges, by Barangay by Type of Construction Materials and General Condition (2018), City of General Trias, Cavite

No.	Name of Bridge/Culvert	Location (Barangay)	Length	Width	Ty	pe of Cons	struction	Condition
NO.	Name of Bridge/Curvert	Location (Barangay)	(meters)	(meters)	Concrete	Steel	Wood	Condition
Public	Bridge							
1	Alingaro Bridge	Alingaro	46.30	10	1			Good
2	Buenavista II Bridge	Buenavista II	31.20	4	1			Good
3	Javalera Reloc Ph 2 Bridge 1	Javalera	7.00	7	1			Good
4	Javalera Reloc Ph 2 Bridge 2	Javalera	8.00	7.5	1			Good
5	Javalera Reloc Ph 2 Bridge 3	Javalera	12.00	7.5	1			Fair
6	Malabon Bridge (old)	Manggahan	72.00	7.32	1			Good
	Malabon Bridge (new)	Manggahan	72.00	9	1			Good
7	Manggahan Bridge (old)	Manggahan - San Francisco	30.00	7.32	1			Good
	Manggahan Bridge (new)	Manggahan - San Francisco	30.00	10	1			Good
8	Panaysayan Bridge (old)	Manggahan - Trece	55.30	7.32	1			Good
	Panaysayan Bridge (new)	Manggahan - Trece	55.30	8.4	1			Good
9	Navarro-Sta. Clara Bridge	Navarro - Sta. Clara	7.00	6.4	1			Good
10	SLDIP Bridge	Pasong Camachile II	9.30	7	1			Good
11	SLDIP Bridge	P. Camachile II-Malagasang	39.50	4.8	1			Good
	SLDIP Bridge	P. Camachile II-Malagasang	41.00	21	1			Good
12	Pasong Kawayan II Bridge	Pasong Kawayan II	50.00	9.5	1			Good
13	PK II Bridge (near Gentri Village)	Pasong Kawayan II	8.00	5.5	1			Good
14	PK II Bridge (near Valentina Ville)	Pasong Kawayan II	8.00	5.5	1			Good
15	Prinza Bridge	Prinza - Pinagtipunan	15.00	7.2	1			Good
16	Alang-Ilang Bridge	San Francisco - Dasmariñas	30.00	17	/			Good
17	San Juan Bridge	San Juan - Poblacion	10.50	8	/			Good
18	Sta. Clara Bridge	Sta. Clara - Poblacion	30.48	7.1	1			Good

No.	Name of Bridge/Cubyort	Leasting (Demonstration)	Length	Width	Ту	pe of Cons	struction	Condition
NO.	Name of Bridge/Culvert	Location (Barangay)	(meters)	(meters)	Concrete	Steel	Wood	Condition
19	SLDIP Bridge (Gentri- Tanza)	Tapia - Tanza	65.00	5	1			Good
20	Cañas Bridge 1	Tejero - Tanza	48.00	8	1			Good
	Cañas Bridge 2	Tejero - Tanza	48.00	12.4	1			Good
21	Pinagtipunan - Sta. Clara	Pinagtipunan - Sta. Clara	47.00	7.8	1			Good
	Total		875.88					
Culver	t							
1	Alingaro Culvert	Alingaro	5.00	9	1			Good
2	Buenavista I Culvert (Ipilan)	Buenavista I	5.00	4.5	1			Good
3	Navarro Overflow Culvert	Navarro	5.50	5	1			Good
4	Navarro Culvert	Navarro	5.50	4.6	1			Good
5	Elang Culvert (Near Le Rica subd.)	San Francisco	4.50	9.5	1			Good
6	Santiago Culvert (near Fiha)	Santiago	5.50	6	1			Good
7	SLDIP Overflow Culvert (Dumpsite)	Tapia	5.50	3	1			Good
8	Sta. Clara - Vibora Overflow Culvert	Sta. Clara, Vibora			1			Good
	Total		36.50					
Hang	ing Bridge							
1	Bacao I Hanging Bridge (purok 1)	Bacao I	36.00	1.5			1	Good
2	Bacao II Hanging Bridge (purok 12)	Bacao II	30.00	1.5			1	Fair
3	Bacao II Hanging Bridge	Bacao II - Imus	40.00	1.5			1	Good
4	Bacao II Hanging Bridge (private)	Bacao II - Kawit	34.00	1.5			1	Good
5	San Gabriel Hanging Bridge	San Gabriel	35.00	1.5			1	Good
	Total		175.00					
Priva	tely-Owned Bridges							
1	Antel Bridge (East)	Bacao II	55.00	16.5	1			Good

No.	Name of Bridge/Culvert	Location (Danson was)	Length	Width	Ty	pe of Cons	struction	Condition
NO.	Name of Bridge/Culvert	Location (Barangay)	(meters)	(meters)	Concrete	Steel	Wood	Condition
2	Governor Hills Bridge	Biclatan	40.00	15	1			Good
3	Holiday Homes III Culvert	Biclatan	5.50	7.6	1			Good
4	Rio De Oro Bridge 1	Buenavista I	41.00	12	1			Good
5	Rio De Oro Bridge 2	Buenavista I	10.00	12	1			Good
6	Villagio Bridge	Buenavista I	9.00	12	1			Good
7	Golden Gate (West)	Buenavista II	30.80	12	1			Good
8	Golden Gate (East)	Buenavista II	36.60	12	1			Good
9	Eagle Ridge Bridge 1	Javalera	15.00	24	1			Good
10	Eagle Ridge Bridge 2	Javalera	50.00	20	1			Good
11	Maricris Bridge	Pasong Camachile II	40.80	7.32	1			Good
12	Maricris-Wellington Culvert 1	Pasong Camachile II	6.00	12.5	1			Good
13	Maricris-Wellington Culvert 2	Pasong Camachile II	6.00	16	1			Good
14	Belvedere Bridge 1	Pasong Kawayan II - Tanza	32.00	9	1			Good
15	Belvedere Bridge 2	Pasong Kawayan II	33.00	9	1			Good
16	KPNP Bridge	Santiago	11.00	11	1			Good
17	Bella Vista Bridge 1	Santiago	20.00	14	1			Good
18	Bella Vista Bridge 2	Santiago	11.00	14	1			Good
19	Bella Vista Culvert 3	Santiago	4.00	12.5	1			Good
20	St. Joseph the Worker Village Bridge	Santiago	9.00	7.5	1			Good
21	Parklane Bridge	San Francisco	32.80	7.9	1			Good
22	Tierra Nevada Bridge	San Francisco	22.00	16	1			Good
23	Tierra Nevada Culvert	San Francisco	4.00	19	/			Good
24	Cyber Greens Bridge	San Francisco	40.00	12.7	1			Good
25	Lancaster Bridge 1 (main)	Navarro - Imus	36.00	13.5	1			Good

No.	Name of Bridge/Culvert	Location (Parangoy)	Length	Width	Type of Construction			Condition
NO.	Name of Bridge/Curvert	Location (Barangay)	(meters)	(meters)	Concrete	Steel	Wood	Condition
26	Lancaster Bridge 2	Navarro	8.00	25	1			Good
27	Lancaster Bridge 3 (near MS 7)	Navarro	8.00	25	1			Good
28	Antel Bridge (West)	Bacao II	48.10	17.6	1			Good
29	Antel Bridge (Inner)	Bacao I	8.00	15	1			Good
30	Heneral Dos - Paseo Bridge	Pasong Kawayan II	14.66	11.8	1			Good
31	Rio De Oro - Centro Bridge	Buenavista I, PK II	29.50	9.1	1			Good
32	Lancaster Bridge 4	Pasong Camachile I	30.00	15.8	1			Good
33	Lancaster Bridge 5	Tapia	123.00	16	1			Good
	Total		869.76					

Source: CPDO (2018), City of General Trias, Cavite

Table 61. Water Service Connections (2017-2018), City of General Trias, Cavite

		2017 Wa	ter Supply	2018 Water Supply		
Barangay	Subdivision	No. of HH Served (Active)	No. of HH Unserved (Inactive)	No. of HH Served (Active)	No. of HH Unserved (Inactive)	
Alingaro		363	40	391	40	
	Winterbreeze	317	42	361	59	
Arnaldo		118	17	118	20	
Bacao I		786	35	888	42	
	Lavanya Homes	1,078	279	1,120	220	
Bacao II		818	50	849	54	
Bagumbayan		303	12	304	18	
Biclatan		1,072	71	1,136	92	
	Governor Hills	2,075	428	2,153	451	
	Aravista	32	9	69	19	

		2017 Wa	ter Supply	2018 Water Supply		
Barangay	Subdivision	No. of HH Served	No. of HH	No. of HH Served	No. of HH Unserved	
		(Active)	Unserved (Inactive)	(Active)	(Inactive)	
	Holiday Homes	1,657	107	1,748	159	
	Greenbreeze	198	25	222	34	
Buenavista 1		200	14	185	14	
	Rio de Oro	201	24	193	33	
Buenavista 2		295	12	317	14	
Buenavista 3		380	9	662	11	
	Jewel Hoes	311	3	329	9	
	Tierra Solana	948	59	1,029	89	
Corregidor		257	26	278	27	
Dulongbayan		115	8	119	10	
Governor Ferrer		90	8	93	8	
Javalera Proper/Highway		415	40	436	35	
Javalera P1,2,3, and 4		1,021	69	1,073	56	
Manggahan/ Tinungan		1,462	166	1,540	179	
	Florida Sun Estate			79		
	Metrosouth	345	65	361	61	
	Metropolis	548	84	584	83	
	Tsarina P 1,2 and 3	384	45	382	49	
	Stateland	197	17	195	17	
	Tierra Grande	204	19	203	21	
	Sunshine Village	184	6	186	5	
	Stateland Hills	360	41	379	57	
Navarro						
Panungyanan		461	35	502	25	
Pasong Camachile 1		735	14	796	19	

		2017 Wa	ter Supply	2018 Water Supply		
Barangay	Subdivision	No. of HH Served	No. of HH	No. of HH Served	No. of HH Unserved	
		(Active)	Unserved (Inactive)	(Active)	(Inactive)	
	Sunterra Place	121	3	124	6	
	Camachile Subd.	1,414	65	1,426	112	
	Ecotrend	39	1	39	1	
Pasong Camachile 2		676	29	703	48	
	St. Michael	14	3	13	4	
Pasong Kawayan 1		536	46	562	44	
Pasong Kawayan 2		799	61	841	64	
	Southsquare	1,680	307	1,887	349	
	Heneral Uno	1,022	130	1,160	185	
	Belmont	735	111	816	118	
	Belvedere	1,058	313	1,163	324	
	Bamboo Heights	153	12	260	28	
	Centro de Oro	63	6	140	12	
	Paseo Heneral Dos			73	4	
Pinagtipunan		1,174	85	1,229	91	
Prinza		178	24	190	19	
Sampalucan		122	8	132	8	
San Francisco	Elang/ De Fuego/ Hinyero	554	21	933	29	
	Sunnybrooke I	2,664	297	2,750	263	
	Sunnybrooke II	2,302	271	2,394	258	
	Tropical Village	2,847	438	2,855	414	
	Brookeside Lane	229	41	247	47	
	Country Meadow	975	104	987	113	
	Crystal Aire	296	42	316	39	
	Beyond Homes			13	0	

		2017 Wa	ter Supply	2018 Water Supply		
Barangay	Subdivision	No. of HH Served (Active)	No. of HH Unserved (Inactive)	No. of HH Served (Active)	No. of HH Unserved (Inactive)	
	Maravilla			398	67	
	Asian Leaf			190	13	
	Bel Aldea			922	304	
San Gabriel		308	15	310	17	
San Juan I		393	15	411	56	
	Veejay Subd.	237	18	243	17	
	Pennsylvania Subd.	79	4	136	8	
	St. Francis Subd.	278	11	299	10	
San Juan II		616	35	642	51	
Santiago		882	31	930	50	
	KPNP Subd.	75	1	86	2	
	FIHA Subd.	403	18	453	26	
	Amaia Scapes	312	66	422	111	
Sta. Clara		546	29	596	26	
Tapia		440	24	473	30	
	Bella Vita Subd.	493	130	593	196	
Tejero		625	92	675	104	
	Heritage Village	186	19	204	21	
	San Francisco Subd.	189	14	193	18	
Vibora		203	19	209	23	
1896		90	6	93	6	
Total		43,936	4,844	49,011	5,766	

Source: General Trias Water Corporation (GTWC)

Table 62. List of Rivers and Catchment Areas, by Location (2020), City of General Trias, Cavite

Name Location		Location	Drainage / Catchment Area (Ha)
1.	Ylang River	Gen. Trias – Imus – Dasmariñas Boundary	1,334.85
2.	Rio Grande (Malabon River)	Bacao I and II-Poblacion- Pinagtipunan-Tapia-Pasong Kawayan I and II-Buenavista I,II	3,840.10
		and III-Manggahan-Biclatan-Javalera-Panungyanan	
3.	Cañas River		428.125
4.	Matangilan River	Pasong Kawayan II-Buenavista I, II and III-Manggahan-Biclatan-Javalera- Panungyanan	860.1125
5.	Pulonan River	Alingaro-Trece Martirez Boundary	228.125
6.	Panaysayan River	Pasong Kawayan II-Buenavista I, II and III-Manggahan Manggahan-Alingaro and Trece Martires, Amadeo Boundary	853.685
7.	Pasong Camachile River	Pasong Camachile I and II-Santiago-San Francisco	939.5

Source: CPDO (2018), City of General Trias, Cavite

Table 63. Number of Connections and Average Retail Rates and Cost per KWH by Type of User (2017-2018), City of General Trias, Cavite

	2017			2018			
Segment	Year-End Customer Count	Cost per KWH	Average Retail Rates	Year-End Customer Count	Cost per KWH	Average Retail Rates	
Residential	102,198	6.61103	₱9.40	112,634			
Commercial	3,968	10.17671	₱7.91	4,328	8.83		
Industrial	77	21.17046	<b>₱</b> 6.60	78	7.64		
Flat Streetlights				145			
Total	106,243			117,185			

Source: MERALCO

# Renewable Source of Energy

To augment the supply of electricity in General Trias, some private companies supply additional power requirement through renewable sources, specifically solar energy systems. These companies provide solar power mainly to various companies located in the industrial zones such us in Export Processing Zone Authority (EPZA) sites in Cavite.

According to the data presented in **Table 64**, the solar power providers generated a total of 55,170.76 MWhr in the year 2016. However, solar power generation constantly declines in the succeeding years. The total solar power generated decreased by 25.24% in the year 2018. Similarly, the amount of gross sales declined by 6.86% from 2016 to 2018.

Table 64. Solar Power Generation and Gross Sales (2016-2018), City of General Trias, Cavite

Year	Generation (MWhr)	Gross Sales (PhP)
2016	55,170.76	182,878,687.61
2017	43,575.02	165,545,472.23
2018	41,241.58	170,333,028.56

Note: Total System Capacity = 32 MW, Roof Top; Land Area Coverage = 500,000 sq.m; Coverage area includes the City of General Trias and Municipality or Rosario in Cavite.

Source: Based on data gathered by the CPDO, City of General Trias, Cavite

### **Telecommunication**

General Trias is adequately served by major telephone, mobile and internet service providers that are capable of servicing at least the major parts of the City. Currently, major service providers in the area include PLDT, Smart, Sun Cellular, Digitel, and Globe Telecom. Still, some of the barangays have little to no signal coverage. As there is a low volume of postage, the City is utilizing a small postal office located in the General Trias Public Market.

The presence of advanced telecommunications facilities not only makes General Trias readily accessible through the Internet, but also its economy benefits from the presence of key players in the telecommunications industry. Modern and digital communication are being offered by major telecommunication companies. As can be observed, all types are privately owned with the exception of the postal services.

### **City Cemetery**

General Trias has ten (10) memorial parks situated within its boundaries having a cumulative total land area of 36.415 ha. (**Table 65**). About 74.78% of these are privately-owned while the remaining 25.22% are owned by the City LGU (**Map 15**).

Table 65. List of Memorial Parks (2018), City of General Trias, Cavite

Name of Memorial Park	Barangay	Name of Developer/Owner	Area (ha.)
Bacao I Public Cemetery	Bacao I	City Government of General Trias	0.9691
Beatriz Memorial Garden	Bacao I	Elvira Eusebio Management Company	2.0592
Buenavista II Public Cemetery	Buenavista II	City Government of General Trias	0.487
Buenavista II Public Cemetery (Expansion)	Buenavista II	City Government of General Trias	1.8259
Heavenly Peace Memorial Garden	Buenavista III	Joselito Gawaran of Heavenly Peace Memorial Garden, Inc.	0.8783
Himlayang General Trias	Pasong Camachile II	City Government of General Trias	4.2396
Paradise Garden Memorial Park	Manggahan	LGTM Corp.	12.4117
Saint Francis of Assisi Memorial Park	Pinagtipunan	La Savoie Devt. Corp.	7.2784
Vibora Public Cemetery	Vibora	City Government of General Trias	1.6595
Way of the Cross Memorial Park	Pasong Kawayan II	Gen. Land Holdings Inc.	4.6063
	Total		36.415

Source: CPDO, City of General Trias, Cavite

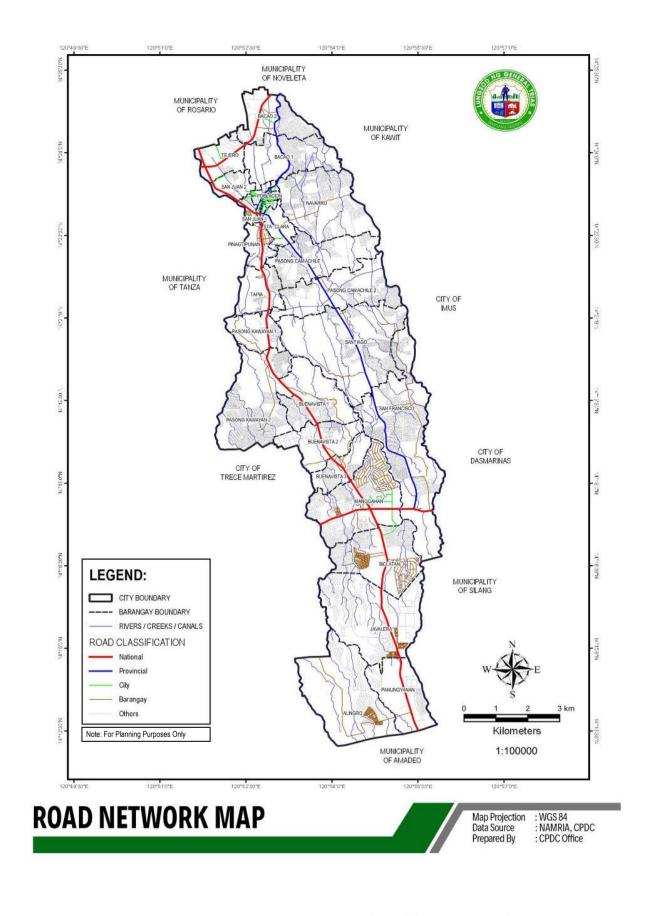
# **Administrative Infrastructure**

General Trias has 15 public buildings, namely: youth center, health center, Medicare hospital, city hall, convention center, evacuation center, women's crisis center, jail facilities, CDRRMC building, training center and fire station (**Table 66**). Among these buildings, the four-storey City Hall in the Poblacion has the largest floor area equivalent to 4,530 square meters. On the other hand, the smallest public buildings are the Evacuation Center in Barangay Bacao II with only 100 square meters and the Women's Crisis Center in Barangay Biclatan with only 200 sq. m floor area (**Map 16**).

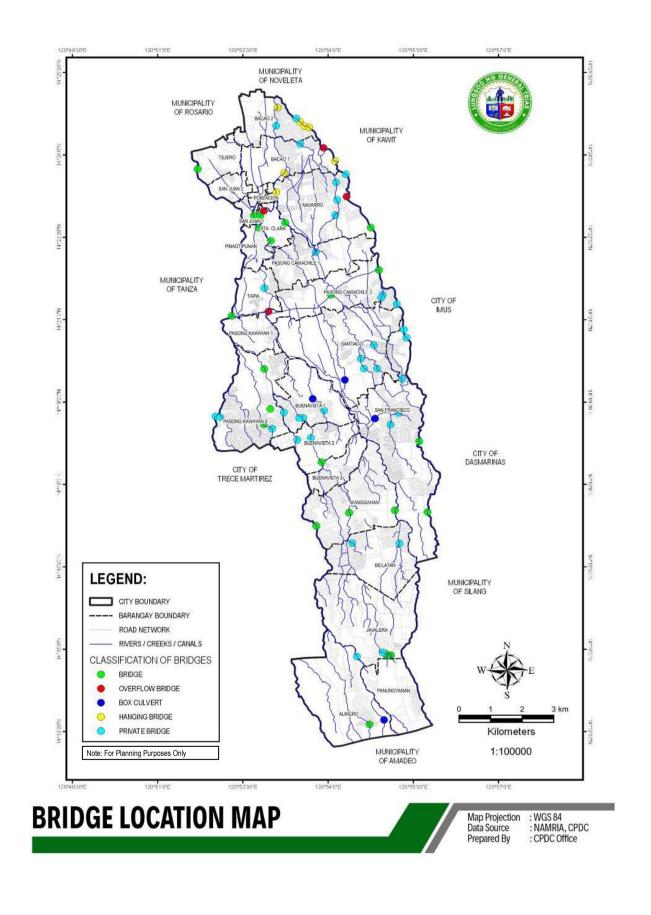
Table 66. List of Public Buildings (2020), City of General Trias, Cavite

Public Building	Total Floor Area (sq. m)	No. of Storeys	Location
Youth Center	430	1	Pasong Camachile I
Health Center	532	2	Manggahan
Health Center	1,178	3	Pinagtipunan
Medicare Hospital	1,850	2	Pinagtipunan
City Hall	4,530	4	Poblacion
Convention Center	2,440	1	Sampalucan

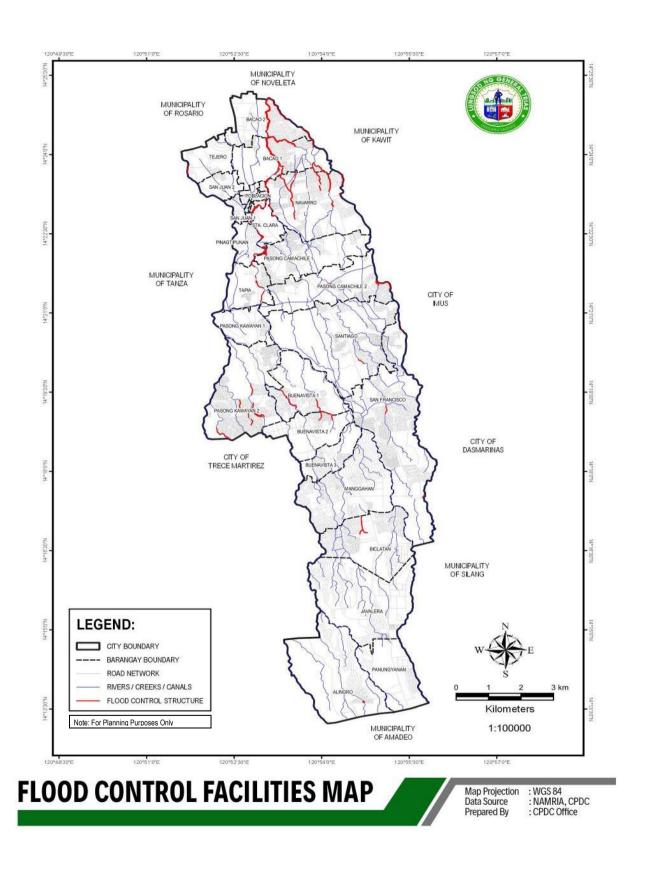
Public Building	Total Floor Area (sq. m)	No. of Storeys	Location
Evacuation Center	270	1	Tejero
Evacuation Center	100	2	Bacao II
Women's Crisis Center	200	2	Biclatan
Bahay Tuluyan	290	1	Biclatan
Jail Facility	1,148	4	Navarro
Jail Facility (Two units)	860	3	Navarro
CDRRMC Building	380	2	Pasong Kawayan II
Training Center	630	2	Pasong Kawayan II
Fire Station	455	2	Pasong Kawayan II



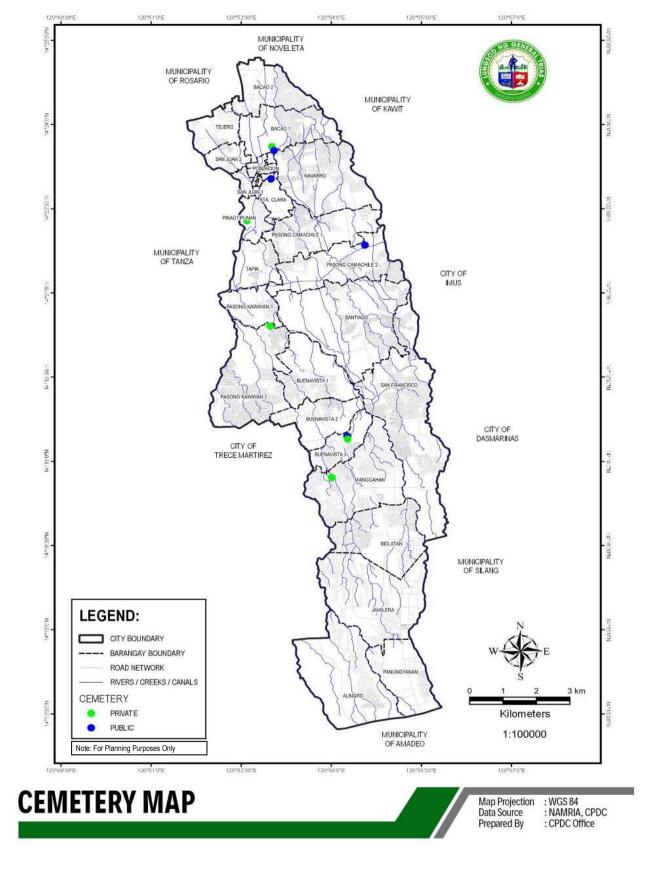
Map 12. Road Network Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite



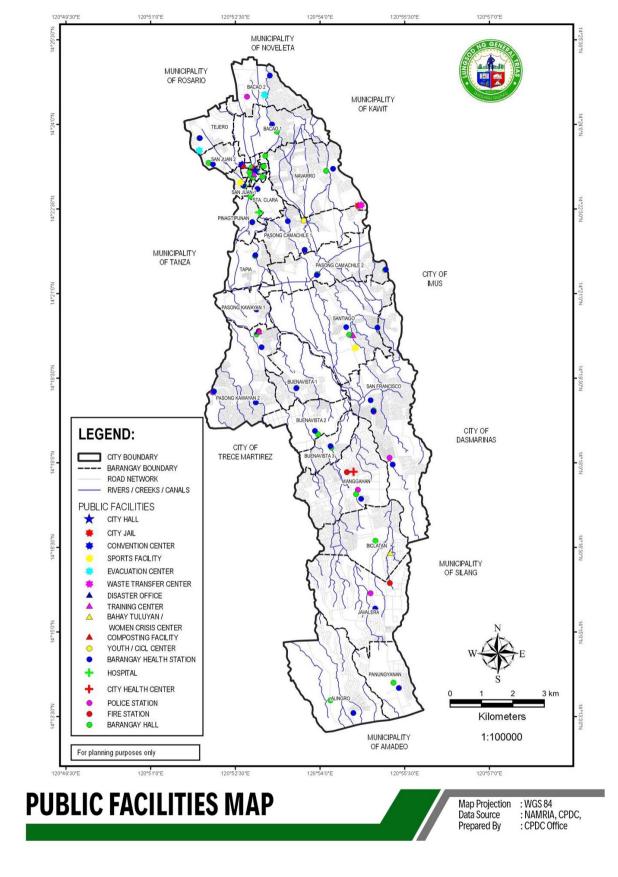
Map 13. Bridge Location Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite



Map 14. Flood Control Facilities Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite



Map 15. Cemetery Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite



Map 16. Public Facilities Map, City of General Trias, Cavite Source: CPDO, City of General Trias, Cavite

#### **G. ENVIRONMENT**

# **Solid Waste Management**

At present the CENRO is in-charge of the daily collection of garbage servicing the 33 barangays in the City: (1) from household: 2 times a week; (2) from populated areas: 3 times a week. Mixed waste is collected from households by City's garbage trucks and directly dumped into 4 designated drop zones.

With the current practice, only the garbage collectors and scavengers practice segregation for most places. However, for some barangays and subdivisions with Mini-MRF, residents practice segregation and even earn from the sales of their recyclables. The MRF or Centralized Materials Recovery Facility (MRF) is a City-initiative located near the Public Market in Barangay Sampalucan. In addition, the City outsourced the collection, hauling and disposal of garbage and other waste material out of the City, which are then brought to a disposal site in Cabuyao, Laguna.

Based on the assumed solid waste generation per capita of 0.25 kg/person/day and a population of 314,303 for base year 2015, the estimated quantity of waste generated is 78,575.75 kilograms daily equivalent to a waste volume of 392.88 cubic meter per day as shown in **Table 67**. This is estimated to increase to 534.15 cu.m/day by year 2021 and 846.76 cu.m/day of waste volume at the end of the 2030.

# **General Water Quality**

At present, there are no water quality monitoring and testing facility for the City of General Trias. Major water outfalls run through the creek, esteros and river bodies of the City. The inability to record water quality levels of major water bodies may affect the City's compliance to water and wastewater regulations. Although there are efforts on creating a septage management plant, the full realization of this proposed project should cater the whole City in meeting the requirements of national standards for water and wastewater quality. For development concerns, meeting national standards should be of utmost importance to achieve the desired level of development for the City.

### **General Air Quality**

On general air quality, General Trias do not have inventory of air emissions in the City. The emission inventories are only through the Land Transportation Office (LTO) for vehicle registration. To meet national standards on air quality, there are independent air monitoring and control for special economic zones in the City regulated by Philippine Economic Zone Authority (PEZA) for tenants in these economic zones. While there are efforts for data collection, it is important to establish an air quality monitoring system for the City and ensure that the required air quality is met for the general population.

Table 67. Projected Solid Waste Generation Profile (2015-2030), City of General Trias, Cavite

Year	Total Population	Quantity (kg/day) 0.25 kg/day PCG*	Volume (cu.m/day)	Waste Generation (kg/year)	Dumpsite Area Requirement (ha.)**	Land Area Requirement (ha.)	Total Land Area Requirement (ha.)***
2015	314,303	78,575.75	392.88	28,680,148.75	10.48	14.340	21.510
2016	330,813	82,703.25	413.52	30,186,686.25	11.03	15.093	22.640
2017	348,189	87,047.25	435.24	31,772,246.25	11.61	15.886	23.829
2018	366,479	91,619.75	458.10	33,441,208.75	12.22	16.721	25.081
2019	385,729	96,432.25	482.16	35,197,771.25	12.86	17.599	26.398
2020	405,990	101,497.50	507.49	37,046,587.50	13.53	18.523	27.785
2021	427,316	106,829.00	534.15	38,992,585.00	14.24	19.496	29.244
2022	449,762	112,440.50	562.20	41,040,782.50	14.99	20.520	30.781
2023	473,387	118,346.75	591.73	43,196,563.75	15.78	21.598	32.397
2024	498,252	124,563.00	622.82	45,465,495.00	16.61	22.733	34.099
2025	524,424	131,106.00	655.53	47,853,690.00	17.48	23.927	35.890
2026	551,971	137,992.75	689.96	50,367,353.75	18.40	25.184	37.776
2027	580,965	145,241.25	726.21	53,013,056.25	19.37	26.507	39.760
2028	611,481	152,870.25	764.35	55,797,641.25	20.38	27.899	41.848
2029	643,601	160,900.25	804.50	58,728,591.25	21.45	29.364	44.046
2030	677,407	169,351.75	846.76	61,813,388.75	22.58	30.907	46.360

# Notes:

Source: City Environmental and Natural Resources Office (CENRO), City of General Trias

<sup>\*</sup>Per Capita Generation (PCG) was based on the 2015 Solid Waste Management Plan; Author's computation per HLURB Guidelines.

<sup>\*\*</sup> Computed based on a ratio of 1 hectare-wide dumpsite per 30,000 population. Author's computation.

<sup>\*\*\*</sup>Land area requirement needs expansion by 50% to allow for daily cover, roads, receiving areas, fencing etc.; Assumption: Landfill Depth = 10m; Residence Time = 10 years; Waste Density = 200 kg/cu.m; Author's computation per HLURB Guidelines.

# **Greenhouse Gas Emission Inventory**

Emission inventory or GHG inventory is an important tool for identifying the source of pollutants and pollution load in a specific geographic area. The development of the emission inventory can support better planning for mitigation options for the local government units to implement specific programs and projects for air quality management.

The Climate Change Act, as amended in 2012 (RA 10174), declares that it is the policy of the Philippine Government to strengthen, integrate, consolidate, and institutionalize government initiatives to achieve coordination in the implementation of plans and programs to address climate change in the context of sustainable development.

Present government policies particularly the Memorandum Circular No. 2014-135 or the Guidelines for the Formulation of the LCCAP complements RA 10174, which does not require but strongly encourages the local government units to increase their efforts to mitigate and reduce their carbon foot print. The rules governing the conduct of entity-level GHG inventories are dependent on the choices made by the LGUs, however, should be anchored in international standards and protocols on community-level GHG accounting.

Quantifying and establishment of GHG emission database cover six sectors: energy, industrial processes and product use, agriculture, land use, land-use change, and waste. Determining of emissions include continuous monitoring from a source; short-term emission measurements that are extrapolated or projected to a longer time period, and use of emissions factors. Moreover, activity data as well as emission factors should be gathered from published and established local, national, or international databases. The choice of method depends on the availability of data, time, staff and funding of the LGU.

The City of General Trias managed to gather data and produce a GHG Emission Summary (**Table 68**). It includes the result of three scope emission sources in tons of carbon dioxide equivalent (tCO2e) produced within and out of the LGU. The computation is based on the manual and spreadsheet provided by the Climate Change Commission for Community-Level GHG Inventory for Local Government Units in the Philippines. The emitted GHG in the City totaled to 12,029,098 tCO2e where 96.96% is contributed by Scope 1 Emissions (Net of Forestry and Land Use), 3.04% is contributed by Scope 2, and lastly 0.00% from Scope 3.

Scope 1 GHG Emissions from Solid Waste Disposal - IPCC FOD Method, GHG Emissions from Solid Waste Disposal – Inside LGU Geopolitical Boundaries (ICLEI), and GHG Emission from Wastewater Treatment and Discharge (Other Sources) do not have values since used method for solid waste disposal is ICLEI and there is no existing solid waste disposal inside the city boundary.

The results inform that the LGU should focus its measures and mechanisms to lessen the GHG emission on the Industrial Processes and Product Use. However, this result is based only on the production of each industry and does not suffice that this industrial firms do not have any means to prevent the high emission from their process/products. The second focus should be on the purchased electricity where industrial and streetlight electricity consumptions have high contribution to GHG emission.

It must be noted that the manner of data collection to come up with this GHG Emission Summary employed varying methods and assumptions. Thus, the reliability of the data as shown in the succeeding table is uncertain. Nonetheless, it still conveys the message that the LGU must take serious actions in monitoring and collecting data on GHG emission to come up with a responsive programs and projects for better air quality management.

Table 68. GHG Emission Summary (2020), City of General Trias, Cavite

Table 66. GHG Emission Summary (2020), City of General Trias, C	GHG	Proportion
Emission Source	Emissions	of Total
	(tCO2e)	Emissions
Scope 1 Emissions (Net of Forestry and Land Use)	,	
GHG Emissions from Community-Level Residential Stationary	24,207.16	0.20%
Fuel Use	24,207.10	0.20%
GHG Emissions from Community-Level Commercial	2,378.70	0.02%
Stationary Fuel Use	2,370.70	0.02 /6
GHG Emissions from Community Mobile Combustion**	1.00	0.00%
GHG Emissions from Solid Waste Disposal - IPCC FOD	0.00	0.00%
Method		0.0070
GHG Emissions from Other Solid Waste Treatment (ICLEI)*	10,993.29	0.09%
GHG Emissions from Solid Waste Open Burning (ICLEI)*	11.32	0.00%
GHG Emissions from Wastewater Treatment and Discharge	16,402.67	0.14%
GHG Emissions from Community-Level Agriculture (Crops)	2,813.14	0.02%
GHG Emissions from Community-Level Agriculture	136,193.77	1.13%
(Livestock)	100,133.77	1.1370
GHG Emissions from Solid Waste Disposal - Inside LGU	0.00	0.00%
Geopolitical Boundaries (ICLEI)	0.00	0.0070
GHG Emissions from Wastewater Treatment and Discharge	0.00	0.00%
(Other Sources)	0.00	
GHG Emissions from Industrial Processes and Product	11,469,938.54	95.35%
Use***	, ,	
Scope 1 Emissions/Removal (Forestry and Land Use)		
GHG Emissions from Forestry and Land Use	0.44	0.00%
GHG Removal from Sink	-76.45	0.00%
Total Scope 1 Emissions	11,662,864	96.96%
Scope 2 Emissions		
GHG Emissions from Purchased Electricity at Community-	101,641.88	0.84%
Level Residential Sites	,	
GHG Emissions from Purchased Electricity at Community-	59,320.76	0.49%
Level Commercial Sites	22,020	
GHG Emissions from Purchased Electricity at Community-	205,262.09	1.71%
Level for All Other Sources (Industry and Streetlights)		
Total Scope 2 Emissions	366,225	3.04%
Scope 3 Emissions		

Emission Source	GHG Emissions (tCO2e)	Proportion of Total Emissions
GHG Emissions from Solid Waste Disposal - Outside LGU Geopolitical Boundaries (ICLEI)	9.45	0.00%
Total Scope 3 Emissions	9	0.00%
Total Emissions	12,029,098	100.00%

<sup>\*</sup> The main differences between the IPCC FOD method and the ICLEI method is that the FOD method produces a time-dependent emission profile that better reflects the true pattern of the degradation process over time, whereas the ICLEI method is based on the assumption that all potential CH4 is released in the year the waste is disposed of. The ICLEI method will give a reasonable annual estimate of actual emissions if the amount and composition of deposited waste have been constant or slowly varying over a period of several decades. If the amount or composition of waste disposed of at SWDS is changing more rapidly over time, however, the ICLEI default method will not provide an accurate trend. For example, if there is a reduction in the amount of carbon deposited at SWDS, the default method will underestimate emissions and overestimate reductions. Source: Climate Change Commission

Source: CPDO, City of General Trias

<sup>\*\*</sup> Mobile/vehicle survey on households, not included vehicle registered for government use.

<sup>\*\*</sup> To be reviewed by CENRO