

Chapter 6. Economic Sector

Agriculture

Agriculture is the science, art, or occupation concerned with cultivating land, producing crops, and feeding, breeding and raising livestock (*dictionary.com*); and these were among the agricultural activities that the Caviteño farm workers had been actively involved with. Furthermore, fishery is also another major component of the agricultural sector wherein the province is home to numerous fishery activities providing livelihood to many Caviteños and food production source, as well. Aside from the coastal areas, there are also other lowland and upland municipalities and cities that have minimal areas devoted to fresh water fishponds.

Agriculture serves as our country's economic backbone and lifeline. It provides employment to millions of Filipinos and contributes to the national income through the formation of backward and forward linkages in the economy. As the economic base of industrialization and modernization, the agricultural sector plays a crucial role in providing raw materials, ensuring food security and developing the countryside (*excerpts from the Message of the Governor included at Agriculture and Fisheries Modernization Plan 2015-2020, Cavite Province*).

The agricultural land is about 45.97% of the total land area of the province or 65,603.88 hectares, a decrease of 5,986.83 hectares as compared to 2012 data of 71,590.71 hectares (Table 6.1). This was due, according to the Office of the Provincial Agriculturist, to the conversion of agricultural area to residential and industrial areas in the municipality of Gen Trias, the Cities of Imus and Dasmariñas; the other areas are categorized as forest and Network of Protected Areas and Agro-Industrial Development (NPAAD) in the municipality of Maragondon, while in the municipality of Indang, the area sold to non-Cavite residents are no longer cultivated and was used for other purposes. However, despite the decrease in the area and Cavite being a center of countryside industrialization, the province is still considered agricultural and still has a lot of potentials in the production of corn, coffee, vegetables and other high value crops. Out of the agricultural area, 37,932.71 hectares or 26.58% came from 7th District, 8.21% or 11,717.71 hectares comprised 6th District, 5th District has 11,563.20 hectares or 8.10% while 2,045.56 hectares or 1.43% is from 4th District. Moreover, 3rd District has 1.18% or 1,684.00 hectares while 1st and 2nd Districts have only 0.18% and 0.29% agricultural land, respectively (Figure 6.1).

Figure 6.1 Distribution of Agricultural and Non-Agricultural Area (Has) by District Province of Cavite: 2013

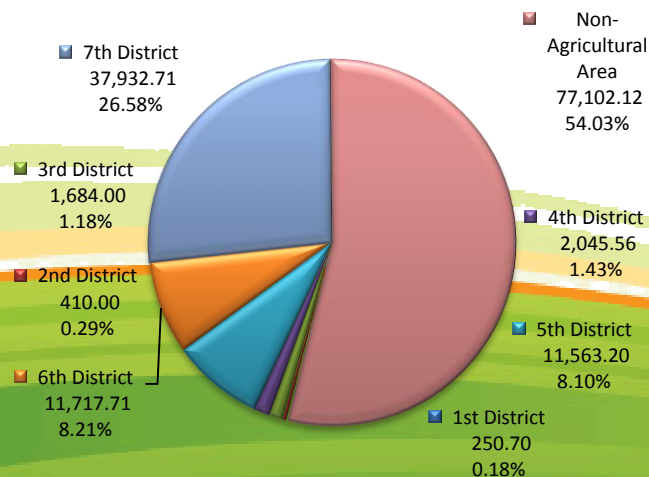


Table 6.1 Total Agricultural and Non-Agricultural Area and Number of Farmers by City/Municipality, Province of Cavite: 2013

City/ Municipality	Total Land Area (Hectares)	Total Agricultural Area (Hectares)		Total Number of Farmers	Agri-cultural Land (%)
		2013	2012		
1st District	3,631.00	250.70	391.70	446	6.90
Cavite City	1,183.00				
Kawit	1,340.00	170.00	311.00	380	12.69
Noveleta	541.00	53.70	53.70	27	9.93
Rosario	567.00	27.00	27.00	39	4.76
2nd District	5,240.00	410.00	310.00	340	7.82
City of Bacoor	5,240.00	410.00	310.00	340	7.82
3rd District	9,701.00	1,684.00	1,684.00	815	17.36
City of Imus	9,701.00	1,684.00	1,684.00	815	17.36
4th District	8,234.00	2,045.56	2,445.56	5,270	24.84
City of Dasmariñas	8,234.00	2,045.56	2,445.56	5,270	24.84
5th District	19,671.00	11,563.20	11,563.20	4,411	58.78
Carmona	3,092.00	1,923.65	1,923.65	230	62.21
Gen. Mariano Alvarez	938.00	207.72	207.72	555	22.14
Silang	15,641.00	9,431.83	9,431.83	3,626	60.30
6th District	30,105.00	11,717.71	11,717.71	7,953	38.92
Amadeo	4,790.00	4,500.00	4,500.00	4,000	93.95
Gen. Trias	11,768.00	4,901.00	4,901.00	1,589	41.65
Tanza	9,630.00	1,896.71	1,896.71	1,392	19.70
Trece Martires City	3,917.00	420.00	420.00	972	10.72
7th District	66,124.00	37,932.71	43,478.54	20,329	57.37
Alfonso	6,460.00	5,731.59	5,800.50	2,779	88.72
Gen. E. Aguinaldo	5,103.00	3,684.00	3,710.06	1,332	72.19
Indang	8,920.00	7,189.42	7,755.00	4,395	80.60
Magallanes	7,860.00	5,571.00	5,571.00	2,144	70.88
Maragondon	16,549.00	7,359.67	10,265.93	4,489	44.47
Mendez	1,667.00	1,327.80	1,327.80	1,075	79.65
Naic	8,600.00	5,194.23	7,290.00	1,357	60.40
Tagaytay City	6,615.00	1,272.00	1,272.00	2,446	19.23
Ternate	4,350.00	603.00	486.25	312	13.86
Total	142,706.00	65,603.88	71,590.71	39,564	45.97

Source: Office of the Provincial Agriculturist, Trece Martires City

Crop Production

Cavite’s fertile and alluvial soil types and favorable climatic condition make it highly suitable for crop production. The lowland areas are suited for rice, corn and vegetable production. The central area is recommended for diversified farming such as cultivation of upland rice, corn, sugarcane, vegetables, root crops, coconut, coffee, mangoes and other fruits. The upland area is suitable for cut flowers, orchard and pastures.

Area planted to crops totaled to 56,169.48 hectares or 85.62%% of the total agricultural area wherein 17,605.00 hectares or 31.343% are planted with food crops, 68.585% or 38,523.73 hectares are planted with industrial/commercial crops while 40.75 hectares or 0.073% are planted with cut flowers, ornamentals and sampaguita (Figure 6.2). Comparing the data from 2012 to 2013, it is noticeable that most of the crops decrease in production. Food crops registered a production volume of 97,838.62 metric tons, a 6.49% decrease as compared to 2012 data of 104,631.62 metric tons. This was attributed by the decrease particularly in rice production from 61,963.38 metric tons in 2012 to 53,973.89 metric tons in 2013 brought about by the occurrence of heavy southeast monsoon (habagat) during wet season cropping while the crop was at flowering stage and the presence of rice black bug affecting most of the rice areas in the province. Moreover, coconut having the widest area of 16,996.90 hectares also decreases in production from 81M nuts to almost 80M nuts due to the outbreak of scale insects. Meanwhile, cut flowers, ornamentals and sampaguita industry posted production volume of 71,529.08 dozen, 321,244 pots and 11.17 metric tons respectively. Production data of the other major crops and number of farmers are shown in Table 6.2.

Of the seven districts in the province, 7th District has the largest area planted to crops with an area of 33,193.18 hectares or 59.09% share. It is followed by 6th District comprising 18.99% of the area or 10,667.63 hectares, 5th District at 13.37% share or 7,510.42 hectares while 2,357.52 hectares or 4.20% are from 4th District and 3rd District has 2,013.15 hectares. Moreover, 1st District was recorded at 195.52 hectares and 2nd District has 232.06 hectares. Major crops harvested totaled to 334,442.48 metric tons wherein 7th District posted a crop production of 66.21% or 221,441.60 metric tons, 6th District registered 12.25% or 40,958.66 metric tons produce while 12.23% or 40,908.17 metric tons came from 5th District. In addition, 4th District has 17,819.95 metric tons or 5.33% harvest, 3rd District has 10,871.41 metric tons, 2nd District registered 1,140.19 metric tons and 1st District was recorded at 1,302.50 metric tons (Figure 6.3). As indicated, the municipality of Magallanes and Silang recorded the highest crop production at 112,803.21 metric tons and 38,426.82 metric tons respectively.

Coconut, which was also one of the major crops planted in the province, has a total production of almost 80 million coconuts. 7th District was the largest producer recorded at 65,707,426 coconuts and still the municipality of Magallanes topped with 23,516,000 coconuts harvested. Bamboo plant which was harvested from the municipalities of Gen. Trias and Maragondon also contributed production of 502,385 poles. Likewise, cut flower and ornamental production which are currently gaining prominence in the province are harvested in the municipality of Silang, Trece Martires City, Alfonso, Amadeo, Maragondon and Gen. E. Aguinaldo while sampaguita is planted mostly in Trece Martires City (Table 6.3).

Figure 6.2 Distribution of Area Planted to Major Crops (Has) Province of Cavite: 2013

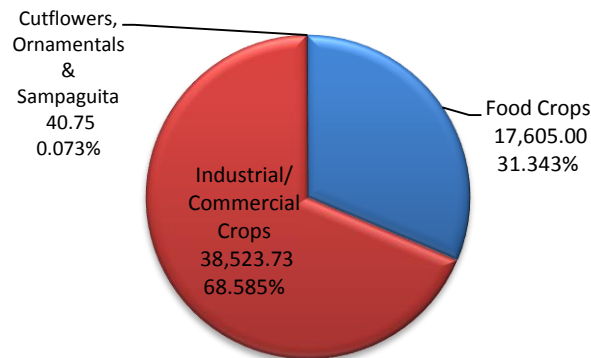


Table 6.2 Major Crops Planted and Total Production Province of Cavite: 2012 & 2013

Major Crops	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)		Farmers Served (Number)
			2013	2012	
Food Crops	17,605.00	18,332.47	97,838.62	104,631.62	26,527
Rice	13,284.06	14,267.61	53,973.89	61,963.38	7,182
Irrigated	12,295.96	13,298.41	51,611.88	59,956.83	6,127
Rainfed	409.00	392.60	1,148.35	488.33	245
Upland	579.10	576.60	1,213.66	1,518.22	810
Corn	1,280.07	1,239.15	6,006.94	5,106.30	1,893
Yellow corn	307.22	277.15	1,250.08	882.34	559
Green corn	972.85	962.00	4,756.86	4,223.96	1,334
Vegetables	2,148.77	1,977.00	25,608.15	24,944.21	13,803
Leafy	241.13	240.96	1,756.98	1,510.28	2,867

Major Crops	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)		Farmers Served (Number)
			2013	2012	
Fruit	1,460.97	1,300.26	18,490.43	18,087.84	7,705
Legumes	239.82	234.72	2,346.38	2,050.13	1,816
Root	192.04	187.69	2,945.17	2,943.86	1,251
Bulb	14.81	13.37	69.19	352.10	164
Root crops	892.10	848.71	12,249.64	12,617.73	3,649
Industrial/Commercial Crops	38,523.73	31,739.91	236,603.86	223,827.55	51,303
79,902,176 nuts					
502,385 poles					
Coffee	9,061.34	8,894.67	6,994.03	8,300.87	11,154
Coconut	16,996.90	11,221.55	79,902,176 nuts	81,162,258 nuts	14,027
Banana	2,983.55	2,840.29	26,061.77	26,483.75	8,264
Pineapple	1,490.29	1,362.62	33,548.18	31,995.79	1,947
Mango	1,638.37	1,292.17	20,257.83	19,019.34	3,157
Papaya	259.37	252.01	3,751.91	3,874.43	1,395
Peanut	148.19	146.20	206.31	209.58	370
Sugarcane	2,220.37	2,170.37	125,760.20	113,554.20	351
Black Pepper	505.07	449.97	441.95	514.66	1,500
Dragon Fruit	23.00	22.70	281.85	222.50	52
Other Fruit Trees	2,081.17	2,000.96	18,359.67	18,335.58	8,599
Other Fruits	66.11	36.40	940.16	1,316.85	27
Muskmelon	2.95	0.45	18.22	40.00	2
Watermelon	63.16	35.95	921.94	1,276.85	25
Bamboo	1,050.00	1,050.00	502,385 poles		460
Cutflowers, Ornamentals & Sampaguita	40.75	40.73	71,529.08 dozen	66,808.21 dozen	833
321,244 pots					
11.17 m.t.					
Cutflowers	12.93	12.91	71,529.08	66,808.21	486
Anthurium	3.07	3.07	16,537.83	13,199.75	170
Orchids	9.86	9.84	54,991.25	53,608.46	316
Ornamental	20.47	20.47	321,244.00	354,575	255
Sampaguita	7.35	7.35	11.17	9.98	92
Total	56,169.48	50,113.11			78,663

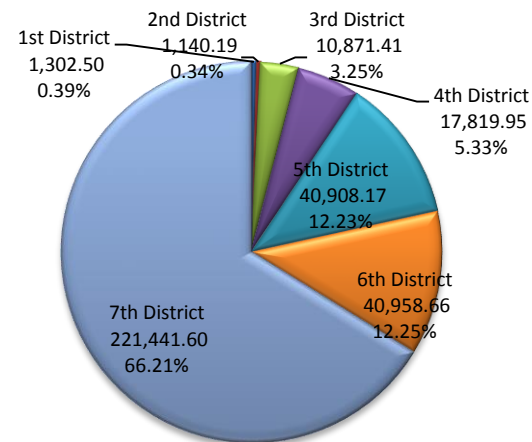
Source: Office of the Provincial Agriculturist, Trece Martires City

Table 6.3 Total Area Planted to Crops and Total Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted to Crops (hectares)	Total Production					
		All crops (m.t.)	Cutflowers (dozen)	Ornamentals (pots)	Sampaguita (m.t.)	Bamboo (poles)	Coconut (pcs.)
1st District	195.52	1,302.50					
Cavite City	3.55						
Kawit	128.49	724.25					
Novelita	63.48	578.25					
2nd District	232.06	1,140.19					
City of Bacoor	232.06	1,140.19					
3rd District	2,013.15	10,871.41					
City of Imus	2,013.15	10,871.41					
4th District	2,357.52	17,819.95					
City of Dasmariñas	2,357.52	17,819.95					
5th District	7,510.42	40,908.17	40,205.33	318,021.00			12,753,964
Carmona	410.90	1,993.49					
Gen. Mariano Alvarez	140.07	487.86					
Silang	6,959.45	38,426.82	40,205.33	318,021.00			12,753,964
6th District	10,667.63	40,958.66	24,975.75	3,223.00	11.17	2,385	1,440,786
Amadeo	4,816.40	9,596.01		3,223.00			527,599
Gen. Trias	2,976.70	15,108.11				2,385	278,487
Tanza	2,114.64	11,578.34					
Trece Martires City	759.89	4,676.20	24,975.75		11.17		634,700
7th District	33,193.18	221,441.60	6,348.00			500,000	65,707,426
Alfonso	5,107.28	18,492.64	6,216.00				4,387,040
Gen. E. Aguinaldo	4,097.62	6,791.69	65.00				18,379,967
Indang	6,003.95	18,594.28					15,328,467
Magallanes	6,577.00	112,803.21					23,516,000
Maragondon	4,633.75	19,711.96	67.00		500,000		3,637,080
Mendez	1,186.45	5,400.39					123,396
Naic	3,743.13	27,715.78					102,000
Tagaytay City	1,094.77	7,884.72					40,291
Ternate	749.23	4,046.93					193,185
Total	56,169.48	334,442.48	71,529.08	321,244.00	11.17	502,385	79,902,176

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.3 Distribution of Crop Production (MT) by District Province of Cavite: 2013



Food Crops

Rice

Rice is a popular cereal crop commonly used as human food. It is actually a type of grass and belongs to a family of plants that includes other cereals such as wheat and corn. Rice is grown in lowland areas and is also evident in the upland areas of Cavite. The top producers of rice in the province are the municipalities of Naic having 13,730.82 metric tons harvest, Gen. Trias with 9,504.18 metric tons, Tanza recorded at 8,099.01 metric tons and the City of Imus registered at 7,998.00 metric tons. Meanwhile, the least production was recorded at the municipality of Alfonso with only 5.25 metric tons harvest (Table 6.4). With a total planted area of 13,284.06 hectares, rice production was posted at 53,973.89 metric tons by which 51,611.88 metric tons or 95.62% of the total production came from irrigated areas, 2.25% or 1,213.66 metric tons harvest are from upland areas and 2.13% or 1,148.35 metric tons are harvested from rainfed areas (Figure 6.4). As also presented, having the widest planted area, 7th District contributed 39.92% or 21,548.73 metric tons. It was followed by 6th District with 32.71% or 17,655.19 metric tons harvest, 3rd District having 7,998.00 metric tons or 14.82% produce while 4,006.05 metric tons or 7.42% are harvested from 4th District (Figure 6.5).

Table 6.4 Rice Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Irrigated			Rainfed			Upland			Total		
	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)
1st District				101.40	332.67	51				101.40	332.67	51
Kawit				99.00	323.70	49				99.00	323.70	49
Noveleta				2.40	8.97	2				2.40	8.97	2
2nd District	193.80	954.80	119	15.00	52.50	7				208.80	1,007.30	126
City of Bacoor	193.80	954.80	119	15.00	52.50	7				208.80	1,007.30	126
3rd District	1,812.00	7,998.00	575							1,812.00	7,998.00	575
City of Imus	1,812.00	7,998.00	575							1,812.00	7,998.00	575
4th District	1,000.00	3,467.80	260	49.00	171.50	24	122.25	366.75	133	1,171.25	4,006.05	417
City of Dasmariñas	1,000.00	3,467.80	260	49.00	171.50	24	122.25	366.75	133	1,171.25	4,006.05	417
5th District	305.00	1,188.65	119				126.50	237.30	180	431.50	1,425.95	299
Carmona	305.00	1,188.65	119							305.00	1,188.65	119
Silang							126.50	237.30	180	126.50	237.30	180
6th District	4,162.69	17,573.86	2,118	18.40	29.33	9	26.00	52.00	50	4,207.09	17,655.19	2,177
Gen. Trias	2,400.19	9,474.85	1,380	18.40	29.33	9				2,418.59	9,504.18	1,389
Tanza	1,762.50	8,099.01	738							1,762.50	8,099.01	738
Trece Martires City							26.00	52.00	50	26.00	52.00	50
7th District	4,822.47	20,428.77	2,936	225.20	562.35	154	304.35	557.61	447	5,352.02	21,548.73	3,537
Alfonso							3.50	5.25	15	3.50	5.25	15
Gen. E. Aguinaldo							35.50	66.00	35	35.50	66.00	35
Indang							3.00	6.00	10	3.00	6.00	10
Magallanes							50.00	70.00	100	50.00	70.00	100
Maragondon	1,284.75	5,292.95	856	192.70	448.60	138	212.35	410.36	287	1,689.80	6,151.91	1,281
Naic	3,124.22	13,730.82	1,732							3,124.22	13,730.82	1,732
Ternate	413.50	1,405.00	348	32.50	113.75	16				446.00	1,518.75	364
Total	12,295.96	51,611.88	6,127	409.00	1,148.35	245	579.10	1,213.66	810	13,284.06	53,973.89	7,182

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.4. Distribution of Rice Production (MT) in Irrigated, Rainfed & Upland Areas, Province of Cavite: 2013

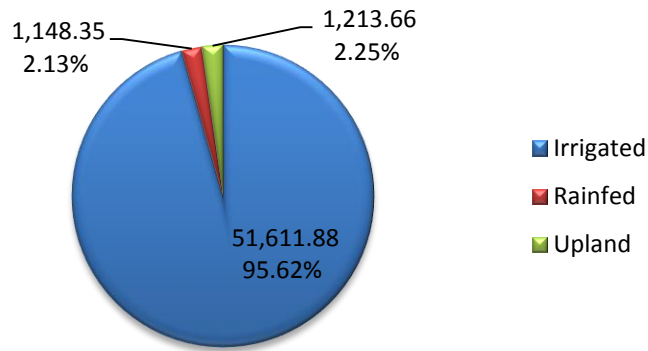
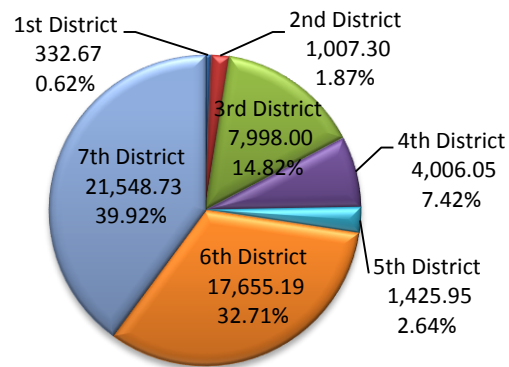


Figure 6.5. Distribution of Rice Production (MT) by District Province of Cavite: 2013



Corn

Corn is second to rice as the most important food crop planted in the province. It is a rich source of calories and is a staple among dietary habits in many populations. Corn not only provides the necessary calories for healthy, daily metabolism, but is also a rich source of vitamins A, B, E and many minerals.

The total area planted to corn posted at 1,280.07 hectares registered a production volume of 6,006.94 metric tons. As shown in Figure 6.6, 31.39% harvest or 1,885.51 metric tons came from 5th District, 1,711.13 metric tons or 28.49% is recorded at 7th District while 27.91% or 1,676.40 metric tons came from 4th District. In addition, 6th and 1st District registered 11.22% and 1.00% harvest respectively. Among the corn producer of the province, the municipality of Silang has the largest production with 1,716.66 metric tons or 28.59% harvest followed by the City of Dasmariñas having 27.91% or 1,676.40 metric tons produce. The municipality of Maragondon ranked third with 642.30 metric tons harvest while the least producer, the municipality of Naic, has only 0.07% harvest or 4.50 metric tons (Table 6.5).



Figure 6.6 Distribution of Corn Production (MT) by District Province of Cavite: 2013

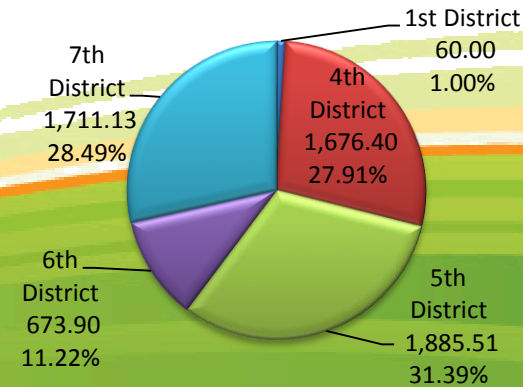


Table 6.5 Corn (Yellow and Green) Production, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
1st District	10.00	10.00	60.00	10
Noveleta	10.00	10.00	60.00	10
4th District	378.00	356.00	1,676.40	301
City of Dasmariñas	378.00	356.00	1,676.40	301
5th District	417.44	385.40	1,885.51	861
Carmona	21.50	25.50	81.70	33
Gen. Mariano Alvarez	14.58	17.53	86.15	52
Silang	381.36	342.37	1,717.66	776
6th District	125.96	127.63	673.90	209
Amadeo	4.50	4.50	22.50	15
Gen. Trias	40.18	35.73	186.94	81
Tanza	7.65	9.25	63.15	15
Trece Martires City	73.63	78.15	401.31	98
7th District	348.67	360.12	1,711.13	512
Alfonso	31.72	27.67	145.81	131
Gen. E. Aguinaldo	80.53	69.53	397.38	170
Indang	32.64	34.34	178.13	67
Magallanes	70.20	66.30	312.20	71
Maragondon	126.80	155.50	642.30	46
Naic	1.50	1.50	4.50	1
Ternate	5.28	5.28	30.81	26
Total	1,280.07	1,239.15	6,006.94	1,893

Source: Office of the Provincial Agriculturist, Trece Martires City

Vegetables

Vegetables are important sources of many nutrients, including potassium, dietary fiber, folate (folic acid), vitamin A, and vitamin C. Eating vegetables provides health benefits – people who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Vegetables provide nutrients vital for health and maintenance of your body (www.choosemyplate.gov).

Grown year round, vegetable production is an important source of additional income for Cavite farmers. Through the continuous support and assistance of the provincial



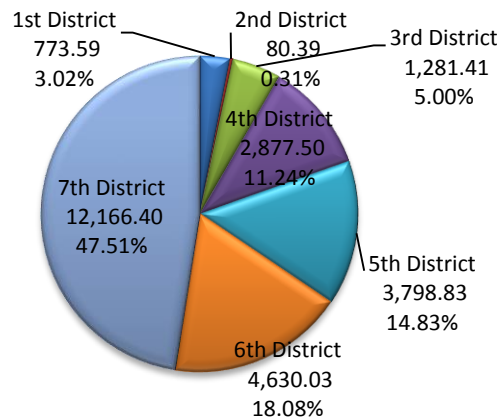
government to vegetable growers with various material production inputs like seeds, fertilizers and farm equipment, an increase of 2.66% or 663.94 metric tons was attained from 24,944.21 metric tons in 2012 to 25,608.15 metric tons in 2013. As indicated in Table 6.6, the municipality of Alfonso is the top vegetable producer with 5,145.12 metric tons, followed by the municipality of Silang having 3,428.09 metric tons, City of Dasmariñas with 2,877.50 metric tons and municipality of Tanza with 2,636.66 metric tons. 7th District posted 47.51% production, 6th District has 18.08% harvest and 5th District registered at 14.83% (Figure 6.7).

Table 6.6 Vegetable Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
1st District	67.82	67.78	773.59	355
Kawit	19.24	19.20	302.61	207
Noveleta	48.58	48.58	470.98	148
2nd District	15.26	15.24	80.39	214
City of Bacoor	15.26	15.24	80.39	214
3rd District	95.15	95.15	1,281.41	313
City of Imus	95.15	95.15	1,281.41	313
4th District	268.85	238.65	2,877.50	576
City of Dasmariñas	268.85	238.65	2,877.50	576
5th District	318.47	314.09	3,798.83	3,610
Carmona	22.25	22.25	282.28	130
Gen. Mariano Alvarez	9.44	8.44	88.46	160
Silang	286.78	283.40	3,428.09	3,320
6th District	437.94	323.19	4,630.03	1,631
Amadeo	29.29	29.29	402.35	241
Gen. Trias	74.01	58.31	867.51	351
Tanza	269.18	173.20	2,636.66	348
Trece Martires City	65.46	62.39	723.51	691
7th District	945.28	922.90	12,166.40	7,104
Alfonso	400.70	400.60	5,145.12	2,149
Gen. E. Aguinaldo	73.47	73.17	695.44	621
Indang	29.72	29.72	389.57	315
Magallanes	147.15	131.65	1,936.13	411
Maragondon	37.83	36.96	354.47	363
Mendez	46.15	46.02	592.88	699
Naic	123.87	118.39	1,735.47	1,043
Tagaytay City	70.48	70.48	1,109.26	1,422
Ternate	15.91	15.91	208.06	81
Total	2,148.77	1,977.00	25,608.15	13,803

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.7 Distribution of Vegetable Production (MT) by District Province of Cavite: 2013



Root Crops

Root crops are found to be essential to the body's wellness as these are teeming with vitamins, notably Vitamin C, carbohydrates and minerals like calcium, iron, and zinc which our body needs. An added bonus: root crops are also rich source of soluble dietary fiber. Studies on soluble dietary fiber have shown this to help lower bad cholesterol and help prevent tumor growth in the colon (www.bellaonline.com).

Root crops planted in the province are sweet potato (*kamote*), cassava (*kamoteng kahoy*), taro (*gabi*) and yam (*ubi*). Different forms of products such as starch, flour, chips can be produced out of these crops. The municipality of Silang leads in producing these crops posted at 3,677.30 metric tons, followed by the municipality of Alfonso with 2,352.70 metric ton while the municipality of Indang ranked third having 1,593.90 metric tons harvest (Table 6.7). As presented in Figure 6.8, 7th District registered 56.68% harvests or 6,943.39 metric tons followed by 5th District with 30.92% or 3,787.05 metric tons while 9.63% came from 6th District. 4th District and 2nd District, has 2.63% and 0.13% harvest respectively.

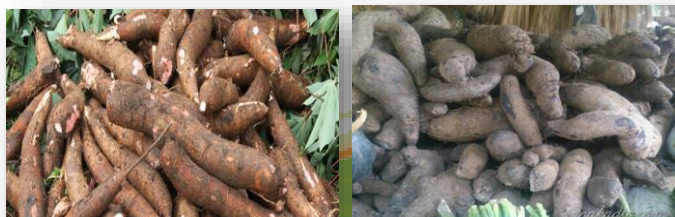
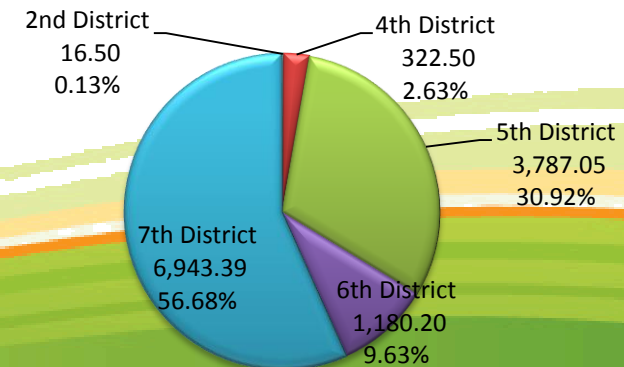


Table 6.7 Root Crops Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
2nd District	1.00	1.00	16.50	5
City of Bacoor	1.00	1.00	16.50	5
4th District	35.00	29.00	322.50	50
City of Dasmariñas	35.00	29.00	322.50	50
5th District	247.97	230.00	3,787.05	1,155
Carmona	4.00	4.00	55.00	9
Gen. Mariano Alvarez	4.00	4.00	54.75	45
Silang	239.97	222.00	3,677.30	1,101
6th District	81.07	80.97	1,180.20	273
Amadeo	27.45	27.45	426.30	70
Gen. Trias	0.10			1
Trece Martires City	53.52	53.52	753.90	202
7th District	527.06	507.74	6,943.39	2,166
Alfonso	192.03	187.13	2,352.70	750
Gen. E. Aguinaldo	14.41	11.99	179.85	61
Indang	106.06	106.06	1,593.90	415
Magallanes	104.50	93.50	1,504.00	270
Maragondon	41.75	41.75	298.20	105
Mendez	19.50	19.50	292.50	302
Tagaytay City	47.81	47.81	722.24	258
Ternate	1.00			5
Total	892.10	848.71	12,249.64	3,649

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.8 Distribution of Root Crops Production (MT) by District Province of Cavite: 2013



Industrial/Commercial Crops

Coconut

Based on research, the coconut is not actually a type of nut but instead it is the fruit of the coconut palm tree. The coconut is rich in fiber, vitamins, and minerals and provides a nutritious source of meat, juice, milk, and oil that has fed and nourished populations around the world for generations. Coconuts are unique as they contain both, a liquid known as coconut water and the endosperm known as the edible “flesh” of the coconut.

Coconut ranks first among the province’s industrial crops in terms of hectareage. In 2013, production of this crop decreased due to the outbreak of an infestation of the dreaded coconut scale insect but in a report submitted by Philippine Coconut Authority, Cavite officer-in-charge Jaime Gamier, he said that 55.5% or 2,029 coconut trees in the towns of Alfonso, Indang, Amadeo, Silang and General Aguinaldo are now showing signs of recovery after the spraying of dishwashing solution and cochin oil, pruning and application of fertilizer (*Manila Standard Today dated January 9, 2014*).

Based on the data, 7th District contributed 82.23% of the total harvest while 15.96% came from 5th District. 6th District registered 1.80% production (Figure 6.9). As also presented on Table 6.8, the municipality of Magallanes contributed the greatest production posted at 29.43% or 23,516,000 coconuts. The municipality of Gen. E. Aguinaldo ranked second contributing 18,379,967 coconuts or 23.00% of the total harvest followed by the municipality of Indang registering 19.18% or 15,328,467 coconuts.

Figure 6.9 Distribution of Coconut Production (pcs.) by District Province of Cavite: 2013

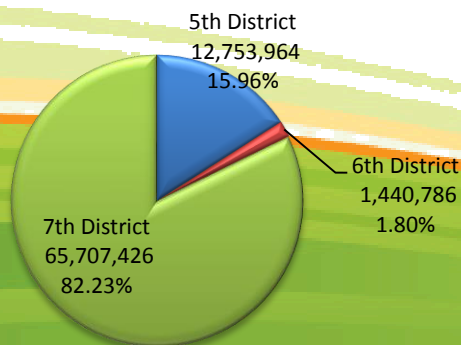


Table 6.8 Coconut Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (pcs.)	Farmers Served (Number)
1st District	3.55			2
Cavite City	3.55			2
2nd District	3.00			1
City of Bacoor	3.00			1
3rd District	1.00			2
City of Imus	1.00			2
4th District	14.50			11
City of Dasmariñas	14.50			11
5th District	2,814.38	2,054.44	12,753,964	2,891
Carmona	21.40			9
Gen. Mariano Alvarez	86.05			74
Silang	2,706.93	2,054.44	12,753,964	2,808
6th District	744.32	239.18	1,440,786	588
Amadeo	348.41	106.05	527,599	252
Gen. Trias	90.92	48.50	278,487	57
Tanza	12.50			11
Trece Martires City	292.49	84.63	634,700	268
7th District	13,416.15	8,927.93	65,707,426	10,532
Alfonso	2,142.84	1,190.19	4,387,040	2,120
Gen. E. Aguinaldo	2,769.54	2,105.38	18,379,967	1,991
Indang	3,654.65	2,211.90	15,328,467	3,350
Magallanes	3,929.45	3,014.97	23,516,000	2,055
Maragondon	675.73	303.09	3,637,080	508
Mendez	120.48	29.38	123,396	379
Naic	50.67	20.40	102,000	35
Tagaytay City	9.50	9.69	40,291	20
Ternate	63.29	42.93	193,185	74
Total	16,996.90	11,221.55	79,902,176	14,027

Source: Philippine Coconut Authority, Indang, Cavite



Coffee

Coffea is a genus of flowering plants whose seeds, called coffee beans, are used to make coffee. It is a member of the Rubiaceae family. It ranks as one of the world's most valuable and widely traded commodity crops and is an important export product of several countries. Coffee is a brewed beverage prepared from the roasted or baked seeds of several species of an evergreen shrub of the genus *Coffea*. The two most common sources of coffee beans are the highly regarded *Coffea arabica*, and the "robusta" form of the hardier *Coffea canephora*. Once ripe, coffee "berries" are picked, processed and dried to yield the seeds inside. The seeds are then roasted to varying degrees, depending on the desired flavor, before being ground and brewed to create coffee (*Wikipedia*).



Coffee is one of the high value crops of the province and known for its best quality produced in the Philippines. Due to the high cost of production inputs and labor intensive of a coffee farm as well as shifting of coffee farms to other land-uses, volume of production slightly decrease from 8,300.87 metric tons in 2012 to 6,994.03 metric tons in 2013. The provincial government through the Office of the Provincial Agriculturist is exerting effort to revive the coffee industry in the province through Coffee Revitalization Program. Among the industrial crops grown in Cavite, coffee ranks second in terms of hectarage with planted area of 9,061.34 hectares wherein 94.35% of the production or 6,598.65 metric tons are robusta variety, 364.66 metric tons or 5.21% are excelsa variety while liberica registered at 0.44% harvests or 30.72 metric tons. Moreover, 6th District posted 43.43% of the total production or 3,037.44 metric tons of coffee while 40.73% or 2,848.53 metric tons harvest came from 7th District. 5th District has only 15.84% production or 1,108.06 metric tons. The municipality of Amadeo, having the widest area planted to this crop leads among the coffee producers with 42.85% production or 2,997.20 metric tons, followed by the municipality of Silang with 15.84% harvest or 1,108.06 metric tons and the municipality of Alfonso with 803.00 metric tons or 11.48% production (Table 6.9).



Table 6.9 Coffee Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Excelsa			Liberica			Robusta			Total		
	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)	Area Planted (Hectares)	Production (Metric Tons)	Farmers Served (Number)
5th District							1,428.75	1,108.06	1,348	1,428.75	1,108.06	1,348
Carmona							3.00		3	3.00		3
Silang							1,425.75	1,108.06	1,345	1,425.75	1,108.06	1,345
6th District	234.35	183.90	618	2.00	1.65	43	3,582.65	2,851.89	4,036	3,819.00	3,037.44	4,697
Amadeo	225.00	180.00	600	1.50	1.20	30	3,538.00	2,816.00	4,000	3,764.50	2,997.20	4,630
Gen. Trias	8.85	3.50	15				43.65	34.92	32	52.50	38.42	47
Trece Martires City	0.50	0.40	3	0.50	0.45	13	1.00	0.97	4	2.00	1.82	20
7th District	291.06	180.76	746	116.75	29.07	269	3,405.78	2,638.70	4,094	3,813.59	2,848.53	5,109
Alfonso	176.01	114.02	345	6.80	2.35	55	984.95	686.63	1,320	1,167.76	803.00	1,720
Gen. E. Aguinaldo	51.55	26.45	307	70.00	16.30	148	283.00	175.00	447	404.55	217.75	902
Indang							763.43	534.40	625	763.43	534.40	625
Magallanes	40.00	32.65	30				75.00	51.30	98	115.00	83.95	128
Maragondon	20.00	5.00	42	35.00	8.75	37	30.50	7.63	99	85.50	21.38	178
Mendez							719.00	637.03	908	719.00	637.03	908
Tagaytay City	3.50	2.64	22	4.95	1.67	29	549.90	546.71	597	558.35	551.02	648
Total	525.41	364.66	1,364	118.75	30.72	312	8,417.18	6,598.65	9,478	9,061.34	6,994.03	11,154

Source: Office of the Provincial Agriculturist, Trece Martires City

Banana

A banana is an edible fruit produced by several kinds of large herbaceous flowering plants in the genus *Musa*. The fruit is variable in size, color and firmness, but is usually elongated and curved, with soft flesh rich in starch covered with a rind which may be green, yellow, red, purple, or brown when ripe (Wikipedia). Wonderfully sweet with firm and creamy flesh, banana is nutritious and a wholesome fruit. It is available for harvest throughout the year and being one of the best sources of potassium, is a favorite food for everyone.



Banana fruit is a horticultural commodity that can be processed and preserved to expand its marketing value. Various processed banana products have already been developed, such as, sun-dried banana and banana crispy. A new product with a potential commercial value is the banana flour made from fresh and ripe banana

(*Agripinoy.net*).

Banana production in the province reached 26,061.77 metric tons and as presented in Figure 6.10, 7th District posted 65.21% production or 16,993.92 metric tons while 6th District was recorded at 19.20% or 5,004.42 metric tons. Moreover, 5th District registered 3,589.43 metric tons or 13.77% production

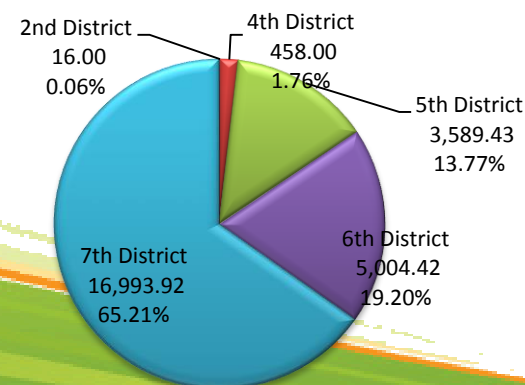
and 2nd District, the City of Bacoor has only 0.06% production or 16.00 metric tons. Based also on the data, the municipality of Indang topped as the banana-producer with production volume registered at 3,831.05 metric tons or 14.70% of the total production. The municipality of Magallanes ranked next with 13.98% production or 3,642.60 metric tons followed by the municipality of Amadeo having 13.58% produce or 3,537.91 metric tons. Moreover, the other top banana-producing municipalities are Silang having 12.37% harvests or 3,222.62 metric tons, Gen. E. Aguinaldo with 11.04% or 2,876.43 metric tons and Alfonso with 7.85% production or 2,044.78 metric tons (Table 6.10).

Table 6.10 Banana Production by City/Municipality Province of Cavite: 2013

City/ Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
2nd District	2.00	2.00	16.00	15
City of Bacoor	2.00	2.00	16.00	15
4th District	48.90	48.20	458.00	100
City of Dasmarinañas	48.90	48.20	458.00	100
5th District	413.65	412.35	3,589.43	1,695
Carmona	22.00	22.00	229.51	33
Gen. Mariano Alvarez	17.00	15.70	137.30	80
Silang	374.65	374.65	3,222.62	1,582
6th District	602.85	522.29	5,004.42	999
Amadeo	455.00	376.54	3,537.91	690
Gen. Trias	53.50	51.40	590.90	54
Trece Martires City	94.35	94.35	875.61	255
7th District	1,916.15	1,855.45	16,993.92	5,455
Alfonso	244.27	244.27	2,044.78	930
Gen. E. Aguinaldo	330.18	280.48	2,876.43	361
Indang	413.50	413.50	3,831.05	550
Magallanes	223.50	218.50	3,642.60	802
Maragondon	360.10	355.10	1,532.66	355
Mendez	92.30	92.30	736.50	1,466
Naic	3.00	2.00		5
Tagaytay City	65.80	65.80	569.60	749
Ternate	183.50	183.50	1,760.30	237
Total	2,983.55	2,840.29	26,061.77	8,264

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.10 Distribution of Banana Production (MT) by District Province of Cavite: 2013



Pineapple

The pineapple is a tropical plant with edible multiple fruit consisting of coalesced berries, and the most economically significant plant in the Bromeliaceae family. These are consumed fresh, cooked, juiced, and preserved, and are found in a wide array of cuisines. In addition to consumption, in the Philippines the pineapple's leaves are used to produce the textile fiber piña-employed as a component of wall paper and furnishings, amongst other uses (*Wikipedia*).



The area utilized for pineapple production was 1,490.29 hectares registering 33,548.18 metric tons harvest. Figure 6.11 shows that production from 5th District was recorded at 60.81% or 20,400.00 metric tons while 31.68% production or 10,627.18 metric tons was registered at 7th District. In addition, 5.01% or 1,680.00 metric tons came from 4th District and 6th District contributed 2.51% or 841.00 metric tons produce.

As also presented in Table 6.11, the municipality of Silang, having the widest area planted to this crop is considered the province's top pineapple producer having 60.68% or 20,356.00 metric tons production. Tagaytay City ranked second producing 4,471.66 metric tons or 13.33% production while the municipality of Indang contributed 2,743.79 metric tons or 8.18% production. The least production was recorded at 27.20 metric tons from the municipality of Magallanes.

Figure 6.11 Distribution of Pineapple Production (MT) by District Province of Cavite: 2013

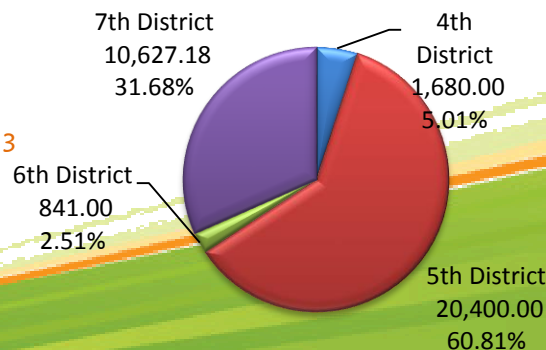


Table 6.11 Pineapple Production (MT) by City/Municipality Province of Cavite: 2013

City/ Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
4th District	81.00	76.00	1,680.00	51
City of Dasmariñas	81.00	76.00	1,680.00	51
5th District	816.00	814.00	20,400.00	773
Carmona	4.00	2.00	44.00	10
Silang	812.00	812.00	20,356.00	763
6th District	36.00	35.25	841.00	56
Amadeo	24.00	24.00	591.00	25
Gen. Trias	3.75	3.00	75.00	13
Trece Martires City	8.25	8.25	175.00	18
7th District	557.29	437.37	10,627.18	1,067
Alfonso	75.25	75.25	1,615.10	164
Gen. E. Aguinaldo	6.60	5.55	83.80	22
Indang	109.75	109.75	2,743.79	156
Magallanes	5.70	2.50	27.20	8
Maragondon	3.00	3.00	60.00	3
Mendez	65.02	65.02	1,625.63	119
Tagaytay City	291.97	176.30	4,471.66	595
Total	1,490.29	1,362.62	33,548.18	1,947

Source: Office of the Provincial Agriculturist, Trece Martires City

Mango

Mango (*Mangifera Indica*), the country's national fruit is considered as one of the finest in the world. It is the third most important fruit crop of the country based on export volume and value next to banana and pineapple. It has an established domestic market and has bright opportunities for the international market both in fresh or processed form. The country's export variety, the "Carabao Mango" is one of the best varieties in the world tagged as "sure export winner". The Philippines possesses the world's best mango variety and it is already present in several markets of Asia, Australia and the Middle East and ranks 6th among the top mango-producing countries (*balinkbayan.gov.ph*).

Mango can be processed into various product forms such as mango puree, mango juice, dried mangoes, mango concentrates, frozen mangoes, mango preserves, etc. In Cavite, one of a proudly Filipino product is the first mango wine in the world, Don Roberto's Mango Wine which comes in two variants – sweet mango wine and green mango wine. Local varieties of mango such as carabao, pico, sapadera and Indian are also available in the province.

Having a planted area of 1,638.37 hectares, a total of 20,257.83 metric tons of mango fruits had been harvested by which 7th District contributed 59.49% of the total harvest or 12,052.15 metric tons, 14.05% or 2,846.85 metric tons came from 4th District, the City of Dasmariñas and from 6th District, 12.28% or 2,488.29 metric tons production was registered. The least production was recorded at 0.10% or 20.00 metric tons from 2nd District, the City of Bacoor (Figure 6.12). Among the mango-producing cities and municipalities, the municipality of Naic has the largest production totaling to 6,432.79 metric tons (Table 6.12).



Among the mango-producing cities and municipalities, the municipality of Naic has the largest production totaling to 6,432.79 metric tons (Table 6.12).

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
Trece Martires City	86.80	71.20	1,306.38	86
7th District	1,013.67	743.55	12,052.15	2,371
Alfonso	53.65	47.80	524.10	409
Gen. E. Aguinaldo	65.50	53.50	779.75	1,019
Indang	163.25	163.25	2,554.90	83
Magallanes	82.00	44.00	431.45	70
Maragondon	295.52	124.25	1,142.41	714
Naic	343.00	300.00	6,432.79	35
Tenate	10.75	10.75	186.75	41
Total	1,638.37	1,292.17	20,257.83	3,157

Source: Office of the Provincial Agriculturist, Trece Martires City

Figure 6.12 Distribution of Mango Production (MT) by District Province of Cavite: 2013

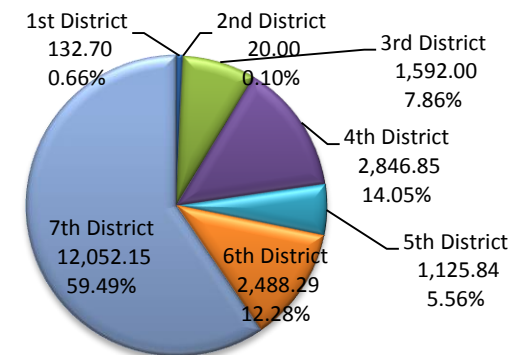


Table 6.12 Mango Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
1st District	12.50	12.50	132.70	39
Kawit	10.00	10.00	94.40	25
Noveleta	2.50	2.50	38.30	14
2nd District	2.00	2.00	20.00	10
City of Bacoor	2.00	2.00	20.00	10
3rd District	105.00	105.00	1,592.00	40
City of Imus	105.00	105.00	1,592.00	40
4th District	209.00	200.60	2,846.85	75
City of Dasmariñas	209.00	200.60	2,846.85	75
5th District	75.65	60.57	1,125.84	398
Carmona	7.75	7.75	112.35	33
Gen. Mariano Alvarez	7.00	7.00	100.20	45
Silang	60.90	45.82	913.29	320
6th District	220.55	167.95	2,488.29	224
Amadeo	13.75	13.75	186.71	85
Gen. Trias	115.00	78.00	925.20	38
Tanza	5.00	5.00	70.00	15

Papaya

Papaya plant is known as a multipurpose plant for almost all the parts have benefits for humans and animals, from the roots to the leaves, using it as food, beverages, medicines, cosmetics or as animal feed.

Papaya fruit, also known as *pawpaw*, is not only delicious but is also a favorite for its digestive, medicinal and nutritional value as well. Papayas are a rich source of vitamin A and C. One half of a small papaya can provide 150% of the recommended dietary intake of Vitamin C. It is low in calories, fat free, cholesterol free, and a good source of potassium, folate, and fiber (www.webmd.com).

Papaya is usually harvested when it shows signs of maturity; evident as skin slightly turning to yellow while unripe green papaya can be used as a vegetable, either cooked, usually in stews, stir-fry, curries, and soups.

The area planted to papaya totaled to 259.37 hectares registering a total harvest of 3,751.91 metric tons. Out of the total production, 48.38% or 1,815.21 metric tons was registered at 7th District, 39.61% or 1,486.10 metric tons was posted at 5th District registering the municipality of Silang as the top producer of this crop, while 6th District has only 12.01% or 450.60 metric tons harvest. The municipality of Indang ranked second in producing papaya with 454.25 metric tons harvest followed by the municipalities of Amadeo and Alfonso with 448.00 and 406.67 metric tons, respectively. The least production was recorded at Trece Martires City with only 2.60 metric tons production (Table 6.13).



Table 6.13 Papaya Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
4th District	1.02			5
City of Dasmariñas	1.02			5
5th District	94.02	94.02	1,486.10	468
Silang	94.02	94.02	1,486.10	468
6th District	32.04	30.20	450.60	112
Amadeo	30.00	30.00	448.00	100
Trece Martires City	2.04	0.20	2.60	12
7th District	132.29	127.79	1,815.21	810
Alfonso	32.40	29.90	406.67	248
Gen. E. Aguinaldo	8.22	8.22	154.70	25
Indang	30.15	30.15	454.25	139
Magallanes	20.00	18.00	126.48	36
Maragondon	2.00	2.00	28.05	12
Mendez	5.00	5.00	128.96	156
Tagaytay City	14.02	14.02	203.95	178
Ternate	20.50	20.50	312.15	16
Total	259.37	252.01	3,751.91	1,395

Source: Office of the Provincial Agriculturist, Trece Martires City

Peanut

Delicious, crunchy, and nutty peanuts are one of the popular oil seeds known to humankind since ancient times. The nuts are enriched with many noteworthy health-benefiting nutrients that are essential for optimum health. They are actually *legumes* but have almost all the qualities that true nuts like almonds have.

Botanically, the nuts are small size fruit pods of plant belonging to the *Fabaceae* family of the genus, *Arachis*. Some of the common names are *groundnut*, *earthenuts*, etc. Peanuts are rich in energy and contain health benefiting nutrients, minerals, antioxidants and vitamins that are essential for optimum health. Research studies have shown that peanuts contain high concentrations of poly-phenolic antioxidants, primarily p-coumaric acid. This compound has been thought to reduce the risk of stomach cancer by limiting the formation of carcinogenic nitrosamines in the stomach. Peanuts are an excellent source of resveratrol, another polyphenolic antioxidant. Resveratrol has been found to have protective function against cancers, heart disease, degenerative nerve disease, Alzheimer's disease, and viral/fungal infections. Just a hand full of peanuts per day provides enough recommended levels of phenolic anti-oxidants, minerals, vitamins, and protein (www.nutrition-and-you.com).

Locally known as "*mani*", it has also been a popular crop in the Philippines. It is ideal as a food ingredient because of its aroma, flavor, crunchy texture, and high energy value. It can be processed into its popular confections like salted peanuts, peanut brittle, and peanut butter and can also be enjoyed roasted, boiled, salted or sweetened. Having 148.19 hectares planted to this crop, peanut production in Cavite totaled

to 206.31 metric tons. The municipality of Silang leads in production of peanuts with a share of 105.65 metric tons or 51.21%, followed by the City of Dasmariñas with 13.40% or 27.65 metric tons. The municipality of Mendez ranked third with 25.25 metric tons while the least production was recorded at the municipality of Maragondon with only 0.20 metric tons harvests (Table 6.14).



Table 6.14 Peanut Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
4th District	20.50	20.50	27.65	35
City of Dasmariñas	20.50	20.50	27.65	35
5th District	81.50	81.50	105.65	178
Silang	81.50	81.50	105.65	178
6th District	21.00	20.21	25.28	33
Amadeo	3.00	3.00	2.95	8
Gen. Trias	1.85	1.06	1.36	5
Tanza	0.25	0.25	0.30	
Trece Martires City	15.90	15.90	20.67	20
7th District	25.19	23.99	47.73	124
Alfonso	8.59	8.39	10.86	56
Gen. E. Aguinaldo	3.00	3.00	2.40	14
Indang	5.40	5.40	7.02	23
Magallanes	3.00	2.00	2.00	10
Maragondon	0.20	0.20	0.20	1
Mendez	5.00	5.00	25.25	20
Total	148.19	146.20	206.31	370

Source: Office of the Provincial Agriculturist, Trece Martires City

Sugarcane

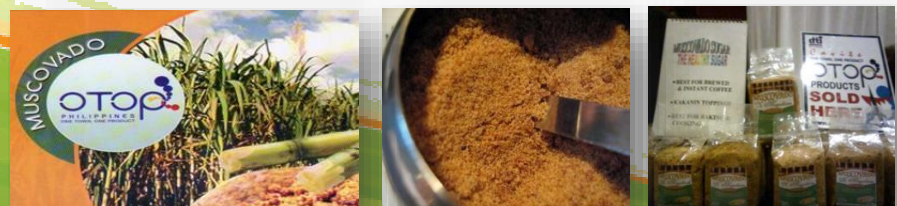
Sugarcane belongs to the grass family (Poaceae), an economically important seed plant family that includes maize, wheat, rice, and sorghum and many forage crops. The main product of sugarcane is sucrose, which accumulates in the stalk internodes. Sucrose, extracted and purified in specialized mill factories, is used as raw material in human food industries or is fermented to produce ethanol (Wikipedia). Fresh sugarcane is used in a number of cuisines around the world, especially in Southeast Asia and other tropical climates. It can be consumed fresh in stalks or, more commonly, as a refined sugar or a juice. Sugarcane, particularly when it has not undergone a heavy refinement process, offers a number of nutritional benefits, making it a healthy alternative to refined white sugar (www.livestrong.com).

Sugarcane is also grown in the province of Cavite particularly in the municipality of Magallanes wherein the primary source of income and living is in sugarcane farming. As shown in Table 6.15, Magallanes topped in producing these crops having 82.44% or 103,680.00 metric tons harvest. Provided with this source of living, the town is very popular in producing muscovado, a type of unrefined brown sugar from sugarcane juice with a strong molasses flavor. The municipality of Maragondon ranked second having 9,480.00 metric tons or 7.54% produce followed by the municipality of Naic registered at 4.62% or 5,812.20 metric tons.

Table 6.15 Sugarcane Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
4th District	128.50	78.50	3,925.00	19
City of Dasmariñas	128.50	78.50	3,925.00	19
6th District	56.00	56.00	2,688.00	2
Gen. Trias	56.00	56.00	2,688.00	2
7th District	2,035.87	2,035.87	119,147.20	330
Gen. E. Aguinaldo	5.00	5.00	175.00	5
Magallanes	1,620.00	1,620.00	103,680.00	265
Maragondon	314.00	314.00	9,480.00	30
Naic	96.87	96.87	5,812.20	30
Total	2,220.37	2,170.37	125,760.20	351

Source: Office of the Provincial Agriculturist, Trece Martires City



Black Pepper

Black pepper (*Piper nigrum*) is a flowering vine in the family Piperaceae, cultivated for its fruit, which is usually dried and used as a spice and seasoning. The fruit, known as a peppercorn when dried, is approximately 5 millimeters (0.20 in) in diameter, dark red when fully mature, and, like all drupes, contains a single seed (*Wikipedia*).

Black pepper is one of the most common spices used in different cuisines around the world. It is used in both whole and grounded form. It contains potassium, magnesium, iron, vitamin K and vitamin C. Apart from a strong flavor; it has antibacterial, anti-oxidant and anti-inflammatory properties which make it an amazing medicinal spice (*www.stylecraze.com*).



Based on record, black pepper production reached 441.95 metric tons. The municipality of Gen. E. Aguinaldo is the leading producer having 165.00 metric tons produce followed by the municipality of Alfonso with 102.63 metric tons

harvest and the municipality of Silang with 87.56 metric tons (Table 6.16).

Table 6.16 Black pepper Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
5th District	79.60	79.35	87.56	233
Silang	79.60	79.35	87.56	233
6th District	21.00	21.00	20.45	36
Amadeo	21.00	21.00	20.45	36
7th District	404.47	349.62	333.94	1,231
Alfonso	98.75	98.75	102.63	418
Gen. E. Aguinaldo	190.85	186.00	165.00	591
Indang	6.40	6.40	6.84	47
Magallanes	100.00	50.00	50.20	50
Maragondon	0.47	0.47	0.38	21
Tagaytay City	8.00	8.00	8.89	104
Total	505.07	449.97	441.95	1,500

Source: Office of the Provincial Agriculturist, Trece Martires City

Other Fruit Trees

With an area of 2,081.17 hectares planted to these crops, a total of 18,359.67 metric tons had been harvested by 8,599 farmers. It is noted that the highest production was registered at 32.93% or 6,046.93 metric tons from the municipality of Indang. The municipality of Alfonso ranked second with 29.07% or 5,336 metric tons while the other top producers are the municipalities of Silang producing 2,087.19 metric tons or 11.37%, Mendez with 7.42% share or 1,361.64 metric tons, Gen. E. Aguinaldo contributing 997.84 metric tons or 5.43%, Amadeo at 5.10% or 936.64 metric tons and Magallanes having 927.00 metric tons or 5.05% production (Table 6.17).



Table 6.17 Other Fruit Trees Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
4th District	1.00			10
City of Dasmariñas	1.00			10
5th District	264.54	255.06	2,108.19	1,806
Gen. Mariano Alvarez	2.00	2.00	21.00	30
Silang	262.54	253.06	2,087.19	1,776
6th District	131.75	111.75	1,303.24	345
Amadeo	92.50	83.50	936.64	174
Gen. Trias	12.00	1.00	3.20	42
Trece Martires City	27.25	27.25	363.40	129
7th District	1,683.88	1,634.15	14,948.24	6,438
Alfonso	655.49	649.48	5,336.62	2,049
Gen. E. Aguinaldo	109.80	107.80	997.84	1,775
Indang	665.75	665.70	6,046.93	769
Magallanes	106.00	67.00	927.00	224
Maragondon	1.00			2
Mendez	114.00	114.00	1,361.64	1,203
Tagaytay City	28.84	27.17	248.10	367
Ternate	3.00	3.00	30.11	49
Total	2,081.17	2,000.96	18,359.67	8,599

Source: Office of the Provincial Agriculturist, Trece Martires City

Other Fruits

Muskmelon and watermelon are other fruits planted in the province. Based on research, muskmelons are very low in calories and fats. The fruit is an excellent source of Vitamin A, contains moderate levels of B-complex vitamins, such as niacin, pantothenic acid and vitamin C, and minerals like manganese (*www.nutrition-and-you.com*) while watermelon, despite popular belief that it is made up of only water and sugar, is actually considered a nutrient dense food, a food that provides a high amount of vitamins, minerals and antioxidants for a low amount of calories and according to the National Watermelon Promotion Board, watermelon contains more lycopene than any other fruit or vegetable (*www.medicalnewstoday.com*).

As shown in Table 6.18, these crops' production totaled to only 940.16 metric tons wherein 75.44% or 709.22 metric tons are harvested from the municipality of Tanza, 227.40 metric tons or 24.19% from the municipality of Gen. Trias while the municipality of Kawit has contributed 3.54 metric tons or 0.38% production.

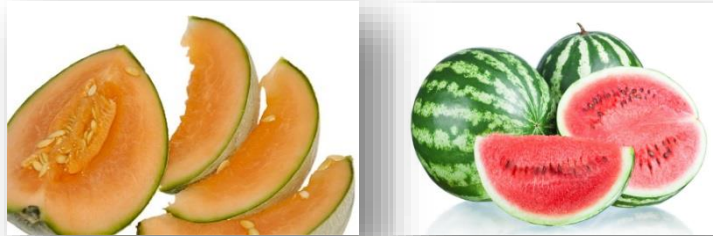


Table 6.18 Other Fruits Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
1st District	0.25	0.25	3.54	
Kawit	0.25	0.25	3.54	
6th District	65.86	36.15	936.62	27
Gen. Trias	8.30	5.15	227.40	12
Tanza	57.56	31.00	709.22	15
Total	66.11	36.40	940.16	27

Source: Office of the Provincial Agriculturist, Trece Martires City

Dragon Fruit

The Pitaya is more commonly referred to as the dragon fruit. It is an extremely beautiful fruit that has dazzling flowers and an intense shape and color. The dragon fruit is usually a dark red color, although some types of this fruit are pink or yellow. The skin of the dragon fruit is a thin rind and is usually covered in scales, and the center of the fruit is made up of a red or white, sweet tasting pulp (*www.naturalfoodbenefits.com*). Dragon fruit is generally a nutritious fruit that is a good source of vitamins and minerals.

Dragon fruit was also successfully grown in Cavite particularly in the municipalities of Indang, Magallanes and Amadeo. In 2013, the municipality of Gen. E. Aguinaldo had contributed 0.35 metric tons harvest giving a total production of 281.85 metric tons. Among the four (4) municipalities, Indang, where Silan's Agri Farm – the top grower of this crop, is located has the greatest volume of production totaling to 247.50 metric tons while the municipalities of Magallanes and Amadeo were posted at 10.00 metric tons and 24.00 metric tons, respectively (Table 6.19).



Table 6.19 Dragon Fruit Production by City/Municipality Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (Metric Tons)	Farmers Served (Number)
6th District	2.00	2.00	24.00	12
Amadeo	2.00	2.00	24.00	12
7th District	21.00	20.70	257.85	40
Indang	20.25	20.25	247.50	28
Gen. E. Aguinaldo	0.25	0.05	0.35	10
Magallanes	0.50	0.40	10.00	2
Total	23.00	22.70	281.85	52

Source: Office of the Provincial Agriculturist, Trece Martires City

Bamboo

Bamboo is a tribe of flowering perennial evergreen plants in the grass family Poaceae, subfamily Bambusoideae, tribe Bambuseae. Bamboos are some of the fastest-growing plants in the world, due to a unique rhizome-dependent system. In fact, within a 24 hour period, bamboo can grow four feet. Bamboos are of notable economic and cultural significance in South Asia, Southeast Asia and East Asia, being used for building materials, as a food source, and as a versatile raw product. Bamboo has a higher compressive strength than wood, brick or concrete and a tensile strength that rivals steel (*Wikipedia*).

Bamboo, being one of the most popular raw materials for furniture and decorations are also being planted in the province. The area utilized for this crop totaled to 1,050.00 hectares registering production volume of 502,385 poles. The municipality of Maragondon which is known as the bamboo capital of Cavite where bamboo products are produced and distributed in various places in the country, topped in producing this crop with total production of 500,000 poles. Moreover, a program called “Kawayang Maragondon” was launched by the municipal government to strengthen their major product like living room bamboo sets and other novelty items. This also contributes to the tourism of Maragondon as it draws people to the town to buy bamboo products they need for their house or for business (*www.wowcavite.com*). The other producer, the municipality of Gen. Trias has a total production of 2,385 poles (Table 20).

Table 6.20 Bamboo Production, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production (poles)	Farmers Served (Number)
6th District	50.00	50.00	2,385	1
Gen. Trias	50.00	50.00	2,385	1
7th District	1,000.00	1,000.00	500,000	459
Maragondon	1,000.00	1,000.00	500,000	459
Total	1,050.00	1,050.00	502,385	460

Source: Office of the Provincial Agriculturist, Trece Martires City

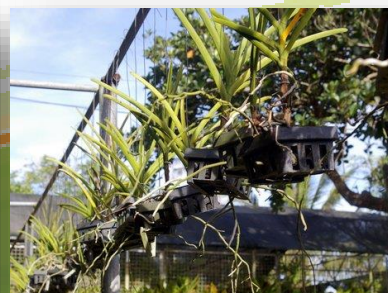
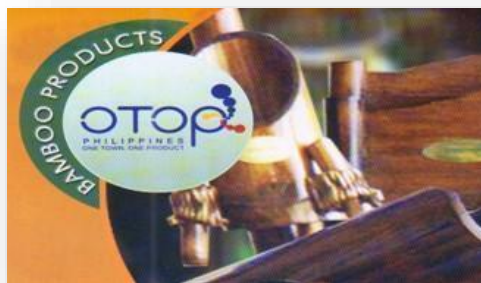
Cut flowers, Ornamentals and Sampaguita

Some farmers in the province also engaged in cut flowers, ornamentals and sampaguita production. As presented in Table 6.21, cutflowers and ornamentals are planted and harvested mostly from the municipalities of Silang, Alfonso, Gen. E. Aguinaldo, Maragondon, Amadeo, and Trece Martires City with total production of almost 72,000 dozens and 321,244 pots respectively. Meanwhile, sampaguita with utilized area of 7.35 hectares has a total production of 11.17 metric tons.

Table 6.21 Cut flowers, Ornamentals and Sampaguita Production by City/Municipality, Province of Cavite: 2013

City/Municipality	Area Planted (Hectares)	Area Harvested (Hectares)	Production	Farmers Served (Number)
Cutflowers (In dozen)	12.93	12.91	71,529.08	486
5th District				
Silang	7.48	7.48	40,205.33	279
6th District				
Trece Martires City	4.85	4.85	24,975.75	111
7th District				
Alfonso	0.33	0.33	6,216.00	35
Gen. E. Aguinaldo	0.22	0.20	65.00	6
Maragondon	0.05	0.05	67.00	55
Ornamentals (In pots)	20.47	20.47	321,244	255
5th District				
Silang	19.47	19.47	318,021	250
6th District				
Amadeo	1.00	1.00	3,223	5
Sampaguita (In m.t.)	7.35	7.35	11.17	92
6th District				
Trece Martires City	7.35	7.35	11.17	92

Source: Office of the Provincial Agriculturist, Trece Martires City



Fisheries

Fishery refers to all activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving and managing aquatic resources and the fishery areas, including the privilege to fish or take aquatic resource thereof. Fishery is also one of the vital areas of agriculture sector in the province. It serves as food production source for Cavite fisherfolks and important means of livelihood-through smoked fish (tinapa) processing, fish drying (daing), fish paste (bagoong) making, fish sauce (patis) making and canning.

Table 6.22 shows that the total number of fishermen was registered at 18,506. In 2013, the municipality of Naic has the most number of fishermen with 4,778 followed by the municipality of Rosario with 3,606 fishermen. The least number of fishermen belongs to the municipality of Noveleta with only 240.

The province's fishing industry is anchored on inland, commercial and municipal types of fishing. Municipal fishlanding areas are located in Cavite City, Tanza, City of Bacoor, Naic, and Ternate while commercial landing areas are located in Rosario and Tanza (Table 6.23).



Table 6.22 Number of Fisherman by City/Municipality Province of Cavite: 2013

City/ Municipality	Number of Fisherman
1st District	9,214
Cavite City	3,528
Kawit	1,840
Noveleta	240
Rosario	3,606
2nd District	723
City of Bacoor	723
4th District	2,449
Tanza	2,449
7th District	6,120
Maragondon	443
Naic	4,778
Ternate	899
Total	18,506

Source: Office of the Provincial Agriculturist, Trece Martires City

Table 6.23 Municipal and Commercial Fish Landing Areas Province of Cavite: 2013

City/ Municipality	Municipal Landing Areas	Commercial Landing Areas
1st District		
Cavite City	Brgy. 10B	
	Brgy. 11	
	Brgy. 48	
Rosario		Pandawan
2nd District		
City of Bacoor	Sineguelasan	
	Alima	
6th District		
Tanza	Julugan	Julugan
	Capipisa	
7th District		
Naic	Munting Mapino	
	Labac	
	Bucana Malaki	
	Bancaan	
Ternate	Brgy. 2	
	Brgy. San Jose	

Source: Office of the Provincial Agriculturist, Trece Martires City

Commercial Fisheries

Commercial fishing is the activity of capturing fish for commercial purposes in waters more than seven fathoms deep with the use of fishing boats of more than three gross tons (*www.nscb.gov.ph*). As shown in Table 6.24, commercial fishing vessels totaled to 123. These are being operated by 1,253 fishermen registering an annual production of 5,143.00 metric tons by which the municipality of Rosario contributed 1,920.00 metric tons, 1,831.00 metric tons from the municipality of Tanza and 1,391.60 metric tons from the municipality of Naic.

Municipal Fisheries

Municipal fishing is a fishing activity utilizing fishing boats of three gross tons or less, or using gear not requiring the use of boats, in municipal waters (*www.nscb.gov.ph*). In Cavite, it is carried out through the use of motorized and non-motorized bancas which were recorded at 5,123. These were being used and operated by 12,984 fishermen registering a production volume of 8,916.90 metric tons. Based on record, having the highest number of banca, the City of Bacoor registered the biggest fish catch with 2,068.60 metric tons followed by the municipality of Tanza having 1,909.99 metric tons production. Ranked third was the municipality of Naic recorded at 1,589.00 metric tons while the least production was 53.00 metric tons from the municipality of Noveleta (Table 6.25).



Table 6.24 Commercial Fishing Vessels (CFVs), Types of Fishing Gears Used, Number of Fisherman and Annual Production, Province of Cavite: 2013

City/ Municipality	Type of Gear Used	Number of Commercial Fishing Vessel	Number of Fisherman	Annual Production (Metric Tons)
1st District				
Rosario	purse seine	48	556	1,920.00
	danish seine			
6th District				
Tanza	purse seine	43	547	1,831.40
	danish seine			
7th District				
Naic	purse seine	32	150	1,391.60
Total		123	1,253	5,143.00

Source: Office of the Provincial Agriculturist, Trece Martires City

Table 6.25 Municipal Fishing Boats by City/Municipality, Province of Cavite: 2013

City/ Municipality	Number of Fishing Banca			Number of Fisherman			Production (Metric Tons)		
	Motorized	Non-Motorized	Total	Full Time	Part time	Total	Motorized	Non-Motorized	Total
1st District									
Cavite City	480	243	723	2,486	210	2,696	816.00	85.05	901.05
Kawit	315	70	385	368		368	310.50	10.80	321.30
Noveleta	20	68	88	240		240	25.80	27.20	53.00
Rosario	940	42	982	3,780	120	3,900	1,504.00	15.96	1,519.96
2nd District									
City of Bacoor	876	196	1,072	933	495	1,428	2,038.00	30.60	2,068.60
6th District									
Tanza	765	12	777	1,455	162	1,617	1,900.49	9.50	1,909.99
7th District									
Maragondon	89	31	120	418	25	443	277.70	11.16	288.86
Naic	553	153	706	1,178	633	1,811	1,496.00	93.00	1,589.00
Ternate	236	34	270	450	31	481	252.90	12.24	265.14
Total	4,274	849	5,123	11,308	1,676	12,984	8,621.39	295.51	8,916.90

Source: Office of the Provincial Agriculturist, Trece Martires City

Aquaculture/Inland Fisheries

Aquaculture is the rearing or raising under controlled conditions of aquatic products such as fish, oysters, seaweeds and other aquatic resources in sea, lakes, rivers and swamps and other bodies of water like fishponds, fish pens, and seaweed cultures (*www.nscb.gov.ph*).

Table 6.26 shows that 510.92 hectares are utilized for bangus, sugpo and tilapia production. These posted a total catch of 1,607.08 metric tons wherein the highest production was registered at Trece Martires City at 1,092.00 metric tons for tilapia and the municipality of Kawit (124.80 metric tons) for bangus production. Moreover, sugpo productions are concentrated in the municipalities of Kawit, Noveleta and City of Bacoor. Aside from the coastal areas, the City of Imus, the municipalities of Amadeo, Gen. Trias and Alfonso have minimal areas devoted to tilapia production contributing a total of 9.48 metric tons.

Another important source of livelihood for Cavite fisher folks is the oyster and mussel industry. Mussel or “tahong” can be processed into chips that are ideal for snacks, food-gifts or for use in any healthy food recipe. As indicated in Table 6.27, oyster production totaled to 7,649.99 metric tons registering the municipality of Kawit as the highest contributor with 7,168.40 metric tons. Moreover, the City of Bacoor contributed the highest mussel production registered at 16,700.00 metric tons while Cavite City has 3,000.00 metric tons produce.



Table 6.26 Bangus, Sugpo and Tilapia Production by City/Municipality, Province of Cavite: 2013

City/ Municipality	Number of Operator			Area (Hectares)			Annual Production (Metric Tons)			
	Brackish water	Fresh water	Total	Brackish water	Fresh water	Total	Bangus	Sugpo	Tilapia	Total
1st District	207		207	296.30		296.30	178.08	32.80		210.88
Cavite City	4		4	0.50		0.50	0.60			0.60
Kawit	173		173	208.00		208.00	124.80	20.80		145.60
Noveleta	30		30	87.80		87.80	52.68	12.00		64.68
2nd District	71		71	113.80		113.80	90.00	34.00		124.00
City of Bacoor	71		71	113.80		113.80	90.00	34.00		124.00
3rd District		5	5		0.38	0.38			0.44	0.44
City of Imus		5	5		0.38	0.38			0.44	0.44
4th District	4	179	183	2.00	13.81	15.81	5.00		1,129.88	1,134.88
Amadeo		7	7		0.13	0.13			0.16	0.16
Gen. Trias		50	50		4.60	4.60			8.28	8.28
Tanza	4	69	73	2.00	7.26	9.26	5.00		29.44	34.44
Trece Martires		53	53		1.82	1.82			1,092.00	1,092.00
7th District	76	144	220	63.60	21.03	84.63	69.32		67.56	136.88
Alfonso		1	1		0.15	0.15			0.60	0.60
Maragondon		25	25		2.50	2.50			2.90	2.90
Naic	21	92	113	3.60	7.38	10.98	4.32		32.06	36.38
Ternate	55	26	81	60.00	11.00	71.00	65.00		32.00	97.00
Total	358	328	686	475.70	35.22	510.92	342.40	66.80	1,197.88	1,607.08

Source: Office of the Provincial Agriculturist, Trece Martires City

Table 6.27 Oyster and Mussel Production by City/Municipality, Province of Cavite: 2013

City/ Municipality	Number of Operator			Area (Hectares)			Production (Metric Tons)		
	Oyster	Mussel	Total	Oyster	Mussel	Total	Oyster	Mussel	Total
1st District	51	92	143	189.40	60.00	249.40	7,528.90	3,000.00	10,528.90
Cavite City	5	92	97	10.30	60.00	70.30	360.50	3,000.00	3,360.50
Kawit	46		46	179.10		179.10	7,168.40		7,168.40
2nd District		334	334		211.01	211.01		16,700.00	16,700.00
City of Bacoor		334	334		211.01	211.01		16,700.00	16,700.00
6th District	43		43	0.43		0.43	21.50		21.50
Tanza	43		43	0.43		0.43	21.50		21.50
7th District	112		112	1.67		1.67	99.59		99.59
Maragondon	10		10	0.50		0.50	25.00		25.00
Naic	102		102	1.17		1.17	74.59		74.59
Total	206	426	632	191.50	271.01	462.51	7,649.99	19,700.00	27,349.99

Source: Office of the Provincial Agriculturist, Trece Martires City

Livestock and Poultry

Livestock and poultry also plays a vital role in agriculture, not only do they produce food directly, but for many smallholder farmers, these are the only ready source of cash to buy the inputs they need to increase their crop production like seeds, fertilizers, and pesticides. Livestock farming is a double-benefiting system - it helps the farmers both economically and supplies them with food throughout the year. With patience and perseverance, it remains a profitable and sustainable business enterprise.

Backyard Livestock and Poultry Population

Aside from crop production, there are farmers who engaged in livestock and poultry production to augment their farm income. They raised animals in their backyard which include cattle, carabao, swine, horse, goat, sheep, chicken, duck, goose, quail, etc.



Based on reports of the Office of the Provincial Veterinarian, backyard chicken population totaled to 159,156 heads wherein 7th District posted 60,917 heads, 6th District registered 37,164 heads while 18,378 heads came from 5th District. A total of 29,332 ducks were being raised by 3,214 farmers wherein 12,561 heads came from 6th District.

It is observed that the municipality of Gen. Trias has the highest inventory of chicken (23,916), duck (7,954) and goose (590) while quail was being raised at the City of Imus, municipalities of Tanza and Alfonso registering a total of 2,766 heads (Table 6.28). In addition, the total backyard cattle inventory in the province was 25,499 heads



raised by 9,919 farmers. The municipality of Gen. Trias has the highest population with 5,696 heads while the least population came from the municipality of Kawit with only 26 heads. Moreover, 46,181 heads of swine was registered wherein 22,524 heads came from 7th District with the municipality of Magallanes having the highest head count of 5,560. A detail of backyard livestock population was presented at Table 6.29.

Table 6.28 Backyard Poultry Population by City/Municipality Province of Cavite: 2013

City/ Municipality	Chicken		Duck		Goose		Quail	
	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers
1st District	3,811	381	620	95	100	30		
Cavite City	729	66	26	5	28	10		
Kawit	247	34	233	24				
Noveleta	2,070	171	255	49	72	20		
Rosario	765	110	106	17				
2nd District	7,610	929	274	26	45	8		
City of Bacoor	7,610	929	274	26	45	8		
3rd District	14,266	1,329	5,095	464			2,460	25
City of Imus	14,266	1,329	5,095	464			2,460	25
4th District	17,010	5,347	5,306	511	344	75		
City of Dasmariñas	17,010	5,347	5,306	511	344	75		
5th District	18,378	2,434	1,936	307	130	40		
Carmona	5,666	481	1,093	133	13	5		
Gen. Mariano Alvarez	3,458	666	660	130	27	8		
Silang	9,254	1,287	183	44	90	27		
6th District	37,164	3,086	12,561	1,428	1,375	259	6	2
Amadeo	4,724	729	112	17	14	2		
Gen. Trias	23,916	1,343	7,954	788	590	187		
Tanza	5,275	680	2,834	494	570	29	6	2
Trece Martires City	3,249	334	1,661	129	201	41		
7th District	60,917	6,955	3,540	383	322	74	300	1
Alfonso	11,259	1,343	1,111	75	67	25	300	1
Gen. E. Aguinaldo	16,705	903	87	19	56	15		
Indang	4,432	846	298	67	25	6		
Magallanes	5,155	585	160	18	20	4		
Maragondon	12,723	1,301	425	41	24	5		
Mendez	3,370	289	15	1	10	1		
Naic	4,848	607	1,294	160	120	18		
Ternate	2,425	1,081	150	2				
Total	159,156	20,461	29,332	3,214	2,316	486	2,766	28

Source: Office of the Provincial Veterinarian, Trece Martires City

Table 6.29 Backyard Livestock Population by City/Municipality, Province of Cavite: 2013

City/ Municipality	Cattle		Carabao		Swine		Horse		Goat		Sheep	
	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers	No. of heads	No. of farmers
1st District	211	62	9	7	605	65			344	65	4	1
Cavite City					165	23			8	4	4	1
Kawit	26	17	2	2	12	6			75	11		
Noveleta	110	27	7	5	330	18			237	41		
Rosario	75	18			98	18			24	9		
2nd District	257	60	19	8	1,397	59	17	5	381	16	54	4
City of Bacoor	257	60	19	8	1,397	59	17	5	381	16	54	4
3rd District	1,147	226	219	76	1,867	80	44	28	617	61		
City of Imus	1,147	226	219	76	1,867	80	44	28	617	61		
4th District	1,553	511	237	138	4,877	738	25	13	2,238	302		
City of Dasmarinas	1,553	511	237	138	4,877	738	25	13	2,238	302		
5th District	2,539	1,048	108	78	7,701	967	1,048	340	1,940	473	46	2
Carmona	680	173	40	23	2,119	128	923	231	1,053	219	46	2
Gen. Mariano Alvarez	56	22	12	7	1,292	220	5	1	212	36		
Silang	1,803	853	56	48	4,290	619	120	108	675	218		
6th District	9,530	2,005	1,495	491	7,210	1,014	101	50	6,808	1,000	731	156
Amadeo	421	141	2	2	1,355	74	29	22	153	67		
Gen. Trias	5,696	860	1,095	349	3,910	525	22	13	4,958	584		
Tanza	2,249	631	347	119	898	246	38	7	979	189	731	156
Trece	1,164	373	51	21	1,047	169	12	8	718	160		
7th District	10,262	6,007	1,022	795	22,524	6,793	1,116	971	4,492	1,136	32	5
Alfonso	1,264	781	68	60	4,963	661	89	62	559	205	6	2
Gen. E. Aguinaldo	953	487			4,402	539	130	111	201	89	24	2
Indang	1,637	726	57	47	1,147	320	261	205	471	174		
Magallanes	1,826	1,546	192	180	5,560	3,467	397	390	345	182		
Maragondon	1,843	848	443	320	3,534	756	86	64	1,589	169	2	1
Mendez	67	33			255	73	25	25				
Naic	1,857	1,020	214	148	1,165	236	2	2	928	179		
Tagaytay City	655	466	33	26	858	361	124	110	189	80		
Ternate	160	100	15	14	640	380	2	2	210	58		
Total	25,499	9,919	3,109	1,593	46,181	9,716	2,351	1,407	16,820	3,053	867	168

Source: Office of the Provincial Veterinarian, Trece Martires City

Livestock and Poultry Farm Population

Livestock and poultry population in commercial/semi-commercial farms was shown in Table 6.30. Among the livestock being raised, hog has the most number of populations totaling to 557,054 heads wherein the municipality of Gen. Trias posted the highest head count of 310,434 followed by the municipality of Tanza and Trece Martires City with 46,879 heads and 46,201 heads respectively. Cattle and carabao production totaled to 3,223 heads while goat farms registered 2,486 heads production. Furthermore, quail farms located in the municipalities of Kawit, Indang and City of Imus posted a total production of 57,000 heads. Also presented in the table are populations for breeder farms, layer farms, among others.

Support Facilities

Agricultural and fisheries machinery refers to machinery and equipment for the production, harvesting, processing, storage, manufacture, preserving, transporting and distribution of agricultural and fisheries products. It includes, but is not limited to tractors and their attachments, power tillers, seeders, transplanters, windmills, harvesting machines, crop protection and maintenance equipment, irrigation equipment and accessories, greenhouses and other thermal conditioning equipment, livestock equipment, fishery equipment, slaughtering equipment, meat/fishery and crop processing equipment, postharvest machines such as milling machines, dryers, threshers, grain and other strippers, agricultural transport machinery and storage facilities including cold storage, reefer vans, slaughter houses and fishing boats of three (3) gross tons or less. New agricultural and fishery machinery includes newly imported as well as one that has not been used since its date of manufacture (*Section 3 – Definition of Terms of Republic Act No. 10601 – An Act Promoting Agricultural and Fisheries Mechanization Development in the Country*).

In Cavite, available farm equipment for production and post-harvest facilities are rice mill, coffee mill/depulper, corn mill, thresher, warehouse/dryer, tractor and others (water pump, shredders, dryer, sprayer) (Table 6.31). Support facilities available for livestock and poultry production include dressing plants, slaughterhouses and meat processing plants. These are classified into a) LRME or locally registered meat establishments; b) AAA - meat processed herein is eligible for sale in any market within the country or for export; c) AA - meat processed herein is eligible for sale in any market within the country; and d) A - meat processed herein is eligible for sale only in the city or municipality. Monterey Meat Plant-a meat processing plant and slaughterhouse as well located at City of Dasmariñas and Purefoods Hormel in the municipality of Gen. Trias fall under the category of AAA. There are also other facilities like feed mills, feed dealers/veterinary drugstores, veterinary clinics, pet shops and meat shops available in the province (Tables 6.32 and 6.33).

Table 6.30 Livestock and Poultry Population in Commercial/Semi-Commercial Farms by City/Municipality, Province of Cavite: 2013

City/Municipality	Number of Population (heads)										
	Commercial/Semi-Commercial Farms							Commercial Farms			
	Cattle	Carabao	Hog	Goat	Sheep	Duck	Quail	Breeder	Layer	Contract Broiler	Game fowl Breeder
1st District			442				18,500				339
Cavite City											339
Kawit							18,500				
Noveleta			442								
2nd District	112		695	251						30,000	1,752
City of Bacoor	112		695	251						30,000	1,752
3rd District			6,384				20,000		15,000		812
City of Imus			6,384				20,000		15,000		812
4th District	60		13,585	175					4,500	1,414,000	935
City of Dasmariñas	60		13,585	175					4,500	1,414,000	935
5th District	378		25,550	220	124			17,000	191,400	1,054,800	54,490
Carmona					46			17,000			1,167

City/Municipality	Number of Population (heads)										
	Commercial/Semi-Commercial Farms							Commercial Farms			
	Cattle	Carabao	Hog	Goat	Sheep	Duck	Quail	Breeder	Layer	Contract Broiler	Game fowl Breeder
Gen. Mariano Alvarez			3,803		38				1,400		
Silang	378		21,747	220	40				190,000	1,054,800	53,323
6th District	1,947	223	407,672	954	230	13,100		87,000	95,000	788,500	8,189
Amadeo	251		4,158	154		7,000		87,000	90,000	120,500	1,283
Gen. Trias	510	122	310,434	800		5,600					4,284
Tanza	902	101	46,879		230	500				100,000	2,622
Trece Martires City	284		46,201						5,000	568,000	
7th District	491	12	102,726	886			18,500	1,259,226	602,300	3,610,060	15,685
Alfonso			7,777					358,226	20,800	21,560	2,614
Gen. E. Aguinaldo			15,335	22					117,500	1,314,000	1,580
Indang			18,739	40			18,500	642,000	63,000	294,500	3,587
Magallanes	130		26,583					115,000	213,000	1,228,000	772
Maragondon	338		4,063	599						458,000	5,547
Mendez			695						35,000		850
Naic	23	12	18,916	225				144,000	153,000	294,000	735
Tagaytay City											
Ternate			10,618								
Total	2,988	235	557,054	2,486	354	13,100	57,000	1,363,226	908,200	6,897,360	82,202

Source: Office of the Provincial Veterinarian, Trece Martires City

Table 6.31 Production and Post-Harvest Facilities by City/Municipality Province of Cavite: 2013

City/ Municipality	Rice Mill	Coffee Mill/ Depulper	Corn mill	Thresher	Ware house	Dryer	Tractor
1st District	1			4			26
Kawit				3			25
Noveleta	1			1			1
2nd District	1			10	1		30
City of Bacoor	1			10	1		30
3rd District	11			38	2	1	142
City of Imus	11			38	2	1	142
4th District	3			20	3		35
City of Dasmariñas	3			20	3		35
5th District	3	11	3	9	27	2	27
Carmona				9	1		18
Gen. Mariano Alvarez					3		
Silang	3	11	3		23	2	9
6th District	23	11		127	20	7	317
Amadeo		10			6		2
Gen. Trias	7	1		90	4		1
Tanza	15			37	10	7	309
Trece Martires City	1						5
7th District	37	23	1	62	32		203
Alfonso		1					
Gen. E. Aguinaldo	1	1			4		
Indang		1					
Magallanes	6	6	1	1			8
Maragondon	10			6	2		98
Mendez		8					
Naic	17			50	20		77
Tagaytay City		6			3		
Ternate	3			5	3		20
Total	79	45	4	270	85	10	780

Source: Office of the Provincial Agriculturist, Trece Martires City

Table 6.32 Number of Dressing Plant, Slaughterhouse and Meat Processing Plant by City/Municipality, Province of Cavite: 2013

City/ Municipality	Dressing Plant		Slaughter House		Meat Processing Plant	
	Number	Class	Number	Class	Number	Class
1st District	8		4			
Cavite City	2	LRME	2	LRME		
Kawit	5	LRME	1	LRME		
Noveleta	1	LRME	1	LRME		
2nd District	15		7			
City of Bacoor	15	LRME	7	LRME		
3rd District	23		2		1	
City of Imus	23	LRME	2	AA	1	AA
4th District	3		5		1	
City of Dasmariñas	3	LRME	5	AAA (1)/ LRME (4)	1	AAA
5th District	5		15			
Carmona	1	LRME	5	LRME		
Gen. Mariano Alvarez	2	LRME	1	AA		
Silang	2	AA/ LRME	9	LRME		
6th District	5		17		1	
Amadeo			1	LRME		
Gen. Trias	3	LRME	12	LRME	1	AAA
Tanza	2	LRME	3	LRME		
Trece Martires City			1	AA		
7th District	13		40			
Alfonso	2	LRME	11	LRME		
Gen. E. Aguinaldo			7	LRME		
Indang	2	LRME	1	LRME		
Magallanes			9	LRME		
Maragondon	3	LRME	3	LRME		
Mendez			4	LRME		
Naic	3	LRME	1	LRME		
Tagaytay City			1	AA		
Ternate	3	LRME	3	LRME		
Total	72		90		3	

Source: Office of the Provincial Veterinarian, Trece Martires City



Table 6.33 Other Types of Facilities by City/Municipality Province of Cavite: 2013

City/ Municipality	Type of Facilities				
	Feed mills	Feed Dealers/ Veterinary Drugstores	Veterinary/ Animal Clinic	Meat Shop	Pet Shop
1st District		20	5	131	7
Cavite City		13	2	71	2
Kawit		5	2	1	3
Noveleta			1	26	
Rosario		2		33	2
2nd District		81	9	27	6
City of Bacoor		81	9	27	6
3rd District		17	6	112	4
City of Imus		17	6	112	4
4th District	1	29	10	5	5
City of Dasmariñas	1	29	10	5	5
5th District	2	48		77	11
Carmona		8		19	2
Gen. Mariano Alvarez		13		26	3
Silang	2	27	2	32	6
6th District	1	55	6	98	11
Amadeo		8		16	
Gen. Trias		27	4	32	6
Tanza		16		24	2
Trce Martires City	1	4	2	26	3
7th District		79	6	143	4
Alfonso		20		40	2
Gen. E. Aguinaldo		14			
Indang		9	1	28	
Magallanes		4		9	
Maragondon		6		12	
Mendez		8		1	
Naic		12	2	44	1
Tagaytay City		4	3	6	1
Ternate		2		3	
Total	4	329	42	593	48

Source: Office of the Provincial Veterinarian, Trece Martires City

Food Sufficiency

Table 6.34 indicates the sufficiency level for crops and meat products in the province. Based on the province’s projected population of 3,516,243 multiplied to the per capita requirement, except for coffee and beef, consumption of each product exceeded the available production. In 2013, sufficiency level for rice, corn and root crops was registered at 14.34%, 27.55% and 81.21% respectively. Sufficiency level for pork was posted at 62.92% while poultry meat was recorded at 15.27%.

Table 6.34 Sufficiency Level for Crops and Meat Products Province of Cavite: 2013

Food Item	Per Capita Requirement	Production	Consumption	Sufficiency Level
	Metric Tons			%
Crops				
Rice	0.10704	53,973.89	376,378.65	14.34
Corn	0.0062	6,006.94	21,800.71	27.55
Root crops	0.00429	12,249.64	15,084.68	81.21
Vegetables				
Leafy Vegetables	0.039	1,756.98	137,133.48	1.28
Fruit Vegetables	0.039	18,490.43	137,133.48	13.48
Root Vegetables	0.039	2,945.17	137,133.48	2.15
Legumes	0.039	2,346.38	137,133.48	1.71
Bulb	0.039	69.19	137,133.48	0.05
Coffee	0.0006	6,994.03	2,109.75	331.51
Banana	0.028	26,061.77	98,454.80	26.47
Pineapple	0.028	33,548.18	98,454.80	34.07
Meat				
Pork	0.013	28,760.14	45,711.16	62.92
Beef	0.00182	6,661.80	6,399.56	104.10
Poultry Meat	0.00814	4,369.28	28,622.22	15.27

Source: Office of the Provincial Agriculturist & Office of the Provincial Veterinarian, Trece Martires City

Formula:

$$\text{Consumption} = \text{Total Population (3,516,243)} \times \text{Per Capita Requirement}$$

$$\% \text{ Sufficiency Level} = \text{Total Production} / \text{Total Consumption} \times 100$$



Agrarian Reform

The Department of Agrarian Reform (DAR) is the lead agency mandated by the government to ensure the success of Comprehensive Agrarian Reform Program (CARP) through Land Tenure Improvement (LTI), Agrarian Justice Delivery (AJD), and Program Beneficiaries Development (PBD).

The Land Tenure Improvement (LTI) is the heart and soul of agrarian reform. It seeks to secure the tenurial status of the farmers and farm workers in the lands they till. It embodies the essence of agrarian reform, upholds the land-to-the-tiller concept and advances social equity. The DAR implements this component through land acquisition and distribution, support leasehold agreements and implementation, and other land tenure improvement services.

Agrarian Justice Delivery is one of the core programs of the CARP. DAR has the primary jurisdiction to determine and adjudicate agrarian reform cases and provide free legal assistance to Agrarian Reform Beneficiaries (ARBs) involved. There are two AJD programs, namely: the adjudication of agrarian cases and agrarian legal assistance. The agrarian legal assistance is composed of mediation and conciliation, administrative resolution of agrarian law implementation (ALI) cases, and provision of legal assistance representation/counseling to ARBs.

Program Beneficiaries Development (PBD) is the support services delivery component of the agrarian reform program. It aims to capacitate the ARBs and provide them access to the necessary support services to make their lands more productive, enable them to venture in income generating livelihood projects and actively participate in community governance. As one of the major final outputs (MFOs) of DAR, PBD is pursued under three (3) major sub-components. These are (1) Social Infrastructure and Local Capacity Building (SILCAB), (2) Sustainable Area-based Rural Enterprise Development (SARED), and (3) Access Facilitation and Access Enhancement Services (AFAES) (*www.dar.gov.ph*).

Land Acquisition and Distribution (LAD)

Land Acquisition and Distribution (LAD) involve the redistribution of government and private agricultural lands to landless farmers and farm workers. It secures farmers' tenure, promotes social equity, and provides them with necessary productive resources needed to ensure their economic viability and productivity. This is categorized by land type/mode of acquisition. Under land type are the Private Agricultural Lands (PAL) and the Non-Private Agricultural Lands (Non-PAL) while mode of acquisition under PAL are Operation Land Transfer (OLT), Voluntary Offer to Sell (VOS), Voluntary Land Transfer (VLT),

and Compulsory Acquisition (CA) while under Non-PAL are the Settlements, Sequestered Lands by the PCGG, Government-Owned Lands/Government Financing Institution (GOL/GFI) and Landed Estate (LE) and those declared as Kilusang Kabuhayan at Kaunlaran (KKK) lands that remain agricultural. Data gathered from Department of Agrarian Reform indicates that as of December 2013, a total of 1,044.0872 hectares are programmed for acquisition and distribution wherein the greater concentration was in the municipalities of Tanza and Naic with 342.5197 hectares and 226.0158 hectares respectively (Table 6.35). Furthermore, 154.1688 hectares of land has been acquired and distributed to 95 farmers from the municipalities of Gen. Trias, Gen. E. Aguinaldo, Magallanes, Naic and Tanza and the City of Dasmariñas, thus land acquisition and distribution's cumulative accomplishment totaled to 9,806.7584 hectares wherein 88.79% or 8,707.4655 were Private Agricultural lands and 11.21% or 1,099.2929 hectares are Non-private Agricultural lands (Table 6.36).

Table 6.35 Land Acquisition and Distribution Status by City/Municipality, Province of Cavite: as of December 2013

City/Municipality	Acquired and Distributed (has)	For Acquisition and Distribution (has)	Total (has)
1st District	11,5651		11,5651
Kawit	11,5651		11,5651
2nd District	101,7447	97,4753	199,2200
City of Bacoor	101,7447	97,4753	199,2200
3rd District	193,6751		193,6751
City of Imus	193,6751		193,6751
4th District	707,8196	14,6673	722,4869
City of Dasmariñas	707,8196	14,6673	722,4869
5th District	1,785,5854	29,1708	1,814,7562
Carmona	498,6174		498,6174
Gen. Mariano Alvarez	79,9235		79,9235
Silang	1,207,0445	29,1708	1,236,2153
6th District	1,816,5926	480,2660	2,296,8586
Amadeo	31,2702		31,2702
Gen. Trias	985,6302	91,3133	1,076,9435
Tanza	530,4155	342,5197	872,9352
Trece Martires City	269,2767	46,4330	315,7097
7th District	5,189,7759	422,5078	5,612,2837
Alfonso	207,8911		207,8911
Gen. E. Aguinaldo	252,2646		252,2646
Indang	326,5911	73,3995	399,9906
Magallanes	2,501,2584	59,8667	2,561,1251
Marañon	1,034,7750	52,9555	1,087,7305
Mendez	7,9259		7,9259
Naic	585,4014	226,0158	811,4172
Taal City	242,2621	9,8019	252,0640
Ternate	31,4063	0,4684	31,8747
Total	9,806,7584	1,044,0872	10,850,8456

Source: Department of Agrarian Reform, Trece Martires City

Table 6.36 Land Acquisition and Distribution by Land Type by City/Municipality, Province of Cavite: as of December 2013

City/ Municipality	Private Agricultural Lands (PAL)								Non-Private Agricultural Lands (Non-PAL)						Total PAL and Non-PAL	
	Operation Land Transfer		Voluntary Offer to Sell		Voluntary Land Transfer		Compulsory Acquisition		Sequestered Lands		Government Owned Lands/ Governm ent Financing Institutions		Landed Estate			
	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs	Area (has)	FBs
1st District					11.5651	6										6
Kawit					11.5651	6										6
2nd District	44.920	26			7.7106	7	44.3259	42			4.7873	3				78
City of Bacoor	44.920	26			7.7106	7	44.3259	42			4.7873	3				78
3rd District	168.99	104			22.7561	34					1.9195	1				139
City of Imus	168.99	104			22.7561	34					1.9195	1				139
4th District	216.70	141			51.7111	66	264.7636	234			174.636	241				682
City of Dasmariñas	216.70	141			51.7111	66	264.7636	234			174.636	241			707.8196	682
5th District	187.85	172	118.432	158	245.3507	166	345.7339	549	798.114	1,25	22.0299	25	68.069	151		2,471
Carmona					2.1129	2	31.7924	57	381.499	663	15.1426	19	68.069	151		892
Gen. Mariano Alvarez							79.2129	173	0.7106	2					79.9235	175
Silang	187.85	172	118.432	158	243.2378	164	234.7286	319	415.903	585	6.8873	6				1,404
6th District	970.81	931	227.711	184	295.7193	265	292.6113	459			29.7361	14				1,853
Amadeo					31.2702	46										46
Gen. Trias	603.78	725	123.706	77	90.9963	96	167.1424	373								1,271
Tanza	367.02	206	8.6578	6	82.9240	57	71.8045	56								325
Trece Martires City			95.3474	101	90.5288	66	53.6644	30			29.7361	14			269.2767	211
7th District	306.41	274	371.184	266	3,537.148	3,10	975.0322	647							5,189.7759	4,293
Alfonso					204.1425	242	3.7486	3							207.8911	245
Gen. E. Aguinaldo					250.8557	245	1.4089	1							252.2646	246
Indang					307.5112	396	19.0799	10							326.5911	406
Magallanes			210.375	130	2,210.324	1,85	80.5582	59							2,501.2584	2,045
Maragondon	18.740	11	42.9837	25	479.2537	322	493.7967	263							1,034.7750	621
Mendez					7.9259	2									7.9259	2
Naic	287.67	263	2.5586	2	44.4753	19	250.6975	167							585.4014	451
Tagaytay City			115.266	109	1.2530	4	125.7424	144							242.2621	257
Ternate					31.4063	20									31.4063	20
Total	1,895.7086	1,648	717.3288	608	4,171.9612	3,650	1,922.4669	1,931	798.1142	1,250	233.1090	284	68.0697	151	9,806.7584	9,522

Source: Department of Agrarian Reform, Trece Martires City