

OUTCOMES OF THE STUDY:

ECONOMIC IMPACTS OF PALM OIL 2017

MAIN FINDINGS IN NUMBERS:

The oil palm sector represents

1.2%
DEL PIB
of Guatemala's GDP

The oil palm sector in Guatemala contributes

28 THOUSAND
direct jobs and
140 THOUSAND
indirect jobs and beneficiaries

The oil palm crop generates investments of over

USD \$1,800 MILLION

Oil palm exports represent over

USD \$400 MILLION
per year

The oil palm crop contributes:

19.76%
of the GDP
in the Department of Petén

6.94%
of the GDP
in the Department of Izabal

INVESTMENT IN THE OIL PALM SECTOR

Investment in the crop		Investment in industrial mills	
Investment/Ha without irrigation USD	\$5,000	Investment per processed ton USD	\$425,000
Investment/Ha with irrigation USD	\$6,250	Other expenses	\$106,250
Portion without irrigation	\$3,500	Installed mills estimated tons	645
Planted Hectares	75%		
	165,511		
Estimated investment USD	\$1,458,561,546	Estimated investment USD	\$324,656,250

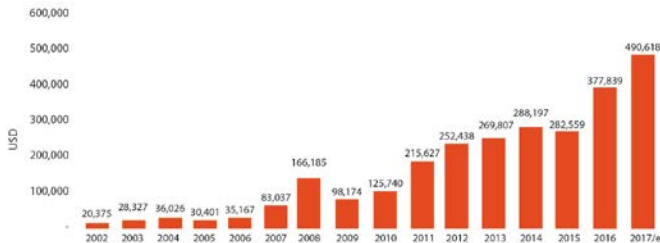
As the table shows, the cost of establishing the crop is the highest investment item. Close to USD \$1,458 million have been invested in the last 13 years, an equivalent of close to **1.93% of 2017's GDP** of Guatemala. The investment per hectare (Ha) is higher than the cost of the land.

To calculate the investment of the sector it is necessary to add the resources invested in mills to process the fruit and for its industrial conversion into crude oil. This table shows that this process involves at least another **USD \$323 million.**



PALM OIL EXPORTS GROWTH

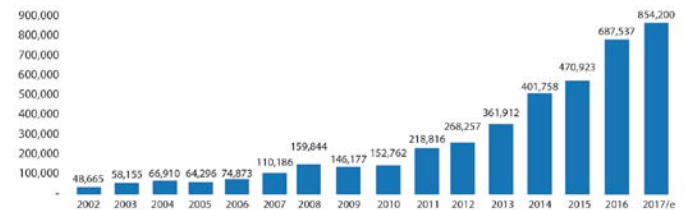
Historic palm oil exports (Thousands of USD)



*Source: TradeMap, United Nations commercial database.

The growth of exports has remained between 24% and 45% year-on-year, generating more than **USD \$400 million**, according to figures from the TradeMap, United Nations' commercial database.

Historical palm oil exports (Tons)



*Source TradeMap, United Nations' commercial database.

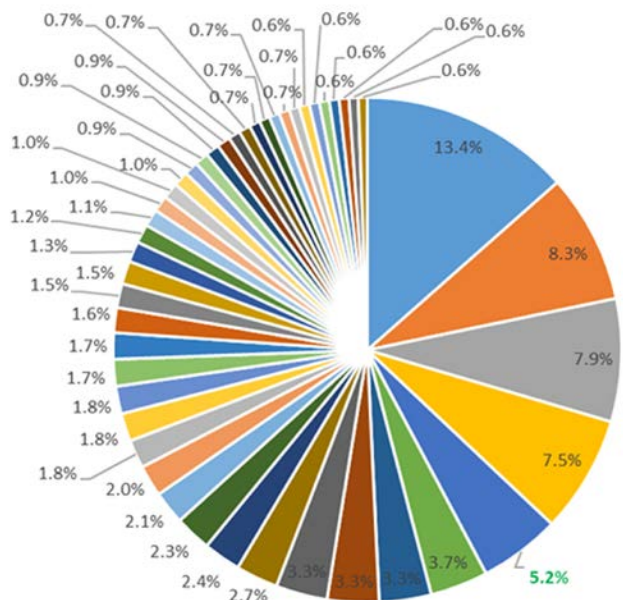
In metric tons, exports amounted to over **650 thousand** metric tons (2016).

PALM OIL RANKS FIFTH IN THE COUNTRY'S EXPORTS

2017 PRODUCT EXPORT RANKING

Products exported	US\$
APPAREL	1,340,131,506
SUGAR	825,381,109
BANANAS	783,732,599
COFFEE	747,957,423
EDIBLE FATS AND OILS	568,894,833
CARDAMOM	367,101,049
PLASTIC MATERIALS AND THEIR MANUFACTURES	329,306,447
FRESH, DRY OR FROZEN FRUITS	328,390,511
BEVERAGES, LIQUIDS, ALCOHOL AND VINEGARS	326,676,020
PAPER AND CARDBOARD MANUFACTURES	268,220,728
IRON AND STEEL	237,226,021
PHARMACEUTICAL PRODUCTS	231,912,475
CEREAL-BASED PREPARATIONS	211,072,795
TEXTILES (WEAVINGS OR FABRICS)	199,614,771
MEAT, FISH, CRUSTACEAN AND MOLLUSK PREPARATIONS	181,075,675

2017 SHARE



Source: Central Bank of Guatemala

The oil palm contribution has placed this sector in the fifth place in the country's exports ranking, behind apparel, sugar, bananas and coffee.



IMPACT ON THE COUNTRY'S

IMPACT ON THE COUNTRY'S GDP IN 2017			
Primary impacts	US\$	Q	% del PIB
of Exports US\$	370	2,718	0.5%
of the local Market US\$	129	951	0.2%
Taxes US\$	36	262	0.0%
Total	535	3,931	0.7%
Secondary impacts	US\$	Q	% del PIB
Consumption US\$	233	1,712	0.3%
Investment US\$	83	611	0.1%
Taxes US\$	60	441	0.1%
Total impact	376	2,765	0.5%

The total impact of the sector is estimated at **1.2% of the GDP**, that is, **Q 6,696 million** in additional added value to Guatemala's economy.

OIL PALM

PRODUCTIVE PROCESS

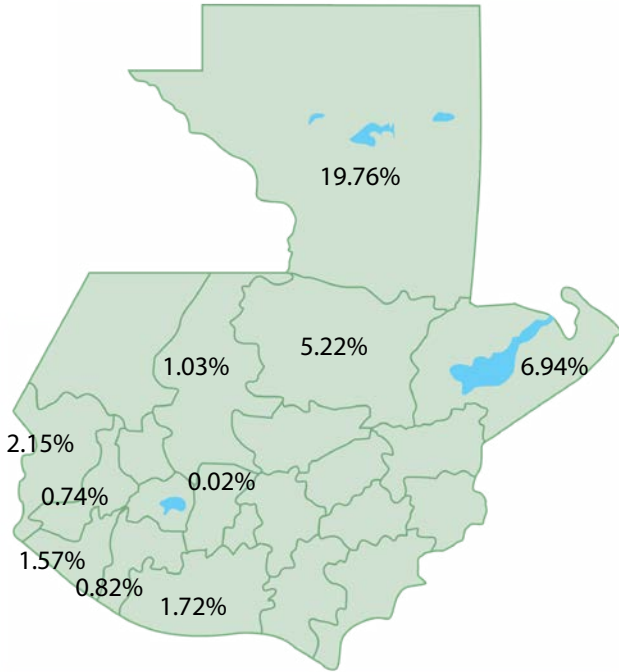


As part of the agro-industrial sector, both the transformation and the industrial activity require significant investments.

Data georeferenced by department

	Hectare	Monetary impact	2017 GDP	% of the GDP
Petén	75,226.84	3,043	15,399	19.76%
Izabal	26,862.16	1,087	15,651	6.94%
Alta Verapaz	24,824.63	1,004	19,223	5.22%
San Marcos	9,416.14	381	17,694	2.15%
Escuintla	11,102.22	449	26,169	1.72%
Retalhuleu	3,934.37	159	10,125	1.57%
Quiché	2,782.71	113	10,929	1.03%
Suchitepéquez	3,874.05	157	19,151	0.82%
Quetzaltenango	7,417.41	300	40,585	0.74%
Chimaltenango	70.00	3	12,009	0.02%
Guatemala	0.00	0	259,365	0.00%
El Progreso	0.00	0	6,689	0.00%
Sacatepéquez	0.00	0	13,476	0.00%
Santa Rosa	0.00	0	11,260	0.00%
Sololá	0.00	0	8,521	0.00%
Totonicapán	0.00	0	8,025	0.00%
Huehuetenango	0.00	0	12,740	0.00%
Baja Verapaz	0.00	0	5,602	0.00%
Zacapa	0.00	0	9,862	0.00%
Chiquimula	0.00	0	10,939	0.00%
Jalapa	0.00	0	7,609	0.00%
Jutiapa	0.00	0	13,269	0.00%
Total National	165,510.53	6,696.12	554,292.60	

Petén is the department where the activity has a greater weight in the economy, with **19.76% of the GDP** of the department. The second department with the highest weight is **Izabal** with 6.94% of its GDP, followed by **Alta Verapaz** with 5.22%, **San Marcos** 2.15%, **Escuintla** 1.72%, **Retalhuleu** 1.57% and **Quiché** 1.03%.



Map of oil palm GDP by department



Sayaxché is the municipality with the largest acreage of the crop in both, the department of Petén, and in the country, with **66 thousand hectares, representing 96.81% of the GDP in that municipality. It is followed by El Chal (24.18%), San Luis (14.16%), Poptún (3.48%) and San Francisco (2.12%).**

IZABAL



The municipality that benefits the most from oil palm in Izabal is **Puerto Barrios, with 11.24% of its GDP. It is followed by El Estor (7.32%), Morales (6.91%), Livingston (4.82%) and Los Amates (1.32%).**

ALTA VERAPAZ



The municipality of **Raxruhá** benefits the most from oil palm activity in the department of Alta Verapaz, with **46.47% of its GDP. It is followed by Fray Bartolomé de las Casas (26.09%), Panzós (22.05%), Chisec (16.75%) and Chahal (15.34%).**

SAN MARCOS



Oil palm generates **36.39% of the GDP** of the **Pajapita** municipality, in the department of San Marcos. It is followed by **Ayutla (27.25%), La Blanca (5.03%) and Malacatán (1.32%).**

ESCUINTLA



Tiquisate, a municipality in Escuintla, records an economic impact of **11.11% of its GDP** from the oil palm grown in that municipality. It is followed by **La Gomera (7.9%), Nueva Concepción (3.75%), Sipacate (1.76%), Masagua (0.97%) and La Democracia (0.33%).**