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Cocaine Market Analysis 2020

National Police
Antinarcotics Directorate
International Center for Strategic Studies against Drug Trafficking



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ILLICIT COCA CROPS GLOBAL, REGIONAL AND NATIONAL CONTEXT

AREA OF PHYSICAL CONDITIONS FAVORABLE FOR COCA GROWING WORLDWIDE

The following graph shows the favorable world geographical area for the existence of coca crops, however, the world production of cocaine is found in the South American Andean Region in the countries of **Colombia**, **Peru** and **Bolivia**.



Image 1. Source UNODC 2020

COCA CROPS IN THE ANDEAN REGION

The cultivation of coca worldwide according to the last year with which annual census information is available for the three countries is concentrated in **Colombia** (66%), **Peru** (23%) and **Bolivia** (11%) out of a total of 234,630 ha in 2019.

country	SIMCI detection (ha)	Variation from previous measurement (2020 vs 2019)	Cocaine production potential tm
Colombia	154.475	9% reduction	1.137 tm
Peru	54.655	1% increase	400 tm
Bolivia	25.500	10% increase	It is in the process of productivity studies

Table 1. Colombia data taken from the 2019 UNODC coca cultivation monitoring report Peru data from the 2019 monitoring report (DEVIDA)
Bolivia data taken from the 2018 coca cultivation report. UNODC

EXPANSION OF ILLICIT CROPS, A REGIONAL THREAT

Some illicit coca crops have been detected by the control authorities in both South and Central America, which represents a serious regional threat from the expansion of criminal organizations dedicated to drug trafficking.

Coca cultivation in Guatemala



Coca cultivation in Panama



Coca cultivation in Honduras



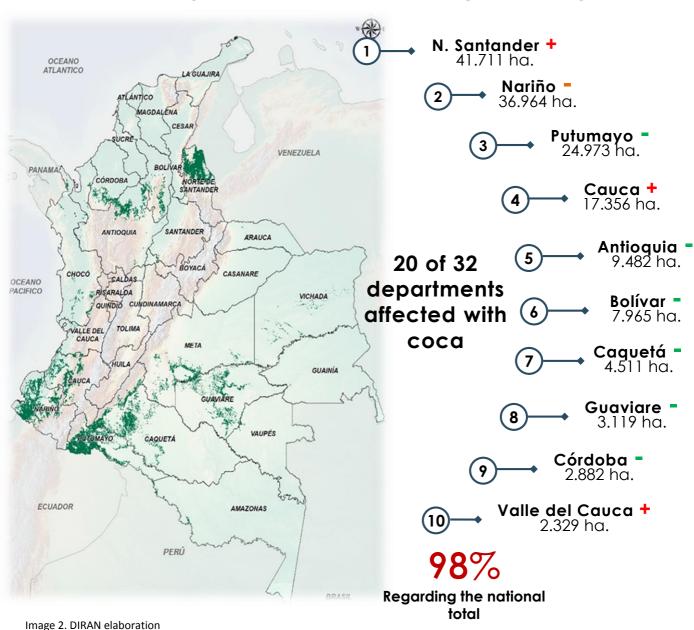
Coca cultivation in Ecuador



COCA CROPS IN COLOMBIA

In Colombia, 154.475 coca crops have been detected; there are 20 departments affected with these crops, however, the concentration of these illicit crops is found in 10 departments. The illicit coca crops detected in Colombia in 2019 showed a reduction of 9% compared to what was detected in 2018.

TOP 10 departments most affected by coca crops



PRODUCTION DYNAMICS PRODUCTION POTENTIAL, CHEMICALS AND PROCESSING INFRASTRUCTURES

DYNAMICS OF COCAINE PRODUCTION IN COLOMBIA

The following aspects influence the estimation of cocaine production in Colombia: (I) establishment of the coca production area measured in hectares, (II) capacity of the production area, (III) capacity to extract the alkaloid, (IV) crystallization. The process is described as follows:

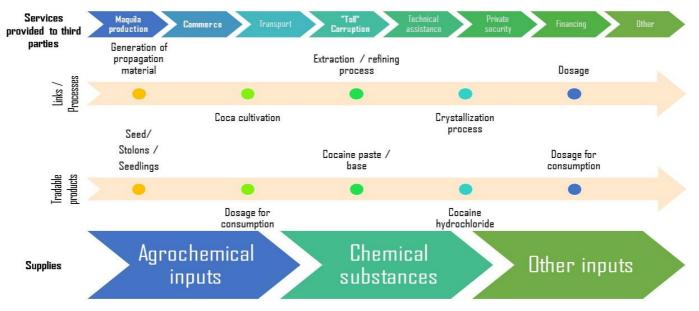


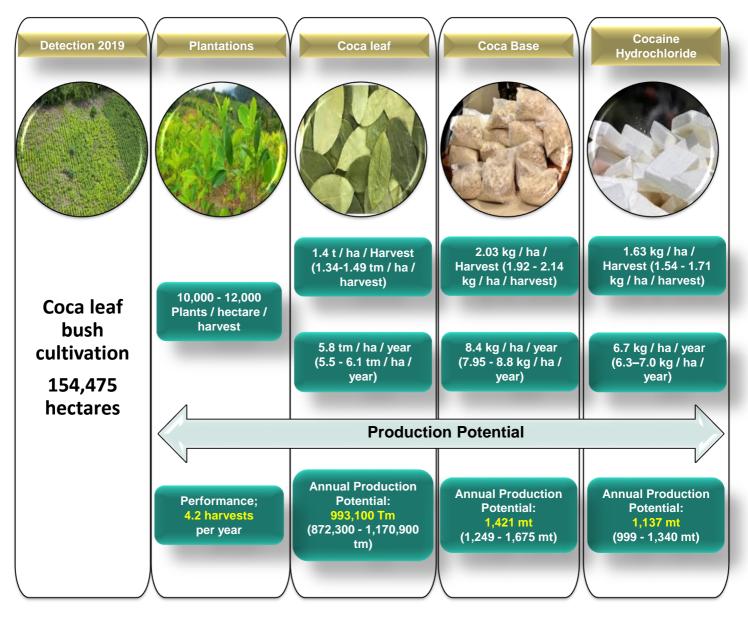
Image 3. Source UNODC 2020

COCAINE PRODUCTION POTENTIAL

The detection of coca crops in Colombia corresponds to 154 thousand hectares, taking into account this information which is provided in the monitoring report of territories affected by illicit crops, reflects the results and the margins of the production potential of cocaine hydrochloride.

Taking into account technical scientific studies developed by different institutions in the country in relation to the productivity of coca cultivation, which are verified through theoretical practical methodologies, the production potential of cocaine hydrochloride is determined.

COCAINE PRODUCTION POTENTIAL IN COLOMBIA



Elaboration: CIENA - DIRAN

Defining the productivity of a region through its verification of crops determines what its production capacity is, in this way containment programs are carried out, sectorize the most complex areas to formulate strategies that lead to mitigate their growth, these actions directly affect in the variations of the figures of the crops and the census through permanent analysis is of vital importance to determine its impact.

COCAINE PRODUCTION POTENTIAL IN THE REGIONS OF COLOMBIA

The information for each of the Antinarcotics Regions is presented below, determined from the yield of the coca leaf, the number of crops per year, the production potential of cocaine base and cocaine hydrochloride.

Taking into account the participation of the most affected actors, thus determining an accompaniment that is evident with the objective of a verification based on the different strategies.

For this reason the traits are determined and the characteristics of the sowing, transformation of the coca leaf and the obtaining of cocaine hydrochloride are established.

Average harvests of coca leaf cultivation / hectare / year: 4.2 harvests per year

Average yield of leaf kilogram / hectare / year: 5.8 tm per year Total potential coca leaf production per year: 993,100 mt per year Average yield of cocaine base per hectare per year: 8.3 kg / ha / year

Total potential for cocaine base production: 1,421 mt per year

Average yield of cocaine hydrochloride per hectare per year: 6.7 kg / ha / year

Total production potential of cocaine hydrochloride: 1,137 mt per year

Concept	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8
Illicit crops detected	129 ha	29.484 ha	0	56.649 ha	41.713 ha	13.612 ha	4.878 ha	8.010 ha
Harvests / ha / year	4,1	4,2	0	3,9	4,4	4,0	4,5	3,7
Cocaine base Kg / ha / year	13,7 kg	13,1 kg	0	9,3 kg	6,7 kg	6,8 kg	15,5 kg	6,8 kg
Annual cocaine base potential	1.736 kg	386.245 kg	0	526.836 kg	279.480 kg	95.681 kg	74.344 kg	54.474 kg
Cocaine hydrochloride Kg / ha / year	10,9 kg	10,5 kg	0	7,5 kg	5,3 kg	5,5 kg	12,4 kg	5,5 kg
Annual cocaine hydrochloride potential	1.387 kg	309.586 kg	0	424.868 kg	221.084 kg	77.362 kg	59.457 kg	44.055 kg

Elaboration: CIENA - DIRAN

CONTROL AND CONTROL OF CHEMICAL SUBSTANCES

In order to control beyond the incidence of the eradication of illicit crops, the National Police in application of Resolution 001 of January 8, 2015 issued by the National Narcotics Council - CNE, generates control and ban on 33 chemicals and substances.

QUANTITIES	CHEMICAL SUBSTANCES	
From 100 gallons	• Thinner	
From 05 Kilograms	 Sodium carbonate Calcium chloride Manganese Dioxide Sodium Hydroxide Potassium Manganate 	
From 5 liters	 Acetate of butilo Ethyl acetate Isobutyl Acetate Isopropyl Acetate N propyl acetate Acetone Isopropyl alcohol Ammonia Butanol Diacetone Alcohol Aliphatic Solvent 1020 Aliphatic Solvent 1125 Ethyl ether Hexane Methanol Methyl Ethyl Ketone Methyl isobutyl ketone Toluene Chloroform 	
In any quantity	 Sulfuric acid Hydrochloric acid Acetic anhydride Potassium permanganate 	

SEIZURES 2020

SOLID CHEMICALS

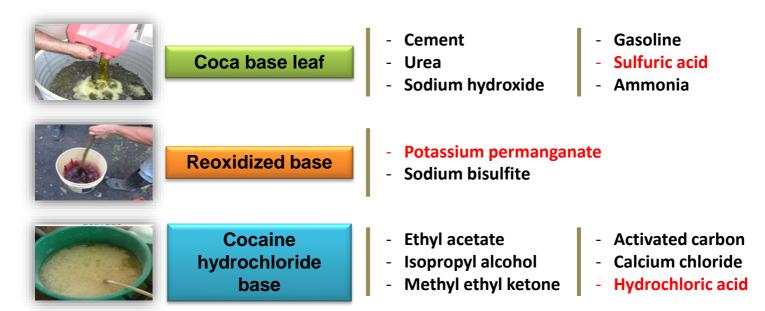


LIQUID CHEMICALS



ESSENTIAL CHEMICAL SUBSTANCES FOR THE PRODUCTION OF COCAINE HYDROCHLORIDE

In order to control beyond the incidence of the eradication of illicit crops, the National Police in application of Resolution 001 of January 8, 2015 issued by the National Narcotics Council - CNE, generates control and ban on 33 chemicals and substances.



CIENA source. Chemicals used in the production of Cocaine

The following have been identified as essential chemicals in the cocaine hydrochloride production processes:

- Coca-based leaf: Sulfuric acid
- Reoxidized base base: Potassium permanganate
- Cocaine hydrochloride base: Hydrochloric acid

Likewise, cement, gasoline and ACPM are controlled within the 10 departments with the greatest impact on illicit crops according to the SIMCI annual report, which for 2020 were: Norte de Santander, Nariño, Putumayo, Cauca, Antioquia, Bolívar, Caquetá, Guaviare, Córdoba and Valle del Cauca.

DRUG PROCESSING INFRASTRUCTURES

The production of illicit drugs is carried out through processing infrastructures, which have basic elements and rudimentary adaptations for the development of the different processes of transformation of alkaloids and obtaining essential chemical substances.

Extraction infrastructure (cocaine base paste): These are those where the alkaloid extraction process begins, starting from the fresh or dry leaf, these infrastructures are known in criminal slang as **cocinas**, **chagras**, **chongos**, etc. It consists of a structure made of wood and plastic, on some occasions they have been found fitted out as homes and are close to illicit crops.

Reoxidation and conversion infrastructure (cocaine hydrochloride): In some regions of the country, it has been evidenced, the separation of re-oxidation and conversion infrastructures, given the dynamics of cocaine base traffic, the infrastructure of reoxidation as an intermediate process for homogenization of the alkaloid before entering the conversion process, however, it is not a generality. The elements that can be found are: filter machines, worms or water bath, microwave ovens, rustic filter machines, filter paper and labels.

Infrastructures for the artisanal production of chemical substances: The infrastructures for the illicit production of chemical substances are increasingly being found; the substances produced in these infrastructures are used as a method of selfsufficiency by drug trafficking structures, as opposed to controls by national authorities. Infrastructures for obtaining sulfuric acid, hydrochloric acid and potassium permanganate, substances characterized as essential for the processing of cocaine hydrochloride, have been characterized through antinarcotic interventions.

Drug processing infrastructures destroyed National Police 2018 - 2020

TYPE OF INFRASTRUCTURE	2018	2019	2020
Extraction (cocaine base paste)	1.708	2.142	2.391
Reoxidation and conversion (cocaine hydrochloride)	159	144	120
Chemical production infrastructures	8	19	11

PROCESSING INFRASTRUCTURES (LABORATORIES)

EXTRACTION INFRASTRUCTURES (cocaine base)





CONVERSION INFRASTRUCTURES (cocaine hydrochloride)







INFRASTRUCTURES FOR HANDMADE PRODUCTION OF CHEMICAL SUBSTANCES (sulfuric acid)



PROCESSING INFRASTRUCTURES (LABORATORIES) DETECTED AND DESTROYED IN DIFFERENT COUNTRIES

In some countries of the American and European continents, cocaine hydrochloride conversion infrastructures have been detected, which indicates that from the Andean Region where the illicit crops are found, shipments of cocaine base have been made to later be converted into cocaine hydrochloride.

Laboratories in Honduras

InSight Crime

Laboratorio de cocaína en Honduras evidencia migración de la producción

NOTICIAS DEL DÍA Escrito por Michael Lohmuller - FEBRERO 11, 2014

Honduras Migración Criminal



Una aparente fábrica de cocaína, descubierta en Honduras por la policía, fue parcialmente destruida después de que el sitio fuera dejado sin vigilancia. El laboratorio puede ser un indicio de que la producción de cocaína se está moviendo hacia el norte, mientras que su destrucción es un recordatorio de la corrupción y la

ineficiencia que enfrenta el nuevo presidente de línea dura de Honduras.

Laboratories in Chile

[VIDEO] Desarticulan laboratorio de drogas en la comuna de Santiago

Durante los operativos fueron detenidos seis sujetos de nacionalidad colombiana que se dedicaban a la venta y distribución de la cocaína a Europa y Australia donde era comercializada.



🐞 Me gusta Compartir Registrate para ver què les gusta a tus amigos

Laboratories in Panamá

Laboratory at the Chile Bolivia Border

La Prensa

Desmantelan otro laboratorio de procesamiento de drogas en Panamá

El laboratorio ilegal hallado y desmantelado operaba en una casa en el sector de Felipillo, en la comunidad de Pacora, a unos 45 kilómetros al este de la capital panameña.



InSight Crime

Dismantled Chile Cocaine Lab With Bolivia Ties Hints at Evolving Crime Dynamics

BRIEF Written by Tristan Clavel - MARCH 29, 2017

Chile Cocaine Production



Chilean authorities have dismantled yet another cocaine lab, used by a group of Bolivians and Chileans to process the drug into its liquid form, suggesting that Chile's role in the drug trade may be evolving beyond that of a transshipment point.

Following a six-month investigation, Chilean police

Laboratory in Dominican Republic

InSight Crime

Desmantelan el 'laboratorio de drogas más grande del Caribe' en República Dominicana

NOTICIAS DEL DÍA Escrito por Charles Parkinson - SEPTIEMBRE 2, 2013





Las autoridades de República Dominicana han descubierto un laboratorio de drogas descrito como el más grande encontrado en el Caribe, lo que respalda las sugerencias de que la región está nuevamente ganando importancia para los narcotraficantes que responden a los esfuerzos antidrogas en Centroamérica

ARTÍCULOS RELA





policía descubrió un laboratorio de cocaína subterráneo, así como 230 kilogramos de cocaína, en los terrenos de una lujosa propiedad en el municipio de San Cristóbal, al sur del país, informó El Nuevo Diario

Laboratories in Spain





España: Desarman uno los laboratorios de cocaína más importante de Europa

Las autoridades han detenido en total a 11 personas entre españoles, colombianos y albaneses





Laboratories in Holland



Laboratories in Argentina



Laboratories in Italy



Laboratories in Albania

ELTIEMPO

Laboratorios 'made in Colombia', nueva arma de narcos en el exterior



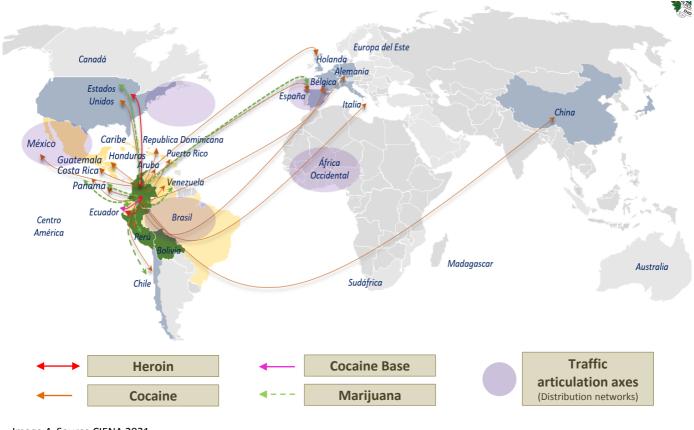
TRAFFIC OF COCAINE HYDROCHLORIDE SEIZURES

TRAFFIC OF COCAINE HYDROCHLORIDE

According to the seizures made in the 2019 and 2020 terms, it was determined that the traffic routes (air, land and sea) totaled 286,848 kilograms seized; being countries of consumption such as China, Spain, Belgium, Germany, Italy, United States and Chile; Countries of transit Brazil, Venezuela, Ecuador, Panama, Puerto Rico, Honduras, Guatemala and Mexico and lastly producing countries, Colombia, Peru and Bolivia.

Among the destinations with the highest seizure cases, the following countries were found: **Panama** with 73,431.6 kilograms, **Ecuador** with 48,719.1 kilograms, **Costa Rica** with 44,815.7 kilograms, **Spain** with 21,021.7 kilograms and finally **Mexico** with 19,443.4 kilograms.

Similarly, the countries of Spain, Central America and Mexico serve as a transit platform.



TRAFFIC MODALITIES

Below are some forms of cocaine trafficking used by criminal organizations.

AIRCRAFT





VEHICLES





TORPEDOS / SEMI SUBMERGIBLES





BOATS





MACHINERY





PHYSICAL ADULTERATION





SEIZURES

The National Police during the 2019 and 2020 periods made a total seizure of 616,944 kilograms of Cocaine Hydrochloride and Cocaine Base, where in 2019 301,491 kg were seized and 315,452 kg in 2020.

SEIZURE OF COCAINE HYDROCHLORIDE AND COCAINE BASE 2019 - 2020 (kilograms)

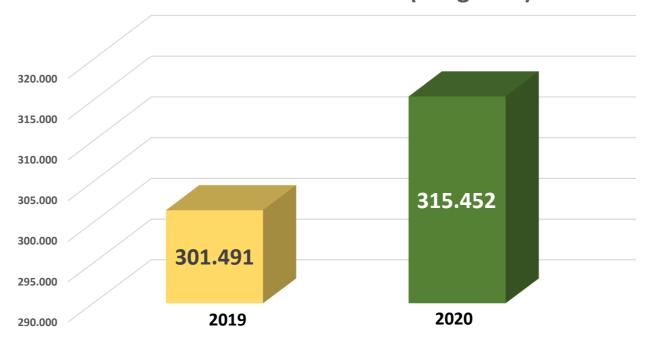


Image 5. Prepared by CIENA, Source SIEDCO DIRAN

For the year 2020, the five departments with the highest seizures were in order: Valle del Cauca (61,357 kg), Nariño (36,757 kg), Norte de Santander (33,423 kg), Chocó (28,946 kg) and La Guajira (28,096 kg).

Similarly, for the year 2019, the five departments with the highest seizures were in order: Nariño (77,790 kg), Valle del Cauca (43,222 kg), Norte de Santander (38,283 kg), Antioquia (26,021 kg) and Bolívar (22,388 kg).

COCAINE PRICE DYNAMICS AT NATIONAL AND INTERNATIONAL LEVEL

The distribution and commercialization of drugs requires diverse activities, actors and organizations, with profit margins and an incentive system that make criminal activity a profitable business.

The National Police of Colombia has determined to evaluate the incidence of prices in the 8 regions, where those departments of production, manufacturing and consumption are established, in order to identify market and production dynamics.



PRICE OF COCAINE HYDROCHLORIDE AND COCAINE BASE PER KILOGRAM IN COLOMBIA

	Cocaine base (Price kilogram)	Cocaine hydrocloride (Price kilogram)
	Colombian pesos	Colombian pesos
REGION 1	\$2.900.000	\$6.700.000
REGION 2	\$2.250.000	\$3.250.000
REGION 3	\$2.800.000	\$4.900.000
REGION 4	\$2.366.667	\$4.133.333
REGION 5	\$3.100.000	\$5.766.667
REGION 6	\$3.066.666	\$3.337.500
REGION 7	\$3.260.000	\$5.133.333
REGION 8	\$2.175.000	\$4.940.000

Source: CIENA - DIRAN

Attention factors:

- The highest value of the kilogram of cocaine hydrochloride is found in Region 1, reaching \$ 6,700,000, it is important to mention that San Andrés and Providencia are in this jurisdiction, which has been identified as an exit platform for Europe and Africa, in the same way it presents an international airport (Gustavo Rojas Pinilla) being a place of transit in tourism for Central and South America.
- Another trend in cocaine hydrochloride prices is reflected in those regions that have **border departments** where its value per kilogram ranges from \$ 4,133,333 to \$ 5,766,667.
- The cocaine base has maintained a stabilization that ranges from \$ 2,175,000 to \$ 3,260,000 per kilogram in the 8 regions.

HISTORICAL SERIES OF COCAINE BASE AND COCAINE HYDROCHLORIDE PRICES IN COLOMBIA 2002 - 2020

The historical prices of cocaine base and cocaine hydrochloride between 2002 and 2020 maintain a stable average trend, where there are no significant changes.



Illicit drug price fluctuation dynamics (2019 – 2020)

	2019	2020
Coca leaf	\$ 25.817 11,502 kg	\$ 56.952 11,502 kg
Cocaine base	\$ 2.014.651 kg	\$ 2.739.762 kg
Cocaine hydrochloride	\$ 4.760.828 kg	\$ 4.770.104 kg
Heroin	\$ 17.651.389 kg	\$ 17.594.875 kg
Marijuana	\$ 258.269 <i>kg</i>	\$ 427.000 kg
Ecstasy	\$ 35.000 dose	\$ 36.639 dose
2CB	\$ 80.000 dose	\$ 89.361 dose
LSD	\$ 30.167 dose	\$ 38.131 dose

Prices are calculated in Colombian pesos, at the average sale in Colombian territory

Illicit drug price fluctuation dynamics First Semester (2019 - 2020)

	2019	2020
Coca leaf	USD \$ 8 11,502 kg	USD \$ 16 11,502 kg
Cocaine base	USD \$ 629 kg	USD \$ 798 kg
Cocaine hydrochloride	USD \$ 1.485 kg	USD \$ 1.389 kg
Heroin	USD \$ 5.507 kg	USD \$ 5.125 kg
Marijuana	USD \$ 81 kg	USD \$ 124 kg
Ecstasy	USD \$ 11 dose	USD \$ 10 dose
2CB	USD \$ 25 dose	USD \$ 26 dose
LSD	USD \$ 9 dose	USD \$ 11 dose

Average sales prices in the Colombian territory, calculated with the Representative Market Rate (TRM)

31/12/2019 31/12/2020 \$3.205 COP \$3.432 COP

List of prices of illicit drugs in countries of transit, destination or consumption 2020

Attention factors:

- The commercialization of cocaine with higher sales prices ranges from \$ 40,600 to \$ 210,000 USD per kg., where the markets of Australia, Austria, Croatia, Germany, Italy and the UK stand out.
- Traditional markets are observed with medium-high sales prices ranging between \$ 30,500 USD to \$ 39,538 USD per kg. of the drug, among these ranges we find countries such as the Netherlands, Portugal, Spain, Canada, Slovenia, France, the U.S and Belgium.
- Finally, in the ranges of \$ 1,375
 USD to \$ 17,500 USD whose commercialized prices have been reported in the countries of Colombia, Ecuador, Panama, Chile, Brazil, Costa Rica, the Dominican Republic and Mexico, are the countries of production and transit.

	Cocaine kg		
Country	Price USD		
Australia	210.000		
Austria	45.600		
Croatia	45.200		
Germany	42.900		
Italy	42.900		
UK	40.600		
Holland	39.536		
Portugal	39.536		
Spain	39.500		
Canada	37.210		
Slovenia	37.200		
France	35.017		
U.S	32.000		
Belgium	30.500		
Mexico	17.500		
Dominican Republic	11.000		
Costa Rica	8.000		
Brazil	7.000		
Chile	7.000		
Panama	6.000		
Ecuador	4.500		
Colombia	1.375		



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