

# SOMOS UNO. Somos todos.

# **Cocaine Market Analysis 2020**

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



El Dorado Airport Ent. 6 CATAM, Bogotá D.C. <u>diran.cenar@policia.gov.co</u>- Phone – (571) 5159750 Ext. 31134



## 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

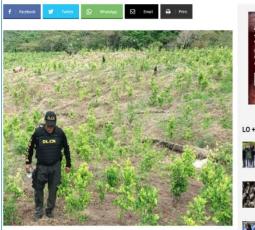
### **EXPANSION OF ILLICIT CROPS, A REGIONAL THREAT**

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 $\equiv$ EL PAÍS **INTERNACIONAL** InSight Crime BLOGS TITULARES a Cultivo de coca en Guatemala, Descubierta la primera plantación de hoja de coca en nueva señal de posibles "experimentos" de grupos Centroamérica Un operativo policial halla un sembradío en suelo panameño, cerca de laboratorio artesanal para criminales producir cocaína 6000 NOTICIAS DEL DÍA Escrito por Victoria Dittmar - MAYO 29, 2018 Guatemala Producción de cocaína E El descubrimiento, por primera SHAR vez, de un cultivo de coca en CIAL PUBLICIDAD Guatemala, podría señalar que los grupos criminales que operan en el área estarían experimentando con la producción de cocaína en un país que tradicionalmente había sido de tránsito, para así ahorrarse los riesgos y costos de ¿Cómo se consigue tu propósi transportar la droga desde Coca cultivation in Honduras Coca cultivation in Ecuador

Las siembras de coca, cada vez más visibles en Honduras







LO + NUEVO Ejército de Guate que 1 mil 500 mig

> OIM relata el drama de 7 m 500 hondureños en carava migrante 19 de entro de 2021 - 10:49 am

Reportan siete decesos co

PLAN V HACEMOS PERIODISMO		HISTORIAS	¿Qué estás buscando?		
	Plan V MULTIMEDIA	APOYA EL PERIODISMO INDEPENDIENTE, DONA 👽	Plan V ENGLISH	Suscríbete 🖂	
				15 de Junio del 20	

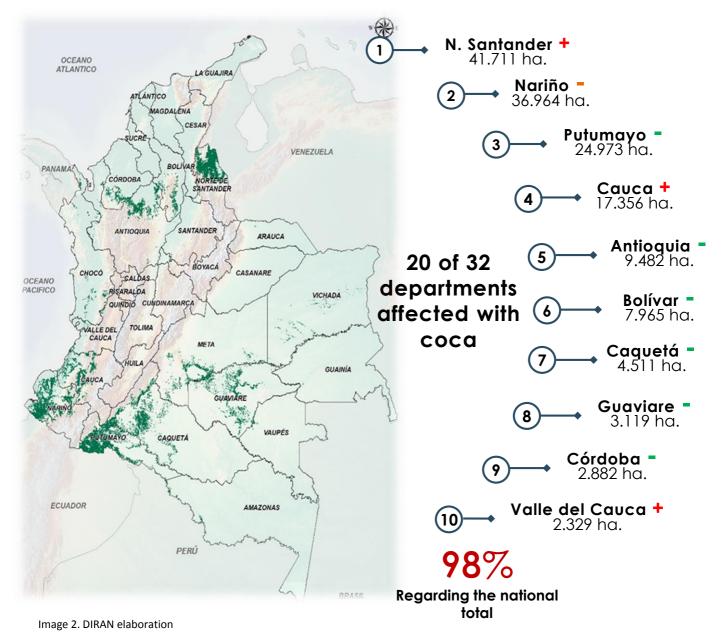
#### sociedad

Cultivos de hoja de coca en frontera norte: las 700 has del eslabón ecuatoriano en la economía del narcotráfico



### 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.

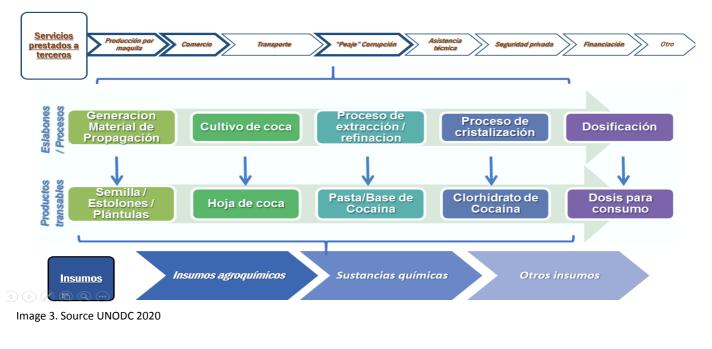


TOP 10 departments most affected by coca crops

### 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:

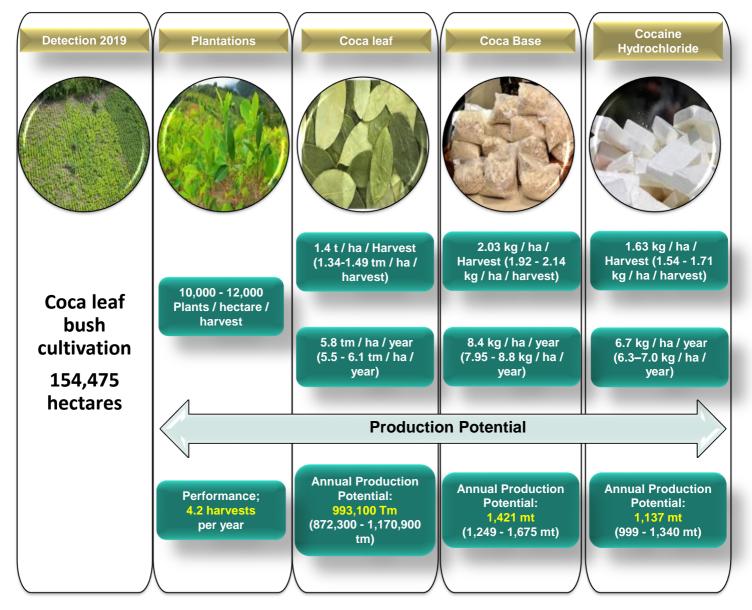


### **COCAINE PRODUCTION POTENTIAL**

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

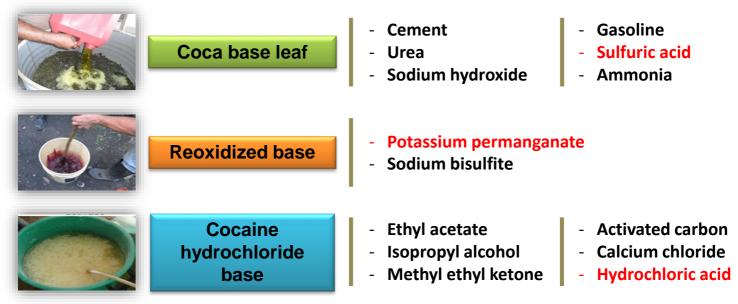
### **CONTROL AND CONTROL OF CHEMICAL SUBSTANCES**

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	SEIZURES
From 05 Kilograms	<ul> <li>Sodium carbonate</li> <li>Calcium chloride</li> <li>Manganese Dioxide</li> <li>Sodium Hydroxide</li> <li>Potassium Manganate</li> </ul>	2020 SOLID CHEMICALS
From 5 liters	<ul> <li>Acetate of butilo</li> <li>Ethyl acetate</li> <li>Isobutyl Acetate</li> <li>Isopropyl Acetate</li> <li>N propyl acetate</li> <li>Acetone</li> <li>Isopropyl alcohol</li> <li>Ammonia</li> <li>Butanol</li> <li>Diacetone Alcohol</li> <li>Aliphatic Solvent 1020</li> <li>Aliphatic Solvent 1125</li> <li>Ethyl ether</li> <li>Hexane</li> <li>Methanol</li> <li>Methyl Ethyl Ketone</li> <li>Methyl isobutyl ketone</li> <li>Toluene</li> <li>Chloroform</li> </ul>	43.457.033 Kilograms LIQUID CHEMICALS 7.792.872 Gallons
In any quantity	<ul> <li>Sulfuric acid</li> <li>Hydrochloric acid</li> <li>Acetic anhydride</li> <li>Potassium permanganate</li> </ul>	

### 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)		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 Laboratories in Chile [VIDEO] Desarticulan laboratorio de InSight Crime **T13** drogas en la comuna de Santiago Laboratorio de cocaína en Durante los operativos fueron detenidos seis sujetos de Honduras evidencia migración de nacionalidad colombiana que se dedicaban a la venta y la producción distribución de la cocaína a Europa y Australia donde era comercializada. NOTICIAS DEL DÍA Escrito por Michael Lohmuller - FEBRERO 11, 2014 Honduras Migración Criminal SHARE 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 rio de cocalna fue de recordatorio de la corrupción y la ineficiencia que enfrenta el nuevo presidente de línea dura de Honduras. te Me gusta Compartir Registrate para ver què les gusta a tus amigos Laboratory at the Chile Bolivia Border Laboratories in Panamá InSight Crime La Prensa **Dismantled Chile Cocaine Lab** With Bolivia Ties Hints at Evolving Desmantelan otro laboratorio de **Crime Dynamics** procesamiento de drogas en Panamá El laboratorio ilegal hallado y desmantelado operaba en una casa en el sector de Felipillo, en la BRIEF Written by Tristan Clavel - MARCH 29, 2017 comunidad de Pacora, a unos 45 kilómetros al este de la capital panameña

01 ago 2013 - 22:00h



RE

hile Cocaine Production



Chilean authorities dismantled a large cocaine processing lab

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



Por: JUSTICIA | 12 de septiembre 2015 . 08:37 p.m.

#### International Center for Strategic Studies against Drug Trafficking

encontrado en el país.

# 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.

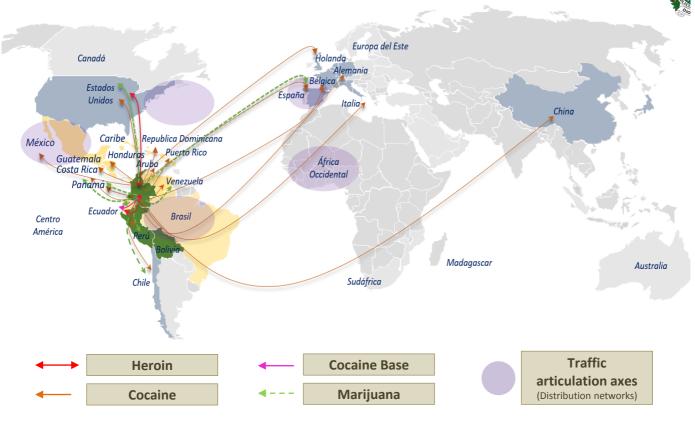


Image 4. Source CIENA 2021

### **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.

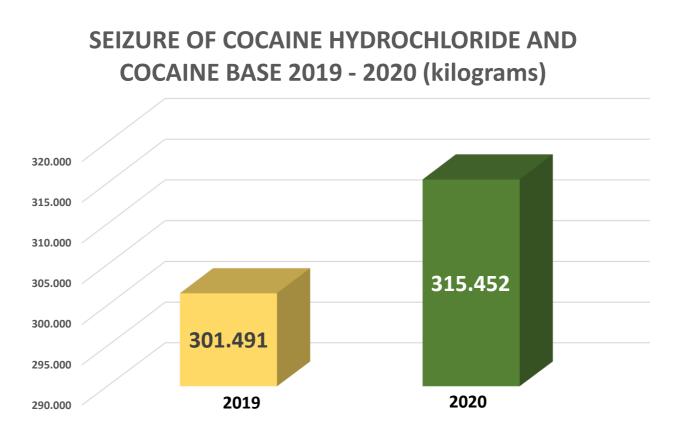


Image 5. Prepared by CIENA, Source SIEDCO DIRAN

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

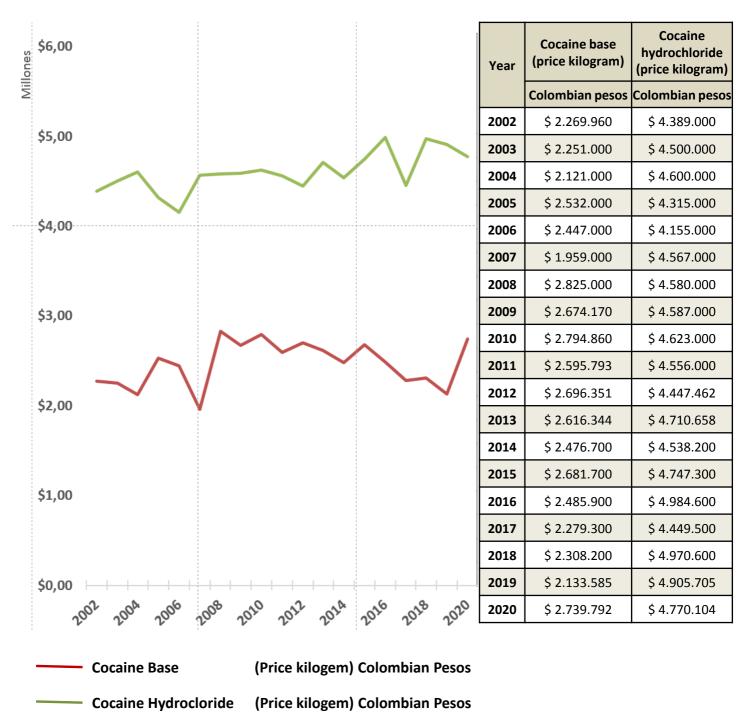
Source: CIENA - DIRAN

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

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

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

	2019	202	20
Coca leaf	<b>USD \$ 8</b> 11,502 kg	<b>USD \$ 16</b> <i>11,502 kg</i>	
Cocaine base	USD \$ 629 kg	USD \$	<b>798</b> kg
Cocaine hydrochloride	USD \$ 1.485 kg	USD \$ 1.	<b>.389</b> kg
Heroin	USD \$ 5.507 kg	<b>USD \$ 5.125</b> kg	
Marijuana	<b>USD \$ 81</b> kg	<b>USD \$ 124</b> kg	
Ecstasy	<b>USD \$ 11</b> dose	<b>USD \$ 10</b> dose	
2CB	USD \$ 25 dose	<b>USD \$ 26</b> dose	
LSD	USD \$ 9 dose	<b>USD \$ 11</b> dose	
Average sales prices in the	Colombian territory,	31/12/2019	31/12/2020
calculated with the Represe	entative Market Rate (TRM)	\$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.

Country	<b>Cocaine</b> kg 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



### El Dorado airport entrance 6 via CATAM Bogotá diran.cenar@policia.gov.co PBX: 5159750 EXT: 31134

