



Francisco Santos Calderon
Shared Responsibility



The world drug problem seen through a green lens

In May of 2007, a new addition was made to the list of the world's known hummingbird species. Baptised as the Gorgetted Puffleg by the scientific community, this hummingbird's potential habitat consists of 1,200 hectares in the cloud forests of the Pinche mountain range in South-western Colombia, although it has only been seen fluttering across 300 hectares. According to the ornithologist that first spotted the puffleg, 8.3 per cent of its total potential habitat, or 100 hectares, are slashed, burnt and chemically treated every year to grow coca. Soon, it seems likely, the puffleg will go from making headlines as a stunning new species to being listed in the World Conservation Union's red books as a critically endangered, stunning new species.



Gorgetted puffleg.

Other Colombian species, many of which are endemic, are also facing extinction due to the incursion of illicit crops in their habitats. Of the world drug problem's many victims, perhaps none are as defenceless, as incapable of voicing their plight, as these plant and animal species. It is time to make the up-to-now silent environmental catastrophe caused by illicit crop cultivation heard, seen and felt around the globe.

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Colombia is working harder than ever to forge international alliances against illegal drugs and their largely unknown ecological repercussions, because the main weapon against drugs is cooperation between nations. And, in order to minimise the impact of illicit drugs, it is essential to reduce not just their supply, but also their demand. It is a fair suggestion that if more were known about the ecocide linked to cocaine consumption, this drug's allure would sharply decrease.

For this reason the international community is invited to learn more about cocaine's Colombian ecocide, and to

work together to incorporate environmental awareness into the discourse about the world drug problem, so that the ecological disaster caused by illicit drugs can gain the attention it needs to be stopped.

A silent catastrophe

Colombia, in the North-west of South America, has coasts along both the Pacific and Atlantic oceans, is the endpoint for the great Andes mountain range (the reason behind Colombia's ample climatic variations), has some of the highest levels of annual rainfall in the world and is almost the size of France and Spain put together.

Only less than six per cent of the earth's total land is covered by rainforests, and therein lie three-quarters of the world's biodiversity. The Amazon rainforest, responsible for 15 per cent of the planet's oxygen supply, covers 40 per cent of South America and 35 per cent of Colombia, ranked among the top ten countries in terms of primary forests.

Colombia is, after Brazil, the most biodiverse nation on the planet. It holds 18 per cent of the world's bird species and is the richest in terms of amphibians.

Additionally, Colombia has a potential annual water production, measured in cubic kilometers, greater than that of countries as large as India, or the continental United States.

Today, there are 54 national parks, a number likely to grow in the future, with a total area larger than twice the entire size of Costa Rica.

However, cocaine production, encouraged by cocaine consumption, poses an ominous threat to this environment, endangering unique species of flora and fauna. The majority of the 78 thousand hectares of coca in Colombia today are located along the Amazon rainforest. However, what is more worrisome is that the World Bank estimates that for every hectare of coca planted three to four hectares of forest are cut down. Due to the frequency with which crops shift, some 360,000 to 600,000 hectares of tropical forest in Colombia are slashed and burnt to make way for coca plants every year. Indeed, the smoke caused by the slash and burn technique is the main source of air pollution in Colombian jungle areas.

WWF says that one hectare of pristine rainforest produces 28 tons of oxygen per year, so the destruction of four hectares precludes the annual production of 112 tons of oxygen.

Conservative estimates consider that, over the last 25 years, more than two million hectares have been clear-cut to produce coca, an area equivalent to the size of Estonia. And, even though this trend has been slowed down by effective government policies in recent years, the damage has already been done.

Coca growers use 10 times more agrochemicals than those used by farmers in legal crops.

The residual effect

Due to the unsuitability of jungle soil for agricultural processes, and in order to maximise plant yields, coca growers use 10 times more agrochemicals than those used by farmers in legal crops. When working with pesticides, coca growers use no protection, thus exposing themselves to grave health risks. To save time and money, they mix most of the agrochemicals into a single batch for fumigation; among them are those commonly known as the 'dirty dozen'.

These chemicals are perilous not only because they resist biodegradation and are toxic but also because they are highly mobile. Once released into the air, they can travel great distances through a process of multiple cycles of evaporation and condensation known as the 'grasshopper effect'.

Sixty-six per cent of the coca growers must turn their harvested leaves into the much easier to conceal and transport coca paste or base; otherwise drug trafficking groups will not buy them. Thus, many coca growers build rudimentary laboratories that are nearly always



landslip with coca laboratory.

located near water sources to facilitate the disposal of resulting chemical residues. Furthermore, in order to keep the chemicals cool, farmers submerge them, using non-airtight containers, in nearby water, where they inevitably leak.

The final stage, carried out by professional chemists, requires the use of substances that are even more hazardous than those used in previous stages. In order to reuse these chemicals, a distillation process is conducted that results in the injection of thousands of gallons of hot water into rivers, increasing water temperature and altering ecosystems. When these chemicals can no longer be recycled, they are dumped unceremoniously into nearby rivers.

According to research studies conducted by the United Nations Office on Drugs and Crime (UNODC) and the Colombian Counter-Narcotics Agency, in order to transform one hectare of coca plants into cocaine, 550 kilograms of pesticides, herbicides, fertilisers, gasoline, ammonia, cement and sulphuric acid are needed. Coca crops, on average, yield four annual harvests. The arithmetic is daunting but simple: 550 kg x 4 harvests x 78,000 hectares = 171,600,000 kilograms or 171,600 tons of chemical waste per year, all of which are dumped on Colombia's soil or in its rivers to produce cocaine.

A troubling prospect

The time is ripe to create awareness about the environmental costs of cocaine production, for it is difficult to recall a time when the international community, decision-makers included, has been as environmentally conscious as now. By capitalising on the present concern with environmental preservation, especially true of the younger generations (who also have a higher general predisposition to drug consumption), the circumvention of two highly worrying scenarios may be achieved.

Both scenarios depend on demand levels for cocaine remaining steady or increasing. The first worrying scenario consists of the further deterioration of Colombia's important ecological wealth. The second scenario, equally troubling, involves the growth of the already vulnerable nations of Africa and the Caribbean as cocaine transshipment hubs.

Colombia is only too familiar with what happens when drug trafficking impregnates the organisms

Forest burnt to make way for coca.



charged with keeping it at bay. Corruption, violence and terrorism ensue, while time, resources and capable people are syphoned away from solving the conditions that keep countries in poverty – and, thus, vulnerable to drug trafficking. Many Commonwealth nations, such as Ghana and Nigeria in West Africa and Jamaica and Guyana with Caribbean coasts, are already feeling these and other side-effects of drug trafficking – more drug mules, increasing local consumption and political scandals.

A particular worry is that nations with geographical characteristics similar to those of Colombia's coca growing region will begin to see coca crops sprout on their own land. Table 1 compares Colombia's latitude and altitude with those of countries that are increasingly becoming cocaine transshipment points, to show that, plausibly, coca could be grown in these countries. The UNDP's Human Development Index is included because living standards also play a key role in a nation's susceptibility to drug production.

Country	Latitude	Altitude range	UNDP Human Development Index
Colombia	4S to 11N	0 to 5770m (coca growing regions of Meta and Guaviare located at 200m)	0.790 (2004)
Ghana	4N to 11N	0 to 880m	0.532 (2004)
Guyana	5N	0 to 2,835m	0.725 (2004)
Jamaica	18N	0 to 2,256m	0.724 (2004)
Kenya	1N	0 to 5,200m	0.491 (2004)
Nigeria	10 N	0 to 2,400m	0.448 (2004)
Sierra Leone	8.3 N	0 to 1,928m	0.335 (2004)

According to the UNODC's 2007 *World Drug Report*, Portugal, the second main entry point for cocaine into Europe, reported an increase in seizures from seven tonnes in 2004 to 18 tonnes in 2005 to 35 metric tonnes in 2006. Portuguese authorities attribute this rise to the influx of cocaine shipments coming from Africa, where cocaine seizures increased six-fold from 2000 to 2005. Also, Amado Philip de Andres, deputy representative of the UNODC in West Africa, more recently said that of all the drugs seized at European airports last year, 21 per cent came from Africa and of that more than 90 per cent landed in through West Africa.

Shared solutions

Simply put, Colombia hopes to show that cocaine is bad for people's health but also bad for the environment. An environmentally conscious person who drives a hybrid car might as well be driving a Hummer if he or she consumes cocaine, no matter how recreationally.

So, how do we plan to create awareness about the ecocide already under way in Colombia? Through activities directed at the general public, such as an itinerant photo-museum, the public showing of videos, virtual games and a diverse and strong presence on the web, it should be possible to sensitise a wide international audience (one that is already increasingly conscious of the importance of environmental protection). At the same time, I am committed to participating in high-level international political arenas to broadcast this message and hopefully catalyse joint action.

To help reverse the ecocide, the expansion of alternative development projects advanced by the Presidential Program against Illicit Crops (PCI) is crucial. Since 2002, these alternative development projects have kept over two million hectares free of illicit crops, conserved over 100,000 hectares and recovered over 34,000 hectares. But to truly right the damage wrought by coca cultivation, more work needs to be done – and this means providing coca growers with environmentally sustainable alternatives.

All nations and their peoples should learn about cocaine's silent environmental catastrophe and join me and my country in our efforts to counter it and stop it from spreading to other already vulnerable areas of the world.

Francisco Santos Calderon has been Vice-President of Colombia since 2002, when he was elected, together with current President Alvaro Uribe, on a pledge to improve security and economic prosperity. Proof that this pledge was amply fulfilled is the fact that both President Uribe and Vice-President Santos were again elected in 2006 with a wide margin of support.

Shared Responsibility is a Colombia-led initiative for illicit drug producing and consuming countries to work on shared solutions to the threat that cocaine production, trafficking and consumption poses to the world. Its mission is to create global awareness about the environmental catastrophe caused by illicit crop cultivation and drug production and to incorporate environmental awareness into the discourse about the world drug problem, in the hope that the ecological disaster caused by illicit drugs will be put to an end.

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