

# STOLEN AMAZON: THE ROOTS OF ENVIRONMENTAL CRIME IN FIVE COUNTRIES



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# “Mapping Environmental Crime in the Amazon Basin”: Introduction to the series

The “Mapping Environmental Crime in the Amazon Basin” Case Study Series seeks to understand the contemporary dynamics of environmental crime in the Amazon Basin and generate policy recommendations for key stakeholders involved in combating environmental crime at the regional, national and local levels.

The Amazon Basin sprawls across eight countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela) and one territory (French Guiana). The research and policy communities have in the past years progressively developed a sound understanding of deforestation and degradation dynamics in the region, as well as of the ways economic actors exploit forest resources under different state regimes. This series sheds light on a less explored dimension of the phenomenon: the role played by illicit actors and economies in fueling deforestation in recent years.

This series draws a complex picture of the continuous socio-environmental impact of authorized and/or licit economic activities on the Amazon forest and its people. It reveals the spatial and temporal dynamics of specific categories of environmental crime and their crossing with legalized economic activities, as well as their linkages with other types of crimes and social violence. It also sheds light on the underlying political economy of criminal

markets, the organizational characteristics of crime groups and government agencies’ collusion in environmental crimes. The country reports also discuss the record of past and current governmental measures to disrupt and dismantle criminal networks that have diversified into environmental crime across the Amazon Basin.

The studies further expose how licit and illicit actors interact and fuel environmental crime and degradation in a time of climate emergency and of accelerated socio-political change across the region. Meanwhile, government attention and action to combat environmental crime in recent years, mainly to reduce deforestation and illegal mining, is stymied by the weakening of environmental protections and land regulations, in which political and economic elites are either complicit in or oblivious to the destruction of the Amazon forest.

This series was funded by the Government of Norway under the Igarapé Institute-led multi-year project “Mapping Environmental Crime in the Amazon Basin: From Diagnosis to Policy Recommendations” (2019-2022). Three studies were commissioned by the Igarapé Institute to InSight Crime, a non-for-profit organization conducting on-the-ground-reporting, research and investigations on issues related to organized crime in Latin American and the Caribbean.

# STOLEN AMAZON: THE ROOTS OF ENVIRONMENTAL CRIME IN FIVE COUNTRIES

This present regional study was led by InSight Crime. The findings and analysis are based on desk top research, fieldwork in the city of Georgetown, Guyana and phone interviews conducted between January and October 2021 with environmental crime experts, government officials, representatives of local communities, and members of international organizations.

The report provides a snapshot of the complex web of actors (state and non-state) and relationships underlying a decade of environmental crimes in the Amazon regions of Venezuela, Ecuador, Bolivia, Guyana, and Suriname. Combined, these five countries comprise around 20 percent of the Amazon. Some of the environmental crimes detected in these smaller nations bear close resemblance to those committed in the largest countries in the region – Brazil, Peru, and Colombia. Others are unique to each of the five countries under review here.

Our study offers no ultimate diagnosis or conclusive policy responses. Rather, this report poses a series of new questions while pointing to a number of opportunities for intervention. We take a close look at international extractive industries and the ways in which they intersect with entrepreneurial criminal groups. We also focus on the growing role of non-state armed groups in cross-border illicit forest economies. This case study also examines the impediments to sustainability hardwired into extractive Amazon economies, which

rely on exploiting natural resources from all countries of the river basin or expanding industrial activities in forest areas. Such a predatory mindset – common to politics and markets across all the Amazon countries – is even harder to change at a time when nations are still staggered by the lingering economic fallout from the Covid-19 pandemic even as they face an escalating climate crisis. Beyond unpacking the dynamics of environmental crime as it spreads across Bolivia, Ecuador, Venezuela, Guyana, and Suriname, this report sheds light on specific regional hotspots: illegal logging along the Peruvian and Ecuadorian borders; mining supply chains connecting Suriname, Guyana, Venezuela (as well as Brazil); and multi-country wildlife trafficking. Big or small, Amazonian countries are links in a complex and increasingly globalized grid of supply chains that connect the remotest tropical ecosystem to mass consumer markets in North America, Europe, and Asia. Bringing transparency, order, and the rule of law to this unruly biome can only come to pass through broad cooperation and commitment among Amazon nations – and the international community – to dismantle environmental crime and protect the forest and its peoples.

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# STOLEN AMAZON: THE ROOTS OF ENVIRONMENTAL CRIME IN FIVE COUNTRIES

## Executive Summary

The Amazon Basin is being cut down at an accelerating rate. Environmental crime is driving soaring deforestation and has created a situation where today some parts of the Amazon are emitting more carbon dioxide than they absorb.<sup>1</sup>

Twice the size of India, the Amazon Basin spans more than 670 million hectares across Brazil, Peru, Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname, and French Guiana.<sup>2</sup>

This report will unpack environmental crime in the Amazon regions of Bolivia, Venezuela, Ecuador, Guyana, and Suriname. It is the product of one year of open-source and field investigation – including desk-top research, telephone and face-to-face interviews with environmental experts, government officials, law enforcement, academics, and others – in these countries.<sup>3</sup>

## The Amazon Basin

*insightcrime.org*

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These five countries make up around 20 percent of the Amazon.<sup>4</sup> Combined, they are home to 91 different Indigenous communities.<sup>5</sup>

Bolivia’s Amazon region spans across five departments found in the north of the country: Pando, Beni, Cochabamba, La Paz, and Santa Cruz. These cover just under 60 million hectares in total.<sup>6</sup>

In Venezuela, three southern states make up the country’s Amazon region: Bolívar, Delta Amacuro, and Amazonas. Bolívar is home to around one third of the country’s forests.<sup>7</sup>

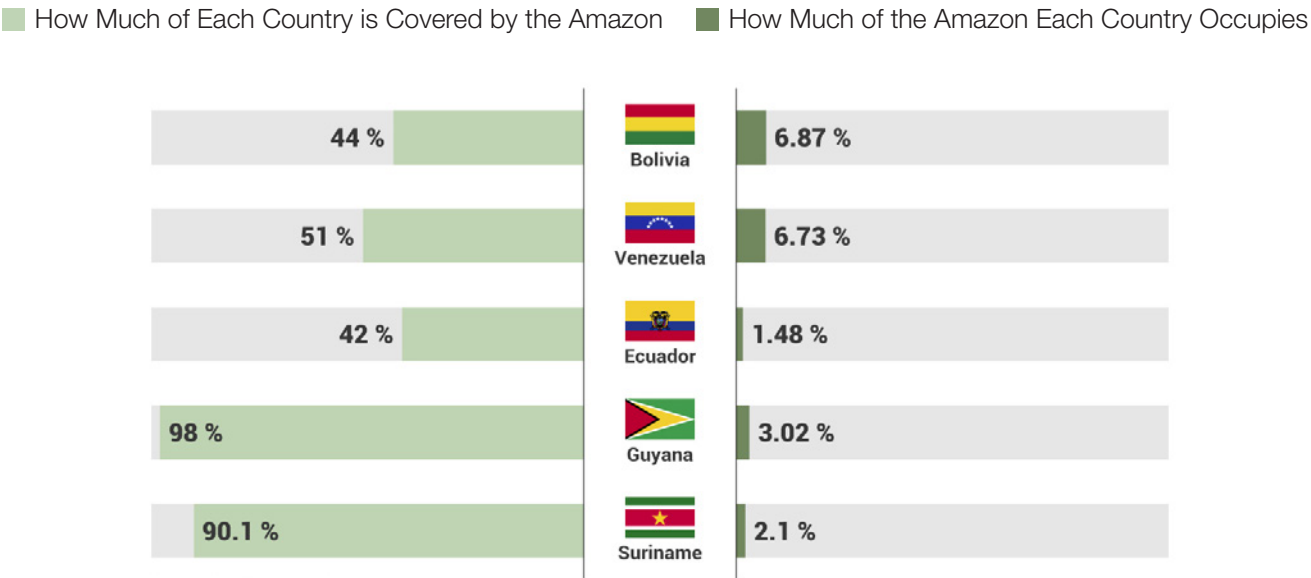
Ecuador’s Amazon region encompasses just two percent of the Amazon,<sup>8</sup> though it is home

to one of the world’s last high-biodiversity wilderness areas: the Yasuní National Park.<sup>9</sup> Six eastern provinces make up its Amazon region. These include Sucumbíos to the north; Napo, Orellana and Pastaza in the center; and Morona Santiago and Zamora Chinchipe to the south.<sup>10</sup>

Around 98 percent of Guyana is classed as being part of the Amazon.<sup>11</sup> Approximately three quarters of the nation is covered by forest.<sup>12</sup>

Similarly, over 90 percent of Suriname forms part of the Amazon.<sup>13</sup> Its three southern districts of Para, Brokopondo, and Sipaliwini are all part of the region. The largest of all three, Sipaliwini, covers around three quarters of Suriname’s total national territory.<sup>14</sup>

# The Amazon Rainforest



Visualization: insightcrime.org  
October 2022

Source: Amazon Geo-Referenced Socio-Environmental Information Network, Mongabay, BBC, UN

The information gathered has been used to develop a picture of how environmental crime works; the actors involved; how it overlaps with legal economies and different types of criminal activities; and what governments are doing to curb deforestation and its drivers. The report concludes with some opportunities for intervention.

The Amazon Basin encompasses an impressive share of the world’s known biodiversity.<sup>15</sup> The giant forest plays a key role as a storehouse of carbon.<sup>16</sup> This carbon sink, however, is in decline as trees are being cut down at a faster rate.<sup>17</sup>

According to Global Forest Watch, an online platform that regularly monitors deforestation worldwide using a standardized methodology, our five countries of study combined lost more than 10 million hectares of tree cover between 2001 and 2021.<sup>18</sup> This equates to the whole of Portugal being cut down.

The Amazon forests are facing a double risk. As criminal groups diversify across the region, no longer solely dependent on the drug trade, they are finding more opportunity in a range of environmental crimes, including timber trafficking, illegal mining, and wildlife trafficking.

Meanwhile, governments in the Amazon region have struggled to find a balance between economic development and environmental protection.<sup>19</sup> The surging demand for commodities like beef and palm oil and the resulting expansion of the agribusiness frontier into the Amazon have put pressures on forests and local communities.<sup>20</sup>

The different challenges that the five countries of study face – including those related to the pandemic, insecurity, or political and criminal chaos – have overshadowed the protection of the Amazon. The lack of adequate resources and cohesion between these nations further spurs rampant deforestation, habitat destruction, and biodiversity loss.<sup>21</sup>

As in Peru<sup>22</sup> and Colombia,<sup>23</sup> the main actors involved in environmental crime in these countries fall into the categories of entrepreneurial criminal networks, Non-State Armed Groups (NSAGs), cheap labor, and legal actors, such as corrupt state authorities or legally registered companies that also play a part in facilitating these crimes.

In Venezuela, due to the presence of NSAGs, the involvement of these actors in illegal mining is prevalent.<sup>24</sup> In others, environmental damage is encouraged by governments, as is the case of agriculture in Bolivia and Ecuador. However, they are frequently associated with illegal acts, like land grabbing or uncontrolled fires to clear land.<sup>25</sup>

While the main motors of deforestation vary from country to country, one driver is common throughout the region: illegal gold mining. The illegal mining boom took off in neighboring countries of Colombia and Peru. The lucrative profits and the criminal dynamics that emerged there provided a blueprint for its expansion into Brazil, Bolivia, Ecuador, Venezuela, Guyana, and Suriname.<sup>26</sup>

In the wake of Venezuela's hyperinflation and economic woes, the regime of President Nicolás Maduro relied on its gold reserves to prop up its spending. The illegal gold proceeds have strengthened corrupt state officials and NSAGs present in the country, from the ex-Farc Mafia,<sup>27</sup> dissidents from the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia – FARC), to local criminal groups known as “sindicatos.”<sup>28</sup>

Guyana's mining scene is dominated by a small number of companies that hold the titles to large swaths of land, allowing small- and medium-scale miners to operate on their concessions for a fee.

To the east, Suriname's gold mining dynamics are even more concentrated, with just two international companies. The companies, which control much of the country's mineral wealth, bring in a mix of local and international labor to operate on their concessions.

In both countries, small-scale illegal miners drive demand for mercury, contaminating the surrounding environment and water sources.

In Ecuador, illegal miners encroach on legal industrial mining sites.<sup>29</sup> Meanwhile, in Bolivia, mining cooperatives work beyond their limits or without permits.<sup>30</sup>

The region is also a hub for wildlife trafficking. Thriving demand for animals and their parts threatens hundreds of thousands of birds, reptiles, and mammals.<sup>31</sup> Jaguars are ensnared for their skulls, skins, and fangs.<sup>32</sup> Jaguar parts are sent to China by plane or through postal services. In the Asian country, these are often passed off and sold as tiger products, which are prized for medicinal purposes and clothing.<sup>33</sup>

Unlike in Colombia – where the ex-FARC mafia have played a large role in illegal mining, land grabbing linked to cattle and agricultural activities, and coca cultivation – NSAGs play a lesser role in these countries of study. Aside from Venezuela, where NSAGs are heavily involved in illegal mining, the main players in these countries are entrepreneurial criminal networks connected to timber trafficking, mining, and wildlife trafficking.

In order to halt climate change, world leaders gathered in Glasgow, Scotland for the COP26 Climate Summit in November 2021. One hundred and ten countries pledged their commitment to rein in global deforestation by 2030.<sup>34</sup> The abstention of Bolivia and Venezuela, two of the nations with the highest rates of deforestation in the Amazon,<sup>35</sup> points to a larger issue that has hampered efforts to tackle deforestation and the environmental crimes fueling it in the region: weak regional cohesion.

Regional initiatives aimed at tackling environmental justice issues have been established, such as the Escazú Agreement.<sup>36</sup> However, these have been overshadowed as the Amazon countries have never marched together when it comes to protecting the Amazon. National interests have prevailed over regional ones. Diplomatic rivalries and economic development agendas have routinely taken precedent over the protection of the Amazon. Furthermore, corruption has acted as a firm barrier against synchronization of efforts and must be rigorously addressed.

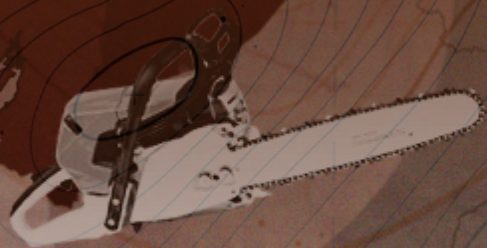
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*Amazon countries have never marched together when it comes to protecting the Amazon. National interests have prevailed over regional ones.*

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# FUELING FOREST LOSS: MOTORS OF DEFORASTATION IN THE AMAZON

ECUADOR



BOLIVIA



# FUELING FOREST LOSS: MOTORS OF DEFORESTATION IN THE AMAZON BASIN

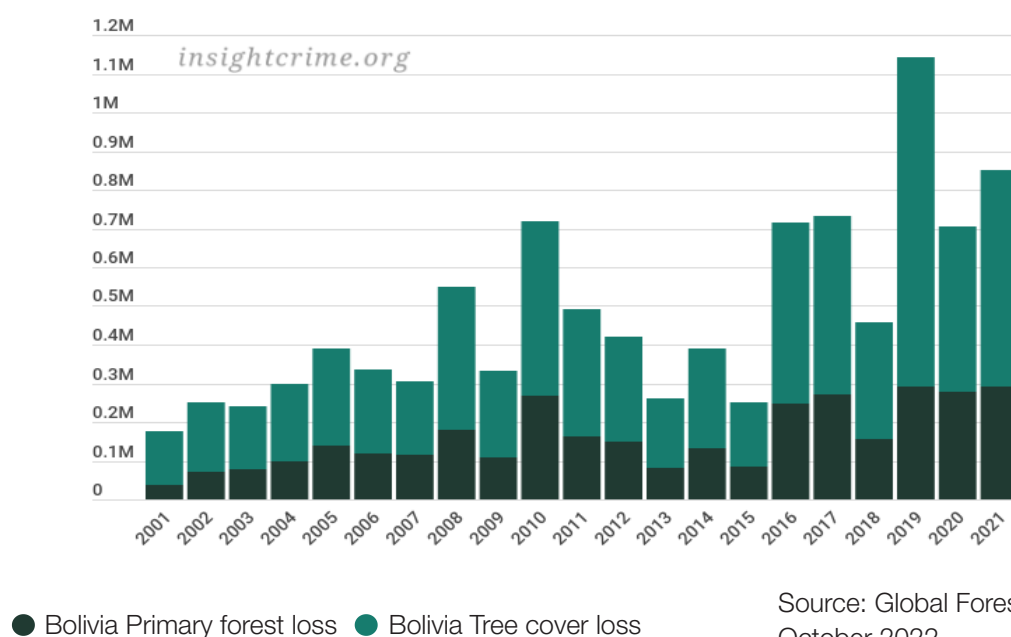
The Amazon Basin is covered by nearly eight million square kilometers of tropical forest, which equate to an area more than twice the size of India.<sup>37</sup> As a resource-rich forest, the Amazon is being plundered at an accelerating rate. In 2021 alone, nearly 2 million hectares of primary forest – the most ecologically significant forests on Earth for carbon storage<sup>38</sup> – were lost across the region, according to the Monitoring of the Andean Amazon Project (MAAP), a network dedicated to monitoring deforestation in the Amazon. This marked a slight decrease from 2020, when around 2.3 million hectares were destroyed.<sup>39</sup>

Government ministries in most of the five surveyed countries provide data on deforestation rates. However, these statistics are often outdated, and they are also based on methodologies that vary from country to country.<sup>40</sup> For consistency, this report will use data from Global Forest Watch, an online

platform that regularly monitors deforestation in each of our countries of study using a standardized methodology.<sup>41</sup> Bolivia saw the highest levels of deforestation out of the five nations, according to Global Forest Watch.<sup>42</sup> Between 2001 and 2021, the nation lost more than six million hectares of forest.<sup>43</sup> This marked a 10 percent decrease in total forest cover since the beginning of the millennium.<sup>44</sup> In 2021, it ranked third in the world among countries that recorded the highest levels of primary forest loss.<sup>45</sup>

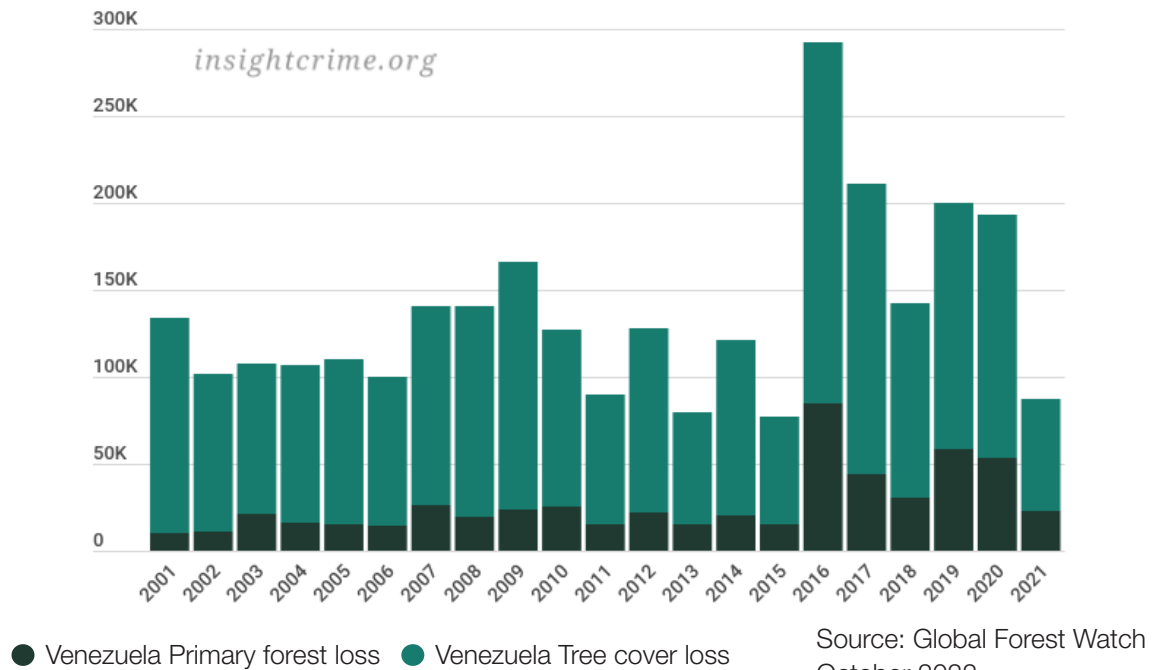
Most deforestation in Bolivia has been concentrated in its Amazon, above all in the Chiquitanía region, located in the southeastern department of Santa Cruz.<sup>46</sup> Forest loss has also been a problem in the northern zones of the La Paz and Beni departments; Madidi National Park, located in the northwest of La Paz; and at the northwestern border Bolivia shares with Peru.<sup>47</sup>

## Tree Cover Loss and Primary Forest Loss(ha) in Bolivia, 2001-2021



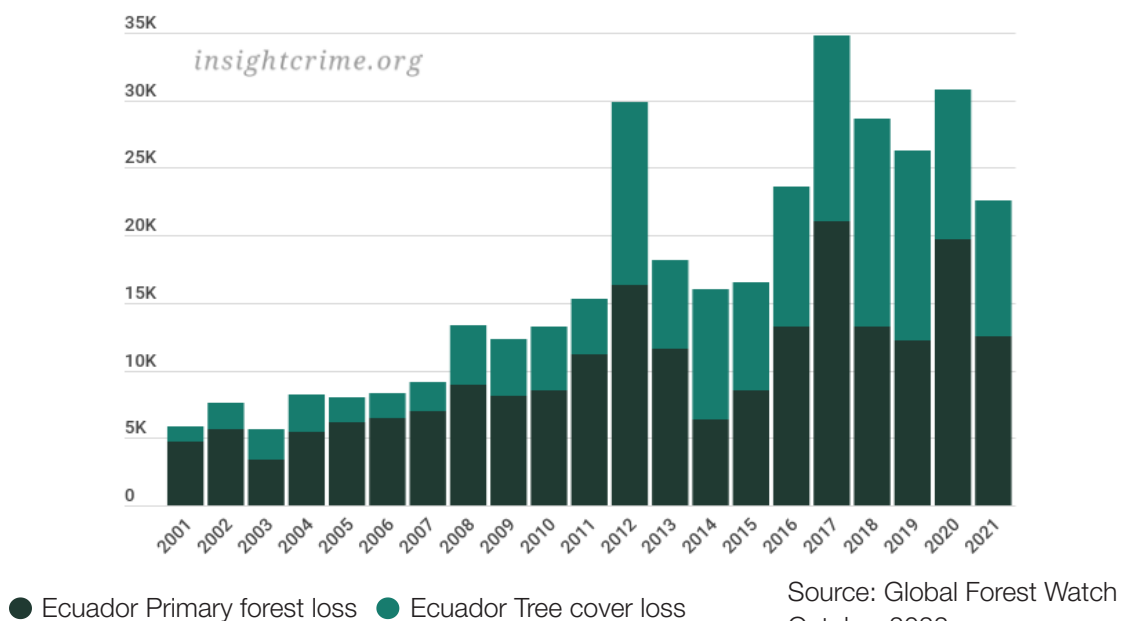
Over the same time period, Venezuela lost 2.29 million hectares of forest, more than half a million of which was primary forest.<sup>48</sup> Deforestation has been a major problem along the Orinoco River to the south of Venezuela's Amazon, where 80 percent of the country's tropical forests are concentrated.<sup>49</sup>

## Tree Cover Loss and Primary Forest Loss(ha) in Venezuela, 2001-2021



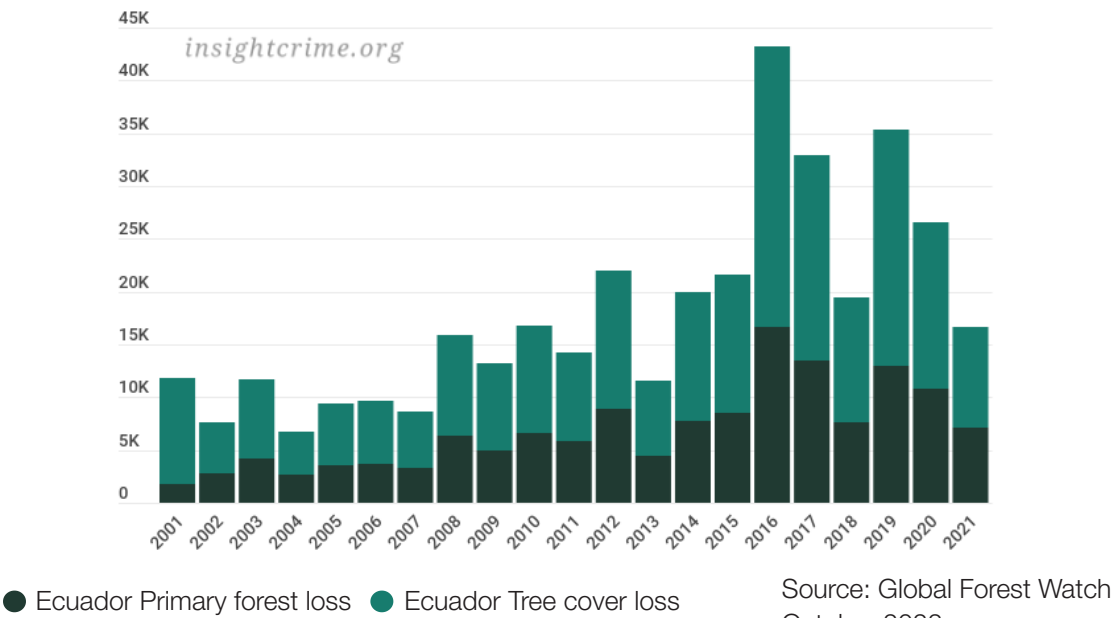
Meanwhile, 902,000 hectares of trees were deforested in Ecuador, above all in the Eastern Amazonian provinces of Pastaza, Napo, Orellana, Morona Santiago and Zamora Chinchipe. Around 15 percent of Ecuador's Amazon has been deforested to date.<sup>50</sup>

## Tree Cover Loss and Primary Forest Loss(ha) in Ecuador, 2001-2021



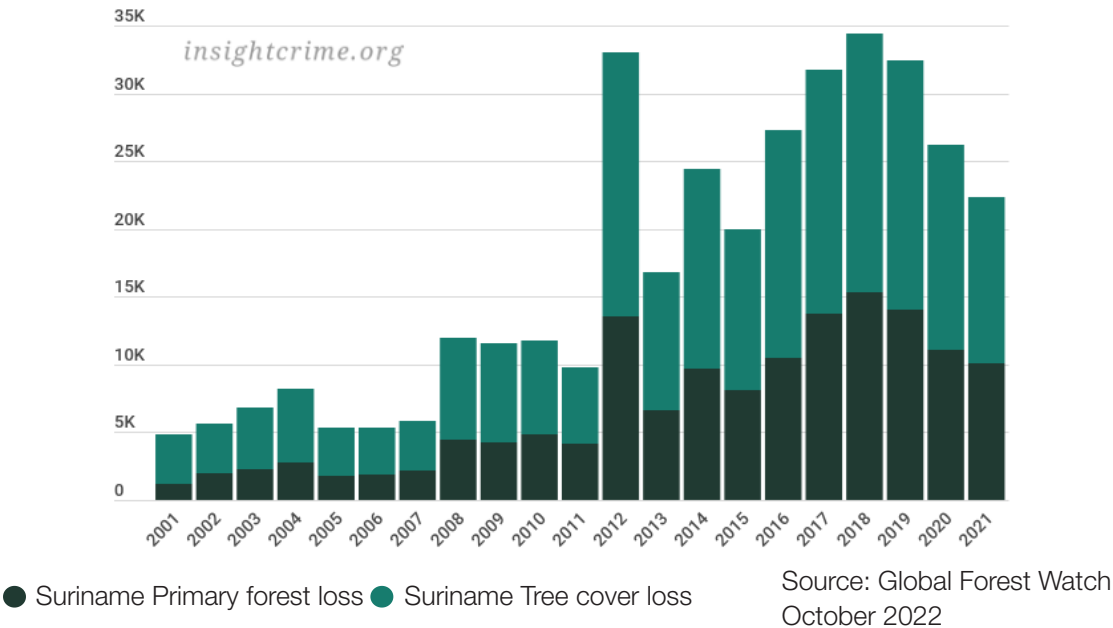
Over the past two decades, in Guyana, some 230,000 hectares of forest were destroyed, meaning deforestation rates have generally remained under 0.1 percent, far less than other Amazon countries.<sup>51</sup> Most deforestation has been concentrated in the eastern Region Ten (Upper Demerara–Berbice), and southwestern Region Nine (Upper Takutu-Essequibo), which borders Brazil.<sup>52</sup>

### Tree Cover Loss and Primary Forest Loss(ha) in Guyana, 2001-2021



In neighboring Suriname, 212,000 hectares of tree cover were lost in the same period.<sup>53</sup> The areas with the most damage consist of the Brokopondo Reservoir in the country’s northeastern region; the village of Baling Soela in the northern municipality of Centrum; along the northern Merian Kreek stream; and in the Lely Mountains, located to the northeast.<sup>54</sup>

### Tree Cover Loss and Primary Forest Loss(ha) in Suriname, 2001-2021



# Main Drivers of Deforestation in the Amazon Basin

Deforestation across the region is driven by a number of environmental crimes. These include: i) cattle ranching and the expansion of agribusiness, ii) timber trafficking, iii) coca cultivation, which we will explore in this section, and iv) legal and illegal gold mining, which will be explored in a separate section later in this report.<sup>55</sup>

The importance of these drivers varies from country to country. In Bolivia, forest fires ignited to clear land for farming stoke most deforestation.<sup>56</sup> Most forest loss in Ecuador's Amazon results from land being cleared for palm oil cultivation.<sup>57</sup> Meanwhile, Venezuela's, Suriname's, and Guyana's forests are most affected by gold mining.<sup>58</sup>

This section will focus on Bolivia and Ecuador, as cattle and agricultural activities are the main drivers behind deforestation rates in both Amazonian countries. Coca cultivation and timber trafficking have also paved the way for forest degradation in these nations, unlike in Venezuela, Suriname, and Guyana.

The next section will focus on Venezuela, Suriname, and Guyana, where legal and illegal gold mining is the primary driver of forest loss. Although mining also contributes to deforestation in Bolivia and Ecuador, its impact is lesser there. For this reason, the effects of this activity in both countries will not be addressed in this report.

## Cattle and the Expansion of Agribusiness in Bolivia and Ecuador

Cattle rearing and other agricultural activities accounted for some 84 percent of total deforestation in the Amazon Basin in 2020, according to a report from the Amazon Geo-Referenced Socio-Environmental Information Network (RAISG), a consortium of civil society organizations that seek to promote sustainability across the Amazon.<sup>59</sup>

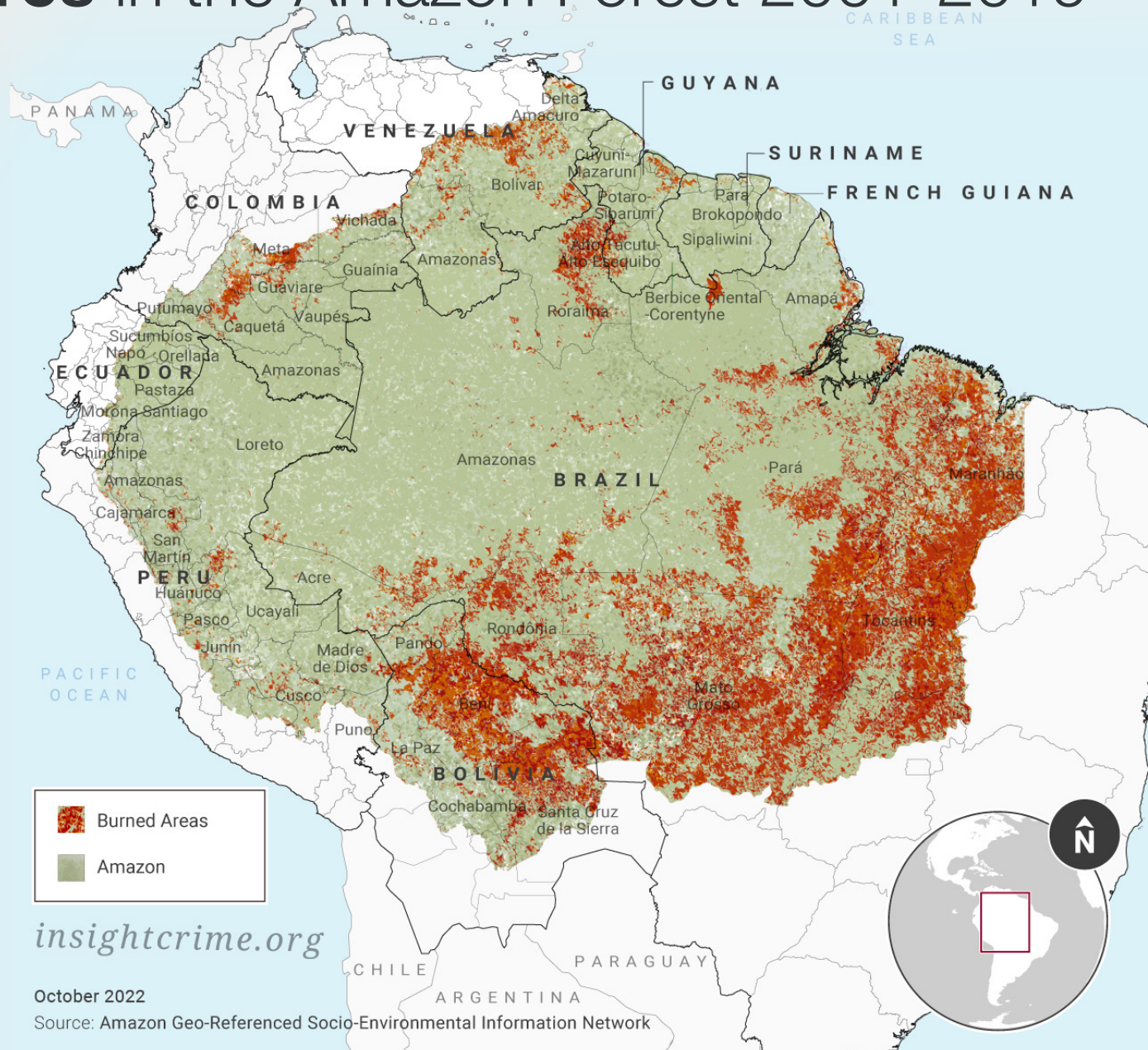
In 2000, cattle and agriculture composed 800,000 square kilometers of the region. Over the next two decades, this area increased by 81.5 percent.<sup>60</sup> The expansion can be explained by surging international demand for soy, beef, and palm oil.<sup>61</sup> Much of this demand comes from Europe and Asia.<sup>62</sup>

Small-scale agriculture – which refers to farming covering less than two hectares<sup>63</sup> – industrial agriculture, and large-scale cattle

ranching are driving deforestation across the Amazon.<sup>64</sup> Trees are cut and burned for crops and cattle grazing in areas that extend beyond legal limits, or within protected reserves.<sup>65</sup>

Fires to clear land often spread quickly and get out of control, such as happens in Brazil.<sup>66</sup> “Where there’s cattle ranching and soybean farming, there’s fire,” Marcelo Coppola, a journalist from Mongabay, explained.<sup>67</sup> As a result, 169,000 square kilometers of forest have been annually incinerated across the Amazon over the last 20 years. This equates to the whole of Uruguay being burned down each year.<sup>68</sup>

# Fires in the Amazon Forest 2001-2019



## Bolivia

In Bolivia's Amazon, the illegal clearing of forests with fire is one of the main drivers of deforestation. A "slash and burn" practice, known as "*chaqueo*," is used.<sup>69</sup> A lack of proper management, high temperatures, and strong winds mean these fires spread easily.<sup>70</sup>

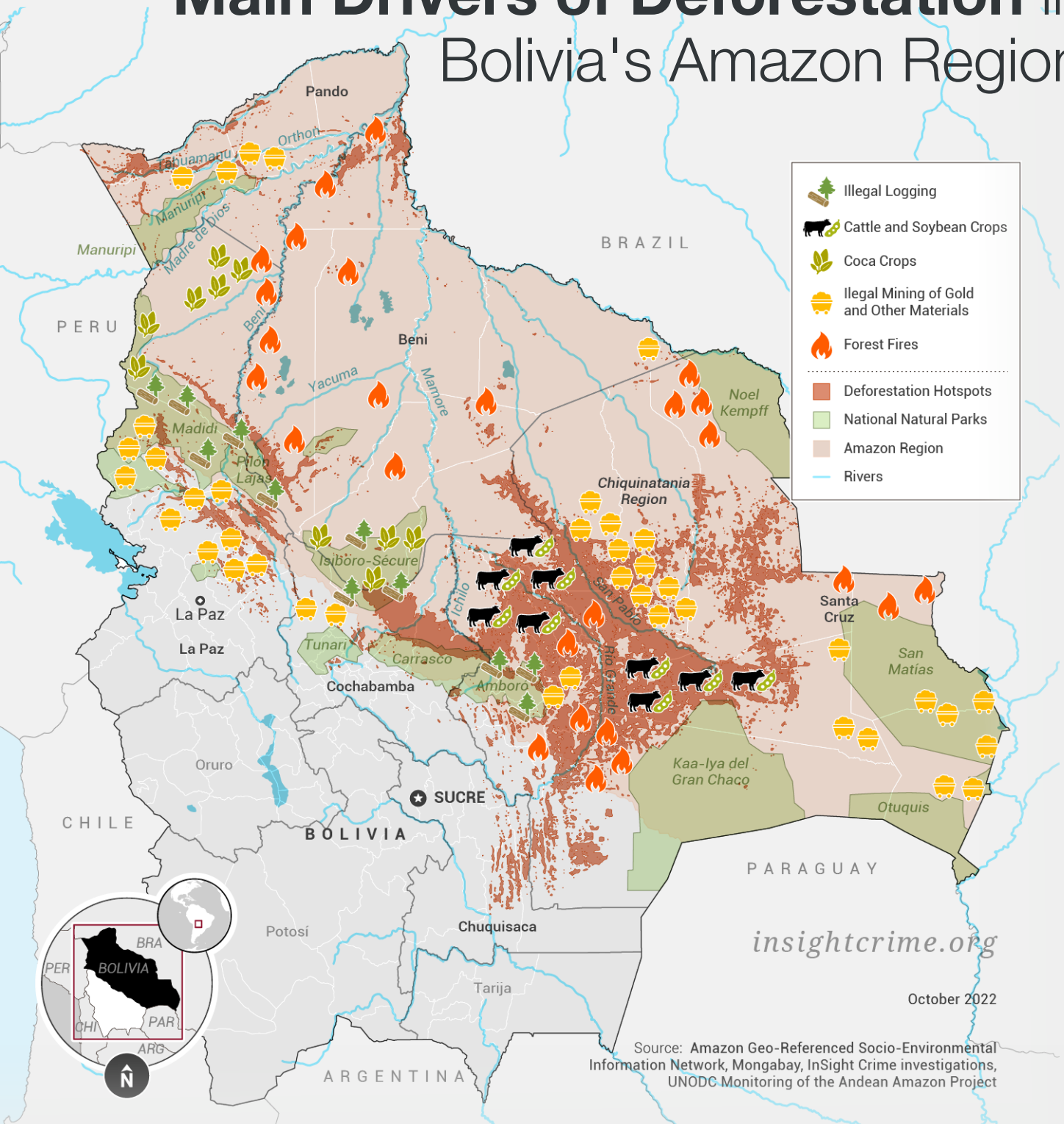
More than 120 major fires were detected in Bolivia between January and September 2020, according to MAAP.<sup>71</sup> Fires have spread across the protected Noel Kempff Mercado National Park at the nation's northeast border with Brazil, and the Chiquitania region, in the eastern department of Santa Cruz.<sup>72</sup>

Aggressive agricultural expansion on both sides of the Bolivia-Brazil border means that the territory finds itself facing increasing pressure on two fronts. In Bolivia, particularly in the Santa Cruz department, the government's decision to regularize lands claimed by farmers and landowners has led to more forest areas being cleared, laid claimed to, and transferred to the hands of a few individuals.<sup>73</sup> Brazil, for its part, has made Mato Grosso, the state bordering Santa Cruz, one of its agricultural capitals. The state is the largest Brazilian producer of beef.<sup>74</sup>

In Bolivia, areas most affected by forest fires in Chiquitania are populated by settlers and “interculturales” (intercultural communities) that do not identify as a distinct ethnic group but claim to be a mixture of immigrants and locals. Alex Villca Limaco, communications secretary at the National Coordinating Council of Indigenous Peoples for the Defense of Territories and

Protected Areas (Coordinadora Nacional de Defensa de Territorios Indígenas Originarios Campesinos y Áreas Protegidas- CONTIOCAP), revealed that some 1,500 families belonging to intercultural communities have settled in Santa Cruz to grow soy and raise livestock.<sup>75</sup>

## Main Drivers of Deforestation in Bolivia's Amazon Region



*insightcrime.org*

October 2022

Source: Amazon Geo-Referenced Socio-Environmental Information Network, Mongabay, InSight Crime investigations, UNODC Monitoring of the Andean Amazon Project

Agricultural activities and land grabbing, also known as land usurpations, often go hand in hand in the Bolivian Amazon. Numerous sources agreed that the latter occurred during the presidency of Evo Morales, between 2006 and 2019.<sup>76</sup>

Under Morales, the nation adopted a policy called the “Framework Law on Mother Earth and Integral Development to Live Well” (Marco de la Madre Tierra y Desarrollo Integral para Vivir Bien) in 2012. This prohibited the conversion of forest land-use into other uses in zones suitable for forestry.<sup>77</sup> It also sought to prevent the expansion of the agribusiness frontier.<sup>78</sup> However, at the same time, the former president paradoxically promoted the expansion of agriculture and cattle rearing into protected areas.<sup>79</sup>

“This is just another tool to ensure the economy continues to grow,” Morales said in August 2019, when celebrating a large shipment of beef being sent to China.<sup>80</sup>

During his tenure, the National Institute of Agrarian Reform (Instituto Nacional de Reforma Agraria - INRA), the body in charge of land reform in Bolivia, titled plots of land to develop agricultural activities. According to Fundación Tierra (Earth Foundation), an NGO that promotes sustainable rural development in Bolivia, these titles went beyond limits established by the nation’s constitution.<sup>81</sup>

“The government granted titles in [protected] areas that should not be used for agriculture or cattle rearing,” said Eduardo Franco Berton, a journalist who has covered environmental crime in Bolivia extensively.<sup>82</sup> This dynamic has driven deforestation since Morales was in power, and it continues growing today after Morales’ departure.<sup>83</sup>

Other irregularities have also been reported. INRA has given land titles to rural communities that migrate from the highlands to settle in the Chiquitania region, in the eastern department of Santa Cruz.<sup>84</sup> In 2019, INRA allowed 69 rural communities to settle on 130,000 hectares of land that formed part of state-owned forest areas in Chiquitania.<sup>85</sup> In these areas, communities

work beyond legally permitted limits, felling expanses of trees to further farming. This has contributed to deforestation and is often driven by Mennonite communities.<sup>86</sup>

Others have acted around legal requirements to claim land. Alcides Vadillo, regional director at the Fundación Tierra, revealed “[ghost] communities have been invented so land can be pursued.”<sup>87</sup> He added that many of those who receive land titles sell plots to medium- and large-scale cattle ranchers and farmers. This has led to land trafficking<sup>88</sup> and a large amount of land being owned by few individuals.<sup>89</sup>

## Ecuador

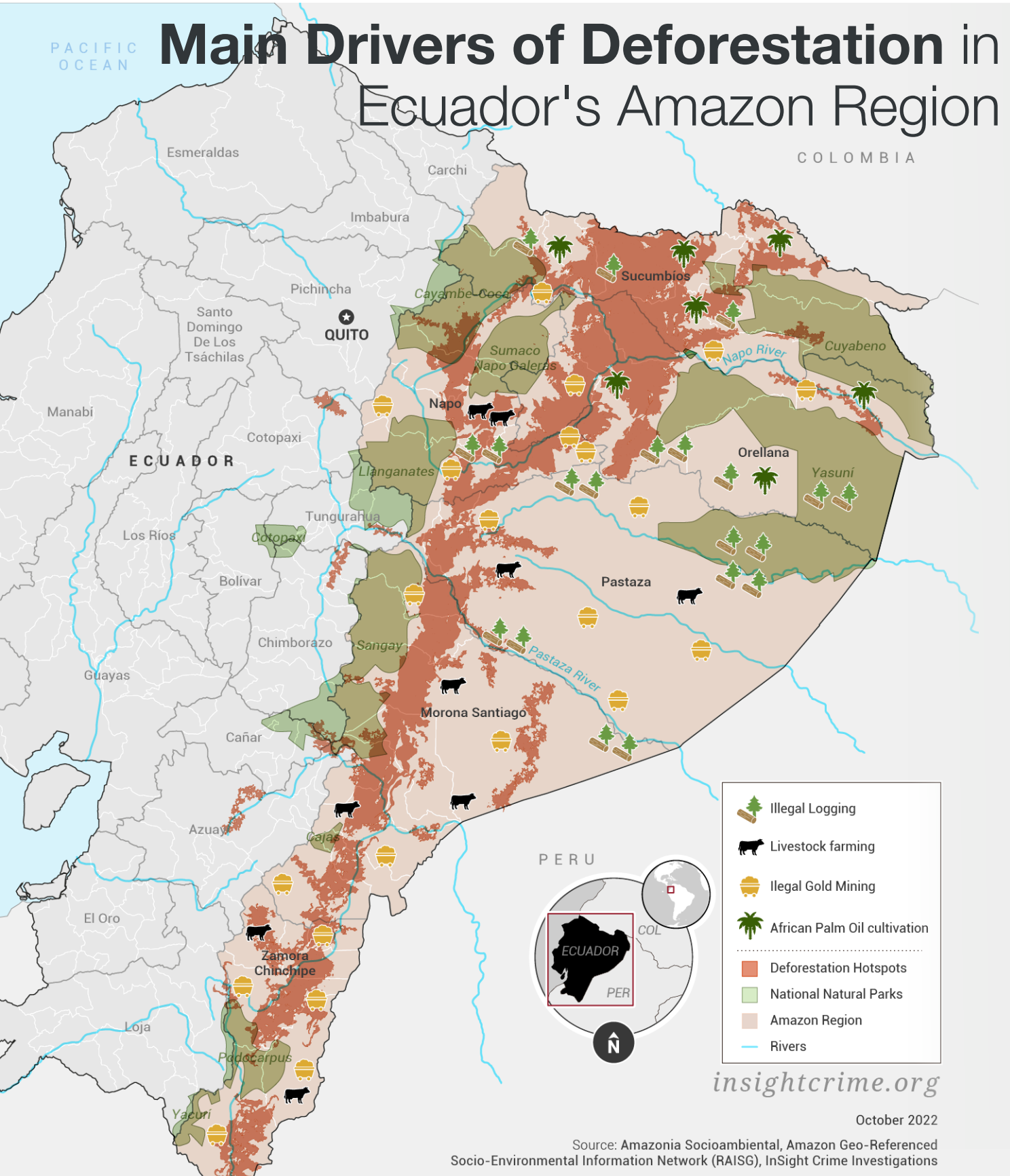
As in Bolivia, deforestation in Ecuador’s Amazon is mostly driven by agro-industrial interests. Sixty-five percent of land use across Ecuador’s Amazon is designated for pasture, according to the United Nations Development Programme (UNDP).<sup>90</sup> A lack of economic incentives for farmers discourages them from being sustainable and efficient in their practices, according to the UNDP.<sup>91</sup> Meanwhile, the expansion of industrial agriculture has reduced possibilities for small-scale agriculture. As access to land has become scarce, the illegal grabbing of small plots has ramped up.<sup>92</sup>

Agricultural interests often drive the unconstitutional eviction of communities from territories that have belonged to them for centuries. In many cases, intimidation and falsified documents are used to expel them from their homes.<sup>93</sup> Otherwise, agricultural activities linked to land grabbing are fomented by judicial decisions and rulings issued by authorities.<sup>94</sup>

Once the land is cleared, cattle are reared, or African palm oil crops are sown.<sup>95</sup>

Carlos Mazabanda, field coordinator for Ecuador at Amazon Watch, said that palm oil production has affected the north of the nation’s Amazon region.<sup>96</sup> The activity has maintained a heavy presence in the northern provinces of Orellana and Sucumbíos.<sup>97</sup>

Several protected forests in these provinces have been illegally invaded to sow palm oil crops, according to Mónica Navas, who was in charge of designing the Sustainable Amazon Project promoted by the Global Environment Fund (GEF).<sup>98</sup> “We are talking about more than 56,000 hectares [invaded] to the north,” she said. “The Napo-Payamino I and II Protected Forest [with an area of 1,025 hectares] is totally appropriated, invaded.”<sup>99</sup>



## Land Grabbing and Land Trafficking in the Amazon Basin

Land-related crimes are a recurring phenomenon across the Amazon, but each country has its own dynamics.

Land grabbing consists of the purchase or leasing of large areas of land.<sup>100</sup> Plots of land across the Amazon are claimed by individuals, governments, and corporations to facilitate food production and other agricultural activities.<sup>101</sup> In some cases, agricultural businesses use legal loopholes and may receive the backing of local and national governments. In others, the farming is illegal.

In Brazil, land grabbing is associated with the unlawful claiming, invasion, and occupation of public lands for agricultural use by entrepreneurial criminal networks. The land grabs are intended not only to generate economic value, but to legitimize the theft of public land by masking it as a productive enterprise.<sup>102</sup>

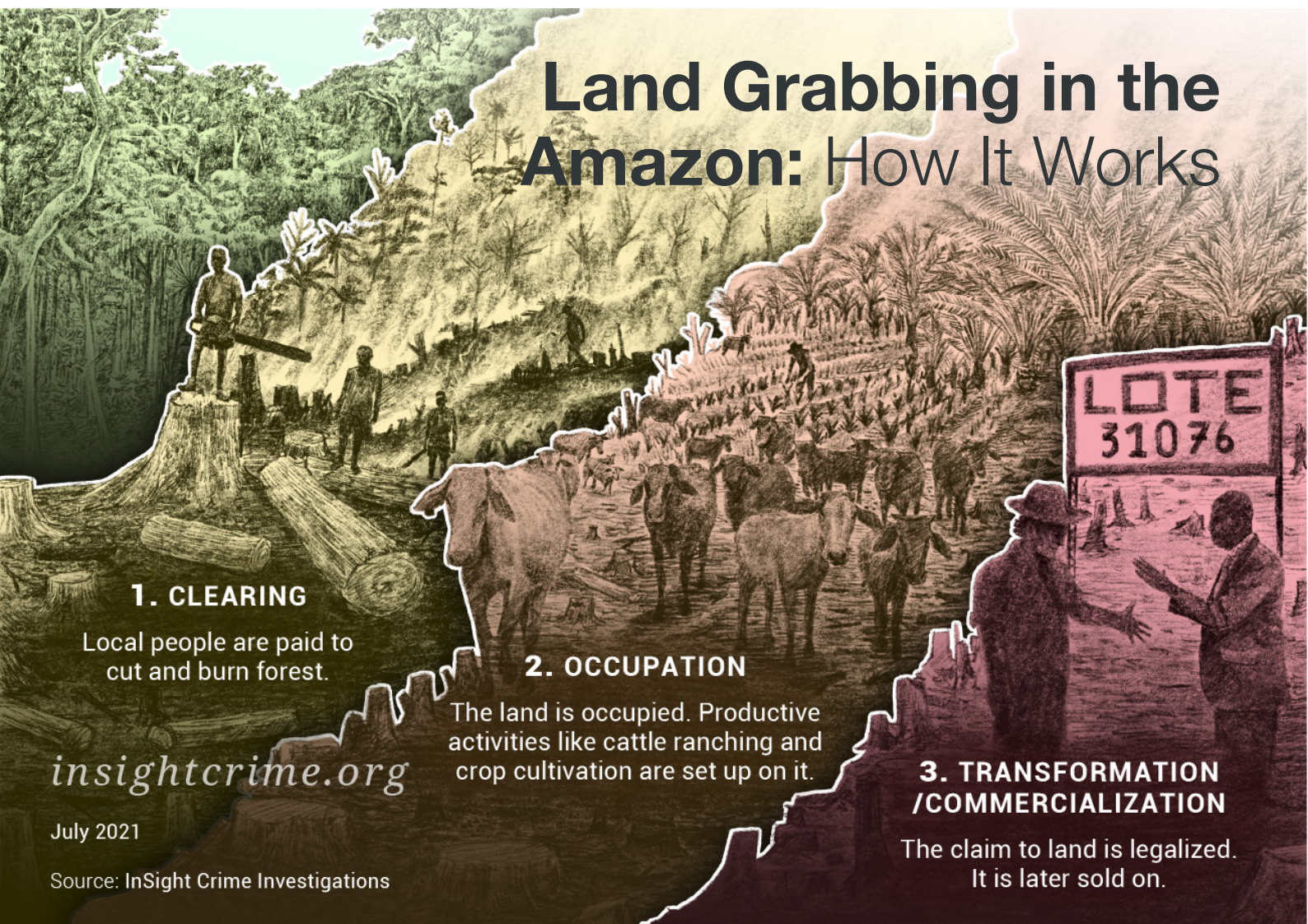
Meanwhile, land trafficking refers to the acquisition of tracts of land – large or small and mostly for the production of agricultural commodities – under corrupt land titling mechanisms. In the Peruvian Amazon,<sup>103</sup> criminal networks organize the occupation of the Amazon lands by farmers and native communities, providing them with legal security to access titles that they later sell to the highest bidder.

Despite the differences, land grabbing and land trafficking across the Amazon typically follows three steps: clearing, occupation, and commercialization.

During the clearing stage, patches of forest are cut and burned. This usually occurs once a road has been cut in a strategic location, or when illegal logging has stripped an area of most of its trees.<sup>104</sup> Plots in protected areas – including national parks, forest reserves, and Indigenous lands – are most targeted. Local people may also be asked to leave their homes by invaders, and violence is sometimes used to displace entire communities.<sup>105</sup>

Then, the land is occupied. Agricultural activities are often set up to prove the plot of land is being used “productively.” These activities most often include cattle rearing, African palm oil crop cultivation, and soybean cultivation.<sup>106</sup>

Once the land has been lived or worked on for a number of years, a claim to it may be legalized.<sup>107</sup> Otherwise, fake ownership deeds may be used to support a claim, with the support of corrupt officials.<sup>108</sup> The land is then often sold.<sup>109</sup>



## Timber Trafficking

Illegal logging in the Amazon Basin often happens as a result of other environmental crimes, such as illegal gold mining, land grabbing, and agricultural development.<sup>110</sup> Trees are also illegally felled to be explicitly trafficked. Harvested, transported, and processed in the Amazon, the timber is to be sold on international markets, including China and the United States.<sup>111</sup>

Across the region, entrepreneurial criminal networks seek high-value, often endangered, species of woods. These include Amazon Rosewood (*Dalbergia Spruceana*), Mahogany (*Swietenia macrophylla*), and Cedar (*Cedrus*), which are all used to make furniture and musical instruments.<sup>112</sup> They also source cheaper, lightweight woods like Balsa (*Ochroma Pyramidale*) to be used in the construction of wind turbines and surfboards.<sup>113</sup>

Timber trafficking unfolds through three stages: harvesting, transportation, and “transformation.” First, cutters, or “*corteros*,” chop down trees illegally. Often these forests are outside of concession boundaries and in protected areas. Then, entrepreneurial criminal networks coordinate the transportation and laundering, or “transformation,” of the wood.<sup>114</sup> Across the Amazon Basin, similar techniques are used to cover up the origins of illegally sourced timber.

Front companies and fraudulent paperwork disguise the origins of wood cut in prohibited areas, or in volumes above those authorized.<sup>115</sup> Once the timber is laundered, it is sold on international markets.<sup>116</sup>

Bolivia and Ecuador are home to some of the main hot spots for timber trafficking in the Amazon Basin.

## Bolivia

In Bolivia's Amazon, timber is illegally harvested in the Santa Cruz, Beni and Pando departments.<sup>117</sup> Protected areas are commonly targeted. Madidi National Park, in the northeastern part of Bolivia along the upper Amazon River basin, and the central Amboró National Park have been pillaged. There, high-quality, resistant hardwoods like mahogany (known locally as “*mara wood*”) and rosewood (“*tipa*”) are extracted on behalf of entrepreneurial criminal networks.<sup>118</sup>

Timber trafficking in Bolivia's Amazon is also promoted by communities in areas where forest is converted into agricultural land. “This is partly due to Law 741 of 2015,” Fundación Tierra's Alcides Vadillo explained.<sup>119</sup> Through clearing plan forms known as Planes de Desmontes (PDM-20), the law lets communities clear up to 20 hectares of trees to make way for agricultural activities.<sup>120</sup> The Authority for the Social Audit and Control of Forests and Lands (Autoridad de Fiscalización y Control Social de Bosques y Tierra – ABT) permits the sale of wood that is felled during this process.<sup>121</sup>

However, a former journalist from the Bolivian news outlet El Deber said that communities often do not respect the 20 hectares limit.<sup>122</sup> Instead, some get involved in timber trafficking and sell clearance plan forms (PDM-20) to timber mafias, which use the documentation to launder wood.<sup>123</sup>

Once felled, the wood is laundered using fraudulent paperwork claiming it was harvested in legally authorized areas and quantities.

Forest Origin Certificates (CFO) are frequently filled in with false data.<sup>124</sup> This documentation may also be used to pass endangered, protected species off as wood that can be legally felled.<sup>125</sup>

Timber is later moved on to cities across the Amazon region or to duty-free trading hubs.<sup>126</sup> There, it is processed in sawmills owned and run by intercultural communities and Chinese citizens, according to Alex Villca Limaco.<sup>127</sup>

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*Once felled, the wood is laundered using fraudulent paperwork claiming it was harvested in legally authorized areas and quantities. Forest Origin Certificates (CFO) are frequently filled in with false data.*

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## Ecuador

In Ecuador's Amazon, timber traffickers have long sought high-value, endangered trees. Cedar wood has been targeted for years. In 2011, the International Tropical Timber Organization reported up to 85 percent of Spanish Cedar harvested in Ecuador's Amazon was illegally sourced.<sup>128</sup> However, as fine woods have become harder to come by, traffickers have focused on cheaper, fast-growing woods like balsa.<sup>129</sup>

## Ecuador's Balsa Boom



### 1. LOGGING

Balsa trees are felled by loggers who encroach on protected territories on behalf of timber mafias.



### 2. TRANSPORTATION

The wood is then sent on to neighboring Peru via river or road. It is transformed in sawmills across the border.



### 3. COMMERCIALIZATION

It eventually reaches international markets, where it is used to construct wind turbines, surfboards and musical instruments.

*insightcrime.org*

October 2022

Sources: InSight Crime Investigations, Mongabay, The Economist

Balsa, like mahogany and cedar, has also been taken from Indigenous lands along the Pastaza and Curaray rivers, which cut through the central Amazonian province of Pastaza and Morona Santiago to the south.<sup>130</sup>

Ana Cristina Basantes, a journalist who has followed environmental crime in Ecuador closely, confirmed this.<sup>131</sup> She explained that illegal balsa harvesting has driven increased deforestation on lands owned by the Indigenous Achuar people, who live along Ecuador's border with Peru.<sup>132</sup> Between March and September 2020, some 20,000 balsa trees were cut down on a series of islands in front of the communities that live on the banks of the Copataza River, within Achuar territory.<sup>133</sup>

When few trees remain, cleared land may later be used for agricultural activities, like African palm oil cultivation, ecologist Nathalia Bonilla said.<sup>134</sup>

Some of the wood stays in the region for local use. Some is also sold in the form of furniture across Ecuador, in the highland province of Azuay and Pichincha in the northern Sierra region.<sup>135</sup>

However, it is more commonly moved on to neighboring Peru, via road or river. Experts in balsa trafficking revealed that wood from Ecuador's Amazon is often sent downstream to the city of Iquitos, in Peru's northeastern Loreto region.<sup>136</sup> Officials have also detected traffickers using the Napo River to send illegally felled timber across the border, according to an investigation by Ojo Público.<sup>137</sup>

Otherwise, it is transported overland. Mobilization guides provided by the Ministry of the Environment are filled in with fraudulent information, as happens in Bolivia. Drivers often carry more timber than specified in the paperwork.<sup>138</sup>

The wood is then usually processed in sawmills across the border.<sup>139</sup> There, timber traffickers hide behind ghost companies that flicker into existence and dispatch large volumes of wood in the space of just one or two years before disappearing.<sup>140</sup>

The balsa boom has brought with it a wave of violence along Ecuador's border with Peru. Loggers are often shortchanged in payment for their services, causing conflict. In addition, loggers are known to harass local women and girls, inciting further violence. In many cases, a lack of state control – mixed with fear of repercussions – leaves communities unwilling to denounce the violence. All of this insecurity is increasingly catalyzed by the flow of arms, munitions, and alcohol into local communities.<sup>141</sup>

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*The balsa boom has brought with it a wave of violence along Ecuador's border with Peru. Loggers are often shortchanged in payment for their services, causing conflict. In addition, loggers are known to harass local women and girls, inciting further violence.*

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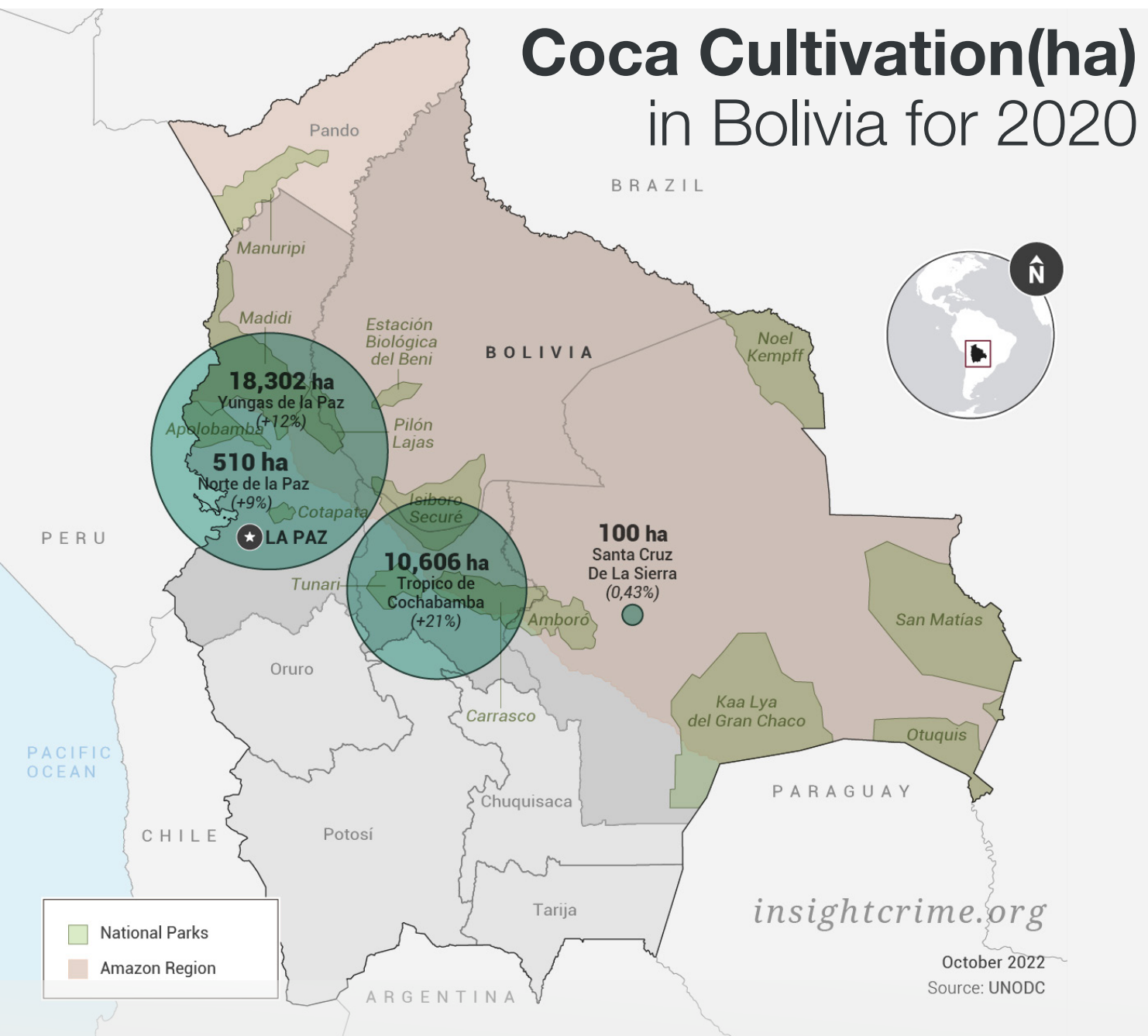
# Coca Cultivation

While the Amazon regions of Ecuador<sup>142</sup> and Venezuela see the sporadic appearance of small-scale coca plantations,<sup>143</sup> most coca, the raw material for cocaine, is found in Colombia, Peru, and Bolivia.

Unlike Colombia, coca cultivation in our countries of study is not a major motor of deforestation. However, patches of forest are cleared for coca plantations in Bolivia, meaning the activity has had some impact.<sup>144</sup>

In Bolivia, Law 1008 of 1988 permitted coca crops to be grown legally across 12,000

hectares in the Yungas region of the La Paz department.<sup>145</sup> In 2017, the government expanded this “authorized zone” to 22,000 hectares, covering the Yungas region and the Cochabamba Tropics, found in the north of Bolivia’s central Cochabamba department.<sup>146</sup> The United Nations Office on Drugs and Crime (UNODC) estimated coca crops covered 29,400 hectares in total in 2020.<sup>147</sup> This suggests that at least 7,500 hectares are illegally cleared, with the coca grown there potentially used to manufacture cocaine. It is possible that this figure is much higher.



Although most coca crops in Bolivia are located in the Andean region, some plantations have been detected in protected areas across the Amazon.<sup>148</sup> This includes in the national parks Madidi and Amboró. They have also been spotted in Apolobamba National Park, located to the west of La Paz, and Cotapata National Park in the department's Yungas region.<sup>149</sup>

In Bolivia's Amazon, coca is processed in rural, remote areas, particularly in the department of Santa Cruz.<sup>150</sup> There, trees are cut down to clear ground for clandestine airstrips that permit the entrance of chemicals, personnel, and supplies, as well as the export of drugs.<sup>151</sup>

## Actors Stoking Deforestation

A number of actors are involved in agricultural activities, timber trafficking, and coca cultivation across the Amazon Basin. They fall into four main categories: legal actors, entrepreneurial criminal networks, non-state armed groups (NSAGs), and cheap labor.



October 2021

Source: InSight Crime Investigations

## Entrepreneurial Criminal Networks

Entrepreneurial criminal networks sit at the top of the chain for each environmental crime. These are market driven and motivated by the profits from the trade in timber, land, or drugs. Entrepreneurial criminal networks finance and orchestrate environmental crimes in the Amazon Basin, staying in the shadows while relying on the work of cheap labor. Such actors typically form loose networks dedicated to criminal activities like timber and drug trafficking. They wield the most influence and economic power in a given criminal activity.

Entrepreneurial criminal networks coordinate land grabs and land trafficking across the Amazon regions of both Bolivia and Ecuador. In Bolivia, land grabbing is often driven by politically powerful Brazilian and Argentine citizens,<sup>152</sup> who have interests in agricultural activities.<sup>153</sup> They subcontract cheap labor to open illegal roads connecting usurped lands with municipalities and cities.<sup>154</sup>

Entrepreneurial criminal networks also coordinate and finance timber trafficking in the Amazon regions of Bolivia and Ecuador.<sup>155</sup> These networks are usually overseen by bosses, or “*patrones*,” as in Colombia and Peru. In Bolivia, *patrones* have been identified operating in the municipality of Yapacaní, located in the northwest of the nation’s Santa Cruz department. They finance timber trafficking, subcontracting “*corteros*” (cutters), who are usually locals and Indigenous people in charge of sourcing, identifying, and logging wood across the region.<sup>156</sup>

A Bolivian logger revealed there were at least five major *patrones* around Amboró National Park, in Santa Cruz, as of 2020.<sup>157</sup> Armed guards working for them protect cutters and set up logging camps in national parks.<sup>158</sup>

Another type of intermediary, known as a broker, travels between Amazonian communities in search of in-demand species of wood.<sup>159</sup> Brokers buy illicitly harvested wood directly from Indigenous people or loggers working in the region. In Ecuador, some brokers work with local communities to harvest the species they seek.<sup>160</sup> Others pressure and coerce local people to find, fell, and sell them trees. Journalist Ana Cristina Basantes revealed that these intermediaries extort local communities or pay them extraordinarily little for illegally chopped wood.<sup>161</sup>

Brokers work with “transporters,” who move the wood onward in trucks or in boats. Blank mobilization guides or permits filled with irregularities<sup>162</sup> are often employed.

In Bolivia, boats known locally as “*callapos*” are used by transporters to move wood along the Yapacani and Ichilo rivers, which connect Amboró National Park to the cities of Santa Cruz de la Sierra or Cochabamba, according to Alex Villca Limaco.<sup>163</sup> Each trip takes them at least three days and pays up to \$580.<sup>164</sup>

## Legal Actors

A number of legal actors also facilitate environmental crimes across our countries of study. They may be members of local communities who have permits to log and farm but work lands beyond established legal limits and encroach on protected territories. These may also be legal enterprises, or public entities that get involved in environmental crime. In some cases, they maintain loose ties to entrepreneurial criminal networks; in others, they work with the complicit agreement of government authorities. The role of government officials will be explored later in the corruption section.

In Bolivia, members of Mennonite and intercultural communities who have permits to fell trees and farm encroach upon protected lands.<sup>165</sup> At a higher level, INRA has permitted land in constitutionally protected areas to be used for farming.<sup>166</sup>

Meanwhile, in Ecuador, some palm oil companies have been complicit in deforestation across the nation's Amazon and beyond. According to journalist Ana Cristina Basantes, palm oil companies have taken over land belonging to local communities.<sup>167</sup> The sowing of palm plantations not only devastates forests, but pesticides used in palm oil production filter into water sources used by the communities, Basantes added.<sup>168</sup>

As for logging, sawmills play an important role in covering up the illegal origins of timber extracted across the Amazon. While illegally harvested balsa wood can be passed off as legal in Ecuador, it is most often laundered in with legally sourced timber by crossing the border into Peru. There, the illegal timber passes through sawmills, where its origins are disguised prior to legal export.<sup>169</sup>

## Non-State Armed Groups (NSAGs)

In an environmental crime context, NSAGs work with entrepreneurial criminal networks to oversee the operation of criminal economies driving deforestation in the Amazon. NSAGs are clearly defined, organized criminal organizations, including militia and guerrilla groups. They are primarily funded by illicit activities. Such groups have four defining features: a known name, a defined leadership, territorial control, and identifiable membership. Unlike in Colombia, NSAGs do not appear to be involved in land grabbing or illegal logging in our countries of study. They are, however, involved in the drug trade in Bolivia.

A journalist who has covered Bolivia's Amazon region extensively said that Brazilian groups such as the Red Command (Comando Vermelho) guard routes used to move cocaine out of Bolivia.<sup>170</sup> Mongabay founder Rhett Butler and CONTIOCAP's Alex Villca agreed that NSAGs may also finance the clearance of land for crops and drug plane landing strips.<sup>171</sup> In 2021, 46 clandestine airstrips were dismantled in Santa Cruz and Beni.<sup>172</sup> Land in the Amazon being cleared to build runways for drug planes is increasingly happening in other countries in the region, including Peru, Brazil, Guyana, and Venezuela.<sup>173</sup>

## Cheap Labor

Entrepreneurial criminal networks and NSAGs employ or threaten local people into providing the physical labor necessary for environmental crimes to occur. Socio-economically disadvantaged local people who make up this “cheap labor” usually get roped into environmental crime in our countries of study through a lack of economic alternatives, or because they are threatened into doing so. They provide the manual labor for basic tasks such as felling trees, as well as planting and harvesting illicit coca crops. They may be employees – but not necessarily members – of criminal networks and NSAGs. They may also be contractors or independent workers who interact with criminal actors that operate further up the supply chain.

The cheap labor gains the least financially and sits at the bottom rung of the criminal ladder.

Land grabbing linked to farming often relies on the manual labor of local people known as “clearers,” who are employed to cut and burn trees before agricultural activities are set up. In some cases, local communities are paid by government entities to deforest their own lands. Mónica Navas, of the Sustainable Amazon Project, said that in Ecuador’s Amazon region “banks gave money for deforestation.”<sup>174</sup> The Indigenous Secoya people of San Pablo in the Shushufindi canton of Sucumbíos province obtained a loan of \$240,000 from the National Financial Corporation (Corporación Financiera Nacional – CFN).<sup>175</sup>

While many participants in this criminal economy operate with impunity, governments are often punitive when Indigenous communities engage in deforestation. The Secoya people were fined \$375,000, despite the fact that the state provided them with money to sow the crops. Members of the community were not penalized for cutting down native forest but for allegedly failing to comply with “established procedures.”<sup>176</sup>

For illegal logging to occur, members of local communities usually form part of a labor force employed to find and cut down trees. This labor force is typically made up of “trackers,” or “*monteros*,” who seek out in-demand species of trees.<sup>177</sup>

In Bolivia, cutters are largely members of local or intercultural communities.<sup>178</sup> They are paid around \$724 for extracting eight cubic meters of wood.<sup>179</sup> Meanwhile, in Ecuador, local trackers and cutters may receive liquor, cigars, and money for their services.<sup>180</sup> However, in some cases they are not paid at all. Journalist Milagros Aguirre Andrade, who wrote a book on Ecuador’s timber trade, revealed members of local communities may be tricked into handing over their wood without being paid for it.<sup>181</sup> In other cases, cutters can make up to \$150 a day felling balsa trees in the region.<sup>182</sup>

Cutters and trackers are not always local people. They may arrive from other regions or countries in search of work. Journalist María Belén Arroyo revealed that “*colonos*,” or “settlers,” from Ecuador’s coastal region migrate to the Amazon to work as loggers.<sup>183</sup> Loggers from Peru have also invaded territories belonging to the Indigenous Yasuní peoples in the provinces of Napo and Pastaza, to source fine woods and balsa.<sup>184</sup>

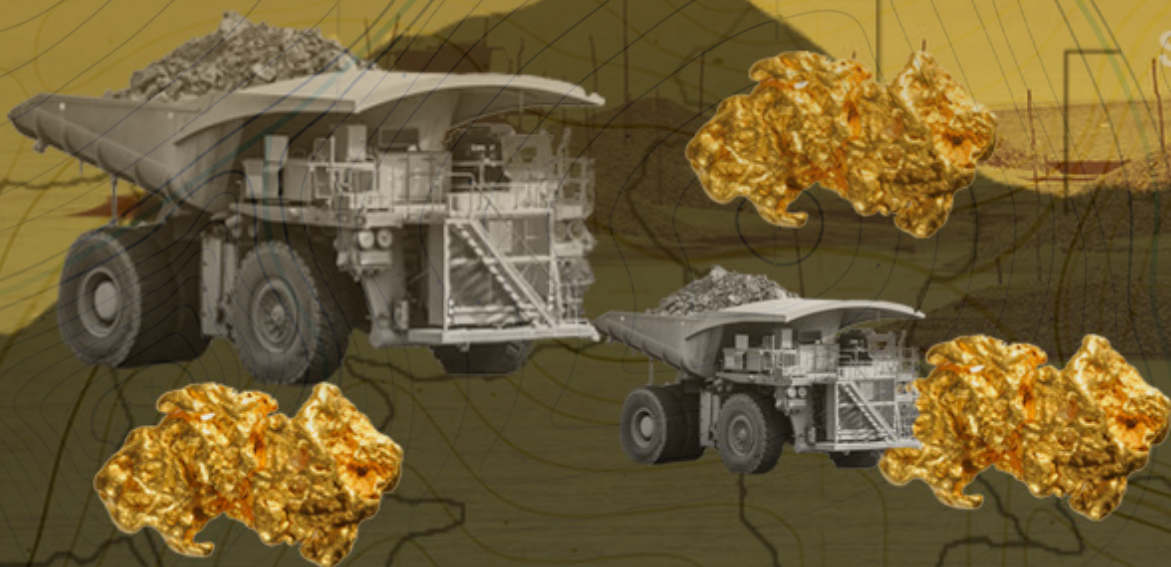
In the case of Bolivia, “carriers,” or “*lomeadores*,” also form part of this labor force. There, “lomeadores” move planks of wood to riverbanks for onward transport. They carry each individual load on their backs for up to three kilometers. Carriers are paid around 14 cents for each foot of wood carried per kilometer in Bolivia.<sup>185</sup>

# BENEATH THE SURFACE OF ILLEGAL GOLD MINING IN THE AMAZON

VENEZUELA

GUYANA

SURINAM



# BENEATH THE SURFACE OF ILLEGAL GOLD MINING IN THE AMAZON

As gold prices have skyrocketed, a boom in mining across the Amazon Basin has flourished, leaving a deep environmental footprint. Illegal mining has become one of the main drivers of deforestation in the Amazon, above all in Venezuela, Guyana, and Suriname. Though it contributes to forest loss in Bolivia and Ecuador as well, it is not the main driver, and thus this report will focus on gold mining in the former countries.

There are three forms of mining-driven deforestation in the Amazon Basin: large-scale industrial gold mining, medium-scale mining, and artisanal, small-scale mining (ASGM).<sup>186</sup> The most recent data available from RAISG shows that there are at least 4,472 illegal mining sites across the region. Some sites cover several square kilometers.<sup>187</sup>

The activity follows three main steps: extraction, transportation, and transformation/commercialization. First, gold is extracted by poorly paid miners, who work in rudimentary conditions. In many cases, they work under the control of NSAGs. Then, the metal is transported onward. It is laundered or “transformed” along the way. The origins of illicit Venezuelan gold are covered up as it is moved through Guyana, Suriname, and Colombia.<sup>188</sup> Eventually, gold and other metals reach international markets, where they are legally sold. In December 2021, a kilogram of gold fetched up to \$57,152.<sup>189</sup>

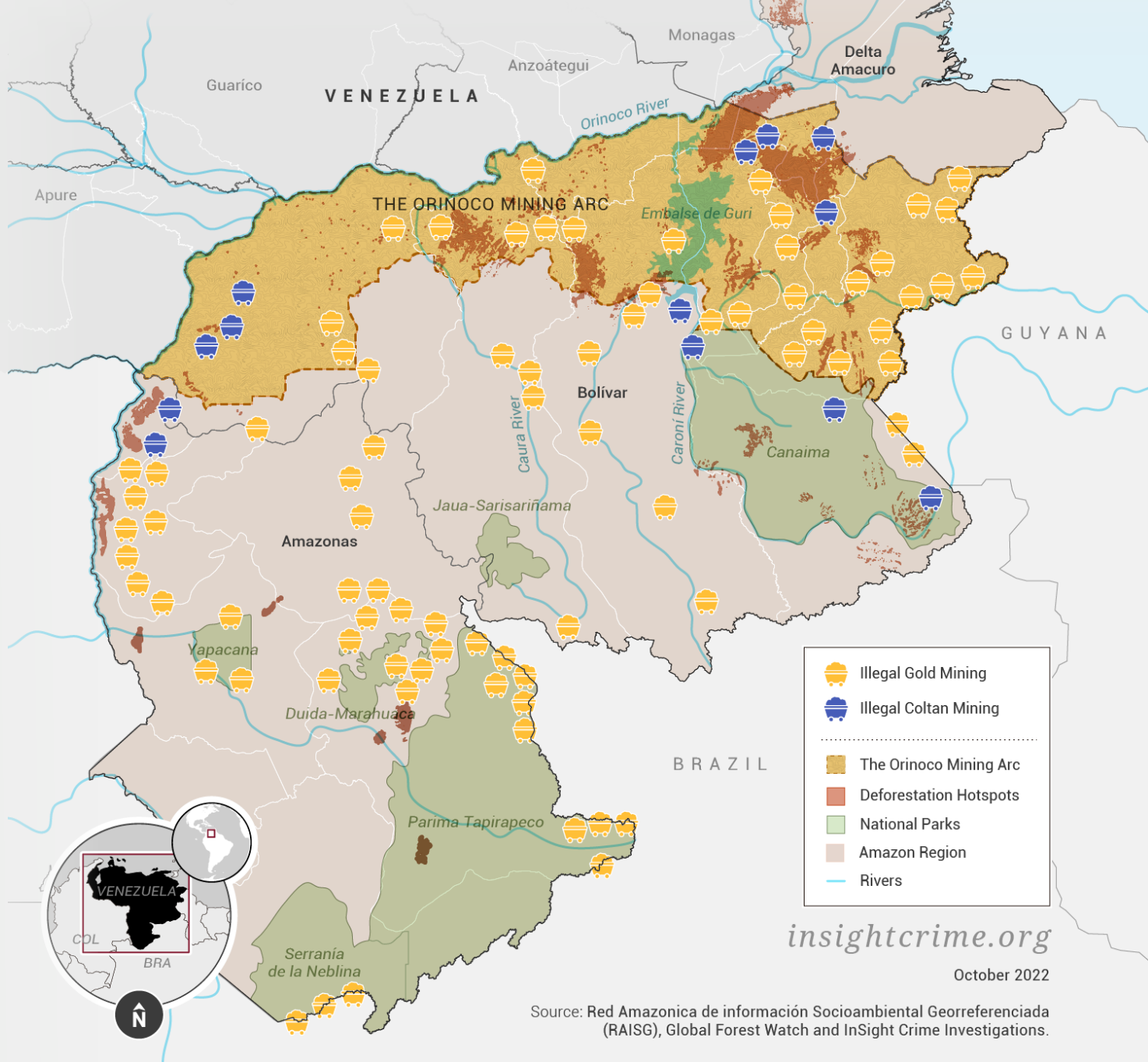
## Venezuela

In Venezuela’s southern Amazon region, gold mining is a principal driver of deforestation and a source of biodiversity loss.<sup>190</sup> It is a major criminal economy, underpinned by corruption, the use of violence, and instrumentalization of local populations by NSAGs. Currently, some 70,000 hectares are affected by illegal mining in the nation’s Amazonian states.<sup>191</sup> These include Bolívar (64,705 hectares), Amazonas (2,356 hectares), and Delta Amacuro (2,169 hectares).<sup>192</sup>

In 2016, mining across the three states faced a turning point when President Nicolás Maduro introduced the “Decree of Creation of the National Strategic Development Zone of the Orinoco Mining Arc,” which regulates the Orinoco Mining Arc (Arco Minero del Orinoco - AMO). This allowed new mines to be set up. It also encouraged public institutions tied to the regime to get involved in mining.<sup>193</sup>

While considered “legal” by Venezuela, mining along the AMO is seen as illegal by the United States and allied nations that have sanctioned the Maduro regime. Other countries – particularly those who continue to trade with Venezuela – consider the country’s mining activity as legal.<sup>194</sup> It is also important to note that concepts like “legal” and “illegal” lose all meaning at a domestic level. There are scarce regulations in place to restrict mining in Venezuela. And while some criminal groups operate independently, most involved in mining have ties to the Maduro regime.<sup>195</sup>

# Illegal Mining in Venezuela's Amazon Region



Experts from an NGO studying environmental crime in Venezuela revealed that in the Amazon each member of the regime has access to a gold mine, acting as its administrator. They choose which NSAG helps them in overseeing its operation and ensuring its security, according to the experts.<sup>196</sup>

Today, through “formal” corrupt channels overseen by officials with ties to the Maduro regime and “informal” channels dominated by NSAGs, gold is extracted, transported/ laundered, and sold.

First, gold and coltan are extracted by miners working under the control of NSAGs along the AMO. In Amazonas, ex-FARC mafia are involved in illegal gold mining in the municipalities of Atabapo, Autana, and Atures, according to an expert with a deep knowledge of illegal mining in the state.<sup>197</sup> Dissidents run illegal mining sites alongside gasoline smuggling, the expert added.<sup>198</sup> Coltan, a metallic ore refined for use in electronics, is also mined in Atures, close to the Venezuela-Colombia border. There, members of local communities are employed by dissidents to work as miners. They are often paid in coltan.<sup>199</sup>

Yapacana National Park, located in western Amazonas state, is also targeted by NSAGs. The park is a “natural island in the middle of the jungle, surrounded by rivers and controlled by guerrillas,” according to the experts from an NGO studying environmental crime.<sup>200</sup> “It is a paradise for illegal mining, all controlled by the ex-FARC or Colombia’s National Liberation Army (Ejército de Liberación Nacional – ELN),” another mining expert explained.<sup>201</sup>

Illegal mining also occurs at the state’s border with Brazil. Miners in Amazonas control illegal sites located in mountainous areas of Serranía de la Neblina National Park, located close to the border.<sup>202</sup> They use Indigenous communities, maintain alliances with Venezuelan armed forces, and pay bribes in cash or gold to other criminal groups to avoid territorial disputes.<sup>203</sup>

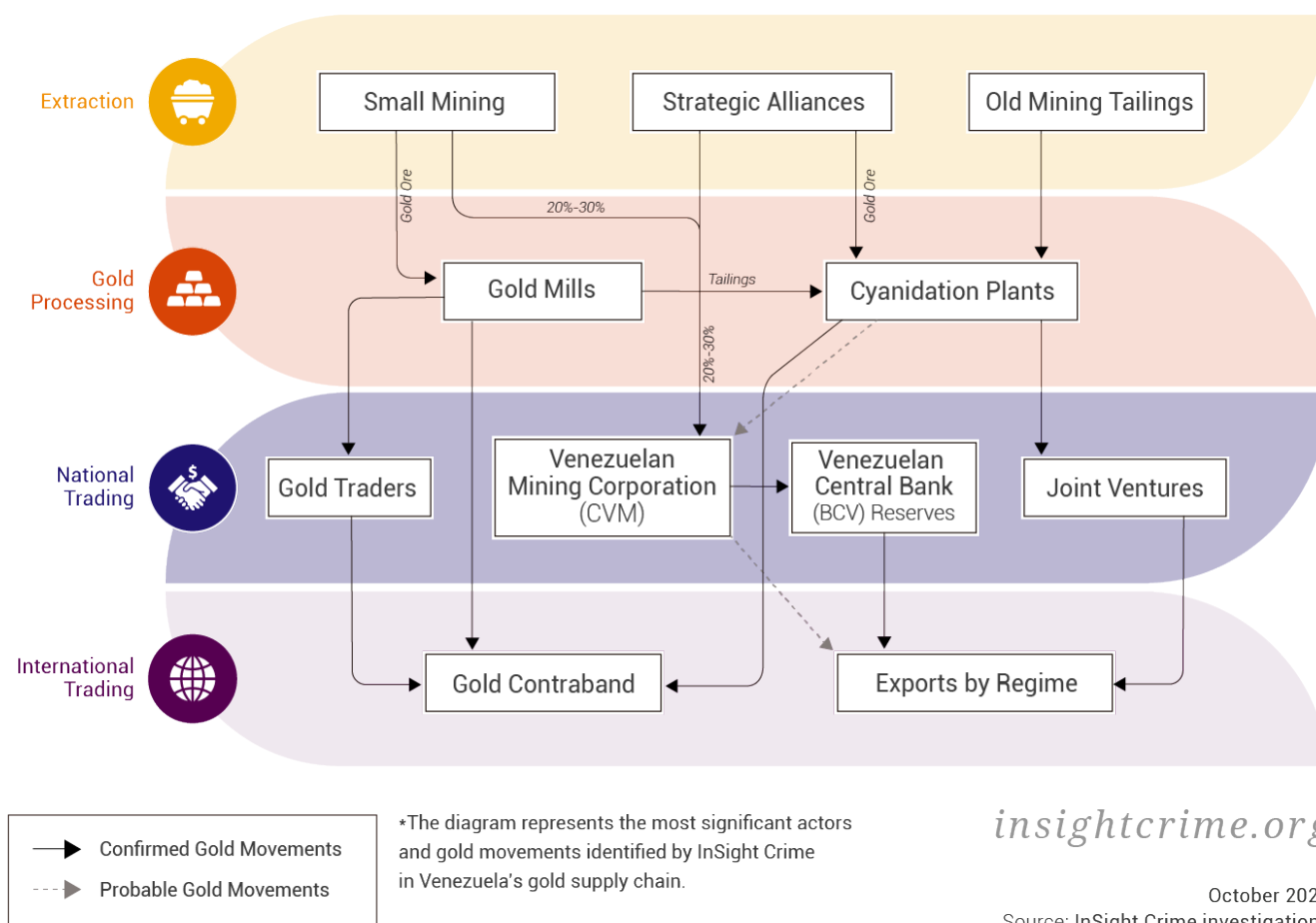
Meanwhile, mining in Bolívar – where the region’s largest mines are concentrated – occurs through two channels. The first is a “formal” one, where mining cooperatives get permission from the Venezuelan government to extract gold.<sup>204</sup>

The second is directly controlled by NSAGs, who allow mining activity to occur on territories they control in exchange for monthly payments in cash or gold. These groups may also control their own mines.<sup>205</sup> For example, the ELN extorts miners in some cases and pressures local populations to open mines for them in others.<sup>206</sup>

To extract gold, mercury is used to separate tiny particles of gold from sediment. Mercury is smuggled, via plane or boat, to Venezuela from neighboring Guyana. The chemical is smuggled across the Cuyuní River, which separates Guyana and Venezuela.<sup>207</sup> It may also be sent along the coast both countries share, although data on this is sparse, according to a report on the illegal mercury trade by IUNC NL,<sup>208</sup> an environmental organization based in the Netherlands.

Once extracted, gold may be moved “formally” via the Venezuelan Central Bank (Banco Central de Venezuela – BCV). The BCV is the only buyer authorized to purchase Venezuelan gold by the nation’s constitution.<sup>209</sup> The gold is usually sent from the BCV to African countries to be refined. It is then sold in Turkey, Aruba, the United Arab Emirates, and China.<sup>210</sup> However, it is estimated that just one-third of all gold mined in Bolívar moves through the Central Bank.<sup>211</sup> The rest is smuggled out of the country via clandestine routes.<sup>212</sup>

# The Gold Supply Chain in Venezuela



Gold leaving Bolívar and Amazonas is often smuggled through the municipality of Puerto Inírida, in Colombia's eastern department of Guainía.<sup>213</sup> Another part of the gold is also sent to Brazil, where it is passed off as having been legally produced.<sup>214</sup>

In 2020, Brazil Federal Police discovered a network led by a Lebanese citizen, who melted gold in the Venezuelan municipality of Santa Elena de Uairén, on the border with Brazil. From there it was smuggled and sold in Brazil.<sup>215</sup>

Another portion of the gold extracted in the state of Bolívar is transported onward from Manuel Carlos Piar Airport in Puerto Ordaz, a city located in the northern municipality of Caroní.<sup>216</sup> From there, gold and other commodities are flown to the city of Maiquetia, located to the north of Caracas.<sup>217</sup>

The gold is then sent onward from Simon Bolívar International Airport, in Caracas.<sup>218</sup>

It may be sent to the Caribbean islands of Aruba, Curaçao, and Bonaire, which are used as transit points.<sup>219</sup> According to an investigation by journalist and criminologist Bram Ebus, between 2014 and 2019, some 160 tons of Venezuelan gold were moved via Aruba and

Curaçao.<sup>220</sup> However, during a field trip carried out by InSight Crime in November 2021, there was no record of gold seizures in Curaçao.

From the Caribbean, the gold may be moved to Europe, from which point it eventually reaches countries like the United Arab Emirates.<sup>221</sup>

Illegal gold is also smuggled out of Venezuela's Amazon to neighboring Guyana, according to Dr. Samuel Sittlington, an expert in financial fraud and former British Overseas Advisor to Special Organised Crime Unit (SOCU) in Guyana. He added that some gold crosses the porous border the two nations share, to be sold to local miners or to third parties.<sup>222</sup> These third parties then pass it off as having been extracted in Guyana to sell it on international markets.<sup>223</sup> Sittlington explained that up to \$1 million of gold could be moving across the Venezuela-Guyana border each week.<sup>224</sup> Once there, brokers buy it and then sell the metal on to the Guyana Gold Board, so it can be sold on the legal market, according to Sittlington.<sup>225</sup>

## Guyana

After speaking with numerous environmental experts during a visit to Georgetown, the capital of Guyana, InSight Crime was able to see how the country has two approaches to treating the Amazon – approaches that seem irreconcilable. The country has a “green” approach that seeks to conserve the Amazon, but simultaneously, it contrasts this with ever-expanding mining operations that are responsible for almost 90 percent of forest loss.<sup>226</sup>

Gold is the country's main export.<sup>227</sup> There are six established mining districts in Guyana. These include the Berbice and Rupunini mining districts to the south of the country, and the Potaro, Mazaruni, Cuyuni, and Northwest mining districts in the northwest.<sup>228</sup> Illegal mining – without proper permits – has been detected in protected areas, including the Iwokrama Forest nature reserve and Kaieteur National Park in the center of the country, as well as in the Kanuku Mountains Protected Area (KMPA), close to the southwestern border with Brazil.<sup>229</sup>

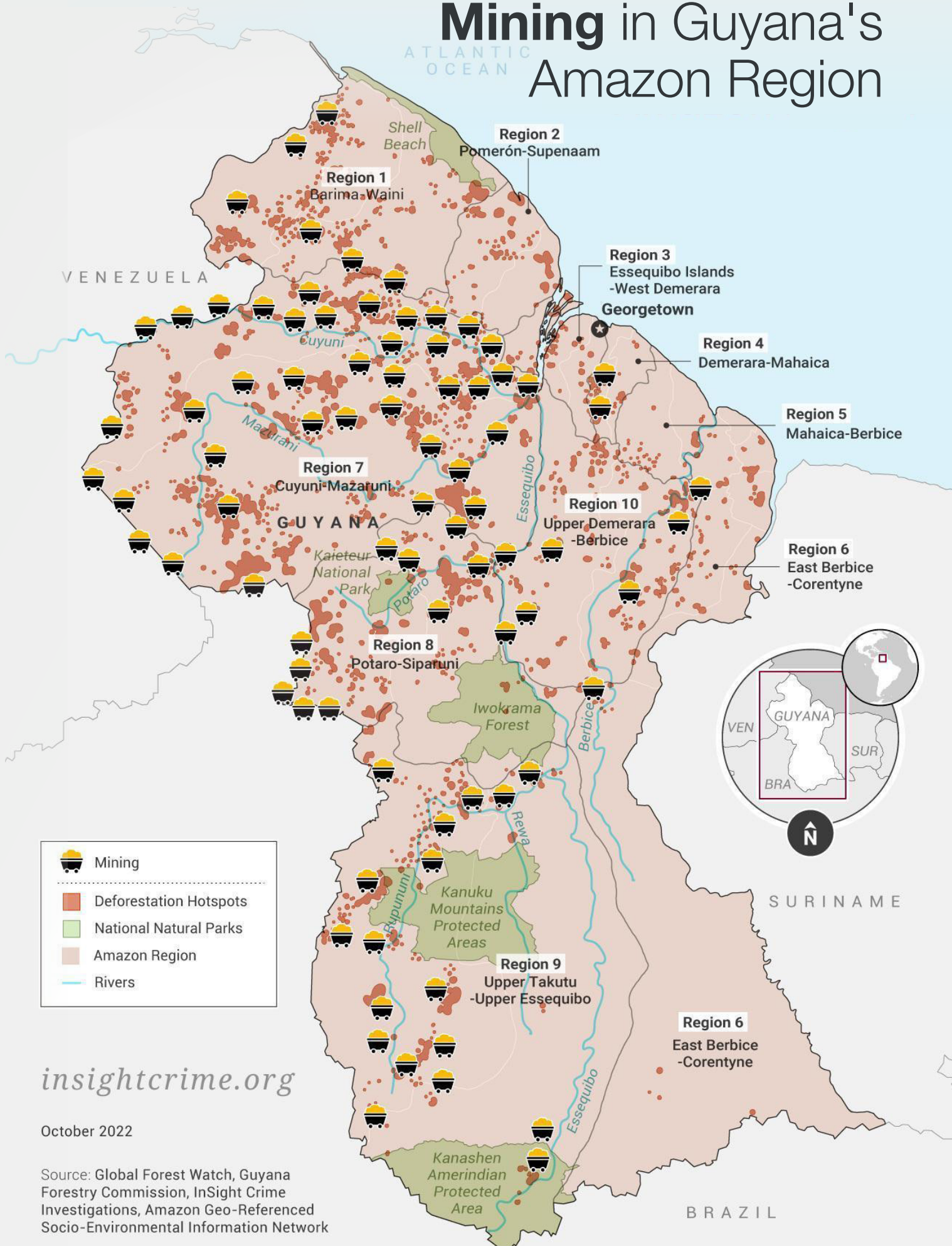
Illegal mining operations have also been found in Micobie, along the Potaro River<sup>230</sup>; along Guyana's northwestern border with Venezuela; and along the banks of the Cuyuní River and west of the Essequibo River.<sup>231</sup>

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*Guyana has a “green” approach that seeks to conserve the Amazon, but simultaneously, it contrasts this with ever-expanding mining operations.*

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# Mining in Guyana's Amazon Region



insightcrime.org

October 2022

Source: Global Forest Watch, Guyana Forestry Commission, InSight Crime Investigations, Amazon Geo-Referenced Socio-Environmental Information Network

The Guyana Geology and Mines Commission (GGMC), which administers mining concessions in the country, issues three scales of mining concessions that are categorized by area: small (11 hectares), medium (from 61 to 486 hectares) and large scale (from 202 to 5,180 hectares).<sup>232</sup>

Gold mining licenses in Guyana are cheap, renewed automatically, and concentrated among a small number of people.<sup>233</sup> In many cases, licensed properties are sublet to small- and medium-scale miners for a fee, usually 10 percent of gold mined.<sup>234</sup>

“The large mining blocks don’t mine themselves. They sublet their concessions to small miners,” said Trevor Benn, former commissioner of lands and surveys of Guyana.<sup>235</sup>

However, this implies environmental damage beyond deforestation. Small-scale miners use mercury to extract gold, increasing mercury contamination.<sup>236</sup> These mining operations can also overlap with Amerindian territories, creating confusion and conflict among local communities and gold miners.<sup>237</sup> Some Amerindian communities affected by mining operations are located in Port Kaituma, Mathews Ridge, Arakaka, Mabaruma – all in northern Region One – and other communities scattered around Region Nine, in the south, and Region Four, Region Seven and Region Eight, in the north.<sup>238</sup>

Gold is mostly extracted by Guyanese and Brazilian miners working close to the Venezuelan and Brazilian borders. These miners use excavators to clear land on the banks of rivers and engage in dredging activities.<sup>239</sup> Miners also dig tunnels to extract gold, fleeing the site if authorities get too close. In October of 2020, police shut down three tunnels used for illegal mining in the New River Basin in the South Rupununi region, located in the south of the country. No gold or people were found at the site.<sup>240</sup>

Guyanese gold is commercialized through a state-owned company called the Guyana Gold Board (GGB). The GGB has around 12

licensed agents that are permitted by law to buy, sell, and export gold.<sup>241</sup> These brokers transport and refine the metal.<sup>242</sup> It then makes its way on to international markets, above all to Canada, the United Arab Emirates, Belgium, Switzerland, and the United States.<sup>243</sup>

Monitoring mining operations for irregularities in Guyana is a challenge due to a lack of state presence. Janette Bulkan and John Palmer, authors of multiple papers on mining and landlordism in Guyana, claimed that roughly 11 inspectors working for Guyana’s mining authority monitor 9,000 mines across the country.<sup>244</sup> Meanwhile, soldiers deployed to the jungle prefer not to get involved, to avoid potential conflict with Venezuelan criminal actors that operate in the region, according to the International Crisis Group.<sup>245</sup>

## Suriname

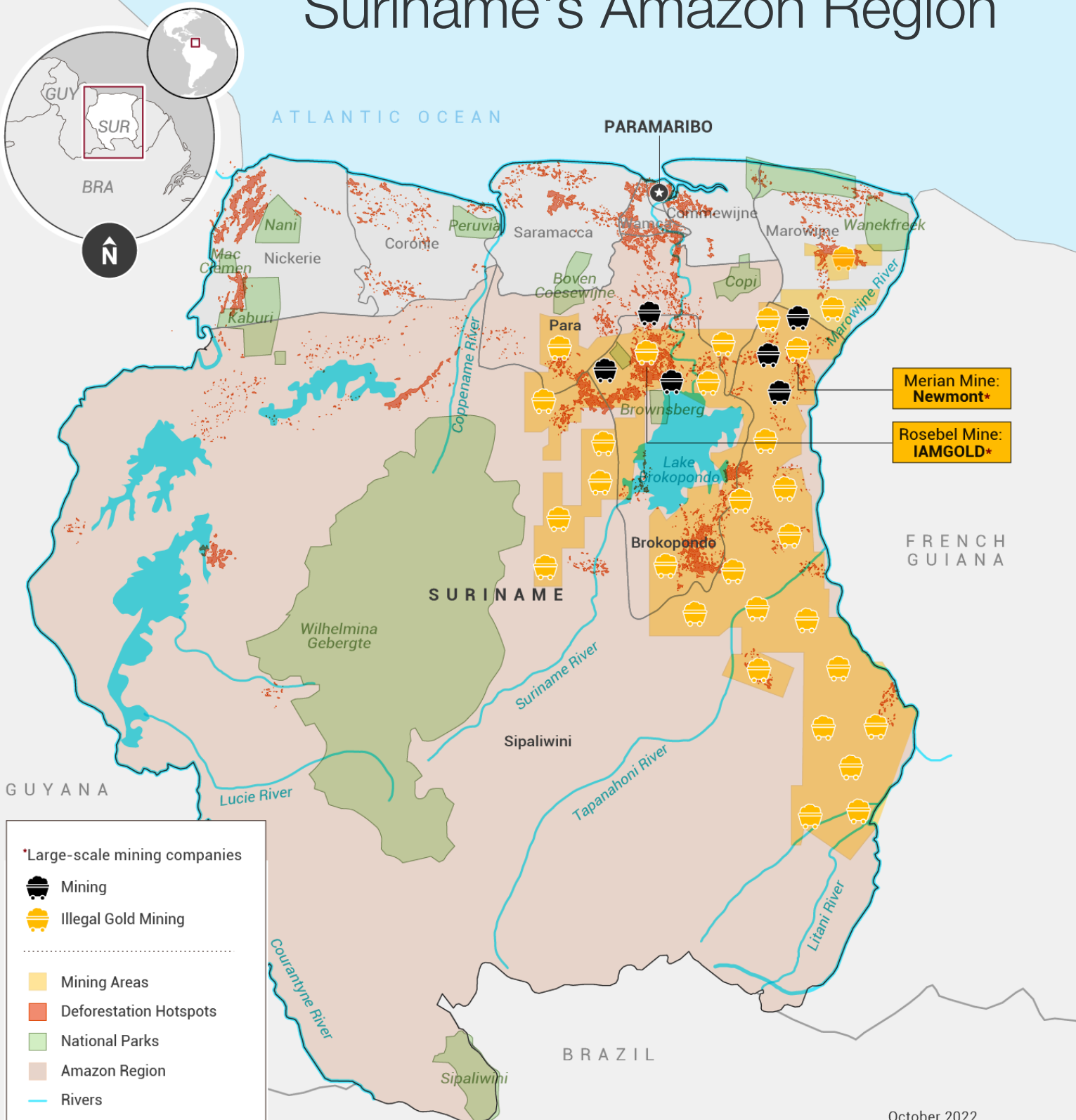
As in Guyana, it is suspected that Venezuelan gold is also passing through Suriname. But, similarly, Suriname’s Amazon is also marked by legal and illegal mining.

Gold is a major legal export for Suriname. The metal accounted for \$2.04 billion of the country’s \$2.6 billion total exports in 2019.<sup>246</sup> Its importance to the national economy has risen since the outbreak of the pandemic.<sup>247</sup>

Small-scale mining in Suriname almost always happens without permission. In 2009, only 115 of the tens of thousands of small-scale miners within Suriname operated legally with a mining concession.<sup>248</sup> Obtaining a mining concession is very difficult for small-scale miners who lack political connections.<sup>249</sup> Artisanal and small-scale mining is mainly concentrated along Suriname’s eastern greenstone belt, along the country’s border with French Guiana.

There, illegal gold mining sites have been detected in the border village of Benzdorp and the resort (municipality) of Langatabiki, straddling the Suriname-French Guiana border.<sup>250</sup> Illegal miners also work on the fields around Nieuw Koffiekamp,<sup>251</sup> a village on the northeastern banks of the Brokopondo Reservoir.<sup>252</sup>

# Legal and Illegal Mining in Suriname's Amazon Region



October 2022

*insightcrime.org*

Source: Amazon Geo-Referenced Socio-Environmental Information Network, InSight Crime, GONINI, Amazon Conservation Team, Mongabay.

Further north in the Brokopondo district, Klaaskreek's Maroon population – descendants of Africans who fled the colonial Dutch forced labor plantations in Suriname and established independent communities in the interior rainforests – has been involved in illegal mining. This is despite the fact that this territory is home to a concession owned by the IAMGOLD corporation.<sup>253</sup>

The Kriki Negi mining area is another site situated northwest of the Brokopondo reservoir.<sup>254</sup> Meanwhile, incursions by miners have even been reported in the nearby Brownsberg Nature Park.<sup>255</sup> These miners also extract gold from the Marowijne River and the Afobaka lake along the belt.<sup>256</sup> Clashes between local miners and those from other regions or countries have occurred in several of these areas.<sup>257</sup>

Gold mining also takes place in protected reserves such as the Brownsberg Nature Park (Brownsberg Natuurpark), a national park spanning roughly 12,000 hectares in the northeastern Brokopondo Reservoir.<sup>258</sup> The Foundation for Nature Conservation Suriname (Stichting Natuurbehoud Suriname – STINASU) has repeatedly tried to remove small-scale miners from this reserve.<sup>259</sup> This resulted in miners suing the foundation in 1999, so they could recover confiscated equipment.<sup>260</sup>

After that, the government attempted to work with the miners, under the condition that no weapons or mercury be used, and no poaching take place. However, these measures have been ineffective due to a lack of law enforcement.<sup>261</sup>

Most gold is extracted from such zones using high-pressure jets of water to dislodge rock and move sediment.<sup>262</sup> For underground mining operations, miners dig several holes about two meters deep. The area is then cleared of trees and other vegetation. After that, high-pressure syringes remove layers of sand and clay until a gold-bearing layer has been reached.<sup>263</sup> Mud is pumped through a suction hose into a sluice box, where gold particles and minerals are caught.<sup>264</sup> Days or weeks later, the sluice

box is “washed” with mercury, binding the gold and separating it from other minerals.<sup>265</sup> Finally, mercury is separated from gold as the amalgam is heated.<sup>266</sup>

The gold is then transported, processed, and laundered.<sup>267</sup> Sometimes the metal is sold at the mining site itself, to be transported onward by a third party for export. This often occurs at the waterfront in the eastern town of Albina.<sup>268</sup>

More commonly, the gold is transported to the nation's capital city of Paramaribo.<sup>269</sup> En route, checks are rarely made.<sup>270</sup> In the rare case where paperwork is asked for, bribes can be paid.<sup>271</sup>

Once in Paramaribo, there is no need to show any paperwork.<sup>272</sup> Licensed buyers pay miners or third parties in euros or US dollars for gold.<sup>273</sup> These buyers then sell it to domestic goldsmiths or exporters. Most is sent to Switzerland. Otherwise, it is sent to the United Arab Emirates (UAE) or Belgium. In recent years the UAE has been increasing its gold purchases at a faster rate than European countries.<sup>274</sup>

It is important to note that not all gold smuggled out of Suriname is mined in the country. Gold from French Guiana is moved into Suriname via the porous 570-kilometer border both countries share.<sup>275</sup> It is also smuggled to Suriname from neighboring Guyana by plane or via the Lawa River, which separates the two countries.<sup>276</sup> Meanwhile, some gold shops in Paramaribo buy directly from traders in Venezuela.<sup>277</sup>

# A Dirty Business: Criminal Networks and NSAGs Fuel Illegal Mining

A range of actors fuel gold mining operations across our countries of study. Those who profit most from illegal gold often never visit mining sites. Instead, they rely on well-placed connections, corruption, and workers short of economic alternatives. Actors involved in the activity fall into three broad categories: entrepreneurial criminal networks, NSAGs, and cheap labor.

## Entrepreneurial Criminal Networks

Some of the main actors driving illegal mining in our countries of study are criminal entrepreneurs, or leaders of criminal networks. They may be political or economic elites who have the financial capacity to buy high-cost machinery. They often have contact with NSAGs operating in mining hubs.<sup>278</sup> These entrepreneurs direct and initiate operations. They hire local miners and operatives, and they oversee the establishment of new mines.

These networks rely on the work of intermediary criminal entrepreneurs to move gold and cover up its illicit origins. The more the metal changes hands, the better.<sup>279</sup>

Brokers working for or with criminal networks grease the wheels of this supply chain. They buy and sell illegal gold and may also work in the legal trade. In Guyana, brokers sell refined gold bars to traders who do not question the origin of the metal.<sup>280</sup> Similarly, in Suriname, merchants in Paramaribo buy the gold without questioning its origin.<sup>281</sup>

These networks require a wide geographical reach to feed international markets. Their leaders and financial backers may be based far from the illegal mining sites they exploit. In Suriname, Chinese gold merchants working in the nation's capital also reportedly send a large share of the gold they buy back to China.<sup>282</sup>

Otherwise, well-placed “exporters” that have ties to foreign markets are relied upon. In Suriname, exporters make deals with jewelers and gold traders based in Dubai, Europe, and the United States, according to a report released by World Wildlife Fund (WWF).<sup>283</sup> Prior to shipment, exporters must show their licenses and register the amount to be transported with the nation's Currency Commission.

Although exporters are legally obliged to buy gold from the Central Bank to send it abroad, in practice this does not happen.<sup>284</sup>

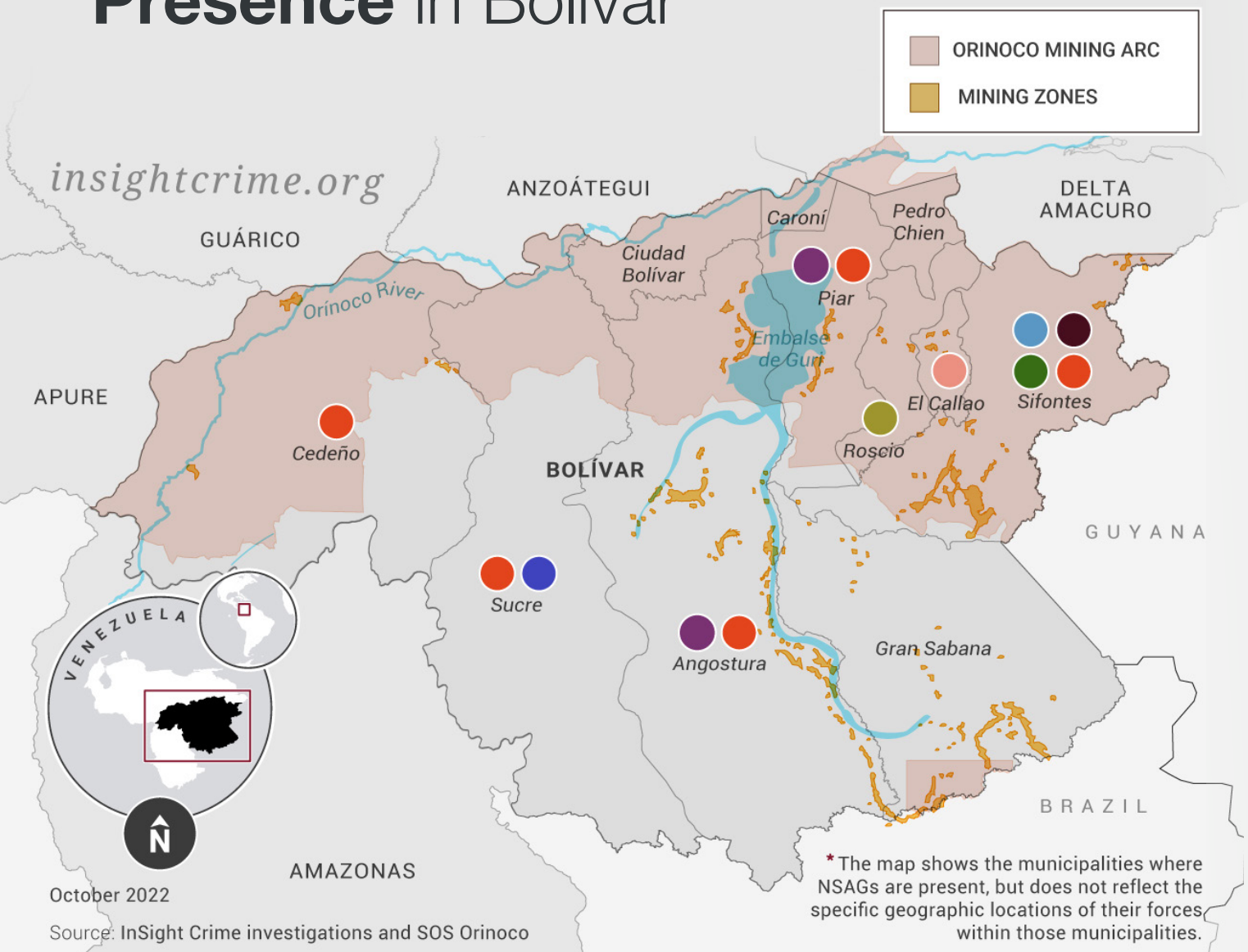
It is interesting to note that female intermediaries with indirect ties to these networks play a greater role in the trade once the gold has been extracted. According to Kuntala Lahiri-Dutt, an investigator at the Australian National University, Surinamese women in the mining sector are traditionally associated with tasks like transporting and processing, so men can continue to work on site.<sup>285</sup>

## Non-State Armed Groups (NSAGs)

In Venezuela, NSAGs control mining sites and gold routes. They are predominantly involved in the extraction phase. They collect extortion fees from small-scale miners, often with the blessing of corrupt politicians and authorities. NSAGs may also be paid in money or gold to look after mines belonging to large criminal networks.<sup>286</sup> Some NSAGs now run mines themselves.

In Venezuela, NSAGs have largely shifted from extorting miners in its Amazon region to exercising direct control over illegal mines.

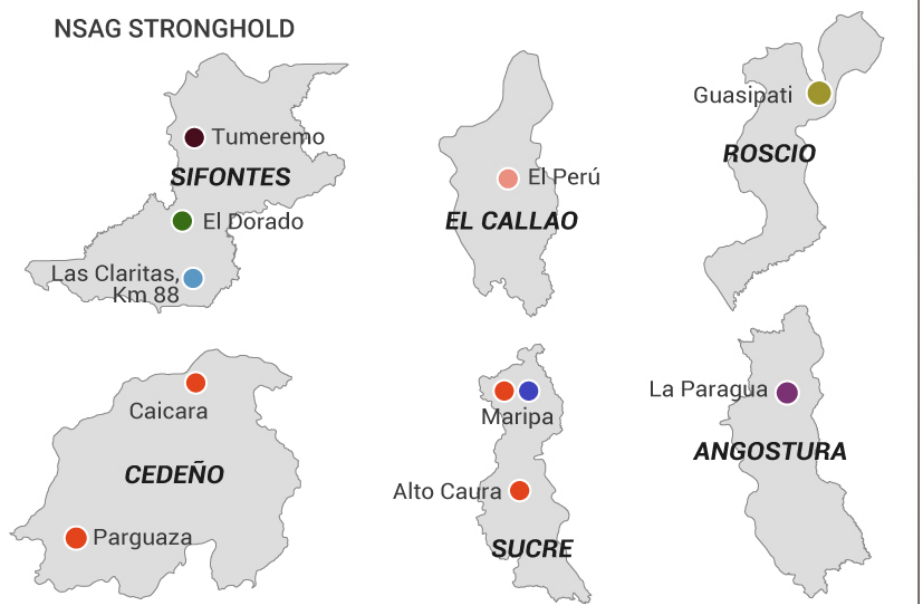
# Illegal Mining and Criminal Presence in Bolívar



## NSAG MUNICIPAL PRESENCE

- Johan Petrica Megabanda
- Sindicato de El Perú
- Tren de Guayana
- ELN / Independent Guerrilla Groups
- Negro Fabio Gang
- 3Rs Organization
- El Ciego Gang
- FARC dissidents

## NSAG STRONGHOLD



Venezuelan criminal gangs dedicated to illegal mining – known as “sindicatos” or mining “megagangs” – have long profited from the illicit activity. Although some of these groups, including Johan Petrica’s Megagang and the El Perú Syndicate (Sindicato de El Perú), are involved in other illegal activities such as micro-trafficking, their main source of income is illegal mining.<sup>287</sup>

These groups typically have over 100 members. They extort artisanal miners and oversee mining operations in the state of Bolívar.<sup>288</sup> In Bolívar, alliances have been created between local politicians and these groups.<sup>289</sup>

The Johan Petrica Megabanda – the megagang led by Yohan José Romero, alias “Johan Petrica” – operates in the mines of Las Claritas, in the Sifontes municipality, located in Bolívar. Like other local mining gangs, its modus operandi centers around the organization and “taxation” of illegal gold extraction, processing, and trafficking.<sup>290</sup>

The Tren de Guayana also operates in the state. Previously, the group used political contacts to move into illegal mining, eventually controlling mines in the municipalities of Roscio and El Callao in eastern Bolívar. Its modus operandi is to “tax” informal gold extraction and processing. Today, the group has lost political protection. However, it still uses corruption to its advantage, with high-ranking members able to evade prison sentences.<sup>291</sup>

The El Perú Syndicate – an NSAG based around the mines of El Perú, in the El Callao municipality of Bolívar – operates differently. Like other local mining gangs, its modus operandi is based on the organization and “taxation” of illegal gold mining and processing. However, it is the only surviving mining gang in Bolívar that operates without any kind of governmental support.<sup>292</sup>

Since 2016, a number of other NSAGs have involved themselves in mining across Venezuela’s Amazon. Sites owned by the Maduro regime are overseen by NSAGs on the ground. NSAGs also control their own mines.<sup>293</sup>

In the state of Amazonas, the Acacio Medina Front, an NSAG made up of ex-FARC dissidents led by Miguel Díaz Sanmartín, alias “Julian Chollo,” is present. Julian Chollo oversees criminal gold operation in Yapacana National Park (Cerro Yapacana), a major hub for illegal mining in the Orinoco-Amazon region.<sup>294</sup>

The ELN José Daniel Pérez Carrero Front, led by Wilmer Albeiro Galindo, alias “Alex Bonito,” has also been increasingly involved in the activity since 2016.<sup>295</sup>

Venezuelan NSAGs have moved into illegal mining in Guyana. Sindicatos charge miners working along Guyanese borderlands a fee in exchange for protection.<sup>296</sup> Boats carrying supplies to Guyanese mines must pass checkpoints controlled by the ELN, sindicatos, and Venezuelan security forces. Each step of the way, extortion payments are charged at gunpoint. Guyanese miners conduct their operations in the shadow of these armed groups.<sup>297</sup>

## Legal enterprises

A number of mining export companies have been accused of trading illegal Venezuelan gold.

El Dorado Trading is one of Guyana’s main licensed gold exporters.<sup>298</sup> It sells gold to international refineries in Canada and Switzerland.<sup>299</sup> In late 2020, the Guyana Gold Board (GGB) investigated allegations that El Dorado had been buying gold from Venezuelan criminal groups.<sup>300</sup> The company denied these accusations.<sup>301</sup> However, the Royal Canadian Mint (RCM) announced it would stop purchasing gold from El Dorado until further notice.<sup>302</sup>

Similarly, high-profile international refineries and other “legal” enterprises, such as transport companies, have been caught buying Venezuelan gold. As InSight Crime reported in June 2021, the owner of South Florida transport company Transvalue was accused of “facilitating a \$140 million transnational illicit gold smuggling operation.”<sup>303</sup> An unsealed affidavit suggested the gold was likely being “illegally mined and smuggled

out of Venezuela.”<sup>304</sup> On arrival in the United States, the gold was moved by Transvalue to a Florida refinery belonging to NTR Metals – a Miami-based subsidiary of Elemetal, one of the largest gold trading companies in the United States.<sup>305</sup> It was eventually purchased with “clean” money by associates who earned commissions by procuring the illicit product for NTR Metals, according to the United States Department of Justice (DOJ).<sup>306</sup>

Meanwhile, some refineries in our countries of study have been accused of money and gold laundering. This has been most evident in the case of Suriname, whose government-backed Kaloti Suriname Mint House (KSMH) has faced allegations of money laundering and buying gold from conflict areas for years.<sup>307</sup>

The KSMH is a joint venture between Dubai’s Kaloti Jewelry Group, the government of Suriname, and Surinamese gold traders. According to government officials, the KSMH was founded in 2014 to purify all gold that Suriname exports and boost the nation’s gold industry.<sup>308</sup> It also sought to extend services to other countries in the region.<sup>309</sup> Former President Desi Bouterse joined Kaloti Chairman Munir Kaloti in a press release stating that KSMH would transform Suriname into a “center of excellence for the region’s gold and precious metals industry.”<sup>310</sup> According to an investigation by the Center for a Secure Free Society, a security think tank, Bouterse continued to support the refinery during his time in power.<sup>311</sup>

After setting up operations in 2015, the KSMH was labeled as a “risk” for mixing proceeds from gold and drugs.<sup>312</sup> In a 2017 report by the Center for a Secure and Free Society, the refinery was labelled as a “fictitious project.”<sup>313</sup> Having conducted interviews with gold dealers and visited the site itself, the organization “confirmed that there was no refinery and no gold refining taking place at the KSMH.”<sup>314</sup> As a result, the government could certify the exports of any amount of gold, real and fictitious, “from a refinery that exists only on paper,” according to the report.<sup>315</sup> It concluded that, for a price,

transnational organized crime groups could use state certification “to launder almost unlimited amounts of cash as if it were gold.”<sup>316</sup> Security consultant Douglas Farah added that the refinery allegedly certified non-existent exports and gold coming from Venezuela as originating from Suriname.<sup>317</sup> The Surinamese government joined Kaloti in denying these allegations.<sup>318</sup>

Several experts and journalists consulted by InSight Crime who have followed Suriname’s mining sector closely but preferred to remain anonymous maintained that KSMH is likely involved in gold laundering.<sup>319</sup> Previous investigations into the KSMH support this.

A 2020 report by journalist and criminologist Bram Ebus made some interesting conclusions.<sup>320</sup> Ebus wrote that Suriname’s “government failed to promote gold imports from its neighbors and the project has yet to turn a profit.”<sup>321</sup> According to the refinery’s managing director, Ryan Tjon, the KSMH processed between 15,000 and 20,000 kilograms of gold in 2019.<sup>322</sup> Tjon admitted that gold trafficking is an issue, but told Bram Ebus that “we are not the ones, the agency, to investigate where the gold actually comes from. We are not a police officer.”<sup>323</sup> Tjon concluded that if an exporter says it is Surinamese gold, the KSMH takes it on good faith.<sup>324</sup>

In 2021, a Surinamese journalist visited the KSMH, describing it as an “abandoned government office,” with an empty parking lot and closed shutters. Three soldiers reportedly guard the building permanently from a corner watchtower. One of them told the journalist he had never entered the building and did not know what was going on inside. However, he did confirm that the building still belongs to Kaloti.<sup>325</sup> Today, cars drive in and out every day, but the windows never open nor is there any light, according to a local resident.<sup>326</sup>

Bouterse’s successor, President Chan Santokhi, has ordered an investigation into the refinery’s role in Suriname.<sup>327</sup>

## Cheap Labor

Local people or migrants searching for economic opportunities are usually hired as miners to extract gold. They sit at the bottom of the chain, receiving the lowest financial reward from the activity. These miners live in makeshift camps and work in perilous conditions. They may extract gold, coltan or copper under the close watch of NSAGs or members of criminal networks. While these miners may act illegally, they can hardly be classed as hardened criminals.

In the likes of Venezuela, migrants from other regions or countries invade protected territories to work as miners. Meanwhile, Brazilian small-scale miners, or “*garimpeiros*,” have also migrated across the Amazon in search of gold. Most small-scale miners in Suriname are Brazilian migrants who send money obtained from gold mining back home.<sup>328</sup>

Chinese and Brazilian migrants also work as miners in both Guyana and Suriname.<sup>329</sup>

Chinese investment in Guyana’s gold mining sector has allegedly brought with it private small-scale operations that operate under varying levels of legality.<sup>330</sup> Meanwhile, Suriname’s community of Chinese migrants is largely ignored by law enforcement, despite the alleged involvement of some individuals in illegal mining.<sup>331</sup> According to Dr. Evan Ellis, an expert on Chinese criminal groups in Latin America, “the level of penetration by the SDF [Suriname Defense Force] and by the Surinamese police is just about zero in these Chinese communities.”<sup>332</sup> These actors reportedly operate close to gold mining areas within Suriname’s interior, like the eastern border city of Albina.<sup>333</sup>

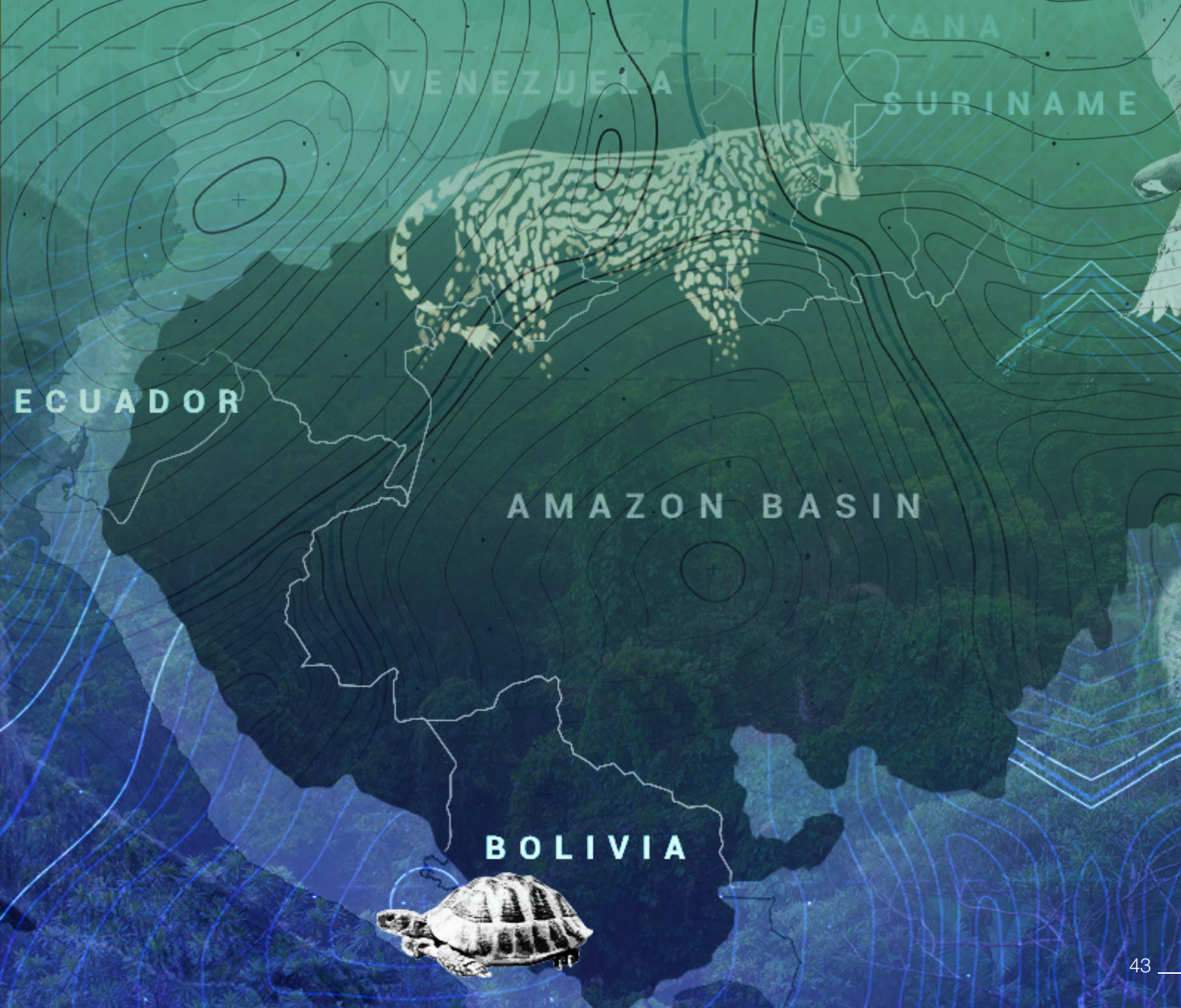
Whether local people or migrants, miners often live and work in dangerous and hardscrabble conditions. In Venezuela, they work under the control of NSAGs. There, Indigenous people and temporary migrants from other states extract gold to survive economically.<sup>334</sup> In the face of the nation’s ongoing socio-political, economic crisis, many have no choice but to mine with the approval of sindicatos.<sup>335</sup> However, they face constant security risks. If they steal, their hands may be cut off.<sup>336</sup> Gunmen have also targeted miners in the nation’s Amazon region.<sup>337</sup>

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*While these miners may act illegally, they can hardly be classed as hardened criminals.*

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# WILDLIFE TRAFFICKING PREYS ON THE AMAZON BASIN



# WILDLIFE TRAFFICKING PREYS ON THE AMAZON BASIN

The Amazon Rainforest is one of the world's most biodiverse regions.<sup>338</sup> Bolivia is considered a “megadiverse country.” Over 48,000 animal species are estimated to live across the nation.<sup>339</sup> Venezuela sits among the top ten most biodiverse countries in the world.<sup>340</sup> Similarly, Ecuador is also considered a hotspot for biodiversity.<sup>341</sup>

As a result, the region is a hub for wildlife trafficking. Thriving demand for animals and their parts threatens hundreds of thousands of birds, reptiles, and mammals.<sup>342</sup>

Birds – including parrots, macaws, and songbirds – are most commonly trafficked.<sup>343</sup> Their bright colors and intelligence means criminal networks are keen to ensnare them, largely to feed the illegal pet trade where demand is high.<sup>344</sup> Others are killed so their body parts can be traded.<sup>345</sup>

Reptiles, including green iguanas and snakes, are also sought after for the pet trade.<sup>346</sup> Meanwhile, alligators are hunted for their skins.<sup>347</sup> Turtle shells are trafficked out of the Amazon to be sold as decorations in Asian markets, while turtle eggs are eaten as delicacies.<sup>348</sup>

Jaguars are killed for their skins and fangs.<sup>349</sup> And their body parts are blended into a paste used in traditional Chinese medicine.<sup>350</sup>

## Wildlife Trafficking Supply Chain

Much like in Colombia and Peru, wildlife trafficking in our countries of study unfolds through three main phases across the region: extraction, transportation/transformation (laundering), and commercialization.

First, members of local communities across the Amazon are hired by criminal networks to capture or kill in-demand species.<sup>351</sup> In Bolivia, jaguars, macaws, and caimans are targeted.<sup>352</sup>

Meanwhile, red and green macaws, yellow-shouldered and yellow-crowned parrots are caught in Venezuela's Amazon.<sup>353</sup> In Ecuador, turtles, parrots, and monkeys are trapped, while songbirds are ensnared and jaguars killed in Guyana and Suriname.<sup>354</sup>

Songbirds like the Towa-Towa are one of the most targeted species that feed the internal and international market.<sup>355</sup> Like in other Amazon countries, songbirds in Guyana are requested for whistling competitions. These irregular competitions take place in Georgetown, where the captivity and trafficking of these species is poorly monitored.<sup>356</sup>

Macaw species are also a priority target for traffickers. In the legal and illegal markets, macaw's prices vary by their color. In legal operations, green macaws are sold for between \$200-250; blue macaws vary in price from \$275-300; and red macaws reach prices of \$400.<sup>357</sup> However, the illegal market doubles their value. Traffickers can sell red macaws for almost \$1,400 and blue macaws for \$700.<sup>358</sup>

Whether dead or alive, animals and their parts are then transported onward. According to WWF “the remote borders between Amazon countries are ideal places for traffickers to export wild animals.”<sup>359</sup> Songbirds are often moved from Guyana to Suriname's capital, Paramaribo.<sup>360</sup> Tropical birds captured in Ecuador's Amazon are moved into Peru or Colombia in small vehicles that are rarely checked by authorities.<sup>361</sup>

Marine species and reptiles are mostly transported by air freight for international sale.<sup>362</sup> Birds from our countries of study are often smuggled alive in checked baggage.<sup>363</sup> Smaller creatures are often trafficked using rudimentary methods. They are concealed inside toilet paper rolls, plastic hair curlers, socks, and underwear.<sup>364</sup>

Before, following or during transit, illegally captured animals and their parts are “laundered,” through breeding farms and falsified documentation.<sup>365</sup> This provides a guise of legality, after which they can be sold.

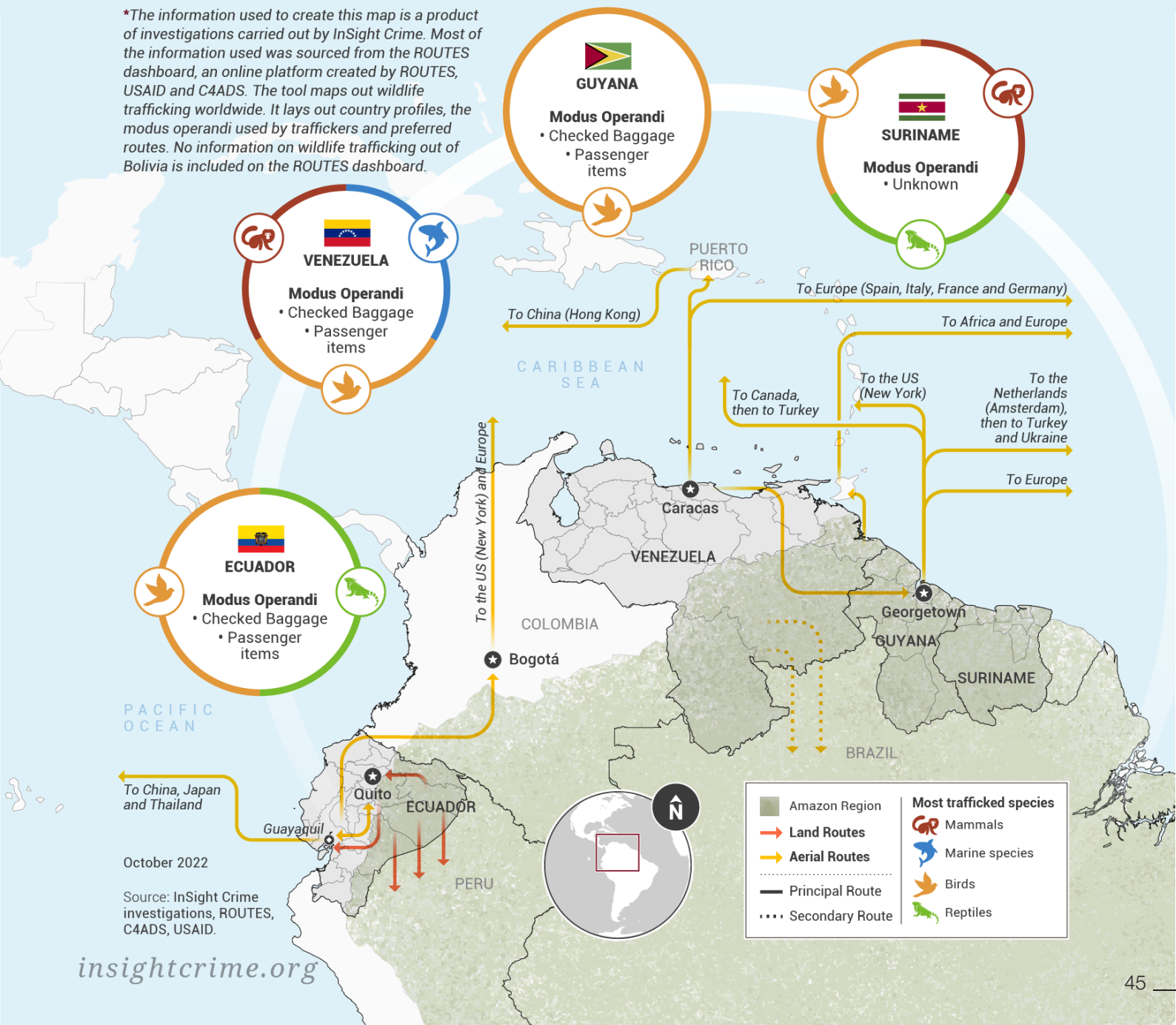
Mammals, birds, and marine species that reach Venezuela’s capital city of Caracas from its Amazon region head to France, Puerto Rico, Guyana, Brazil, Spain, Austria, Germany, and

Italy.<sup>366</sup> Birds leaving Venezuela are also moved via transit points like the Caribbean nation of Trinidad and Tobago.<sup>367</sup>

Wildlife trafficked out of Guyana reaches a host of nations. Songbirds and other exotic birds have been found at customs offices in the United States and Canada, and en route from Guyana to Japan.<sup>368</sup> Meanwhile, jaguar parts and turtles sourced from across the region reach Asia.<sup>369</sup>

# Most Trafficked Wildlife Species, Routes and Methods in The Amazon

\*The information used to create this map is a product of investigations carried out by InSight Crime. Most of the information used was sourced from the ROUTES dashboard, an online platform created by ROUTES, USAID and C4ADS. The tool maps out wildlife trafficking worldwide. It lays out country profiles, the modus operandi used by traffickers and preferred routes. No information on wildlife trafficking out of Bolivia is included on the ROUTES dashboard.



Creatures sold on the international market, in particular, fetch high prices. Macaws captured in Ecuador's Amazon region sell for between \$1,000 and \$5,000 on international markets.<sup>370</sup>

Otherwise, creatures are sold domestically in squares, urban markets, pet shops, or parks across the Amazon, according to Julia Salvador at Wildlife Conservation Society (WCS)

Ecuador.<sup>371</sup> Tropical birds caught in Ecuador's Amazon are sold in pet shops in urban centers.<sup>372</sup> Red-masked parakeets are illegally sold in stores along the border with Peru.<sup>373</sup> In Suriname and Guyana, birds that remain in the country are traded at markets found in town squares.<sup>374</sup> Social media may be used to facilitate these transactions, Salvador explained.<sup>375</sup>

## Actors Ensnaring the Amazon's Wildlife

While wildlife trafficking is often considered a "disorganized crime" in our countries of study, a number of actors are involved in the trade. These include entrepreneurial criminal networks, legal actors, and cheap labor.

### Entrepreneurial Criminal Networks

Entrepreneurial criminal networks coordinate and finance wildlife trafficking across our countries of study. They rely on the support of intermediaries to source, transport, launder, and sell animals and their parts.

Brokers connect local labor forces with organized criminal networks dealing in the Amazon's illegal wildlife trade. These intermediaries, who have ties to regional or international networks, travel between communities in search of species that are in demand. Criminal networks and entrepreneurs focused on bird trafficking in Ecuador's Amazon employ brokers to track down valuable species of exotic birds, which then are sent to Colombia or Peru.<sup>376</sup>

Julia Salvador, at WCS Ecuador, explained that brokers often contact members of local Indigenous communities across the Amazon to buy animals from them at an extremely low price.<sup>377</sup> They then sell them to exporters for a significantly higher price, according to Salvador.<sup>378</sup>

### Legal Actors

Legal actors – including breeding farms and zoos – also facilitate wildlife trafficking across our countries of study. The origins of illegally captured wildlife are covered up through these institutions. Certificates claiming the animals were born in captivity allow them to be exported in many cases.<sup>379</sup>

These actors may maintain direct or indirect ties to criminal networks and entrepreneurs. In Ecuador, some networks work through brokers to sell species taken out of the Amazon through pet stores in cities like Guayaquil.<sup>380</sup> Exotic birds trapped in Guyana and Suriname are also sold through pet stores, or in urban markets.<sup>381</sup>

Breeding farms may also have ties to wildlife trafficking. While these organizations have been celebrated for their role in repopulating habitats with endangered wildlife, some have faced allegations of corruption.

Reptile traders in Guyana and Suriname use falsified documentation to traffic reptile skins.<sup>382</sup> This paperwork fails to correctly declare which species are traded and how many reptiles traders possess.<sup>383</sup>

## Cheap Labor

In most cases, a labor force is employed to remove animals from their habitats. It often consists of “poachers” and “catchers,” who are most often local people living close to the natural habitats of river turtles, parrots, jaguars, monkeys, and other prized fauna.<sup>384</sup> They are contacted by brokers – often working on behalf of entrepreneurial criminal networks – to catch or kill wildlife.<sup>385</sup>

Locals employed as hunters and catchers are familiar with habitats, tracking, and trapping techniques.<sup>386</sup> They often get involved in the trade due to a lack of economic alternatives. “Local villagers with few opportunities to make an income may turn to wildlife trafficking as a means of survival,” jaguar researcher Vanessa Kadosoe revealed.<sup>387</sup> Julia Salvador from WCS Ecuador agreed.<sup>388</sup>

Ranchers, miners, loggers, and farmers across the region hunt and sell fauna to supplement their incomes. They act opportunistically, without a formal buyer lined up, knowing they will always be able to sell in-demand creatures on to somebody.<sup>389</sup>

Nonetheless, poachers and catchers receive low pay for their efforts and sit at the bottom of the chain. In 2016, Karen Noboa, an official working for the Wildlife Unit of Ecuador’s National Biodiversity Agency, revealed that when a creature taken out of the nation’s Amazon region reaches its international destination, it is often commercialized for a price ten or twenty times higher than that paid to the person who originally poached it.<sup>390</sup>

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# CORRUPTION: THE COMMON SOURCE OF ENVIRONMENTAL CRIME IN THE AMAZON



# CORRUPTION: THE COMMON SOURCE OF ENVIRONMENTAL CRIME IN THE AMAZON

Corruption facilitates environmental crime in each of our countries of study. Entrepreneurial criminal networks are propped up by legal actors, including security forces, regulators, authorities, and legally registered enterprises that facilitate land grabbing, illegal logging, illegal mining, and wildlife trafficking.

## Corruption on the Ground

This often occurs on the ground at a lower level, via the payment of bribes to corrupt authorities.

In Ecuador, police officers and soldiers have been known to let transporters move illegally sourced timber once they have been paid off, according to journalist Milagros Aguirre Andrade.<sup>391</sup> Two environmental crime experts speaking anonymously explained that “through official and non-official ports at the (Ecuador-Peru) border, everything flows,” including illegal wood.<sup>392</sup>

In Guyana, police are allegedly paid bribes to turn a blind eye to illegal mining. Some police officers in the nation use payoffs to supplement their low salaries, according to Dr. Samuel Sittlington, former advisor to the Guyanese Special Organized Crime Unit.<sup>393</sup> They may also be paid in gold by local illegal miners.<sup>394</sup> At the Guyana-Venezuela border, it is reportedly commonplace to see officers wearing large gold necklaces and accessories.<sup>395</sup> Sittlington added that corrupt civil servants – including police, border control, and government officials – are also involved in smuggling and underreport export numbers in exchange for bribes.<sup>396</sup>

Corrupt officers working for environmental regulators on the ground also turn a blind eye to irregularities during inspections. Miners in the town of Mahdia in Guyana’s Potaro-Siparuni region alleged that officers who inspect and administer mines accept payments to overlook breaches in mining regulations.<sup>397</sup>

“When a mining inspector appears, you better start digging into your pocket for a bribe,” according to John Palmer, an expert in small-scale mining in Guyana. “There are either none or very, very few cases of prosecutions under the Mining Act.”<sup>398</sup> Guyanese journalist Alva Solomon said that environmental officers accept bribes on the ground, instead of reporting illegal smuggling, land encroachments, and illegal mining.<sup>399</sup>

## Corruption From Above

Corruption also greases the wheels of environmental crime at a higher level, with networks of corrupt politicians, police officers, and environmental officials involved.

These high-level networks often have different layers. For example, police officers have worked with environmental officials to facilitate timber trafficking in Ecuador. One of the most notable busts linked to the trade occurred in 2017 across the nation’s central Amazonian provinces of Napo and Pastaza.<sup>400</sup> Twenty arrests were made in total.<sup>401</sup> Eleven of those detained were police officers, and three officials working for the Ministry of the Environment were also charged.<sup>402</sup>

Police officers were reportedly paid between \$50 and \$100 to let vehicles carrying illicit timber pass without inspection.<sup>403</sup> Meanwhile, the environmental officials stamped mobilization guides used to move timber, charging between \$150 and \$200 per stamp. The corrupt officials also provided falsified documents used to extract and transport timber sourced from the region.<sup>404</sup>

Illegal mining has also been a source of corruption for these authorities. During February 2022, the Amazonian province of Napo saw a large-scale illegal mining operation take place across six of its parishes.<sup>405</sup> The greatest damage was concentrated on the Jatunyaku river community in Yutzupino, in the western part of the country.<sup>406</sup>

The discovery of the entry of heavy machinery and more than 700 illegal miners put mining concessions that were supposedly in the exploration phase under the spotlight.<sup>407</sup> According to Eduardo Vayas, president of the environmental group Napo Ama la Vida, the advance of mining is due to the approval of mayors, as he commented to the newspaper Notimundo.<sup>408</sup>

Vayas said the mayors of the municipalities of Carlos Julio Arosemena Tola, Tena, and Archidona actively participate in mining. Andrés Bonilla, mayor of the latter municipality, owns one of the mining concessions operating in the area.<sup>409</sup> Under these conditions, the entry of illegal workers and machinery into the mines especially favors these authorities, who reap most of the profits from the concessions.

In Bolivia, members of the MAS political party have allegedly facilitated land grabbing and trafficking in protected areas across Bolivia's Amazon.<sup>410</sup> Moisés Salces, former mayor of San Ignacio de Velasco, close to the nation's border with Brazil, revealed members of the party give "partisan offerings by granting land" in protected areas, like the Bajo Paraguá San Ignacio de Velasco Municipal Protected Area.<sup>411</sup>

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*Entrepreneurial criminal networks are propped up by legal actors, including security forces, regulators, authorities, and legally registered enterprises that facilitate land grabbing, illegal logging, illegal mining, and wildlife trafficking.*

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According to regional director of the Earth Foundation, Alcides Vadillo, communities that receive land titles create "façade unions" that serve as political branches of the MAS party.<sup>412</sup> These include the National Coordinator for Change (Coordinadora Nacional para el Cambio – Conalcan); the Intercultural Confederation (Confederación de Interculturales); and the Bolivian Peasant Workers' Union Confederation (Confederación Sindical de Trabajadores Campesinos de Bolivia).<sup>413</sup> Through these entities, communities have received titles to lands in Santa Cruz and the Cochabamba tropics that have been designated protected or for public use.<sup>414</sup>

In addition to this, the Land and Forestry Authority (Autoridad de Bosques y Tierras – ABT) and the National Agrarian Reform Institute (Instituto Nacional de Reforma Agraria – INRA) appear to tacitly approve of the deforestation this leads to, according to a former journalist from Bolivian media outlet El Deber who has followed the activity closely.<sup>415</sup> Once land is deforested, applications for land titles for agricultural activities in protected and non-protected areas are sent to INRA.<sup>416</sup> As such, both INRA and the ABT have facilitated transactions that result in land grabbing, the journalist added.<sup>417</sup>

In Guyana, mining experts in the country, who agreed to speak on the condition of anonymity for security reasons, said that Guyana Geology and Mines Commission (GGMC) officials allegedly deliberately use inaccurate maps of Amerindian territories to issue permits within those lands, even though this is prohibited under the Mining Law.<sup>418</sup> “The law in Guyana is designed to allow mining and environmental crime to thrive,” said one environmental crime expert in Guyana.<sup>419</sup> “Corrupt GGMC officials hide behind weak titling systems in Guyana to give land to large miners,” he added.<sup>420</sup>

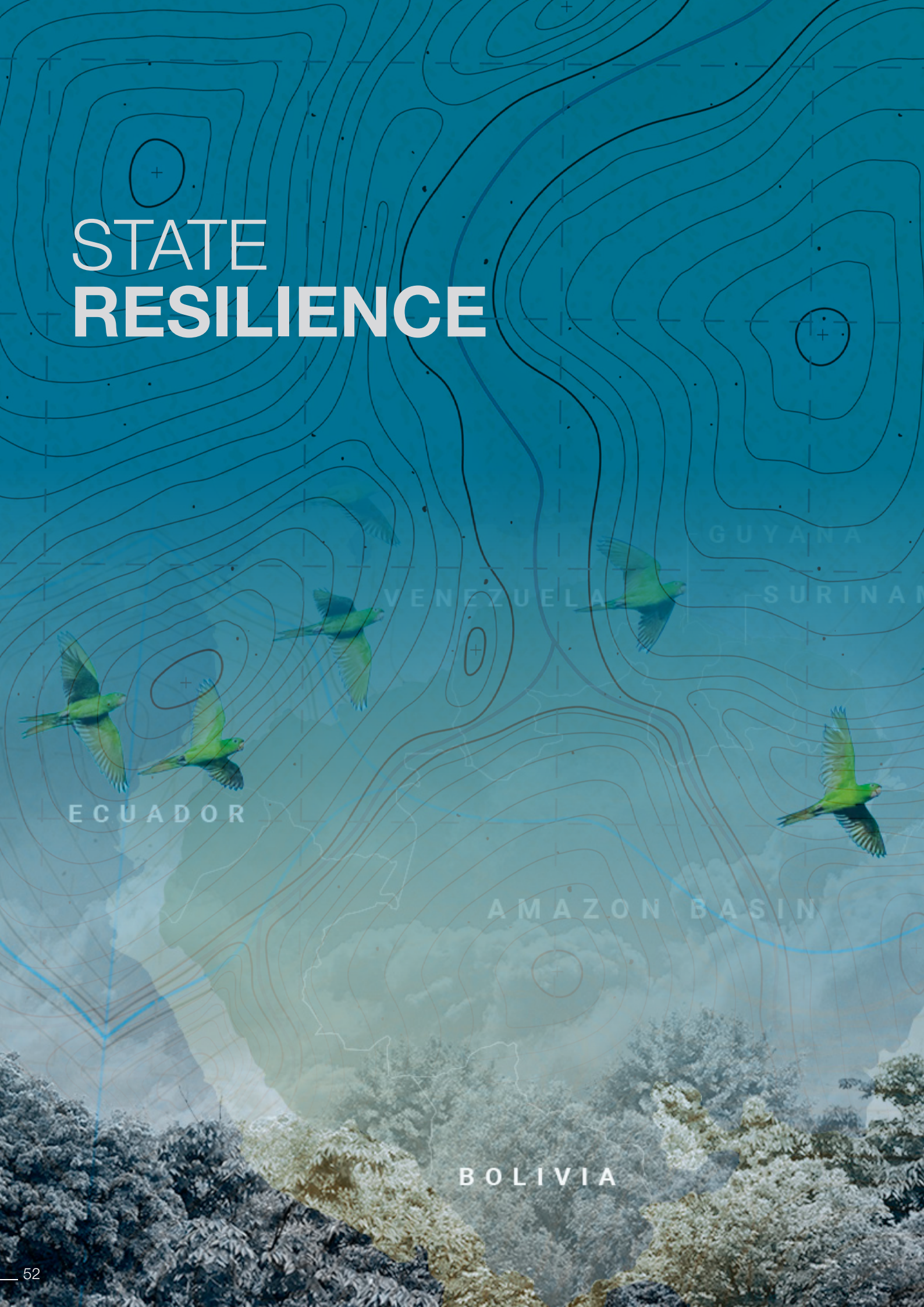
Venezuela is a special case for high-level corruption that facilitates its gold trade. Most criminal groups involved in mining in its Amazon region have direct or indirect ties to the Maduro regime. In Bolívar, mining cooperatives pay bribes to the Maduro regime for permission to extract gold. This dynamic is facilitated by the Ministry for Ecological Mining Development (Ministerio para el Desarrollo Minero Ecológico), according to an expert on environmental crime in southern Venezuela.<sup>421</sup> One of the state’s former governors facilitated pacts between local mining mafias, dividing up territory and profits, to stop disputes over mines, the expert added.<sup>422</sup>

Another interesting corruption case linked to Venezuela’s gold trade is that of Álex Nain Saab Morán, a Colombian businessman known for making shady million-dollar deals with the Venezuelan government.<sup>423</sup> The

Colombian government issued an arrest warrant for Saab in 2018. Various other countries are investigating him for money laundering, financing terrorism and other crimes.<sup>424</sup> He was arrested in Cabo Verde in June 2020 and extradited to the United States in October 2021.<sup>425</sup>

Saab maintained alleged ties to the Venezuelan General Mining Company (CVG Minerven), a state company in charge of mining gold in the nation’s eastern Guayana region.<sup>426</sup> Minerven’s current president, Adrián Antonio Perdomo Mata, is a former employee of Saab.<sup>427</sup> Through his ties to the organization, Saab allegedly participated in the exchange of precious metals for consumer goods between Venezuela and Turkey.<sup>428</sup>

# STATE RESILIENCE



# STATE RESILIENCE

Environmental crime thrives across the Amazon as a result of low state resilience. Some efforts have been made to combat it. However, corruption, a lack of political will, and limited articulation between public agencies form an explosive mixture that has resulted in soaring deforestation.

## Legislative Framework

Each of our countries of study has its own legislative framework designed to protect the environment. However, contradictions, ambiguities, and legal gaps mean that these often fall short of combating environmental crime.

In Bolivia, a number of laws are in place to target environmental crime. However, legal gaps and contradictions mean that perpetrators are rarely punished.<sup>429</sup>

The “Law of Mother Earth and Integral Development for Living Well” in Law 300 of 2012 lays out the government’s commitment to protecting the environment and promoting sustainable living.<sup>430</sup> This has been the legal basis of norms used to regulate the management of natural resources, including water and hydrocarbons across the nation.<sup>431</sup> However, alongside this, successive governments have promoted expansive agricultural activities and cattle rearing, which are often linked to land grabbing.<sup>432</sup> This raises questions over how effective the law has been in curbing environmental crime.

Otherwise, the nation’s penal code outlines penalties for a number of environmental crimes. Article 358 states that anybody who destroys forest, jungle, pasture, or crops should receive a prison sentence of between one to six years.<sup>433</sup> Article 206 details that anybody who creates a fire to make way for agriculture (that spreads and damages other properties) faces two to four years of imprisonment.<sup>434</sup> Fires continue to incinerate Bolivia’s Amazon and other regions, suggesting this legislation has failed to fend off perpetrators.

As for wildlife trafficking, penalties are light. Law 1333 of 1992 punishes illegal hunting, fishing, and capturing animals using explosives with one to three years in prison.<sup>435</sup>

In Venezuela, the “Organic Environmental Law” of 2006 provides guidance for the management of natural resources and lays out constitutional rights to a safe, healthy, and ecologically-balanced environment for all.<sup>436</sup> Articles 64 and 71 highlight a public right to access information on the environment. The state is tasked with controlling its dissemination.<sup>437</sup> However, the Maduro regime has not fulfilled this function. From 2012, the government stopped publishing environmental datasets. This has made reliable data on environmental crime, deforestation, and biodiversity loss incredibly hard to come by.<sup>438</sup>

The “Penal Law of the Environment” (Ley Penal del Ambiente) of 2012 lays out how environmental crimes in the nation should be handled.<sup>439</sup> The illegal occupation of protected areas is punished by two months to one year’s imprisonment. Illegal hunting faces a maximum sentence of five years and those involved in non-metallic mining, like coal or sand, in or near water sources can spend up to eight years in prison.<sup>440</sup>

Gold mining, however, is not included. On the contrary, it has been promoted by the Maduro regime. In February 2016, President Nicolás Maduro created a new legal framework for mining that included the formal creation of the Orinoco Mining Arc. This has been

used to boost mining activity.<sup>441</sup> Despite this “legal framework,” a lack of regulation and enforcement, corrupt officials, and the power of NSAGs mean that unrestrained gold mining has fueled deforestation.<sup>442</sup>

Laws designed to target environmental crime in Ecuador have been relatively lax and, in some cases, contradictory.

A landmark decision was made in 2008 to legally recognize nature as having inherent rights when the nation rewrote its constitution. This included a new chapter on the “Rights of Nature.”<sup>443</sup> Articles 71 and 72 detail how nature in all its forms has the “right to exist, persist, maintain, and regenerate.”<sup>444</sup> As a result of this, ecosystems themselves can be named as “defendants” in Ecuador.<sup>445</sup> The new constitution, however, also permitted mining in protected areas, on special request of the president and the National Assembly’s approval.<sup>446</sup>

Most environmental crimes committed in the nation are punished with relatively light penalties.

Chapter Four of the nation’s penal code provides guidelines on how to punish a wide range of environmental crimes. These include forest fires, crimes against flora and fauna, and illegal mining.<sup>447</sup>

For most of these crimes, offenders are punished with between one and three years in prison. Article 246 punishes anyone who directly or indirectly causes fires in native forest to between one and three years of imprisonment. Article 245 lays out the same punishment for anybody who invades protected areas.

Anybody involved in the hunting, fishing, capture, collection, extraction, trafficking, possession, transport, exchange, or trade of endangered species also faces this sentence.<sup>448</sup> Julia Salvador, at WCS Ecuador, revealed that, in many cases, those caught for wildlife trafficking who receive the maximum sentence of three years “get out free in a year or are not even sent to prison.”<sup>449</sup>

In contrast, Guyana has a robust legal framework used to target environmental crime. Successive governments have regularly updated this as fresh challenges have emerged.

Unlike its Amazonian counterparts, Guyana is known for its strict laws and regulations when it comes to the management of natural resources.<sup>450</sup> Its government has developed a green state development strategy that lays out a “green agenda” that is expected to run until 2040.<sup>451</sup> The agenda will reportedly work towards a “green economy defined by sustainable, low-carbon and resilient development that uses its resources efficiently, and sustained over generations.”<sup>452</sup>

The most important piece of legislation used to combat environmental crime in the nation is the Environmental Protection Act of 1996. This recognizes the Environmental Protection Agency (EPA) as the main agency tasked with handling environmental issues in Guyana.<sup>453</sup> This act also provides guidelines on the management, conservation, and protection of the environment, as well as the sustainable use of natural resources.<sup>454</sup>

Unlike other countries in the region, Suriname’s legal framework dances between national and departmental mechanisms. This dynamic makes it challenging to enforce laws.<sup>455</sup>

When it comes to “legal procedures,” mining, in particular, is a problematic area for the nation.

Legal concessions are relatively easy to obtain. They are issued by the Geology and Mining Department (GMD) of the Ministry of Natural Resources.<sup>456</sup> Before a concession is approved, Indigenous groups or other locals present in the affected area are supposed to be consulted. Then, a district commissioner submits non-binding advice to the ministry.<sup>457</sup>

However, there is no way local people can appeal against official decisions to allocate concessions on their lands. What’s more, in practice, concessions are typically granted without a full consultation, paving the way for deforestation to occur.<sup>458</sup>

## Political Will and Leadership

Some clear attempts to fight environmental crime in the Amazon have been made by successive governments in our countries of study. However, the political will to fight deforestation and biodiversity loss in the region has largely been inconsistent. At times, public rhetoric and proposals have clashed with actions later taken.

In Bolivia, successive governments have promoted cattle rearing and agricultural activities as key motors for economic development.<sup>459</sup> Initially, especially when these dynamics were first being promoted under Morales, an attempt was made to reconcile the relationship between land use and conservation. However, this rhetoric largely offset attempts to fight deforestation in the nation's Amazon region.

After the end of Morales' term in office, it has become commonplace to see this contradictory political messaging continue. Luis Arce, Bolivia's current president, has promised to reactivate the country's economy, which has been hit hard by the COVID-19 pandemic. Promoting agricultural activities will be at the forefront of this recovery plan.<sup>460</sup>

"The current government is a continuation of that of [former President] Evo Morales," a Bolivian journalist explained.<sup>461</sup> "The expansion of the agricultural frontier to promote development in the country is a policy that will persist. It is stipulated in the National Development Plan."

Successive governments have also continued to promote mining and the creation of mining cooperatives to facilitate economic growth.<sup>462</sup> As a result, mining has been carried out in protected areas such as Madidi National Park and areas surrounding the Beni River.<sup>463</sup>

Alongside this, high-level attempts to safeguard the nation's Amazon region from illegal acts have lacked any real bite. For example,

successive governments have failed to take any substantial action to curb uncontrolled fires used to make way for agricultural expansion.<sup>464</sup>

In part, the lack of a political will to combat environmental crime results from the strong rapport between the governing MAS party and economic groups that benefit from agriculture and mining.<sup>465</sup>

Venezuela has shown itself to be even less willing to target environmental crime in its Amazon. As in Bolivia, unrestrained mining activity is actively promoted by state officials.

During the nation's ongoing crisis, the Maduro regime's finances have been hit hard by US sanctions and falling oil prices.<sup>466</sup> As a result, the regime has increasingly promoted gold mining to attempt to make up the difference. Rampant deforestation has been a direct result of this policy.<sup>467</sup>

This will likely persist for as long as Maduro is in power. Gold is a major source of financing for the current government, the military, and NSAGs allied with it. Meanwhile, the opposition rarely brings up the environment as a topic of political interest.<sup>468</sup> As such, there is no real political will to restrict the activity or reduce its impact.<sup>469</sup>

Venezuela is one of just a few countries that did not submit a voluntary carbon emission reduction target as part of the 2016 Paris Climate Agreement,<sup>470</sup> which aimed to foster a global response to climate change.<sup>471</sup>

Environmental datasets have also been hidden from public view. There is no official data available on deforestation, endangered wildlife or mining in Venezuela.<sup>472</sup> Environmental impact studies have not been undertaken and Indigenous peoples have not been appropriately consulted as plans for mining are made.<sup>473</sup>

When combined, these factors show that the political will to combat environmental crime and deforestation in Venezuela's Amazon is largely non-existent.

In contrast, some steps have been taken in Ecuador to show the nation is taking environmental crime more seriously. The 2008 landmark decision to recognize nature as having inherent rights was a leap forward, in rhetoric at least.<sup>474</sup>

However, as in Bolivia, this has been offset by the state's ongoing promotion of industrial activities (like mining, oil exploration and palm oil cultivation) across the nation's Amazon.<sup>475</sup> Palm oil cultivation has been linked to land grabbing in the nation's Amazon region, while illegal miners have encroached on protected territories.<sup>476</sup> It is difficult to say that the government is clamping down on environmental crime while these dynamics are at play.

This paradox looks set to continue. President Guillermo Lasso, who was sworn in May 2021, promised to boost extractive industries during his electoral campaign.<sup>477</sup>

On top of this, a lack of consistent public data available on deforestation points to a low political will to monitor and resolve environmental crimes.<sup>478</sup> This correlates with the weakness of environmental institutions in the nation. A high turnover of ministers, budget cuts, and the unexplained dismissal of personnel have led to a gradual weakening of the nation's Ministry of the Environment and Water.<sup>479</sup>

When taken together, these factors show a relatively low political will to target environmental crime in Ecuador's Amazon in any meaningful way.

The ongoing evolution of Guyana's legal framework to protect the environment and its international commitment to preserve its forest indicates the country is committed to fending off environmental crime, especially illegal logging.<sup>480</sup> At the same time, however, the country is in a race to exploit its mining and oil resources, which has had an impact on the degradation of its ecosystems.<sup>481</sup>

Meanwhile, in Suriname, some political will to combat deforestation and its drivers moving forward is apparent. However, the results of recent promises are yet to be seen.

President Chan Santokhi, who has led the country since July 2020, has promised to better regulate the mining sector, in order to reduce its environmental impact and increase tax income.<sup>482</sup>

On top of this, the current government has advocated for Indigenous rights to be considered as mining concessions are handed out.

With its plan to create a new mining department in the Ministry of Natural Resources, it seems Indigenous groups will finally have a voice in these processes.<sup>483</sup> The department plans to engage with local communities, and to no longer grant concessions without local approval. If successful, this will be a leap forward in a country where Indigenous communities have long been ignored when concessions have been granted.

Unfortunately, according to members of local communities affected by mining, informal relationships between state officials and miners still decide who is allowed to legally mine and who is not.<sup>484</sup> As such, Suriname still has some challenges to overcome when it comes to transparency around activities like mining.

However, steps are being taken in the right direction. The mining department implemented a program for concession applications to be submitted online starting in 2019, to make processes more transparent.<sup>485</sup> While there is some political will to make proactive changes, the results are yet to be seen.

## Multilateral Cooperation

Our countries of study largely fail to cooperate between themselves (and with other nations in the region and beyond) to tackle environmental crime in the Amazon. This is a clear area for improvement.

In Glasgow, the majority of the Amazonian countries pledged to end deforestation in under a decade. The international community promised nearly \$30 billion in funding “to help unleash the potential of forests and sustainable land use.”<sup>486</sup>

Despite the fanfare, there are clear shortcomings in the agreement, with Bolivia and Venezuela not signing up, and the commitment of the Amazonian countries that did, especially Brazil, being called into question. Ultimately, the goal spelled out at COP26 is just that: a goal without a substantive roadmap to get there, or legislative teeth to enforce it along the way. At the regional level, similar degrees of divergence on environmental protection become clear.

Some treaties and formal alliances between Amazonian countries exist in name. The Amazon Cooperation Treaty Organization (ACTO) was established in 2002. It is made up of Brazil, Bolivia, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela.<sup>487</sup> ACTO’s origins date back to 1978, when the eight countries signed the Amazon Cooperation Treaty (ACT).<sup>488</sup>

The organization is currently working on a new Strategic Agenda for the 2021-2030 period. To date, it has set up different projects to strengthen institutional and civilian efforts around the management, handling, and monitoring of water and forest resources, as well as species of flora and fauna.<sup>489</sup>

However, the impact of these efforts has been limited.<sup>490</sup> Amazonian countries have traditionally struggled to strike a balance between environmental protection and economic

development.<sup>491</sup> This trend has hampered collaborative efforts to fight deforestation and environmental crime in some cases.

On top of this, ACTO lacks financial resources and faces internal difficulties. Decision making is slow and projections fall short of what they set out to achieve.<sup>492</sup> In this context, it should be a priority for future research to be able to contribute to the construction of a dialogue that supports cooperation with ACTO.

With ACTO struggling,<sup>493</sup> the Leticia Pact was signed by Colombia, Peru, Bolivia, Ecuador, Brazil, Suriname, and Guyana in 2019.

The agreement seeks to strengthen coordinated action to fight deforestation in the Amazon Rainforest, facilitate cooperation and the exchange of information, create an Amazonian Network for Cooperation in the face of natural disasters, and promote research and technological development to fight environmental crime and deforestation.<sup>494</sup> The Inter-American Development Bank (IDB) provided funding so each signatory can set up initiatives to combat deforestation within the pact’s framework.<sup>495</sup>

Finally, the Escazú Agreement, a regional treaty approved in 2018, seeks to expand access to environmental information, enhance public participation in environmental decision-making, and protect environmental activists in Latin America and the Caribbean.<sup>496</sup> It is important to note that while Bolivia, Ecuador, and Guyana have ratified this agreement, Venezuela and Suriname have yet to sign it.<sup>497</sup> There is no real indication that they will.

While both the Escazú Agreement and Leticia Pact mark a step in the right direction, their results are yet to be seen. For them to work effectively, each of our countries of studies must get onboard and a number of challenges must be overcome.

Environmental expert María Antonia Tigre explained that international cooperation to protect the Amazon comes with difficulties, including “political challenges, conflicts of interest, financial ambitions of countries, as well as biological, ethnic, and social diversities between them.”<sup>498</sup>

## Civil Society

In many cases, our countries of study have seen more effective action taken by civil society organizations than state authorities in tackling environmental crime across the Amazon.

While most state responses in Bolivia have been contradictory, civil society organizations in the nation have made focused, active attempts to combat illegal logging, mining, and wildlife trafficking in its Amazon region.

“Casa Verde,” a platform created by the Conservation Strategy Fund (CSF), has promoted sustainability in Bolivia by bringing local communities onboard and raising awareness of the damage environmental crimes cause.<sup>499</sup> The platform connects individuals and businesses with environmental organizations so they can work together on sustainability projects.<sup>500</sup>

A number of civil society groups have also acted to combat wildlife trafficking in the nation. These include Bolivian Network to Combat Wildlife Trafficking (Red Boliviana de Combate al Tráfico de Animales Silvestres – RE-BOCTAS), Animal S.O.S., La Paz Municipal Zoo, Love for Animals Association (Asociación Amor por los Animales Bolivia – APLAB),<sup>501</sup> the Earth Foundation, and CONTIOCAP.

To date, these initiatives have wielded greater success than national-level attempts to combat environmental crime in Bolivia.

Like in Bolivia, civil society groups play a more active role in monitoring environmental crime across Venezuela’s Amazon region than the state. Civilians, non-governmental organizations, and universities are keen to protect the rainforest, but they rely on economic support from overseas to act effectively.<sup>502</sup>

SOS Orinoco, an advocacy group set up in 2018 by a group of experts inside and outside of Venezuela, has been a key player in documenting environmental crime south of the Orinoco River. It has investigated mining in the region, as well as the criminal organizations involved in it.<sup>503</sup> The group has also documented the destruction mining causes to raise international awareness and make proposals to combat it.<sup>504</sup>

In other cases, Indigenous communities have defended their territories as criminal organizations with an interest in mining have encroached. This resistance has put some Indigenous groups living in Venezuela’s Amazon in great danger. However, it has meant that some have been able to protect their lands from environmental crime.<sup>505</sup>

Similarly, in Ecuador’s Amazon, some Indigenous communities have taken an active role in combating environmental crime. They have been pushed to do this as a result of scarce state efforts to tackle crimes like illegal logging.

Local communities in the region often collaborate with non-governmental organizations, which provide them with training to better patrol their territories using technology.

On the other hand, Ecuador’s Ministry of the Environment has been involved in a handful of programs that bring aboard local communities and NGOs to target environmental crime.

The ministry’s “Socio Bosque” program, launched in 2008, provided economic incentives to get communities involved in forest conservation.<sup>506</sup> While it offered some promise, its impact was limited by the nation’s subsequent economic crisis.

Non-governmental organizations have also collaborated with the nation's Ministry of the Environment. From 2014, WCS Ecuador and the Ministry of Environment started working toward the official implementation of a platform called SMART (Spatial Monitoring and Reporting Tool), which is used to record illegal activities in ten protected areas across Ecuador.<sup>507</sup>

Prior to this, in 2001, the ministry worked with private sector groups to develop an independent forest control system.<sup>508</sup> It established a control body called Green Surveillance (Vigilancia Verde), which monitored timber trade flows from forests to markets. It also introduced a body of independent forestry advisors, called Forestry Advisory (Regencia Forestal).<sup>509</sup> Finally, it handed over administrative and inspection duties to the private sector.<sup>510</sup>

The impact of this specific initiative was questionable, as illegal logging and timber trafficking have continued to thrive in Ecuador. On top of this, it is important to note that these collaborative initiatives undertaken with the Ministry of Environment's backing are still relatively rare. More often, local communities work with NGOs or come up with their own solutions to fend off environmental crime.

However, if implemented efficiently, with the correct expertise, public-private partnerships offer great promise in tackling environmental crime across Ecuador's Amazon.

In contrast to Bolivia, Venezuela, and Ecuador, civil society groups in Guyana are hardly involved in fighting environmental crime, as environmental education in the country is relatively low.<sup>511</sup>

However, members of some Amerindian communities have fought back against those encroaching on their territories.<sup>512</sup> On top of this, a handful of civil society organizations have worked with these communities to help them tackle the aftermath of environmental crime, including mercury pollution.<sup>513</sup>

In Suriname, civil society groups largely perform an awareness-raising function to combat environmental crime. However, their impact in reducing such activities is limited, due to the government's lack of interest and logistical difficulties in reaching remote zones of the nation's interior.

Local initiatives like the "NO KWIK," a project funded by the Environment and Mining Foundation of Suriname and Suriname Conservation Foundation, raise awareness around the impact activities like mining have. They share the dangers of mercury pollution with local communities.<sup>514</sup>

Other non-governmental organizations like the Amazon Conservation Team Suriname (ACT Suriname)<sup>515</sup> and the Foundation for Forest Management and Supervision (SBB)<sup>516</sup> also work to raise awareness.

At an international level, the Alliance for Responsible Mining (ARM), World Wildlife Fund Guianas, the Institute of Research and Development (IRD), and the University of Quebec in Montreal (UQAM) united to work on the "Supporting Mercury Phase-out in the Guianas" project. This, too, aimed to raise awareness around the impact mercury used in mining can have on people and surrounding ecosystems.<sup>517</sup>

These organizations have made great leaps in raising awareness around environmental crimes in Suriname. However, such groups can do little to fully stamp out these activities without authorities onboard.

NGOs are largely based in the nation's capital, Paramaribo. They have limited access to the nation's interior, where environmental crimes are being committed. Meanwhile, successive governments and state authorities have failed to curb environmental degradation themselves. This has placed an overwhelming burden on NGOs to address a large part of these crimes alone.

# CONCLUSIONS AND OPPORTUNITIES FOR INTERVENTION

Each of our countries of study still has a long way to go in tackling land grabbing, illegal logging, illegal mining, and wildlife trafficking across the Amazon region. Distinct conclusions can be made on environmental crime in each individual country. However, some common findings are clear across the region.

## **1. Each country has its own blend of environmental crime – but illegal mining is key**

A number of activities drive deforestation across the Amazon regions of Bolivia, Venezuela, Ecuador, Guyana, and Suriname. The specific blend of these activities varies from country to country. However, illegal small-scale gold mining is a common problem across the region, largely for its use as an economic alternative in areas where few opportunities exist. It is the main driver of deforestation in the Amazon regions of Venezuela, Guyana, and Suriname.<sup>518</sup> In Ecuador, illegal miners encroach on legal, industrial mining sites.<sup>519</sup> Meanwhile, in Bolivia, mining structures work beyond their limits or without permits.<sup>520</sup> As the price of gold continues to soar, it is unlikely that illegal mining will be stamped out any time soon.

## **2. NSAGs are getting involved in environmental crime across the Amazon**

NSAGs – once dedicated to trafficking drugs, arms, and people – have moved into environmental crime in some of our countries of study. Former FARC dissidents, the ELN, and "mining megagangs" oversee mining in Venezuela's Amazon region.<sup>521</sup> Some have expanded into Guyana.<sup>522</sup> Meanwhile, in Ecuador, NSAGs work along the border with Colombia to cultivate coca.<sup>523</sup>

## **3. Corruption facilitates environmental crime every step of the way**

Corruption greases the wheels of environmental crime in each of our countries of study. It is most commonly seen in low-level bribes. Corrupt environmental officials and police officers are paid off to overlook illegal logging in Ecuador and illicit mining in Guyana.<sup>524</sup>

Higher level networks made up of politicians and state officials mean environmental crimes across the region often go undetected or unpunished. Venezuela offers the most interesting example of high-ranking corruption, as NSAGs work with officials from the Venezuelan government to extract and move illegal gold out of Bolívar.<sup>525</sup>

## **4. Legal actors behave illegally or irregularly**

Some legal actors – state officials, authorities, and legally-registered enterprises – have facilitated environmental crime across our countries of study through illegal or irregular acts. In Ecuador, criminal entrepreneurs illegally source wood in the Amazon and sell it to legal forestry companies.<sup>526</sup> Meanwhile, Guyana's gold traders and Suriname's first gold refinery have been implicated in numerous scandals.<sup>527</sup>

Others, like palm oil companies in Ecuador, behave in accordance with the law of a given country but still contribute to widespread deforestation.<sup>528</sup> The activities of these businesses are often promoted by governments for economic growth.

State actors have also had some complicity in irregular acts driving environmental crime. This is a major problem in Bolivia, where mining concessions set up in protected areas have been backed by state officials.<sup>529</sup>

### **5. Deforestation in the Amazon is often a product of organized crime – but not all environmental crime is organized**

A mixture of criminal networks/entrepreneurs and NSAGs drive land grabbing, illegal logging, mining, and wildlife trafficking across the region. However, not all environmental crime is organized. Often, those paid to mine gold, fell trees, and catch jaguars are local people with scarce economic alternatives. Criminal entrepreneurs exploit this, making use of local knowledge on where to find in-demand species of trees and animals. Some locals act opportunistically, particularly in the wildlife trade, which is often considered a “disorganized crime.”<sup>530</sup>

### **6. Lack of coordination is a challenge for all**

Each of our countries of study sees relatively low state resilience when it comes to targeting environmental crime, which is often not considered a priority. Amazonian countries currently act in isolation as they target illegal logging, illegal mining, and wildlife trafficking. They scarcely coordinate cross-border operations. However, the Amazon’s porous borders and international supply chains mean greater cohesion between these nations will be key in the years to come.

Each of our countries of study should make imminent efforts to combat deforestation now, to avoid the fate of Amazonian counterpart Brazil. Brazil’s Amazon region has reached a crisis point, as more carbon dioxide is now released than absorbed.<sup>531</sup>

### **7. Environmental crime in the Amazon feeds international markets**

Illegal logging and mining sometimes feed domestic markets for furniture and jewelry in the Amazon. However, most environmental crimes committed in the region fuel legal international markets. Balsa wood illegally felled in Ecuador is sent to the United States and China, and gold sourced in Venezuela makes its way across the world.<sup>532</sup> The body parts of jaguars hunted in Bolivia, Guyana, and Suriname are sold on Asian markets.<sup>533</sup> The illicit origins of gold, wood, and animal parts are covered up as such products are passed along lengthy supply chains.

## Looking Ahead: Opportunities to Combat Environmental Crime in the Amazon Rainforest

### Promote Technology to Fight Environmental Crime

When used correctly and with proper training, technology can be used to stave off environmental crime across the Amazon. Work together with forest monitoring platforms like MAAP, Global Forest Watch, and Kongsberg Satellite Services (KSAT) to keep track of hot spots affected by environmental crime. Provide local communities with smartphones, drones, and other technology to track and report illegal logging, land grabbing, mining, and coca cultivation on their lands. Give locals the training to be able to use these tools effectively. Support innovative approaches to monitoring, investigating, and ending environmental crime in our countries of study.

### Build Alliances with Local Communities Across the Amazon

Increased steps need to be taken to work with local communities in fighting environmental crime across the Amazon. Members of local communities are most often approached by criminal networks/entrepreneurs to provide the manual labor for illegal logging, mining, and clearing forests.

Build constructive relationships with these communities to prevent them from falling into environmental crime. Give them economic alternatives that provide the income they may otherwise seek by felling trees and mining gold on behalf of criminals. Support reforestation programs like those carried out by the United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation (UN-REDD), giving members of these communities a leading role. Provide them with training to monitor their lands with drones and smartphones. Make it easier for them

to denounce environmental crimes on their lands by taking their complaints seriously and giving them easy-to-use, confidential reporting mechanisms (i.e. mobile applications).

Ensure they are involved in the planning and issuing of mining or logging concessions. In practice, this does not happen in the likes of Ecuador and Suriname, where there is a lack of trust between authorities and such communities. Members of local communities are the best allies authorities can work with in combating environmental crime. Concrete actions must be taken to strengthen these alliances.

### Protect Indigenous Reserves and Safeguard Protected Areas

Environmental crime thrives across protected areas in our countries of study, from Bolivia's national parks to Ecuador's Indigenous territories. This is often due to weak state presence, the vast size of such spaces, and, in some cases, a lack of legal protection for Indigenous communities. Greater resources need to be allocated to protect these areas and law enforcement patrols need to be stepped up. Map out and regularly monitor high-risk areas, tailoring law enforcement operations and support for local communities accordingly.

### Partner Up with Civil Society Organizations and the Private Sector

Consumers who are unaware of the origins of illegally sourced timber, gold, and wildlife unknowingly fuel environmental crime in the Amazon. Work with civil society organizations to raise awareness around how environmental crimes work in the region. Through public campaigns, highlight the importance of consumers buying from companies who adhere to due diligence.

Bringing onboard the private sector is becoming increasingly important in fighting environmental crime across the Amazon. Legal companies (forestry companies and refineries, among others) may knowingly or unknowingly fall into the trap of purchasing illegally sourced

timber or gold. Work with these enterprises to make due diligence a priority. Collaborate with them to promote internal anti-corruption mechanisms and procedures to target irregularities. Encourage businesses to adopt sustainable practices and avoid sourcing goods from the peripheries of or within protected areas. Set up independent, public bodies in each country of study to ensure that these enterprises fulfill such commitments.

### **Crack Down on Corruption**

Some of those in charge of stamping out environmental crime across the Amazon have frequently been accused of fueling it through turning a blind eye to illegal wood, minerals, and animal parts. Others have formed part of high-level corruption networks, as has been the case in Bolivia, Venezuela, and Ecuador. Combat corruption driving environmental crime by increasing intelligence operations to find out which “legal actors” may be involved. Set up independent anti-corruption units with a focus on environmental crime in each country of study, to stop corrupt officials and authorities falling through the gaps. Increase penalties for those found facilitating illegal logging, mining, land grabbing, and wildlife trafficking. Increase pre-employment checks on police and officials who will work to combat environmental crime.

### **Promote Increased Cooperation Between Governments**

While most of our countries of study belong to the ACTO and have (excluding Venezuela) signed the Leticia Pact to combat environmental crime in the Amazon, little has been done to follow this through. The governments of our countries of study must collaborate more effectively, closely, and regularly to stamp out cross-border timber trafficking, illegal mining, and wildlife trafficking. Joint operations to target hotspots for these activities should be set up with the support of international organizations like INTERPOL. Greater multilateral efforts should be made by specialized regional organizations such as the Financial Action Task Force of Latin America

(Grupo de Acción Financiera de Latinoamérica – GAFILAT) to detect illicit financial flows linked to environmental crime and patrol key smuggling routes. Our countries of study should work together to support and protect local communities vulnerable to environmental crime in Amazonian borderlands, through the provision of economic alternatives, training to monitor their lands, and greater law enforcement.

### **Support Specialized Prosecutors to Shift Perceptions**

Not all of our countries of study have prosecutors who have a specialized knowledge of environmental crime. This means that crimes like timber trafficking, illegal mining, and wildlife trafficking are often seen as insignificant, when considered alongside drug trafficking and homicide. Only recently, Ecuador and USAID announced a specialized unit would be set up to punish environmental crime in the nation.<sup>534</sup> Specialized Attorneys General’s Offices working to target environmental crime should be set up in each country of study. They should be provided with regular training that considers the shifting *modus operandi* used to carry out such crimes and wider trends to consider. The presence of these bodies should be used to show law enforcement officers that environmental crimes need to be tackled and are increasingly organized.

### **Step up Cross-Border Patrols and Intelligence**

From mercury to wildlife parts, illicit products of environmental crime are frequently smuggled through porous land borders, or via key Amazonian riverways. Our countries of study should work together to build intelligence around the most commonly used routes, tailoring resources accordingly to clamp down on smuggling across the region. These routes, blind spots, and the actors using them should be mapped out on a centralized database available to intelligence units in each Amazonian nation. Collaborative police operations in border zones should be planned according to this information.

### **Promote Clear Forest Management Systems**

Clear legal limits need to be put in place across our countries of study to promote sustainable forest management. This means clearly defining how many forestry resources can be used in designated areas, when, and how. Countries like Bolivia currently have ambiguous regulations in place to regulate forest use.<sup>535</sup> This means that doors are left open for illegal loggers, land grabbers, and others to take advantage of legal vacuums. Clearly defined limits with regular checks made to enforce these will combat this.

### **Encourage Sustainable Agriculture and Cattle Ranching**

Agricultural activities are the main drivers of deforestation across the Amazon Rainforest. These are often carried out legally but, in some cases, they have ties to land grabbing and illegal or unauthorized clearing. In many cases, unsustainable and irregular practices are used to rear cattle and grow crops, leading to more and more deforestation. Encourage small-scale farmers to adopt sustainable practices in return for financial incentives. Ensure large-scale agricultural enterprises comply by increasing penalties for those who behave irregularly, illegally, and unsustainably. Increase restrictions and legal clarity around the use of protected areas in the likes of Bolivia, so these zones are not encroached upon by large-scale agricultural interests.

### **Ensure Comprehensive Investigations and Consultations Are Carried Out Before New Roads Are Constructed**

Illegal, irregular, and legal roads have paved the way for environmental crimes to occur across the Amazon. Local communities affected by this infrastructure and what it leads to are often not consulted in legal planning processes. Ensure these planning processes thoroughly consult local communities. Make sure these processes assess the environmental impact a given road would have, including the environmental crimes it may pave the way for. On top of this, make greater efforts to curb the illegal/informal construction of roads through regular satellite monitoring of potential deforestation hot spots.

# End notes

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