Amazon Fires – Background Information
Prepared by Rainforest Partnership

Fires
1. The fires are not new – they’re seasonal – but the rates and overall numbers are highs for the decade and reflect the shift toward pro-deforestation policy of President Bolsonaro.
   a. The majority of the fires have been in the states of Mato Grosso, Pará, and Amazonas
   b. Original statistic that was circulated: ~74,000 year-to-date fires in Brazil, up ~84%
   c. Further reporting (8/23) clarified that over 40,000 fires were in the Amazon region, which was up ~35% from year-to-date averages since 2010.
      Reference: NYTimes: Amazon Rainforest Fires: Here’s What’s Really Happening
   d. As of September 9, 2019, fires have totaled 102,786 in Brazil and 73,243 in the Amazon region.
      Reference: National Institute of Space Research – Website in BP
   e. Past years with high totals: 2012’s YTD was over 107,000; 2010’s YTD was over 166,000; and, in the period between 2002 and 2007, the yearly average for fires was ~153,000)
      Reference: National Institute of Space Research – scroll down to the “tabula anual comparativa de países” and find the "Todos os anos" tab
   f. For Brazil: The month of September is historically a much worse month for fires than August.
      Reference: National Institute of Space Research – Fires by month and year
   g. From January 2019 through July, over 7,200 square miles (4.6 million acres) of the Brazilian rainforest has burned. That’s more than the states of Connecticut and Rhode Island combined.
      Reference: National Geographic – Amazon Fires Land Area
   h. Adding to the sense of urgency, a recent assessment of the New York Declaration on Forests (NYDF), which aimed to half deforestation by 2020 and halt it by 2030, says that the declaration has failed in achieving key pledges. According to Charlotte Streck, whose organization Climate Focus coordinated the report’s publication, deforestation has not only continued but accelerated since the declaration was made.
      Reference: BBC – World 'losing battle against deforestation
Drivers

1. The most notable new drivers of the fires center on Bolsonaro’s reshuffling of environmental responsibilities across various governmental bodies, slashing of staff and funds for various agencies, and pursuing fewer fines for crimes associated with deforestation and the environment.

   a. “Within hours of being sworn in to office on January 2 [of this year], Bolsonaro moved all forest policy to the Ministry of Agriculture … The transfer included FUNAI’s long-standing role in demarcating Indigenous lands, which was added to the portfolio of the assistant minister for land affairs, Luana Ruiz, a lawyer whose family owns land that overlaps with Indigenous territory in the state of Mato Grosso do Sul.” The transfer of FUNAI’s authority has now been blocked several times; however, Bolsonaro continues to issue orders for the transfer of authority each time it’s blocked. FUNAI is Brazil’s government body that establishes policies and carries out policies relating to Indigenous Peoples. The acronym translates to the National Indian Foundation.

   b. “Bolsonaro’s 44-year-old Minister of Environment Ricardo Salles has slashed staff and funding at FUNAI’s most important partner in government, the environmental monitoring and enforcement agency known as IBAMA.”

   c. Salles, in addition, “has replaced the board of Brazil’s conservation institute, ICMBio, with officers from São Paulo’s military police, part of what Brasil de Fato, a weekly newspaper, calls the ‘militarization of the environmental sector.’”

   d. According to The Intercept, Salles also fired everyone in the sustainable development office and then chose to leave it empty.

   e. Other notes:

      i. “In the last half-century, about one-fifth of this forest, or some 300,000 square miles, has been cut and burned in Brazil.” That’s an area larger than the state of Texas.

      ii. “Scientists warn that losing another fifth of Brazil’s rainforest will trigger the feedback loop known as dieback, in which the forest begins to dry out and burn in a cascading system collapse, beyond the reach of any subsequent human intervention or regret. This would release a doomsday bomb of stored carbon, disappear the cloud vapor that consumes the sun’s radiation before it can be absorbed as heat, and shrivel the rivers in the basin and in the sky.”
f. **Official data from Brazil's environment agency shows fines from January to 23 August dropped almost a third compared with the same period last year.**
   Reference: [BBC – Fines for deforestation dropped a third](#)

   g. **The Head of Brazil’s National Institute of Space Research, Ricardo Galvão, was fired in early August (8/2) amid internal government controversy showing a rise in deforestation.**
   Reference: [The Guardian – Head of INPE sacked](#)

2. Many people are trying to identify the main drivers, and many of them point toward consumption.

   a. **Soy:** Ongoing trade-war has caused China to turn away from U.S. and toward Brazil for soy; China just signed a new deal with Brazil to buy its soy from Brazil in 2020; and Brazil just took the lead from the U.S. as the #1 exporter of soy in the world

   b. **Beef:** Brazil is the largest producer and exporter of beef in the world. According to Business Insider, nearly 50% of Brazilian livestock are raised in fields that used to be rainforest. “Today, Brazil has the planet's second largest herd of cattle and produces 10 million metric tonnes of beef per year. It's also the world's top exporter providing 20 percent of global beef exports, with China as its largest customer.”
   Reference: [Business Insider – Link between Amazon and Meat Consumption](#)

   i. As with all these issues, these topics are complicated. For an on-the-ground / human perspective, read more here: [NatGeo – Farmers and Their Complex Relationship with the Land](#)

   c. **Leather:** “Worried by the link, [VF Corp.,] the US parent company of footwear and clothing brands such as Vans, Timberland, The North Face, Dickies, Kipling, and many more, says it has suspended its leather and hide purchases from Brazil.” Brazil is the 2nd largest global exporter of leather behind China and produces 97 million square feet of leather per year.
   References: [Quartz – Amazon Leather](#)

   d. Corporations are distancing themselves from products and goods sourced from Brazil. Asset managers, pension funds and companies have issued warnings, halted deals and stopped purchases of government bonds.
   Reference: [The Guardian – Business and Financial Pressures](#)
Indigenous Peoples

Brazil is home to approximately 900,000 indigenous people from 305 tribes, most of whom live on reserves, according to Brazil’s Socio-Environmental Institute. More than 120 traditional territories claimed by indigenous groups have not yet received government recognition.

Source: Mother Jones – Protests Against Bolsonaro

1. During Bolsonaro’s campaign, he “compared the Amazon to ‘a child with chickenpox,’ saying that ‘every dot you see is an Indigenous reservation.’ He vowed no new protections for Indigenous land and is already laying the groundwork to eliminate protected areas.”

Reference: NACLA – Bolsonaro’s comments on indigenous reserves

2. “A number of groups representing the Amazonian indigenous peoples declared an environmental and humanitarian emergency on Thursday [8/22] in an open letter. They are calling on the Office of the High Commissioner for Human Rights and the Special Rapporteur on the Rights of Indigenous Peoples to the United Nations to take action as the violent fires threaten their people with what the letter calls ‘extinction.’”

3. “This dependence on the forest is exactly why the fires can be so detrimental to the well-being of indigenous peoples. These communities don’t have supermarkets or pharmacies to go to. They have the Amazon. The forest serves as all that and more. It’s where they hunt, where they fish, where they gather materials to build their homes.”

4. Several studies and reports have shown that deforestation decreases in the lands formally held by indigenous groups.

   a. The study referenced above is “Titling indigenous communities protects forests in the Peruvian Amazon,” and the results suggest that awarding land titled to local communities can protect forests.

5. Raffaella Fryer-Moreira, an anthropologist at University College London, was quoted to say, “The forest fires we are witnessing today will be understood by many communities not only as an ecocide but as a genocide” and went on to say, “While it is clear that indigenous communities are disproportionately affected by this damage—in terms of immediacy and scale of impact, as well as an absence of alternative resources—we cannot ignore the fact that our species as a whole depends on the global environment”

Reference for points 2-5 listed above: Farther (Gizmodo) – Amazon Fires and Impact on Indigenous Peoples

6. During his campaign for president, Bolsonaro promised that under his presidency there would be no further demarcation of indigenous lands.

7. Sônia Guajajara, the coordinator of the Articulation of Indigenous People of Brazil, a prominent organization that lobbies for indigenous rights, blames the fires, in part, on weakened environmental protections and new roads, which have left the forest fragmented and even more vulnerable to flames.
8. “According to data from the Instituto Socioambiental, in the past month there were 3,500 fires in 148 indigenous territories in the Brazilian Amazon. “This is a pretty shocking statistic,” says Christian Poirier, the program director for Amazon Watch. He says that indigenous people are responding by “trying to expose what is happening on their territories and demanding that the government take action.”

9. Helena Palmquist, who handles many indigenous affairs for the public ministry of the Amazonian state of Pará, says, “I’ve been receiving many complaints in the past few months of many invasions on indigenous land.” These intrusions are happening, she adds, “even in areas that have been guaranteed in Brazilian law to be free from invasion.”

10. The Atlantic Reporter Shannon Sims writes, “The Brazilian constitution offers protections to both the environment and indigenous peoples, but local enforcement agencies often fail to safeguard either. “Enforcement has essentially been paralyzed in the Bolsonaro administration,” Palmquist says. She says that indigenous people often complain to the police that they hear tractors or see smoke coming from the forest but that the federal police don’t seem to do anything. “The indigenous people are on the front lines. They are feeling the greatest impact from the destruction of the forest,” she told me.”

11. “The Brazilian constitution describes indigenous territories as areas where indigenous people can live permanently—that is, where they can practice their cultures and traditions (which might include hunting or cutting down trees)—even though the land technically still belongs to the government. The multistep process to demarcate lands as indigenous territories can take years, and requires groups to demonstrate that the land is their ancestral territory. Many groups have been stuck in limbo in that process, waiting and hoping for the government to act. That has left groups vulnerable, and once Bolsonaro was elected, their hope for demarcation quickly dimmed.”

12. “The best mechanism for the protection of the forest is demarcation,’ says Miguel Aparicio, a professor of ethnography who has been researching indigenous communities in the Amazon for 25 years. ‘Demarcated land has the lowest rates of deforestation, so there is nothing better than demarcating to guarantee the long life of the forest.’ He says that the fires are being put out most quickly by residents when they are in indigenous territory, ‘because indigenous people are truly fixated on extinguishing the fires and protecting their land.’ For him, more indigenous territory means more guardians of the forest and, during the dry season, more firefighters.”

13. “For us to lose the forest and the animals in these fires … they are basically burning our rights and our way of life,’ Guajajara says. ‘The fires are destroying where we get our food; they are damaging the rivers where we get our water; and they are impacting our rituals. So these burnings are immeasurable losses.’”

References for points 6-13 found above: The Atlantic – Amazon Fires on Indigenous land
14. IBAMA claims that, though warned days in advance of “A Day of Fire” in Pará state, it received no law enforcement backup from federal or state authorities. This allowed ruralists (radical agricultural advocates) in Altamira and Novo Progresso to set hundreds of fires on August 10-11, with little fear of fines or prosecution.

Reference: Mongabay – Misinformation and Blame

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Resources for Verified Media/Images

1. Nasa’s Atmospheric Infrared Sounder instrument, aboard the Aqua satellite, produced this composite animation of the carbon monoxide plumes associated with the Amazon fires:
   https://photojournal.jpl.nasa.gov/archive/PIA23356.mov

   From Esprit Smith of NASA’s Jet Propulsion Laboratory:
   “This time series maps carbon monoxide at an altitude of 18,000 feet (5,500 meters) from Aug. 8-22, 2019. As the series progresses, the carbon monoxide plume grows in the northwest Amazon region then drifts in a more concentrated plume toward the southeastern part of the country.

   Each "day" in the series is made by averaging three days' worth of measurements, a technique used to eliminate data gaps. Green indicates concentrations of carbon monoxide at approximately 100 parts per billion by volume (ppbv); yellow, at about 120 ppbv; and dark red, at about 160 ppbv. Local values can be significantly higher.”

2. Flyover photos recently released from Greenpeace show fires on what appear to be both tracts of land and forested area (scroll down to next page).
   Full archive can be found here: Greenpeace – Amazon Fire Archive
Forest Fires in Porto Velho, Rondônia, Amazon - Third Overflight (2019)

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Forest Fires in Altamira, Pará, Amazon (2019)
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Amazon Burnt Area in Porto Velho, Rondônia, Amazon (2019)
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3. In addition, CBS has a slide show that has good shots of the fires:

4. From NASA’s Earth Observatory:
   Source: https://earthobservatory.nasa.gov/images/145464/fires-in-brazil