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POINTS TO BE TAKEN INTO ACCOUNT FOR
THE IMPLEMENTATION OF THE LETICIA PACT

DAR
DERECHO AMBIENTE Y RECURSOS NATURALES

THE FUNDAMENTAL PROBLEMS THAT MUST BE SOLVED TO AVOID A NEW DEVASTATION IN THE AMAZON.
Points to be taken into account for the implementation of the Leticia Pact

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The fundamental problems that must be solved to avoid a new devastation in the Amazon

POINTS TO BE TAKEN INTO ACCOUNT FOR THE IMPLEMENTATION OF THE LETICIA PACT

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The Amazon basin covers 7.4 million km², 90% of which is covered by forests, which extend through the countries of Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru, Suriname and Venezuela. The Amazon River basin is the largest in the world, with the world's largest flow, averaging 225,000 m³ of water per second. It is also a highly complex system where its multiple components depend on the integrity of the whole (WWF, 2016)[1], home to a third of the world's primary forests, it produces 20% of the Earth's fresh water and is home to at least 10% of the planet's known biodiversity (WWF, 2016). In addition to being the territory of many indigenous peoples and traditional communities, with an incalculable cultural heritage, whose ways of life, with a close relationship with nature, allow them to take advantage of their resources without jeopardizing the existence of the Amazon. Something that our governments have not been able to guarantee so far.

In addition, the Amazon forests provide numerous ecosystem goods and services that benefit not only local populations, but the entire planet. Thanks to their interaction with the Andes Mountains and the Atlantic Ocean, they play a key role in the water cycle and the regulation of temperature, keeping it within certain ranges.

Forests also regulate greenhouse gas emissions, helping to mitigate global warming by absorbing CO_2 from the atmosphere and releasing oxygen through the process of photosynthesis. In addition, it acts as a carbon sink, storing between 90 and 140 billion tons of carbon (WWF 2016).

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1. http://awsassets.panda.org/downloads/amazon__spanish.pdf

The Amazon and forest fires

In the Amazon, fire is a widespread element in the rural landscape (Nepstad et al 2019), as part of agricultural practices. It is used to clean recently deforested areas, preparing the land for agricultural activities. However, what this type of practice does is to accelerate the processes of soil degradation and loss, since, due to the type of soils in the Amazon forests, which are characterized by a shallow arable layer, the burning of stubble and fallow ends up reducing more and more this fertile layer for the development of crops. Revealing the underlying objectives behind these burns: deforestation for the trafficking and grabbing of land, feeding on the speculation surrounding these.

Fires contribute to both deforestation and forest degradation, affecting forest resilience. This is already diminished by droughts, which are increasingly intense and frequent due to the impacts of climate change, making them more vulnerable to other dangers, such as new burns, pests, droughts, storms, among others (Brando et al 2019[2]).

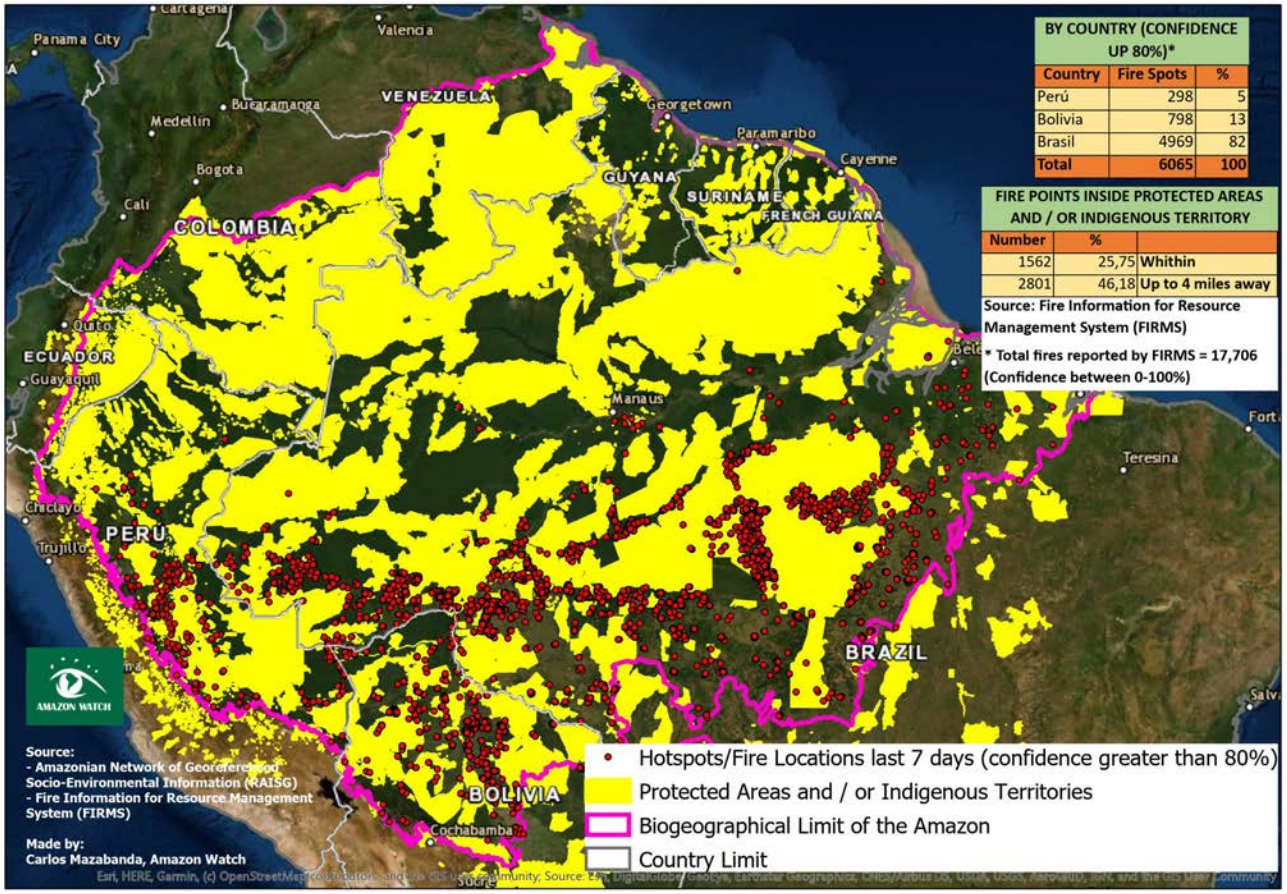
Photo: Han Silvester GAMMA-RAPHO

In the middle of this crossfire are the protected areas and territories of indigenous peoples.

The territories that have historically been containing the advance of deforestation in the Amazon, as can be seen in the map of Global Forest Watch and Amazon Watch (2019),

2. Paulo M. Brando, Lucas Paolucci, Caroline C. Ummenhofer, Elsa M. Ordway,Henrik Hartmann,Megan E. Cattau, Ludmila Rattis, Vincent Medjibe, Michael T. Coe, and Jennifer Balch. Droughts, Wildfires, and Forest Carbon Cycling: A Pantropical Synthesis Annual Review of Earth and Planetary Sciences. Vol. 47:555-581

where it is observed that the vast majority of the hot spots registered in recent days in the Amazon basin, are located in areas close to protected areas and territories of indigenous peoples, putting them both in the front line of defense against fires and at the same time evidencing their vulnerability.



Hot spots inside and outside Conservation Units and Indigenous Territories of Brazil.
Source: Amazon Watch, 2019

Faced with these disasters, the Coordinating Committee of Indigenous Organizations of the Amazon Basin (COICA), which brings together the nine countries of the Amazon Basin, indicates that the forest fires unleashed in Brazil and Bolivia in recent weeks are affecting more than 100,000 indigenous people.

In Brazil alone, the presence of hot spots in 148 indigenous lands and 118 conservation units has been recorded in the past year. According to information from the Socio-environmental Institute (ISA), since late July, the indigenous lands most affected by the fires were: Araguaia Indigenous Park (TO), TI Pimentel Barbosa (MT), TI Parabubure (MT), TI Apyterewa (PA), TI Marãiwatsédé (MT), TI Kayapó (PA), TI Areões (MT), TI Kanela (MA), TI Mundurucu (PA) and TI Pareci (MT)[3].

In the case of Conservation Units, the situation is more serious, with more than twice as many hotspots compared to Indigenous Lands. Apa Triunfo do Xingu (APA), Florex Rio Preto-

3. https://www.socioambiental.org/pt-br/noticias-socioambientais/isa-mostra-terras-indigenas-mais-afetadas-por-incendios-na-amazonia-brasileira

Jacundá (RO), Flona do Jamanxim (PA), Resex Jaci Paraná (RO), Pes do Mirador (MA), Apa do Tapajós (PA), Esec da Terra do Meio (PA), Flona de Altamira (PA) and Pes de Guajará-Mirim (RO), were the most affected Conservation Units. It is important to note that the largest number of fires were recorded outside the Conservation Units and Indigenous Lands[4].

Faced with this scenario, COICA has issued an open letter demanding the declaration of an environmental and humanitarian emergency, requesting the intervention of the Office of the High Commissioner for Human Rights and the Special Rapporteur on the Rights of Indigenous Peoples before the United Nations, in order to take necessary actions to face this emergency and formulate preventive measures for the future, as well as the activation of a Solidarity Fund[5].

Risk across the region: common elements

The environmental catastrophe that has turned the eyes of the world on the Amazon in recent weeks, is configured by three elements: deforestation, climate change and the underlying interests behind these burns, the latter have added "gunpowder" to the fire that was already accumulating. These fires are composed of weak institutions, absence of the state, lack of territorial order, lack of recognition of the rights of indigenous peoples and other traditional communities, schizophrenia of the Amazonian states that promote, on the one hand, policies that drive deforestation, as well as others that seek to curb it[6]; and as if that were not enough, the impacts of Climate Change, which make droughts in the Amazon more intense and frequent (Brando et al. 2019). In this way, a propitious scenario is emerging for controlled burns to turn into disasters of great magnitude. Therefore, giving way, to a conducive scenario where controlled burns turn into disasters of great magnitude.

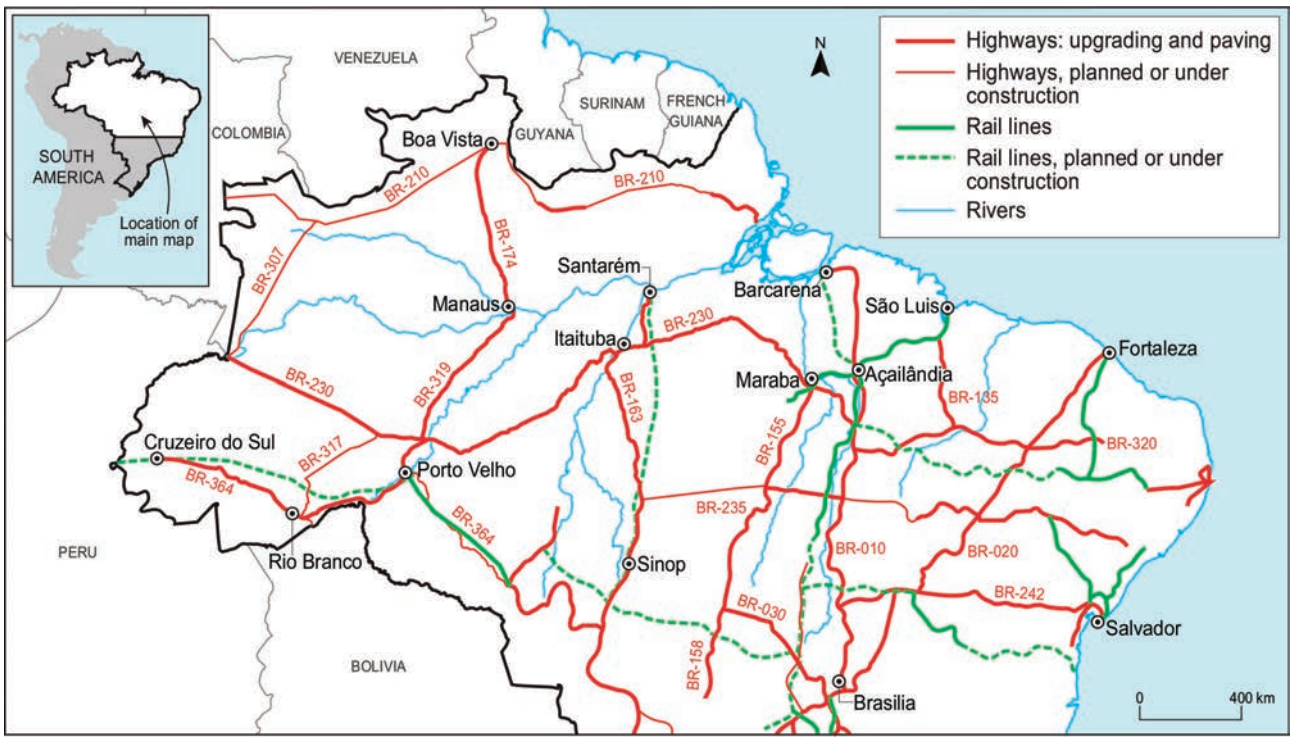
These elements are evident in the events that have occurred in recent weeks in Brazil and Bolivia. Many Brazilian institutions had already warned of these factors; INPE, the organization responsible for monitoring and disseminating data on deforestation in Brazil, indicated in early August that deforestation in the Amazon had increased by 39% over the same period last year[7]. As well as the IPAM (Institute of Environmental Research of the Amazon)[8], which warned in its technical note the direct relationship between the increase in burning and the growth of deforestation. Indicating that 7 of the 10 municipalities that registered the most extensive fires since January 2019 coincide with the municipalities with the highest concentration of deforestation so far this year.

An important element to consider in this triad of factors are the hundreds of burns along existing and planned roads, the latter particularly important, because it raises a flag about the processes of speculation and land traffic, driven by processes of migration and land use

4. Ídem
5. https://www.facebook.com/CoordinadoraOrganizacionesIndigenasCuencaAmazonica/photos/pcb.482797728940184/482797705606853/?type=3&theater
6. http://www.dar.org.pe/archivos/publicacion/OS%20Articulo%20Carreteras_20.02.pdf. https://bankinformationcenter.cdn.prismic.io/bankinformationcenter%2F9ce19fe0-50ca-44e8-a70f-78334cf7f68f_peru-+estudio_bic-dar_limpio+rev_29.05.2018.pdf
7. INPE: more than 300,000 hectares of Amazon forest have been lost since Bolsonaro took office in January. https://www.elespectador.com/noticias/el-mundo/la-destruccion-amazonica-se-acelera-durante-el-gobierno-de-bolsonaro-articulo-873782
8. https://ipam.org.br/wp-content/uploads/2019/08/NT-Fogo-Amazo%CC%82nia-2019.pdf

change. This element is evident in the Brazilian states with the highest deforestation and the highest incidence of fires, as are:

- Pará, along the BR 163[9] highway whose Dantesque fires did not start a month ago, but have been registered with greater intensity since 2017[10] when the road was paved.
- Amazonas, at the intersection of Transamazónica (BR-230) and the Porto Velho-Manaus highway (BR 319), a road that runs from Manaus to Porto Velho and Rondonia, where the deforestation arch is located, and that connects the centre of the Amazon with the main drivers of deforestation[11]. For example, the migration of loggers from the state to these areas has been recorded[12].
- Acre, where the NGO Comissão Pró-Índio reports the incidence of fires along primary and secondary roads, as well as in road projects on the borders with Peru, driven by speculation and land traffic, phenomena that could cross the border and replicate in our country.

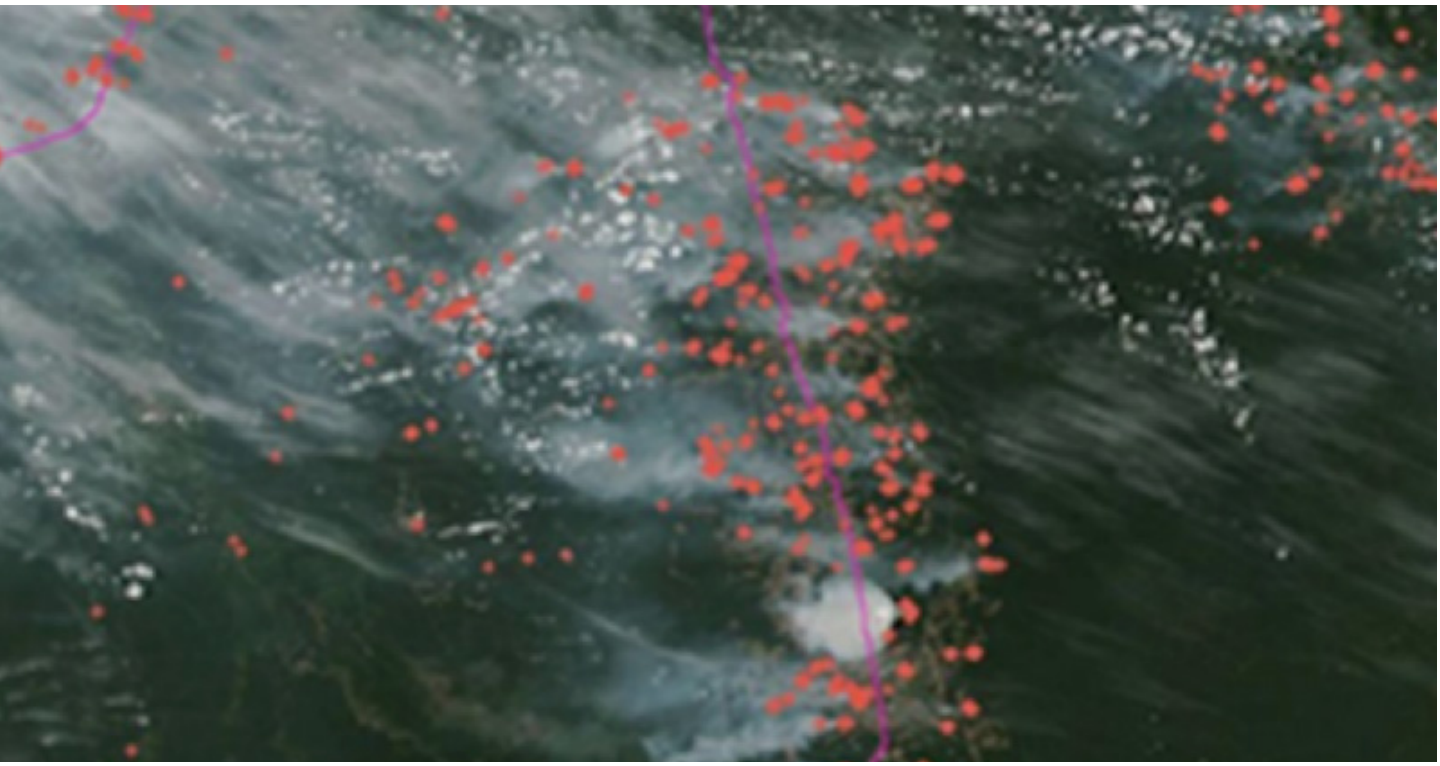


Source: Expansion of planned infrastructure in the Brazilian Amazon (Bebbington, 2009)[13].

[MapBiomas[14]: See the animation of the advance of deforestation along the BR163 highway in the last 33 years.]

9. https://es.mongabay.com/2017/12/record-incendios-la-amazonia-deja-cientificos-anonadados/
10. https://www.elespectador.com/noticias/medio-ambiente/satelites-de-la-nasa-muestran-como-arde-la-amazonia-de-brasil-articulo-876950
11. https://www.facebook.com/cnn/videos/659104204568726?s=1073238536&v=e&sfns=mo
12. https://www.elespectador.com/noticias/medio-ambiente/satelites-de-la-nasa-muetran-como-arde-la-amazonia-de-brasil-articulo-876950
13. http://www.dar.org.pe/archivos/docs/revista.pdf
14. http://mapbiomas.org/map#transitions

At this juncture, it´s fundamental and important to put this discussion on the table, since it can be said that all Amazonian governments promote the construction of infrastructure in the Amazon without adequately pondering how these roads, in addition to connecting, function as catalysts for deforestation, forest degradation and sources of GHG emissions; the governments of Bolivia and Brazil have shown us the consequences to which we are heading, since these conditions are repeated in all Amazonian countries.



Fires along the BR 163 highway, in the region of Pará, which affected the Floresta Nacional do Jamanxin (Image of August 13 captured by the Terra de Nasa satellite[15]).

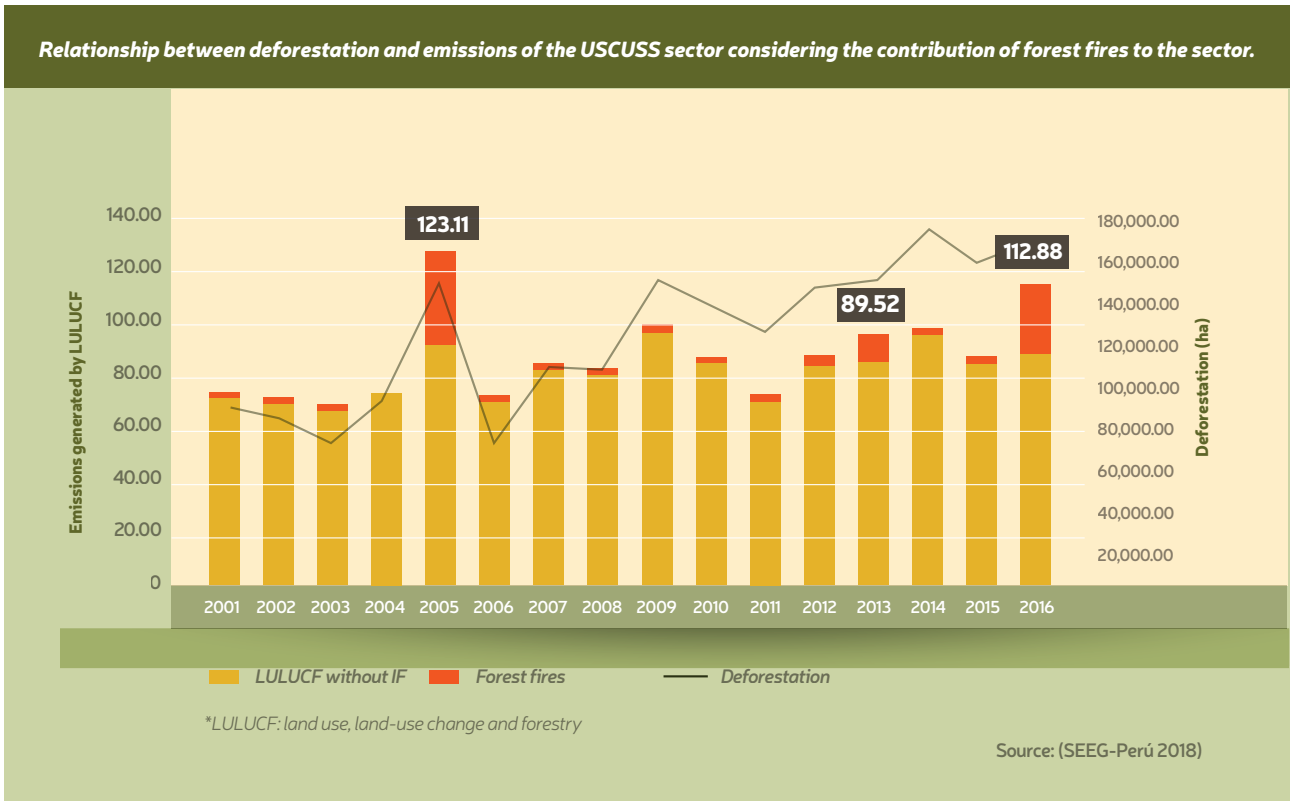
Peru: Chronicle of an announced devastation

The devastating fires that are now on the front pages of the media are only the tip of the iceberg of the underlying problem: deforestation and its drivers. In Peru, the direct cause of deforestation is the advance of the agricultural frontier, but the driving force behind the change in land use is the expansion of road infrastructure, without land use planning or security, triggering processes of uncontrolled migration, creating the ideal scenario for this type of disaster.

15. https://www.elespectador.com/noticias/medio-ambiente/satelites-de-la-nasa-muestran-como-arde-la-amazonia-de-brasil-articulo-876950

According to the latest IPCC Special Report on Climate Change and Lands (2019)[16], Land Use Change (USCUSS sector) represents 23% of global greenhouse gas emissions. And even more, for tropical countries, where this sector contributes on average more than 40% of their national emissions, in addition to playing a major role in global climate change (Aragão, 2018[17]), as evidenced in a recent report by Rainforest Foundation Norway (2018)[18], which analyzes the situation of 6 countries with the largest tropical forests in the world.

Likewise, one of the impacts of forest fires is the increase in GHG emissions as a result of forest loss. In Peru, the years 2005, 2013 and 2016, years which presented important droughts, there were uncontrolled burns that became forest fires of great magnitude, which produced a considerable increase in GHG emissions in those years (SEEG Peru, 2018[19]), as can be seen in the following figure:



Relationship between deforestation and emissions of the USCUSS sector considering the contribution of forest fires to the sector (SEEG Peru 2018)

Climate change is playing an increasingly important role in the incidence of forest fires, along with increased deforestation, reducing the resilience of forests, both where fires did not occur before and and in those where they are frequent.

Such is the case of the forest fire that occurred in Loreto in 2016, where, according to INDECI[20], 13,000 hectares of forest were lost[21]. Just as in 2005, in the case of Junín, with forest fires that

16. https://www.ipcc.ch/report/srccl/
17. https://www.nature.com/articles/s41467-017-02771-y.pdf
18. https://d5i6is0eze552.cloudfront.net/documents/Publikasjoner/Andre-rapporter/RF_Point_of_no_return_1218_web.pdf?mtime=20181203131631
19. http://www.dar.org.pe/archivos/publicacion/Infografias%20SEEG%20-%20castellano_2019_web.pdf
20. http://sinpad.indeci.gob.pe/Sinpad/Estadistica/Frame_Esta_C7.asp
21. https://www.servindi.org/actualidad-noticias/20/09/2016/loreto-declaran-en-emergencia-valle-de-shanusi-por-incendio-forestal

caused the loss of more than 53,000 hectares of forest[22]. Both regions, in their respective years, led the ranking of GHG emissions at the national level, surpassing Lima with its 10 million inhabitants and its immense and polluting vehicle fleet.

[SEEG Peru: See the animation of the regional GHG emissions ranking for the last 17 years.]

These forest fires, which are evident in national statistics, coincide with the areas with the greatest deforestation, as can be seen in the National Strategy for Forest Conservation and Climate Change, which identifies 12 deforestation fronts in the Amazon, the highway Federico Basadre, San Martín, Yurimaguas, VRAEM (Valley of the Apurímac, Ene and Mantaro rivers) and Tambopata - Manu (along the IIRSA South Highway), most of which are linked to road and river axes (PNCB, 2015[23]). As clearly shown in the figure below:

Photo: NASA Earth Observatory

22. https://larepublica.pe/archivo/298186-mas-de-veinte-mil-ashaninkas-atrapados-por-incendio-forestal/
23. http://www.bosques.gob.pe/archivo/ff3f54_ESTRATEGIACAMBIOCLIMATICO2016_ok.pdf

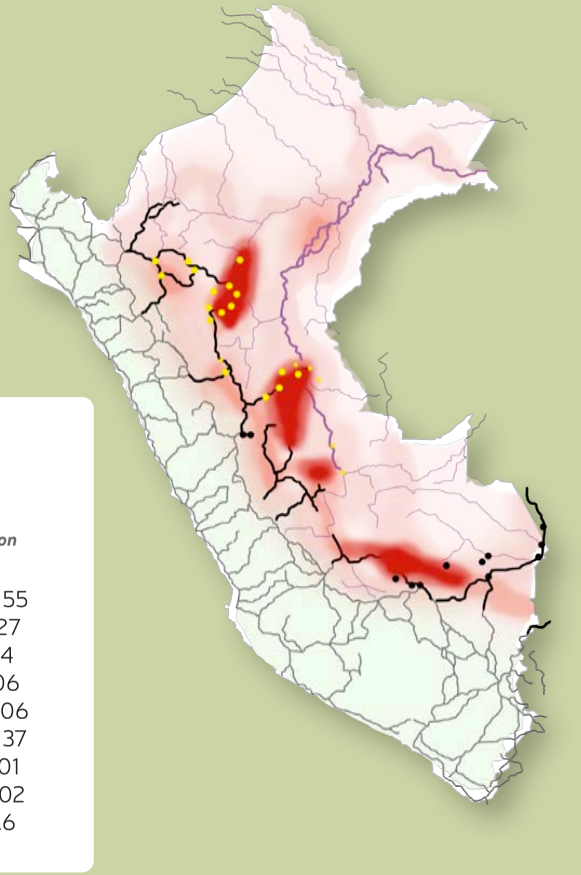
Main deforestation fronts in the Peruvian Amazon

Source: PNCBCC 2016. Estrategia Nacional de Bosques y Cambio Climático

SERFOR (2016) **"the opening of roads that is one of the most important catalysts (of deforestation)**, since they facilitate **access to previously isolated areas".** Road and river axes account for **62% of deforestation in Amazonia.**

For its part, the ENBCC highlights the existence of **12 deforestation fronts** in the Amazon, most of them **associated with road and river axes** (PNCB, 2015).

Main road axes and deforestation density



Source: FIP, 2013. http://www.minam.gob.pe /cambioclimatico/wp-content/uploads/sites/11/2014/03/PI-FIP-Peru-Vs-20062013.pdf

Correlation between main road axes and deforestation density (Source: DAR, 2019[24])

24. http://www.dar.org.pe/archivos/publicacion/Medida_de_Mitigacion_NDC.pdf

What to do?

Faced with the elements mentioned above, we must remember the climate commitments that the country has promised to fulfill in the Paris Agreement signed 4 years ago, as part of a global commitment to address climate change. Peru's commitment is to reduce 30% of projected GHG emissions by 2030, as well as to reduce the country's vulnerability to climate change. To this end, a set of measures have been identified to operationalize the commitment, specifically: 91 climate change adaptation measures and 62 GHG mitigation measures[25].

However, in the absence of a direct link between one of the main drivers of deforestation: road expansion; and the current package of mitigation measures for the Land Use Change sector - a sector that certainly contributes most to the national commitment target[26] and generates the greatest amount of emissions currently, due to deforestation[27]- the need arose to address this issue and in order to ensure the forest and wildlife heritage, SERFOR, committed itself to develop a new measure to combat deforestation associated with road expansion in the Amazon, through improved road management to mitigate its direct, indirect, cumulative and synergistic impacts as a driver of deforestation in the Amazon.

Proposals such as the new SERFOR measure should attract the attention of Amazonian governments, since it seeks to attack the causes rather than the consequences of the problem; if included as part of the implementation of the recently signed Leticia Pact[28], this measure would contribute to the implementation of several of its commitments, in terms of the fight against deforestation and degradation that affects the Amazon, monitoring of illegal activities and helping to recognize the fundamental role of indigenous peoples and local communities in the conservation of the Amazon (who are those mainly affected by this problem).

For this new measure led by Serfor to be successful, it requires the support and involvement of all those sectors responsible for planning, managing, and overseeing the country's highways, as well as those responsible for their maintenance, improvement, and regulation, both at the national and sub-national levels. As well as sectors with regulatory responsibilities and promotion of activities identified as drivers of deforestation.

We at DAR are supporting the governing body, SERFOR, to develop this measure, which already has a conceptual note[29], which sets out the main objectives of the measure, which seeks to be key to achieving the goal set: the reduction of deforestation and its emissions.

Specifically, such a measure seeks: a) Include in the road planning a criteria to mitigate the impacts of roads on forests, in terms of deforestation and GHG emissions, b) Include SERFOR's participation in feasibility analyses of road infrastructure projects that affect forest heritage, c) Include SERFOR's participation in the definition of options with lesser impact, d) Incorporate in Environmental Impact Studies the quantification of the direct, indirect, cumulative and synergistic impacts of roads on forests, in terms of deforestation and GHG emissions, analyzing their impacts beyond reach of the roads, e) Design, propose

25. http://www.minam.gob.pe/cambioclimatico/wp-content/uploads/sites/127/2019/01/190107_Informe-final-GTM-NDC_v17dic18.pdfPA%C3%91OL.pdf
26. Being the main protagonist of this goal the USCUSS sector represents 70% of the commitment. Source: PCM - Technical Secretary of the Multisectoral Commission of the INDC (2015)
27. MINAM. 2016. INFOCARBONO -. http://infocarbono.minam.gob.pe/
28. https://www.gob.pe/institucion/rree/noticias/50579-pacto-de-leticia-por-la-amazonia
29. http://www.dar.org.pe/archivos/publicacion/Medida_de_Mitigacion_NDC.pdf

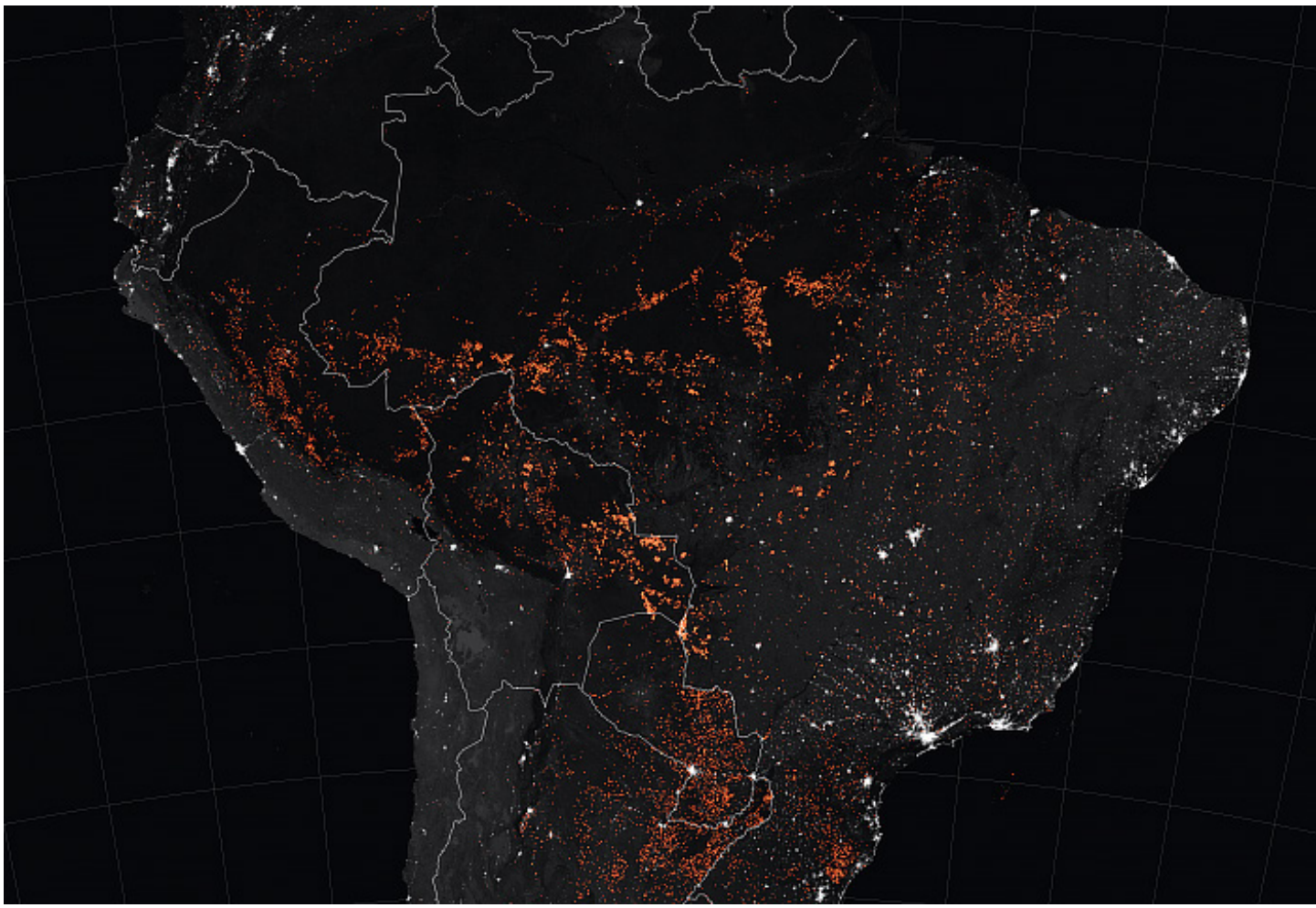


Photo: Southamerica tamo 2019234 th

and implement actions to mitigate the impacts of roads on forests, f) In roads already built, as a requirement for road improvement include mitigation programmes with a productive approach keeping the forest standing.

It should not be forgotten that Peru has a Framework Law on Climate Change (LMCC), which was enacted by the Executive branch in 2018 and whose regulation is finalizing the Prior Consultation process[30]. The law holds regional and municipal governments accountable as competent authorities on climate change, giving them a greater role in operationalizing our climate commitments in the territory. Therefore, after naming this competence, the challenge will be for the National Authority (Ministry of the Environment) to support the authorities to obtain the technical and budgetary capacities to fulfill the aforementioned responsibilities and that the commitments do not remain only in statements.

In terms of disaster risk management, at the global level there is the Sendai Framework, an agreement for Disaster Risk Reduction (2015-2030), whose objective is focused not only on reducing existing risk but also on not generating new risks and strengthening resilience, an agreement signed by the countries of the Amazon basin. In relation to disaster risk management, it is important to mention its articulation with climate commitments (in adaptation and mitigation measures), seeking a clear connection that can be implemented on the ground, an objective that should be reinforced in the next package of mitigation

30. http://www.aidesep.org.pe/noticias/pueblos-indigenas-logran-la-incorporacion-de-propuestas-claves-para-la-accion-climatica

measures to be updated. This should also be **articulated to channel the opportunities provided by the Budget Programme: PP 068 - Disaster Risk Management**[31], which encourages regional and local governments to include forest fire risk management in their PEI and POI, as indicated in Law No. 30779, a law that provides measures to strengthen the National Disaster Risk Management System-SINAGERD.

In view of all this, it is important to reflect on the agreements signed with the United Nations regarding issues such as climate change, biodiversity and disaster risk management, agreements that in view of this environmental catastrophe are not being complied with, as they do not guarantee the effective protection of the Amazon against the interests of irresponsible economic groups. It is important to **rethink the binding nature of these agreements, so that they are not only enunciated but transcend action.**

It is important to remember that Brazil hosted the Rio Earth Summit in 1992, at which the United Nations Framework Convention on Climate Change was approved, and where the Declaration of Forest Principles and the Convention on Biological Diversity were also ratified.

In the context in which our neighbouring countries of the Amazon basin live, with characteristics very similar to ours, these considerations become a priority to avoid being protagonists of the next chronicle of an announced devastation.

Photo: NASA Earth Observatory

31. https://www.mef.gob.pe/contenidos/presu_publ/ppr/prog_presupuestal/articulados/0068_atencion_emergencias_desastres.pdf

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