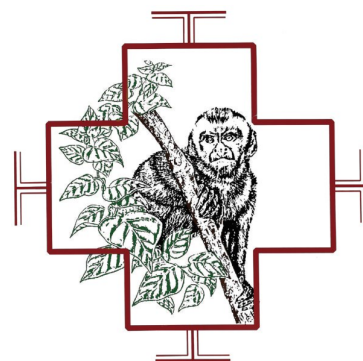


# TReeS News No.89

November 2021

Newsletter of the Tambopata Reserve Society (TReeS)

A COP26 Climate Change special edition



Dear TReeS members,

Welcome to this edition of TReeS News, which is a special edition focusing on climate change and its impact on Peru, the Peruvian Amazon and Madre de Dios as global attention focuses on the COP26 event, being held in Glasgow, Scotland.

Peru has a key interest in the COP26 discussions as a major store of carbon - approximately 10% of the Amazon rainforest lies within Peru - while being identified as one of the top 10 most vulnerable nations to the varied impacts of climate change.

One of the major facets of climate change is increased climatic unpredictability. Peru already experiences significant climatic unpredictability via the severe El Niño / La Niña climatic phenomena's. These are now occurring on a less predictable basis both in terms of timing and severity as well as daily weather events no longer following the expected patterns.

This edition considers some of the wider impacts of climate change on the Peruvian Amazon, focusing on Madre de Dios - there is a first hand account from the President of the native community of Monte Salvado on the Las Piedras river. It is increasingly likely that the projects TReeS is asked to support will have a climate change element to them.

It also refers to some of the main aims of the Peruvian government at COP26 and some of the measures it is taking to counter the expected consequences of climate change.

Articles in this issue include:

- Global warming: some more alarming statistics!
- COP25 / COP26: brief reviews.
- Peru & COP26.
- Climate change & the Amazon / Madre de Dios.
- Amazon deforestation trends.
- Climate change and the NC of Monte Salvado.
- Carbon Sink vs Carbon Source in the Amazon.
- FENAMAD attend COP26.
- Matsigenka community laptops appeal.
- TReeS small grants (becas) 2022 launch.

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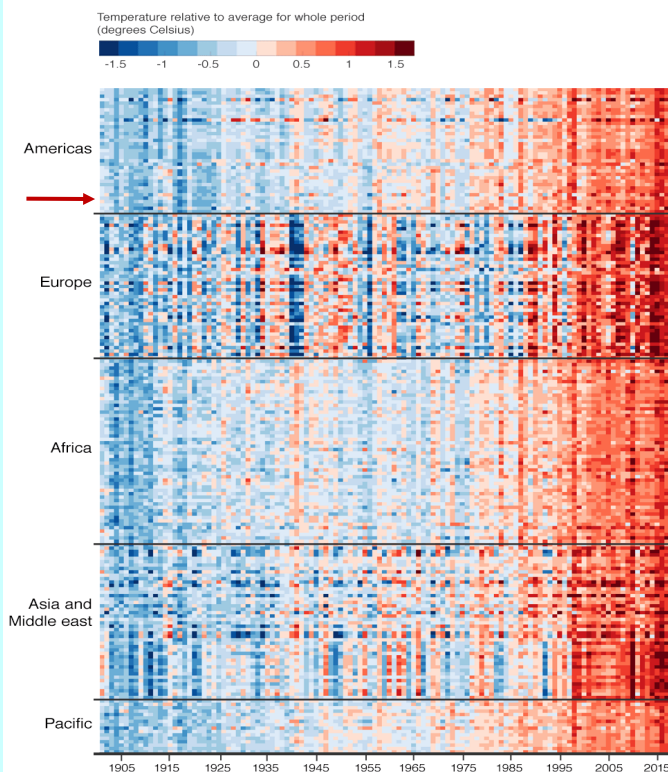
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## Global warming - yet more alarming statistics!

- \*In July 2021, at 416 parts / million, CO2 concentrations were the highest in history;
- \*July 2021 global average temperature was the highest monthly temperature ever recorded;
- \*2020 was the second warmest year ever with temperatures almost 1°C warmer than the average C20th temperature. The seven warmest years ever recorded since 1880 were the last seven years;
- \*Greenland ice sheet - the largest ice store on the planet – is now melting seven times faster than in 1990.
- \*11% of global greenhouse gas emissions result from deforestation;
- \*800 million people (11% of the global population) are directly vulnerable to the impacts of climate change;
- \*Emissions of greenhouse gases from human activities are responsible for approximately 1.27°C of warming since 1850 but global temperatures are expected to reach 1.5°C above pre-industrial levels by 2050.
- \*In Glasgow – Sept'21 was the joint warmest September ever, following on from the warmest Summer ever in 2020.

## Temperature changes around the world (1901-2018)



Each row of coloured pixels represents the temperature record of an individual nation within in its region (1901-2018).

The countries are listed in alphabetical order in their bloc - Peru is the fifth from last country listed in the Americas.

© Ed Hawkins (Reading University)

## Antecedents - COP25

The COP25 event was due to be held in Chile, in December 2019, but due to the Covid-19 pandemic the meeting was moved to Madrid, Spain.

COP25 concluded that far greater cuts to emissions were needed than had been agreed at COP Paris, in 2015. The Paris Climate Accord set out measures to keep the rise in the global average temperature to 'well below' 2°C above pre-industrial levels, ideally 1.5°C but, in reality, even if the targets were fully adhered to they would still have led to global warming of around 3°C by the end of the 21st. However, it is now recognized that this would submerge many coastal cities, severely impact upon agriculture worldwide and change life as we know it.

The lack of effective decision-making at the meeting highlighted the continuing disconnect between scientists and politicians, especially those from the USA, Russia, China, India, Brazil and Saudi Arabia – the main producers of greenhouse gas emissions.

Since 2019, serious floods, forest fires, droughts and continued rapid ice melt around the globe as well as a wealth of even more alarming data has, hopefully, shifted some political views leading up to COP26.

## COP26 - Glasgow: 31st October - 11th November 2021

COP26 presents a unique and some might say a final chance for world leaders to come up with some detailed, concrete and, quite possibly, severe, measures to address climate change. Young people, indigenous peoples, island peoples, marginal peoples and many rainforest peoples are crying out for action to be taken.

About 120 heads of state plus 20,000 government officials, experts, representatives of community organisations and observers have been invited to attend. These numbers have led to criticism that COP26 is self-defeating in terms of the greenhouse gases that will be created in bringing so many people together. However, the summit is seen as a critical for global climate action: to have a chance of limiting global warming to 1.5°C, global emissions must halve by 2030 and reach 'net-zero' by 2050. The 2021 Inter-governmental Panel on Climate Change (IPCC) has stated that it is still possible to achieve the 1.5°C target but only if unprecedented action is taken now.

The stated objectives of COP26 are as follows -

**\*Secure global net zero by mid-century and keep 1.5°C within reach:** nations are requested to present ambitious 2030 emissions reductions targets that align with reaching net zero by 2050. To deliver on these targets, countries will need to -

- accelerate the phase-out of coal;
- curtail deforestation;
- speed up the switch to electric vehicles. encourage investment in renewables.

**\*Adapt to protect communities and natural habitats:** the climate is already changing and will continue to do so even as emissions reduce, with devastating effects. COP26 aims to work together to enable and encourage countries affected by climate change to -

- protect and restore ecosystems;
- build defences, warning systems & resilient infrastructure & agriculture to avoid loss of homes, livelihoods and lives.

**\*Mobilise finance:** to deliver on the first goals, developed countries must make good on their promise to mobilise at least \$100bn in climate finance per year to secure global net zero.

**\*Work together to deliver:** on the challenges of the climate crisis. COP26 must -

- finalise the Paris Rulebook (the detailed rules that make the Paris Agreement operational);
- accelerate action to tackle the crisis through collaboration between governments, businesses and civil society.

## What are Peru's objectives at COP26?

Peru's approach is set out in the 'National Strategy for climate change' (ENCC 2050) which has a vision to achieve carbon neutrality and resilience of ecosystems, livelihoods, and productive and infrastructure systems by 2050. The current health, political and social crises represents an even greater need to establish a sustainable development agenda for the next 50 years.

Five guidelines set out in the Regulation of the Framework Law on Climate Change have been approved by Congress, in addition to 154 measures that are part of the National Climate Challenge (NDC) and are expected to be implemented soon, of which 92 measures correspond to climate change adaptation in the thematic areas of water, agriculture, forestry, health, fisheries, etc.

The National Centre for Strategic Planning (Ceplan) has co-ordinated with 13 Ministries to adopt 62 mitigation measures in sectors such as energy, industrial processes and product use; agriculture; land use, land use change and forestry; and waste as well as the commitment to reduce greenhouse gas emissions by 40 per cent by 2030.

The National Plan for Adaptation to Climate Change 2021-2030, covers the areas of water, agriculture, forests, fisheries and aquaculture, health, tourism and transport to help "restore ecosystems, build defences, warning systems and more resilient infrastructure and agriculture to prevent the loss of homes, livelihoods and even lives".

In mid-October, the Movimiento Ciudadano Frente al Cambio Climático (MOCICC) (Citizens against climate change) held a webinar at which the Ministries of the Environment & Foreign Relations presented the government priorities for COP26. The government aims to -

- decrease Peru's greenhouse emissions by 50% by 2050.
- commit to the target of 1.5°C above pre-industrial levels.
- pressurise developed countries to confirm their \$100bn commitment to the most vulnerable nations, with an emphasis on adaptation strategies.

- decrease deforestation in association with reducing land grabs and drug trade activities.

- increase protection for community, environmental and indigenous leaders though earlier this year the previous Congress refused to ratify the Escazu agreement.

MOCICC promotes a multi-sectoral / layered approach to the challenges of climate change with economic growth policies no longer so focused on resource extraction but on more sustainable, adaptive approaches.



*The forested banks of the river Madre de Dios © TReeS*



## Peru

Since at least 2006, Peru has been identified as one of the country's most vulnerable to climate change. Melting glaciers, extensive water-poor regions, a sizeable rural population plus most major cities located on the Pacific coast in one of the historically driest deserts on the planet greatly exacerbate Peru's vulnerability.

Recorded temperatures across Peru have risen 1°C since the 1960s. Peru contains around 70% of the world's high altitude tropical glaciers but by 2100 it is estimated that only 2% of them will remain. These glaciers feed the many rivers that drain westwards bisecting the coastal desert as they flow towards the Pacific ocean. Approximately 50% of Peru's population lives on the coast in the river valleys which are also the location of some of Peru's most productive farmland.

Peru contains about 15% of global biodiversity and ranks in the top 10 countries for biodiversity. Peru has the third largest tropical forest coverage on the planet accounted for by the 60% of Peru which lies in Amazonia. 63% of all mammal species and 44% of all bird species inhabit the Peruvian Amazon, and the old Tambopata Reserved Zone (5,500 hecs) holds the world record for bird (600+) and butterfly (1200+) species.

## How is the climate of Amazonia changing?

Average total rainfall across Amazonia ranges from 2500 to 4500mm per year and the average temperature is 27°C.

Puerto Maldonado receives an average total rainfall of 2000mm per year with as much as 350mms falling in January but as little as 60mms falls in July. The average temperature is 31°C but temperatures can fall to below 20°C for several days in July during a *friaje*.

## Temperatures

Research suggests that temperatures could rise by as much as 6°C - well above the predicted global average increase - in some places across Amazonia by the end of the century. The increase across Amazonia is unlikely to be uniform and it also masks the fact that there are likely to be many more very warm days and specific 'hotspots' with temperatures 1-2°C higher than in the surrounding area.

In Madre de Dios, temperatures have started to hit the upper 30°C on a more regular basis and to remain in the mid-30°C for a more extended period than in the past.

At these temperatures conditions become challenging for human life. The human body isn't designed to survive in temperatures of 40°C plus on a regular basis, especially in humid conditions. Access to good sources of water in indigenous communities within the forest is challenging at the best of times but at these temperatures demand will increase.



Heavily eroded banks of the river Tambopata © TReeS

Likewise, the forest may also struggle to survive though research has yet to establish how the forest will react to regular temperatures at these higher levels.

The growing climatic unpredictability is also evidenced by *friajes* in recent years in which temperatures have fallen as low as 15°C for several days. Temperatures at these levels present their own challenges for life, both human and animal, in such locations.

## Rainfall

With higher temperatures rainfall levels are likely to rise though this is more likely to occur through extreme events than a constant or steady increase. Consequently, there are likely to be increased incidences of flooding in the wet season with affected areas remaining flooded for longer leading to changes in river courses, greater bank erosion and sedimentation.

River bank settlements will find that they lose valuable farm land, docks and access points are damaged or destroyed, and buildings damaged. Ox-bow lakes will be disturbed and there will be increased sedimentation reducing fish stocks. Not only will valuable crops be lost but the ability to transport the remaining produce to market may be severely restricted.

More stagnant water is likely to lead to enhance the disease risks – the risks will become more intense and last longer for diseases such as dengue fever, malaria, Zika and Chikungunya. Any combination of the above is likely to impact on traditional lifestyles and on the mental health of local people.

Disruption to river transport will impact on students and health care staff reaching the institutions where they study or work. Many younger indigenous people in the Amazon region have already migrated to larger urban areas to obtain an education or in search of work and are more likely to remain there, if their communities become increasingly vulnerable.

As a consequence of the above, traditional practices within indigenous communities may end, leading to a loss of traditional knowledge. The most established indigenous communities may have the resources and strength to survive but others may succumb to outside pressures and offers from loggers, miners, etc.

Climate change induced disruption elsewhere in Peru especially in the Andes mountains may well encourage migration to the Amazon region which is often still often depicted as a 'sparsely populated, land of opportunity' in the Peruvian media.

## Wind

Increasing incidences of extremely strong winds which remove the roofs or flatten buildings, bring down trees and make river transport difficult are being recorded.



Flooded outer suburbs of Puerto Maldonado, February 2021

© MINAM



Evacuation of a family in Puerto Maldonado © Pavel Martiarena



COER alert highlighting the very heavy rainfall on 18th of February 2021 which lead to serious flooding across Madre de Dios

### Centro de Operaciones de Emergencias Regional (COER)

The Regional Centre of Emergency Operations (COE) Madre de Dios alerts the public to a natural emergencies such as floods, landslides and quakes but is increasingly issuing alerts linked to climate change such as heavy rains, extreme temperatures and forest fires. The Madre de Dios regional centre works with provincial and local centres to co-ordinate a variety of services to deal with a range of events. However, most of these services have limited capacities to respond to the events concerned both in terms of timing and actions. <https://www.facebook.com/coermddoficial/>

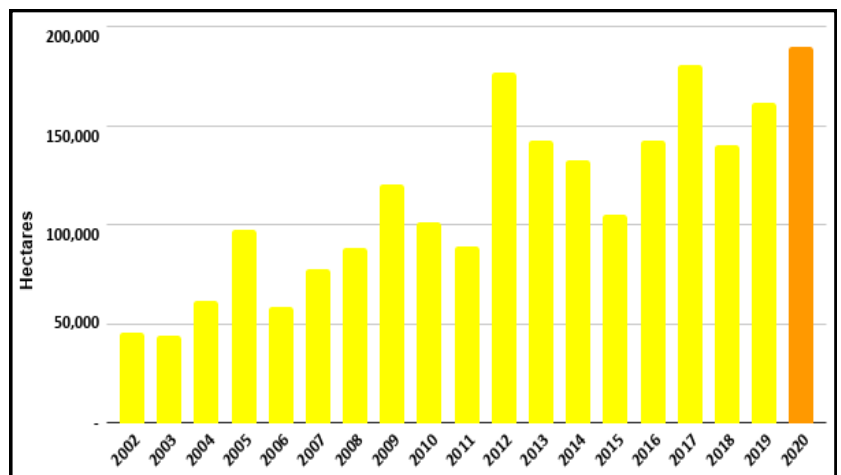
### What is the latest on deforestation?

The Amazon rainforest declined by almost 2.3 million hectares in 2020, a 17% increase in primary forest loss from 2019, and the third-highest annual total loss since 2000. The countries with the greatest 2020 primary forest loss were Brazil, then Bolivia, followed by Peru which accounted for 8% of the total loss. However, this figure was the greatest loss of primary forest ever recorded in Peru at just over 190,000 hectares - a 55,000 hectares rise on 2019. Madre de Dios was responsible for 23,042 hectares of the primary forest loss.

The deforestation trend over the last 10 years in Peru has been upward - the rate has almost doubled over the previous 10 years and the greatest annual deforestation has occurred on eight occasions in the last 10 years.

Deforestation has reduced the rainforest in Peru by about 7% since 2014 and it has been reduced by about 10% in total. The loss has been due to logging, agricultural expansion, illegal gold-mining in Madre de Dios, and new plantations in central and northern Peru. The building of new roads in to the forest has often encouraged these activities.

Recent research suggests that protected areas have a major role to play with forest cover loss in protected areas recorded at 114,463 hectares



Peruvian Amazon: Primary Forest Loss © MAAP 136

over the last 20 years compared to over 780,000 hectares in the smaller area covered in the buffer zones surrounding these protected areas. All forest loss also has an immediate impact on all aspects of biodiversity but especially on larger mammals.

It is estimated that if 40% of the Amazon is lost to deforestation or the consequences of climate change then a tipping point of no return will be reached and it will convert to savannah and desert as the Amazonia wide hydrological cycle is broken.

The Peruvian Amazon is home to around 4.5 million people, 15% of the countries population and has risen by about 10% over the last 10 years suggesting that controlling further deforestation will be challenging.



## El impacto del cambio climático en el modo de vida de la población Yine en la CN Monte Salvado

La comunidad nativa de Monte Salvado “*gikshikaluru*”, pertenece al pueblo indígena Yine que significa “gente” de la familia etnolingüística Arawak. Actualmente viven 110 habitantes asentados en un área de 36,975 hectáreas. La comunidad se ubica en el río Las Piedras y colinda con la Reserva Indígena Madre de Dios a favor del pueblo Mashco-Piro, en aislamiento. Para llegar a la comunidad se viaja durante mas o menos tres días en época seca desde la ciudad de Puerto Maldonado. Los pobladores de la comunidad identifican cambios en el clima que afectan sus actividades diarias, la salud, sus conocimientos sobre los indicadores climáticos, el acceso a algunos recursos de importancia para la seguridad alimentaria que provienen tanto de la chacra como del bosque, del río y quebradas. En el plan de vida de la comunidad del 2018 (documento de gestión y gobernanza interna), los pobladores mencionan como perciben los cambios en el clima: “...en los últimos dos años ha aumentado el calor, sentimos a diario, el excesivo y sofocante calor del ambiente. Este calor hace que nos de sueño constantemente. Debido a la intensidad del calor, decidimos ir menos horas a trabajar, lo que provoca menos producción y los ingresos disminuyen”,...“las lluvias se dan cuando no debe darse, por momentos, y cuando es su temporada ya no llueve”.

Karla Sebastián, presidenta de la comunidad nativa Monte Salvado, nos cuenta que este año el clima ha estado muy extraño. El año empezó con fuertes lluvias que ocasionaron el 20 de febrero, el desborde de los ríos Madre de Dios, Tambopata, Tahuamanu y Las Piedras causando inundaciones en 29 (76%) de las comunidades bases de FENAMAD que se vieron afectadas con la pérdida de chacras y viviendas. El 21 de febrero se declaró Madre de Dios en Estado de Emergencia con Decreto Supremo N° 030-2021-PCM, producto del impacto de los daños ocasionados por las intensas precipitaciones pluviales (lluvias).

14 comunidades perdieron sus chacras y viviendas. Entre las comunidades afectadas estuvo Monte Salvado donde se perdieron la mayor parte de los cultivos como plátano y yuca. Luego durante la época seca las crecientes se dieron de manera inesperada y mucho más frecuentes que en años anteriores. Estos cambios en el clima afectan también a la naturaleza, calientan el agua del río, afectan los lugares de anidación de animales como la tortuga acuática taricaya *Podocnemis unifilis* (importante recurso para la seguridad alimentaria y la economía de la comunidad) que no contó con playas disponibles para el desove. Luego se dio una sequía y los friajes se dieron continuamente. “La sequía nos afectó en la chacra, hemos notado que la falta de lluvia ocasionó que los suelos se sequen disminuyendo la producción de los cultivos como plátano, se secaron los árboles como palta, caimito, entre otros”.

¿Que estamos pensando hacer? Identificar más en detalle los efectos del cambio climático y proponer acciones para enfrentarlos y minimizarlos como: proteger las fuentes de agua, identificar los cultivos

y plantas resistentes a sequías e inundaciones, monitorear los cambios en el comportamiento de las plantas y animales que son importantes para nuestra seguridad alimentaria y economía. Buscar apoyo técnico para trabajar los suelos cuando sea tiempo de sequía, manejar la taricaya adaptándonos a los cambios de época de desove y tener nidos artificiales para las taricayas asegurando la eclosión de los huevos que se pierden por las inesperadas inundaciones.

Karla Sebastián - Presidenta de la comunidad nativa M.Salvado; y Claudia Gálvez Durand Besnard - Coordinadora de implementación de la Estrategia para la Acción Climática y la Protección de los Territorios Indígenas en Madre de Dios, FENAMAD.

### Reserva Comunal Amarakaeri & climate change

The RCA features in a new video about the impact of climate change on the Harakbut and other indigenous groups in the Peruvian Amazon at:

<https://www.facebook.com/Amarakaeri/videos/393990511421231>



*The Las Piedras river in the vicinity of Monte Salvado © FENAMAD*



*Monte Salvado: centre of the community © FENAMAD*



*Monte Salvado: centre of the community © FENAMAD*

## **The impact of climate change on the livelihoods of the Yine people in the native community of Monte Salvado**

The native community of Monte Salvado "gikshikaluru" belongs to the indigenous Yine people. Yine means "people", in the Arawak ethno-linguistic family. There are currently 110 inhabitants living in an area of 36,975 hectares. The community is located on the Las Piedras river and borders the Madre de Dios Indigenous Reserve designated for the Mashco-Piro people who live there in voluntary isolation. To reach the community you have to travel for approximately three days in the dry season upriver from the city of Puerto Maldonado.

The community members have identified changes in the climate that affect their daily activities, health, their traditional knowledge of climate indicators, access to some important resources for food security that come from their *chacras*, the forest, the river and streams. In the 2018 community life plan (internal management and governance document), the villagers mention how they perceive the changes in the climate: "...in the last two years the heat has increased, we feel the excessive and suffocating heat of the environment on a daily basis. This heat makes us sleepy all the time. Due to the intensity of the heat, we decide to work fewer hours, which leads to less production and a decrease in income, .... the rains often come now when they are not supposed to and when it is the rainy season, it doesn't rain".

Karla Sebastián, president of the native community Monte Salvado, says that this year the weather has been very strange. The year began with heavy rains that caused the rivers Madre de Dios, Tambopata, Tahuamanu and Las Piedras to overflow their banks on the 20th of February, causing flooding in 29 (76%) of FENAMAD's base communities, which were affected by the loss of farmland and damage to their houses. On 21st February, Supreme Decree N° 030-2021-PCM declared a State of Emergency in Madre de Dios, as a result of the impact of the damage caused by the very heavy rainfall. In 14 communities farmland was lost and houses damaged. Among the affected communities was Monte Salvado where most of the crops such as bananas and cassava were lost.

During the dry season, floods occurred unexpectedly and much more frequently than in previous years. These changes in the climate also affected nature, warming the water of the river, affecting the nesting places of animals such as the aquatic turtle *Podocnemis unifilis* (*Taricaya*) (an important resource for food security and the economy of the community), which no longer had beaches available for nesting. Then there was a drought and cold spells (*friajes*) occurred continuously. "The drought affected us on the *chacras*. We noticed that the lack of rain caused the soil to dry out, reducing the production of crops such as bananas, and trees such as avocado and caimito, among others, dried out.

What are we planning to do? Identify in more detail the effects of climate change and propose actions to confront and minimise them, such as: protect water sources, identify drought and flood resistant crops and plants, monitor changes in the behaviour of plants and animals that are important for our food security and seek technical support to work the soils in times of drought, manage the *taricaya* by adapting to changes in the spawning season and have artificial nests for the *taricaya* to ensure the hatching of eggs that are lost due to unexpected floods.

Karla Sebastián, President of the native community Monte Salvado; and

Claudia Gálvez Durand Besnard - Coordinator for the implementation of the Strategy for Climate Action and the Protection of Indigenous Territories in Madre de Dios, FENAMAD.



*Flood damaged river banks hamper river access © FENAMAD*

**References** - the following articles, documents and websites have been referred to in the production of this newsletter.

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- \*'Compendio legislativo sobre cambio climático en el Peru', SPDA, 2014;
- \*'Deforestation and climate change are projected to increase heat stress risk in the Brazilian Amazon', Beatriz Alves de Oliveira, Communications Earth & Environment, 2:20, 2021;
- \*'El Perú y el Cambio Climático Segunda Comunicación Nacional del Perú a la Convención Marco de las Naciones Unidas sobre Cambio Climático', Ministry of the Environment, (MINAM), 2010;
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- \*'Long-term thermal sensitivity of Earth's tropical forests', M.Sullivan et al, Science 368, 869–874 (2020);
- \*'Persistent collapse of biomass in Amazonian forest edges following deforestation leads to unaccounted carbon losses', C.Silva Junior et al., Sci. Adv. 2020;
- \*'Peruvian Amazon disappearing: transformation of protected areas during the last two decades (2001–2019) & potential future deforestation modelling using cloud computing & MaxEnt approach', Alexander Cotrina et al, Journal for Nature Conservation, Vol.64, December 2021.



## Carbon Sink vs Carbon Source in the Amazon

Two recent scientific studies indicate that parts of the Amazon are now net emitters of carbon into the atmosphere (Gatti et al 2021 & Harris et al 2021).

As a result of deforestation, the Brazilian Amazon appears to have become a net carbon source over the past 20 years. It is calculated that carbon emissions have exceeded carbon removals by 3,600 million tones of carbon dioxide equivalent over the last 20 years. However, the total Amazon remains a net carbon sink by 1,700 million tones of carbon dioxide equivalent over this period. This suggests that the Peruvian Amazon must be making a major contribution. It is also clear that protected areas and indigenous territories are crucial carbon sinks given the extensive areas of intact forest within them, highlighting their importance and effectiveness for the overall conservation of the Amazon

The carbon flux is the difference between forest carbon emissions (such as deforestation) and carbon removals from the atmosphere by intact forests and regrowth.

A negative flux indicates that carbon removals exceed emissions and the area is a carbon sink, thus beneficial to climate change. (**Green** on the map below).

A positive flux indicates that carbon emissions exceed removals and the area has become a carbon source, thus exacerbating climate change. (**Red** on the map below).

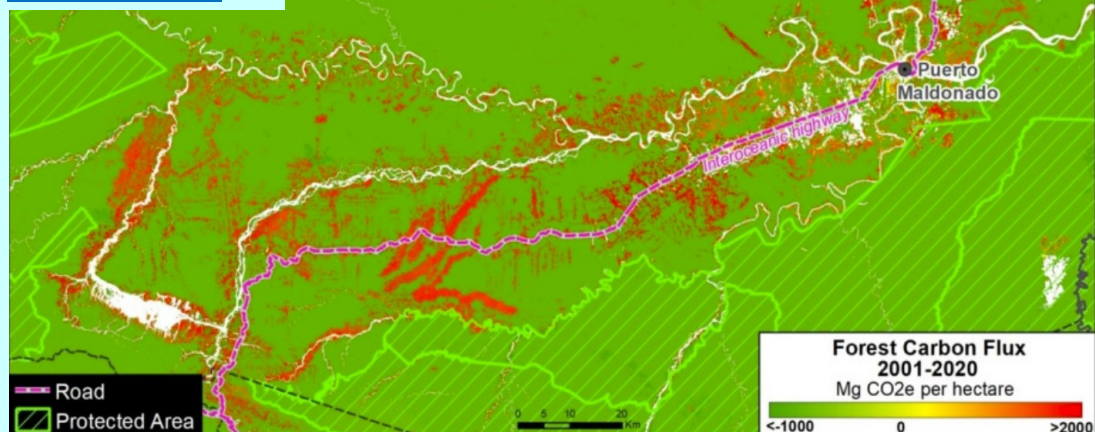
In southeastern Peru the positive carbon flux associated with the Interoceanic highway and forest clearance along it as well as the illegal gold-mining areas between the Amara-kari Communal Reserve and the Bahuaja-Sonene National Park can be identified as red streaks running across the map. Areas completely deforested prior to 2001 appear as white shading such as the long-established gold-mining region of Huaypetue in the bottom left hand corner of the map below, while the newer gold-mining areas of La Pampa and Guacamayo (bright red shading) are located off the Interoceanic highway.

However, the negative flux associated with the large protected areas in Madre de Dios such as the Amarakaeri Comunal Reserve (left margin of the map) and Bahuaja-Sonene National Park & Tambopata National Reserve (bottom third of the map) are equally clear - extensive solid green shaded areas. Even close to Puerto Maldonado there are extensive areas of intact forest hugely beneficial to absorbing carbon emissions and the global climate.

Gatti, LV et al (2021) Amazonia as a carbon source linked to de-forestation and climate change. *Nature* 595, 388–393.

Harris NL et al (2021) Global maps of twenty-first century forest carbon fluxes. *Nature Climate Change* 11, 234–240.

[www.maap.project.org](http://www.maap.project.org)



## FENAMAD attend COP26

FENAMAD were keen to attend COP26 having attended previous COP events and received four invites to COP26. However, to arrange for members of the Directorate to attend proved challenging. Aside from the lengthy and complex procedure of obtaining a UK visa, they also had to face the additional requirements posed by Covid-19 and of securing accommodation.

With Peru on the UK's 'red' list despite the number of Covid cases averaging 30,000+ per day while in Peru the average has been well below 1,000 per day for many weeks, delegates were going to be required to quarantine on arrival in the UK, even if fully vaccinated: all of the FENAMAD Directorate are fully vaccinated. However, the quarantine period was reduced from 10 to 5 days.

With 20,000 people due to attend, the event the organisers announced a couple of months prior to the event that all registered accommodation in Glasgow was fully booked. Some weeks prior to the event it was announced that all accommodation in Edinburgh (50 minutes from Glasgow by train) was also fully booked and that there was a waiting list of 2,000 people.

In the end, Julio Cusurichi (President of FENAMAD) & Segundo Laureano (President of COHARYIMA) (See photo) plus their technical adviser Daniel Rodriguez are attending. They secured accommodation in Edinburgh but needed to complete and pay for quarantine having arrived in the UK just before Peru came off the 'red' list.

FENAMAD are taking part in the COP26 'Side events' including the one on 'Indigenous Territorial Governance' in which one of the speakers is Julio Cusurichi -

[www.youtube.com/watch?v=KzkyQoMz5NM](https://www.youtube.com/watch?v=KzkyQoMz5NM)

TReeS will also have a direct link to COP26 through the attendance of TReeS committee member Holly O'Donnell as ACEER (Amazon Center for Environmental Education & Research) Head of delegation. Holly is ACEER's Director of Research.



### TReeS funds Matsigenka community laptops

Thanks to the generosity of TReeS members, supporters and the technology company 'Softwire', funds were successfully raised to supply solar powered laptops and support equipment to two remote Matsigenka communities, located within Manu National Park.

The new laptops are en route to the communities and will enable community leaders to improve their capacity to receive, process and respond to official communications more effectively, with the local government, FENAMAD and COHARYIMA including those linked to climate change.

The communities will also be able to receive COER weather related alerts and access Senhami weather/climate data as well as report on any significant weather events and climate related changes that they observe.

**Appeal: £1,250** to fund the purchase and delivery of a laptop and associated equipment to a third Matsigenka community (We would welcome sponsorship from another technology company). <https://gofund.me/bb2a3678>



*Laptops and internet access open up many options for indigenous communities to be better informed and to report © FENAMAD*

# TReeS Becas 2022

**Tambopata Reserve Society (TReeS) abre la convocatoria para su programa de becas 2022.**

Las becas financiarán costos de transporte terrestre, estadía y alojamiento, compra o alquiler de materiales de campo o laboratorio por un valor total de hasta **US\$1,000.**

#### Requisitos

- Ser estudiante peruano de pre o posgrado en un instituto peruano.
- Llevar a cabo un proyecto de investigación de tesis en Madre de Dios en temas ambientales y/o sociales.



**FECHA LIMITE: 23:59 del 20 de ENERO 2022**

Las aplicaciones se pueden descargar en este formulario online:

<https://bit.ly/2YXq6fO>

y deberán ser enviadas, junto con su curriculum vitae adjunto, a la siguiente dirección electrónica:  
**treesbecas@gmail.com**



### TReeS Becas 2022

TReeS is pleased to announce further details of the 2022 small grants application process.

Over the last 13 years, TReeS has offered 70+ small grants to Peruvian students to undertake their fieldwork in Madre de Dios at a rate of around 4 -6 grants per year. Their reports can be found on the TReeS website.

For the first time the application process can also be accessed on-line. After the Covid-19 related restrictions applied in 2020 -21 which lead to grants only being awarded to students studying at the UNAMAD (University of Madre de Dios), in Puerto Maldonado, students from any University in Peru are now welcome to apply. The process has also been opened up to all students and not just undergraduates.

**Appeal: £25+** to maintain the small grants programme.

We would also welcome full funding of individual students by those with a specific interest in funding research relating to specific studies of birds, bats, butterflies, impacts of gold-mining, etc in Madre de Dios.

### General enquiries

To receive the TReeS Newsletter by email, purchase TReeS merchandise, volunteer, etc, please get in touch at:

[treesuk1@gmail.com](mailto:treesuk1@gmail.com)

Details of TReeS merchandise can be found on the website:

[www.tambopata.org.uk](http://www.tambopata.org.uk)

### TReeS committee 2021-22

Chair: Lucy Dablin

Secretary: Cecilia Montauban

Treasurer: John Forrest

Holly O'Donnell

Helen Newing

TReeS is UK registered charity no. 298054

### Peru News update

\*Abimael Guzman, leader of Sendero Luminoso during the 1980s until captured in 1992, has died in prison.

\*The UK government removed Peru from the Covid 'red' list with effect from 1.11.2021, reopening unrestricted travel to /from Peru.

### TReeS Membership

Annual membership fees (£15) are due on **1<sup>st</sup> January** each year. On-line payments can be made direct to the TReeS bank account at - **Lloyds Bank PLC**

Sort code: **30 99 83** Account no. **00574637**

Cheques, made out to 'TReeS', can be posted to -  
**P.O.Box 33153, London NW3 4DR**