



2022 TOP 100 GOOD PRACTICE STORY

Title of the Story: Pacaya Samiria National Reserve, conserving the lungs of the world

Destination Name: Pacaya Samiria National Reserve, Loreto

Country: Peru

Submitter name: Susan Huaccanqui Flores

Email address: shuccanqui@sernanp.gob.pe

Position: Tourism specialist

Submission category: *(Please check one of the boxes that indicates the focus of your story)*

Please find detailed information for the categories below in the Top 100 training module 'Good Practice Story'.

- Governance, Reset & Recovery
- Nature & Scenery
- Environment & Climate
- Culture & Tradition
- Thriving Communities
- Business & Marketing

Find detailed instructions for submitting good practices in the Top 100 training module "Good Practice Story".

Should you have any questions on your submission please refer to our FAQ page or contact top100@greendestinations.org





DESCRIBE YOUR GOOD PRACTICE STORY

Address each aspect of your good practice story in the different sections being specific including relevant quantitative and qualitative information.

Issues faced

What was the problem/issue solved with the good practice?

The Amazon is the lungs of the world, made up of an immense hydrographic basin inhabited by thousands of biological species of all kinds, making it the most megadiverse area in the world. It has also been recognized for its role in the storage and capture of CO₂, one of the substances causing global warming: the Amazon - home to half of the world's tropical rainforests - stores 450 billion tons of CO₂ in its trees and soils. In the case of the Peruvian Amazon, the jungle regions contain 97.5% of the country's surface carbon stocks, in the form of living forests. Seventy-nine percent of these are distributed in the lowland jungle departments: LORETO, Ucayali and Madre de Dios. According to the Ministry of Environment, in the forests of Loreto, the reserves range between 69.4 and 128.2 tons of carbon per hectare.

Unfortunately, the Amazon forests have been seriously affected by anthropogenic activities such as small-scale farming, illegal mining, drug trafficking and illegal logging, among others, reducing them by 17% since 1970, and seriously affecting the capacity of the Amazon biome to be a carbon capture well and turning it, rather, into a source of emissions. It should be noted that the deterioration of the Amazon rainforest is one of the turning points that could lead to an irremediable change in the world's climate system.

In the Peruvian Amazon, changes in the climate have been observed that have accelerated over the years, such as more intense rains in short periods, which generate floods, heat waves with increasing thermal sensation; also, in 2005 and 2010 in the department of Loreto, there were the greatest droughts recorded in recent years, while in 2012 and 2015 there were the strongest floods that seriously affected various localities in the region. The Pacaya Samiria National Reserve, located in this department, is no stranger to this problem. This protected natural area, which protects 2 million 80 thousand hectares of flooded tropical forest, has been threatened since long before its creation by activities such as small-scale agriculture, illegal logging, illegal hunting, illegal fishing, and the expansion of human settlements that put the delicate balance of this extensive reserve at risk. As a result of this progressive climate change, there have been droughts and abnormal floods that have seriously affected the fauna and flora, as well as the ecosystem services that the reserve provides to the local population. The Pacaya Samiria National Reserve represents 6% of Loreto's jungle region and stores an average of 200 million tons of carbon.

Methods, steps and tools applied





How was the good practice implemented?

The National Climate Change Strategy (ENCC) seeks that the population, economic agents and the State increase awareness and adaptive capacity for action in the face of the adverse effects and opportunities of climate change; in addition, that they conserve carbon reserves and contribute to the reduction of GHG emissions; in this sense, one of the most widespread and well-known strategies in the world is the creation of Natural Protected Areas (NPA), since they protect various ecosystems such as forests that fulfill the function of being carbon reserves.

In Peru, the System of Natural Areas Protected by the State SINANPE plays a very important role in the fight against Climate Change. SINANPE is made up of 76 nationally administered natural protected areas that represent 17.89 % of the national territory. One of the largest and most representative natural areas is the Pacaya Samiria National Reserve. This PNA was created in 1972 with the objective of conserving flora and fauna resources, as well as the scenic beauty characteristic of the tropical rainforest. Its management is based on the thematic axes of sustainability (environmental, sociocultural, and economic) through which adaptive management strategies are implemented in order to maintain the flooded forests or tahuampas, restingas, hill forests, aguajales, and aquatic ecosystems in a good state of conservation; as well as, under good management, promote the use of natural resources in a planned and orderly manner.

The objective of the environmental component is to maintain the conservation status of the flooded forests (tahuampas), hill forests, restingas, aguajales and aquatic ecosystems (rivers, streams, oxbow lakes) of the RNPS. The actions deployed include the implementation of a surveillance and control system, patrols, overflights, monitoring of flora and fauna, and the promotion of sustainable management of aquatic chelonians. On the other hand, the objective of the sociocultural component seeks to increase the degree of stakeholder participation in the management of the area. The actions deployed to strengthen participatory management include the formation and operation of the Management Committee of the RNPS, articulation activities with stakeholders to improve their involvement in the management of the RNPS, awareness campaigns in educational centers and the population in general. Regarding the objective of the economic component, the objective is to increase the benefits of the regulated and sustainable use of natural resources within the NPA. Promoting the formalization of forestry activities through timber plantations with native species, sustainable management of aquatic chelonians, sustainable management of lizards, sustainable use of subsistence game species such as the majas (*Cuniculus paca*), añuje (*Dasyprocta punctata*) and other ungulates, sustainable management of palm trees such as aguaje (*Mauritia flexuosa*) and huasaí (*Euterpe oleracea*), sustainable management of arahuana (*Osteoglossum bicirrhosum*), paiche (*Arapaima gigas*),





carachama (*Pseudorinelepis genibarbis*) and other food fish. This last component also promotes the sustainable use of the natural resource landscape through tourism. Tourism activity in Pacaya Samiria National Reserve has developed since the 1970s in a poorly organized or supervised manner; however, with the creation of the reserve and the implementation of the Regulations for Tourism Use of the Natural Protected Areas System, the activity became more formalized and better controlled. In 2014, the process of granting rights for the use of the natural resource landscape began, achieving the signing of 14 contracts with tour operators in the city of Iquitos.

In the last 10 years, tourism management in the protected natural area has followed the following guidelines:

Planning and visitor management: site plans have been developed for the tourism sectors of the Samiria basin and the Yanayacu Pucate tourism sector, which have defined the areas for the development of tourism activities, the rules for visitors, permitted activities and levels of use of the areas, as well as indicators of the impact of the activity. Restricted areas have also been defined for species that are turtle nesting areas from July to September.

-Diversification and strengthening of the tourism offer: monitoring and control posts have been implemented with interpretation and visitor reception centers. In addition, the provision of tourism services has been strengthened through training in environmental management and tourism management.

-Natural landscape resource use: To enter the protected natural area, it is essential to hire an authorized tour operator, so local companies or tour operators sign contracts with SERNANP to obtain authorization. To date in the reserve, there are 13 tourism service contracts, 1 concession, and 6 tourism service agreements granted to local residents.

-Tourism management monitoring: to date, tourism activity indicators are being implemented, such as satisfaction rates, number of visitors, number of beneficiaries, economic income, and impact of the activity on the local economy, among others.

It is important to note that tourism is not the ultimate goal of the protected natural area, but rather a conservation strategy: THE PRESERVED BIODIVERSITY OF PACAYA SAMIRIA NATIONAL RESERVE PROVIDES CULTURAL ECOSYSTEM SERVICES THROUGH TOURISM AND RECREATION. THESE ACTIVITIES GENERATE AN ECONOMIC DYNAMIC THAT BENEFITS THE LOCAL, REGIONAL, AND NATIONAL POPULATION, BUT ABOVE ALL, IT STRENGTHENS THE PRESERVATION OF THE TROPICAL RAINFOREST BY GIVING IT GREATER ECONOMIC VALUE FOR THE PEOPLE OF THE NP AND THE SURROUNDING AREA. In other words, tourism contributes to the fight against climate change, mainly because the standing forests and the diversity of fauna are the main attractions of the Reserve's tourism offerings, and tourism is part of the range of diversified activities that allow the population to be more resilient to the ravages of climate change.





Key success factors

What helped you tackle the issues?

First, the clear environmental policies that the Peruvian State has set out within the strategy for the preservation of protected natural areas that is crucial to the fight against climate change, which also promotes the benefit of the population settled in the NPA and its surroundings.

Second, the participatory approach that was carried out in the planning and execution of activities related to the conservation of Pacaya Samiria National Reserve, including tourism activities, which brought together native and rural communities, tourism operators, unions, state entities and nongovernmental organizations, making it possible to conserve the tropical rainforest and thus maintain its carbon stock.

Thirdly, the greater relevance of natural protected areas at the national and international level, both as areas with great tourism potential that conserve unique ecosystems of great natural beauty, and because they are considered crucial for maintaining the world's climate balance.

Finally, the alliance with the Ministry of Foreign Trade and Tourism for the consolidation of sustainable tourism activity in the ANP, through capacity building and access to competitive funds for investment in tourism ventures that allowed them to access renewable energy sources such as solar energy for the operation of their establishments.





Lessons learned

While implementing the Good Practice what challenges were faced, and how were they overcome?

Lessons learned from the Pacaya Samiria National Reserve conservation process were the following:

1. The implementation of adaptive management in the NPA for the conservation of tropical forests was progressive and complicated because eradicating predatory activities by the population took many decades and the efforts to raise awareness and involve the riparian communities meant a large investment of resources.
2. The Amazonian riparian communities in the interior and buffer zone of the Pacaya Samiria National Reserve have a rich cultural heritage in the knowledge of their environment and the species that inhabit it, the natural cycles of the rise and fall of the rivers that make them more resilient to adapt to climate change. In this sense, this process of combating climate change should consider this knowledge and skills of the riparian communities.
3. The involvement of the population in alternative activities such as sustainable tourism was challenging because they did not know how tourism services work since many of these people had not taken a tourism service or had worked in tourism businesses before; therefore, training the population on lodging, guiding and food services was decisive.

Results, achievements and recognitions

What were the qualitative and quantitative results of the good practice?

The conservation activities carried out by the National Service of Natural Protected Areas in Pacaya Samiria National Reserve, in synergy with the State institutions, private sector and communities has achieved that the conservation status of the Reserve is maintained at 93.66% since 2017; that is, this percentage of the territory of the ANP, its forests and various ecosystems are preserved in optimal conditions and fulfill their environmental functions adequately including those related to the capture and storage of CO₂. As previously noted, the Reserve extends over 2 million 80 thousand hectares of floodable tropical forests and as a carbon reserve stores an approximate of 200 million tons of carbon.

The local population has become involved and aware of the importance of conserving the tropical flooded forests and the species that inhabit them, benefiting more than 65 community organizations for the sustainable management of natural resources in the reserve.





More than 120 families in the local communities and more than 600 families in the area of influence have benefited from the project. These families are engaged in tourism activities and have stopped predatory activities such as illegal logging, poaching and illegal fishing, thus contributing to the healthy conservation of the tropical forests by capturing and storing CO2.

Local businesses have developed tourism activities in a sustainable manner. Regarding their lodging establishments, they have been implemented with solar panels for energy generation, also, their buildings are traditional and bioclimatic with high palm roofs that ensure ventilation and natural lighting of the environments.

Finally, as of 2021, the Pacaya Samiria National Reserve is part of the Top 100 Green Destination. Also, in 2021, the Pacaya Samiria National Reserve came in second place in the category of Nature and Ecotourism in the Green Destinations Story Awards.

Additional references

Reserva Nacional Pacaya Samiria (2020). 48 años conservando nuestra selva de los espejos.
https://www.youtube.com/watch?v=_O5pPk6jkXU&t=2s&ab_channel=ReservaNacionalPacayaSamiria

Reserva Nacional Pacaya Samiria (2020). Reserva Nacional Pacaya Samiria – Turismo .
https://www.youtube.com/watch?v=vuCVX1OtcWE&ab_channel=ReservaNacionalPacayaSamiria

Reserva Nacional Pacaya Samiria (2021) Pacaya, video oficial del sector turístico.
https://www.youtube.com/watch?v=kmQgZ9ZEwsQ&ab_channel=ReservaNacionalPacayaSamiria

Reserva Nacional Pacaya Samiria (2021) Yanayacu Pucate, video oficial del sector turísticos.
https://www.youtube.com/watch?v=0AbF_FYSMr0&ab_channel=ReservaNacionalPacayaSamiria

Reserva Nacional Pacaya Samiria (2017). Plan Maestro de la Reserva Nacional Pacaya Samiria 2017-2021.
https://drive.google.com/file/d/1Hw58Xq1aZ-Lp1RJVV0r6oU_MLAIzJ_re/view?usp=sharing

Reserva Nacional Pacaya Samiria (2022). Plan de Sitio Turístico de la cuenca del Samiria.
<https://drive.google.com/file/d/1EopE58CWliNoTelC4QmGqzw9h0YRpJdQ/view?usp=sharing>





Provide links to further information. Pictures and videos should be available for download either from YouTube, Vimeo or other Cloud-based (Google/ One Drive) download URL (not WeTransfer).

Sthephan, A. (2010). Áreas Naturales Protegidas como respuesta al Cambio Climático.

https://conservationdevelopment.net/rsFiles/Datei/FOLLETO_APCC_PDRS_GIZ.pdf

Bodmer, R. (2014). Cambio climático y fauna silvestre en la Amazonía peruana. Impacto de la sequía e inundaciones intensas en la Reserva Nacional Pacaya Samiria.

https://www.researchgate.net/publication/272169917_Cambio_climatico_y_fauna_silvestre_en_la_Amazonia_peruana_Impacto_de_la_sequia_e_inundaciones_intensas_en_la_Reserva_Nacional_Pacaya_Samiria

McGrath, M. (2021). El "impacto inmenso" de las regiones del Amazonas que ahora emiten más carbono del que absorben.

<https://www.bbc.com/mundo/noticias-57820472#:~:text=La%20deforestaci%C3%B3n%20y%20el%20cambio,m%C3%A1s%20CO2%20del%20que%20absorben.>

Florián, J.(2022). ¿Qué hacer en la Amazonía ante el cambio climático? <https://dar.org.pe/que-hacer-anteel-cambio-climatico-en-la-amazonia/>

Ministerio del Ambiente (2016) Tercera Comunicación Nacional del Perú a la Convención Marco de las Naciones Unidas sobre el Cambio Climático .<https://www.minam.gob.pe/wpcontent/uploads/2016/05/Tercera-Comunicaci%C3%B3n.pdf>

