

World news story: Visit of British scientists highlights increased scientific collaboration between UK and Peru

More than 20 scientists from research institutions across the UK travelled to Peru to meet their Peruvian counterparts and identify opportunities for further collaboration.

The visit's programme, developed in the context of the Newton-Paulet Fund, will advance understanding of Peru's receding tropical glaciers and its impact on the country's water supply. The results of the programme are also expected to provide greater understanding about the risks of glacier melt as a natural disaster and how to create mitigation strategies against them.

The scientists participated in a joint workshop on "Peruvian Glacial Retreat and its Impact on Water Security and Resilience to Natural Hazards", organised by CONCYTEC (Peru) and the Natural Environment Research Council (NERC). At the workshop, they highlighted the importance of Peru's glaciers for the international scientific community.

"Having 20 scientists from British research institutions here, with great experience in the dynamics of glaciers from different mountain regions of the world, demonstrates the importance of Peruvian glaciers to the international scientific community and the awareness of the impact of climate change", said the President of CONCYTEC, Dr. Fabiola León-Velarde.

Colin Gray, Charge d'Affaires of the British Embassy said: "In order to tackle a variety of global challenges, such as climate change, we need scientific research to be an essential part of the solution, and we need to work on these solutions together. That is why it is great to see so many Peruvian and British researchers collaborating, learning from each other, and working together to better understand the impact of receding glaciers. This group has important contributions to make."

As part of the programme, the British scientists travelled to see the glaciers of Huaraz and the Palcacocha lake on 21 and 22 March, together with experts of the National Institute of Glacier Research and Mountain Ecosystems (INAIGEM).

Glaciers in the Peruvian Andes provide water to surrounding communities for agriculture, human consumption, hydroelectricity, and industry. However, their surface area has reduced some 20% in the last 30 years. Many glaciers in Peru are sources of fresh water for coastal areas characterised by their arid climate and low rainfall.

On the Newton-Paulet Fund:

These activities are part of the Newton-Paulet Fund, the UK's most important investment in Peru in science and innovation. It allows Peruvian and British scientists to work together to find solutions to challenges in economic development and social welfare through collaboration in science and innovation, in Peru and across the world.

The joint fund of US\$26 million will be invested in areas such as health, specifically malnutrition and anaemia; water, including but not limited to the effects of tropical glaciers melting, and biodiversity.

On the support of the UK Space Agency:

In addition, the UK Space Agency recently announced that it will provide more than US\$3.7 million to support Peru in satellite research to reduce vulnerabilities from environmental disasters, using UK expertise and cutting-edge technology. The UK Space Agency's International Partnership Programme will use remote sensing data to allow for more effective monitoring of the dams, and for quicker action to be taken to avoid the tailings dams failures.

Tailing dams are earth embankments used to store toxic mine waste and effluent which can be more than 100m high. Their rate of failure is high, due to poor design regulations and less rigorous construction methods than for normal water-retaining dams.