

# This is the way nature benefits us and the way climate change will affect us

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*A study published today in the prestigious Science magazine reveals that in 2050, over 5 billion persons will be living in areas exposed to the highest risk of water contamination, coastal storms and the loss of crops.*

*The areas currently most vulnerable are the most exposed to these risks.*

*Based on evidence gathered from all over the world, the study offers a new visualisation tool for understanding nature's contribution to the welfare of people and forecasting scenarios to mitigate the impact of climate change.*

*Bilbao, 11 October 2019*

Being able to rely on scientific evidence and tools to manage forecasts is a key factor to improving the status of nature on the planet and to protecting and using ecosystems sustainably, so vital for modern-day and future societies. For a long time, the scientific community has gathered local information on the benefits that nature contributes to population groups and, for the first time, an international group of researchers has created an **interactive world map on the benefits of nature worldwide**. Applying this new open-code technology, the study makes it possible to observe **where on the planet people benefit the most from nature's contributions and which areas are the most vulnerable to the loss of these benefits** as ecosystems deteriorate and climate change accelerates. Thus, this tool offers the information necessary to confront the worst scenarios projected by current climate models and advance towards a future in which human development the world over requires increasing sustainability and equity.

**Unai Pascual, Ikerbasque researcher for the Basque Centre for Climate Change (BC3) and co-chairman for natural value assessment on the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)** is co-author of this study, spearheaded by researchers from Stanford University (USA). The study seeks to

place accurate knowledge at the disposal of society to guide prevention and protection policies and measures against the impacts of climate change. As the work published by Science demonstrates, the natural environment has become increasingly more vulnerable, resulting in a growing exposure to risk for all those populations living in the areas most threatened by water contamination, coastal storms and the loss of crops due to the decrease in pollinating species. In publishing this work, Pascual underscored, "analysis shows that current environmental governance at local, regional and international level is failing when it comes to managing strategic investment to protect ecosystems and human populations in the most vulnerable regions of the world."

Nature is losing its capacity to protect populations from the consequences of increasingly more frequent risks arising from water contamination, coastal storms and lower crop pollination, fields which the study published by Science magazine focuses on. The evidence indicates that it is precisely in those areas of the world where population requirements on the ecosystem are greatest where this capacity of nature to satisfy demands is decreasing, due to the deterioration of ecosystems. According to projections, **by 2050, over 5 billion people could be at major risk of water contamination, coastal storms and the loss of crops.**

In addition, this impact shows that the negative effects of environmental deterioration will be unequally distributed. According to Unai Pascual, "in all the future scenarios analysed, developing countries, by themselves already the more vulnerable, will be obliged to support a greater risk from the loss of benefits to the welfare of populations coming from nature and its ecosystems."

The study urges all agencies charged with ecosystem management to take urgent measures. In the words of BC3 Ikerbasque researcher Unai Pascual, "if we continue on this path, the ecosystems will be unable to continue providing natural security against the impact of climate change on our most basic needs as human beings: food, water and infrastructures". This work seeks to contribute to integrating the benefits of nature to human beings into decision-making, in a framework of global action towards a more sustainable and equitable planet.

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