

## **Magdalena Skipper, speech to the UN Science Summit, 14th September 2021**

There have been many lessons that the ongoing pandemic has taught us. In my view, the most important among them has been a dramatic demonstration that following science advice pays off in real time.

Consider these examples. Time and again, scientists provided us with evidence that mask wearing reduces transmission of SARS-CoV-2, and most recent supporting data have just come from a randomised control trial in rural Bangladesh. And if we are to overcome the reluctance towards mask wearing that continues in some regions despite such compelling evidence we would do well to look to social and behavioural sciences for guidance.

This spring, before the emergence of the more infectious DELTA variant, the US Centre for Disease Control lifted the requirement for indoor mask wearing by fully vaccinated individuals in direct response to peer-reviewed research.

In June last year, the UK government introduced a concept of 'support bubbles'. Later implemented in various forms by other governments, this was a [science-led strategy](#) for social distancing that flattened the COVID-19 curve post strict lockdowns and which became so important to so many for their mental wellbeing.

Clear scientific guidance on vaccination boosters is now emerging - they should for now be reserved only for the very vulnerable since there is good evidence that vaccination-induced immunity persists well. This, of course, is an opportunity to listen to the calls from the WHO and the scientific community to redirect vaccines to those parts of the world where thus far their availability has been woefully low. The whole world must be protected, and quickly.

Sadly, ample examples from around the world illustrate that not following the science is associated with a real human cost. We must remember that, in the case of other crises that face us, this cost will extend beyond humanity, to all ecosystems across the globe.

The pandemic has also amplified the importance of global scientific collaborations. There is little doubt that without strong collaborations and data sharing right at the start of the pandemic we would not have seen the incredibly rapid vaccine development. Alas, despite the promising start, it's not all plain sailing now. As political tensions mount, scientific collaboration around COVID-19 has been falling. Politics should never come between scientists, and the UN with its power to convene internationally has a unifying role to play.

Collaborations will be key in solving other crises that face us.

The upcoming COP26 is the most significant global climate meeting since 2015. A new round of commitments to dial back greenhouse-gas emissions is expected to be agreed. These commitments are firmly rooted in scientific evidence provided by more than 200 scientists from around the world that are part of the IPCC. Their most recent report shows that despite much

persistent damage the Paris target can be met if global emissions reach net zero by around 2050 — a target to which many countries have now committed.

New relevant research emerges all the time and should be taken into account; only just last week a group of researchers from University College London [reported in Nature](#) that 89% of coal reserves, 58% of oil reserves and 59% of gas reserves must remain unextracted to have a 50% chance of hitting internationally agreed climate-change goals.

Global fossil-fuel industry prospects are already bleak, but this work shows that further limits on extraction will be needed to improve the chances of reaching the 1.5 °C target.

As difficult as it may seem, we must heed researchers' advice. History teaches us that global political will can make a real difference. The Montreal Protocol, finalized in 1987, has succeeded in reducing ozone-depleting substances in the stratosphere. As a result, [the ozone layer is recovering](#) as is the tropospheric circulation in the Southern Hemisphere.

The treaty is widely considered as one of the most successful and effective environmental treaties. We have opportunities for more but to achieve it scientists and politicians have to come together.

Last December, the High Level Panel on Sustainable Ocean Economy announced its results in a series of so-called Blue papers as well as peer-reviewed scientific publications. Fourteen world leaders came together to commission scientists from across the world and research disciplines to chart the way for where next for the global ocean health, economy, equity, finance, wealth and knowledge. The outcome of this commission was a public and unprecedented commitment from these 14 leaders to use marine ecosystems sustainably.

More leadership like this is urgently needed and the UN should help galvanise such action.

In just over a week from now, the UN will hold its sixth Food System Summit. A group of leading scientists, known as the Scientific Group, has been tasked with ensuring that the science underpinning the summit is broad, robust and independent. The group has identified seven priorities to accelerate the transformation to healthier, more sustainable, equitable and resilient food systems. Although in the areas of climate change the process is well established this is the first time that scientists have been explicitly brought into multilateral discussions around the future of food.

When it comes to transforming the food system, the UN should also embrace other research efforts such as for example CERES2030 – a global endeavour to provide science-based guidance on how to most effectively finance the road to zero hunger or the Blue Food Assessment which later this week will be revealing the first systematic assessment of the contribution that aquatic food makes towards food security.

Next spring will see the 15th UN Convention on Biological Diversity which will take place in Kunming, in China. For more than 30 years now, the international community has tried - and failed - to find a way to slow down and reverse biodiversity decline.

A new action plan - the Global Biodiversity Framework – is being discussed ahead of the meeting. Among other things, the framework proposes a goal to conserve 30% of the world's land and ocean by 2030. But this and other goals can only be met if a path towards them is carefully and systematically evaluated. This can be done by IPBES - the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services - in an analogy to what the IPCC is doing ahead of climate COPs. Unfortunately, it appears that the countries organizing the Kunming meeting are not involving IPBES in the action plan. We will likely come to regret not taking this opportunity to fully align science advice and policy.

The UN has recognised the role of science in the path towards achieving SDGs; the second UN Global Sustainable Development Report has been commissioned by the Secretary General. But it is time for the UN to take the next step and place the science agenda front and centre on the UN General Assembly agenda itself.

The UN sees its General Assembly as the means to bring together world leaders, civil society champions, young people and global businesses to reinforce and reinvigorate our collective determination to solve our shared problems. The grave omission in this vision is the absence of an explicit mention of science. It's an omission that is likely to be costly. The world cannot afford it; it's time to formally and explicitly extend the invitation.