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The world's goals for saving humanity are still the best option

Now is the time for everyone to double down on work to achieve the Sustainable Development Goals.

ight years ago, the world signed up to an unprecedented project. At a United Nations summit in September 2015, 193 countries agreed to work towards 17 goals with the aim of improving the lives of all people and the planet we inhabit. The Sustainable Development Goals (SDGs) would include efforts to eliminate poverty and hunger, reduce inequalities, rescue the climate and sustain life on Earth – and they would all be achieved by the ambitious deadline of 2030. Never before had nations united on such a bold commitment to improve conditions for humanity and its home.

With the world now halfway to that deadline, the sheer scale of the task is clearer. Over the past three months, *Nature* has been examining the progress made towards the goals so far, and how researchers are making a difference. Next week, the UN is hosting a summit in New York City to inject new energy and urgency into efforts to meet the goals. So, what needs to be done, and what further part can the global research community play? Our reporters have spoken to around 100 researchers and policy specialists across a range of disciplines to find out.

By some indications, the goals have had an extraordinary impact in a relatively short time. The SDGs have entered the global lexicon: they feature in government and corporate plans, and their multicoloured logos are taped to classroom walls around the world. In 2019, a global survey by the World Economic Forum of almost 20,000 people across 28 countries found that 74% of respondents had heard of the goals.

But when it comes to progress towards the goals and their 169 linked targets, the report card is grim (see page 250). In the first few years after 2015, the world was inching forwards: child mortality and extreme poverty were falling, for instance, and access to electricity was increasing. But shifting geopolitics, the COVID-19 pandemic, the unassailable force of climate change and the war in Ukraine have undermined most of the gains.

Only about 12% of the targets are now likely to be met by the deadline, and on around 30%, progress has stagnated or gone backwards. An estimated 575 million people will still be living in extreme poverty in 2030. By that time, the world is also likely to have broken the goal of limiting global warming to within 1.5 °C of pre-industrial temperatures, which was agreed at the 2015 Paris climate summit. And on the current trajectory, gender gaps and discrimination will not be eliminated for another 286 years.

Although this state of affairs is demoralizing, it would be wrong to give up. Failure to achieve a worthy goal is not a reason to abandon it. It's a reason to study what went wrong, regroup and adjust course – for 2030 and beyond.

Sounds of the '60s

The UN has been setting global goals since at least the 1960s as a way to focus attention on the needs of the world's poorer countries. This idea gained prominence with the Millennium Development Goals, a set of eight international development targets – such as halving extreme poverty and achieving universal primary education by 2015 – that were set in 2000.

Research in the workplace supports the intuitive idea that goal-setting can improve people's performance – provided that the goals are clear and achievable, and individuals buy into them and receive regular feedback. But it's not known whether setting global goals is effective

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at accelerating progress in the same way, or whether it can motivate change on a monumental scale. Although some countries made good progress towards the Millennium Development Goals, it's hard to say how much of that progress would have occurred anyway.

The principle of the SDGs was established by Paula Caballero and Patti Londoño, two policymakers from Colombia, and is described in vivid detail in their 2022 book *Redefining Development* (see page 247). The goals were groundbreaking because they combined nations' social and economic aspirations with environmental ones to form one set of integrated goals. This encapsulated the idea that progress in living conditions must occur hand in hand with protection of the planet, and that these objectives must apply to all countries, not only the poorest.

But politicians' response to the SDGs has been lacklustre. Starting in 2020, a team of 61 researchers scoured more than 3,000 academic studies published between 2016 and 2021 for scientific evidence that the SDGs were having an impact on politics¹. The meta-analysis, led by Frank Biermann, who studies global sustainability governance at Utrecht University in the Netherlands, showed that although the SDGs were influencing political discussions, there was little evidence they were driving substantive changes in government policies or spending. To correct their course, governments must engage beyond this superficial level.

Measuring up

Nature's focus has been on how science can help. We are committed to publishing more research that assesses the SDGs' progress and showcases effective interventions that could help to achieve them. One clear message from our reporting is that measurement of progress towards the SDGs needs to be improved. The UN publishes an agreed set of some 230 indicators – such as the proportion of a country's population living below the international poverty line and the proportion of land degraded. But although hundreds of individuals at a range of organizations painstakingly collect and check national statistics, there are still vast gaps, particularly for low- and middle-income countries, and in data disaggregated by gender. For several cross-cutting goals, such as climate action, gender equality and peace and justice, fewer than half of countries or areas have internationally comparable data. Moreover, donors cut funding for the collection of data and statistics by US\$100 million between 2019 and 2020 (the most recent year for which data are available) - the biggest drop since the SDGs began.

Researchers also argue that some of the measures agreed by the international community in 2015 are too simplistic and inaccurate, and have devised newer ways of measuring progress towards the SDGs. For example, the projection that around 575 million people will remain in extreme poverty in 2030 is based on the World Bank's definition, which states that those below the poverty line live on no more than \$2.15 per day at 2017 prices. But in many parts of the world, people earning well above this threshold cannot afford basic food or housing (see *Nature* **618**, 886; 2023). An alternative measure is the Multidimensional Poverty Index (MPI), developed by researchers at the University of Most people trying to get evidence used are not going about it in a systematic way." Oxford, UK, and the UN Development Programme. The MPI captures other indicators of poverty, such as the quality of housing and access to clean water and sanitation, and suggests that there are likely to be around twice as many people living in extreme poverty.

Narrow focus

Another problem is siloed thinking. Although a founding principle of the SDGs was that they were integrated, that aspect has been neglected by most efforts to achieve or measure them. Each target has its own cascade of indicators, and both national and multilateral agencies tend to focus on one area – the environment, health, development and so forth. This means that even when policymakers take action to support one goal, they typically don't consider how it might push others forwards or backwards – progress to reduce hunger and promote sustainable agriculture (SDG 2), for example, can conflict with efforts to protect biodiversity on land (SDG 15).

The study and measurement of these SDG interlinkages has become a research field in its own right² and has helped to show that progress on a subset of SDGs – including poverty, good health, education, gender equality, clean water and clean energy – offer particularly big wins by producing synergistic benefits across many others.

Such interactions are complex, and researchers need to further develop and test straightforward tools that allow policymakers to assess them. A team at the Stockholm Environment Institute (SEI), for example, has developed an approach to assess interactions between targets called SDG Synergies. This was piloted in workshops with the Mongolian government in 2017. Participants used a matrix to score the degree to which a range of possible development actions (such as protecting water) could boost or curtail other goals (such as biodiversity or health), and so worked out which to prioritize. This type of analysis is now required in Mongolia when new development policy proposals are considered, and the tool has since been used to analyse SDG links in countries from Mexico to Sri Lanka. Ahead of next week's summit, researchers at the SEI are pushing for a wider adoption of such tools, among other things³.

Evidence ignored

Another message many of our reporters heard is about the difficulty in getting practitioners or policymakers to use research. Reams of evidence on effective ways to help children learn, for example, are rarely used in classrooms or by education ministries. And research showing that clean energy can drive progress towards many SDGs without hindering economic development is consistently ignored.

Widespread frustration at this chasm between research and policy is fuelling interest in studying the problem in its own right. There are plenty of anecdotes and theories about what does or doesn't work to get science and evidence used – building trust and relationships between researchers and policymakers, for example – but most people trying to get evidence used are not going about it in a systematic way.

One of the most coordinated efforts to address this is the

Transforming Evidence Network, a group started in 2020 that now includes several hundred funding organizations, researchers, community leaders and government representatives. Its aim is to build up a body of evidence about effective methods for getting research used.

Policymakers and the UN are already discussing what should come after 2030. One idea, which draws on studies of SDG interactions, is to focus on a smaller number of cross-cutting goals – including human well-being, energy decarbonization and sustainable and just economies (see *Nature* **618**, 647; 2023).

Getting the job done

We strongly support efforts to learn from the past and to take heed of evidence. But completely replacing the goals after 2030 would be wrong-headed, given how widely recognized they have become, and that they all remain essential to sustainable development. Any effort to replace them would detract from the spirit of inclusion that distinguished the SDGs project from previous goals.

But making no adjustments would also be foolhardy, given all that's been learnt over the past eight years. This month's summit is focused on re-energizing nations to push for the goals in the run-up to 2030. In the near term, that's the right approach: even if most targets will be missed, it's better to double down on efforts and use the deadline to focus minds than to give up and risk eroding fragile gains. This unprecedented project was always going to involve tremendous hard work, and a lot can be done in seven years. The world's priority must be to make the greatest possible gains against the current goals – while using science to intelligently evolve them.

1. Biermann, F. et al. Nature Sustain. 5, 795–800 (2022).

2. Sachs, J. D. et al. Nature Sustain. 2, 805–814 (2019).

 Weitz, N., Carlsen, H., Bennich, T., Nilsson, M. & Persson, Å. Nature Sustain. https://doi.org/10.1038/s41893-023-01212-7 (2023).

Three cheers for the UK joining Horizon Europe

The United Kingdom will be part of the world's largest research funding scheme once more – and not a moment too soon.

he celebrations were audible on both sides of the English Channel; relief in the United Kingdom and the rest of Europe that UK scientists can now participate in Horizon Europe, the world's largest research-funding scheme, and the Europe-wide Copernicus Earth observation programme (see page 235). The UK government's brief announcement at 7 a.m. Our troubled world needs scientists to collaborate now more than ever."

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on 7 September was accompanied by an extensive list of positive testimonials from research leaders. "Thrilled"; "delighted"; "excellent"; "huge", they variously said.

At *Nature*, we, too, are relieved and overjoyed by the decision, which should not have taken so long to make. Our troubled world, with 'polycrises' of environmental degradation, economic headwinds and threats to peace and security, needs UK researchers to collaborate with colleagues in Europe and elsewhere now more than ever.

Accession to the €95.5-billion (US\$102-billion) scheme will cost the United Kingdom €2.6 billion a year. This was always going to be a tough ask, given the considerable negative sentiment towards the European Union in the current UK administration. The decision was hanging in the balance as recently as July but, thankfully, the arguments in favour of joining won the day.

UK Prime Minister Rishi Sunak is reported to be unconvinced of the benefits. One of the arguments against joining was that the United Kingdom had already missed the programme's first 2.5 years of funding – started in 2021, the scheme will last until 2027. Moreover, continuing delays to joining the programme would have made it harder for UK researchers to join or lead multi-year projects.

Although talks between the two sides had resumed in April, just days later, UK officials announced a collaborative scheme called Pioneer that was intended "to strengthen the UK's position as a science and technology superpower". The reaction of UK science leaders to the proposal was overwhelmingly negative and some publicly voiced fears that accession to Horizon Europe might not happen.

Around three-quarters of Horizon Europe's funds are allocated to global challenges and innovation. Already, nearly 40,000 researchers in 142 countries are taking part, many with long-standing links both to the programme and to each other. It would simply not have been possible for the United Kingdom to have matched the power, reach and depth of such a scheme had it chosen to go it alone.

When Brexit formally took effect on 31 January 2020, this journal urged the United Kingdom and the EU to "cherish what you have achieved and stay close". The years since have shown how not to do that. The number of EU researchers working in the United Kingdom has plummeted and some UK scientists who had won Horizon Europe grants have had to give them up (see page 236). Most UK universities are in the process of decoupling from European higher-education regulatory standards. The country has also left the European student-exchange scheme Erasmus+. The UK government's replacement, the Turing scheme, funds young people in the United Kingdom to study, travel and work anywhere in the world for up to a year – but, unlike with Erasmus+, there is no money for young people to come to the United Kingdom.

What happened last week is a huge, valuable and immensely reassuring win – not only for research, but also for what such collaborations can achieve. However, with the issues threatening the world in mind (see page 227), it is only a first step. Collaboration and openness are key to progress. Thanks to this decision, UK, European and international researchers can once again strengthen and deepen their ties – and contribute to solving the world's challenges.