# More Global Public Goods

The key to tackling global crises.

By HANNAH ZICK

atching the news over the last few weeks, months, and indeed years, it feels like the world is stuck in a never-ending cycle of catastrophes and crises.

Take for example the Canadian wild-fires that constituted the worst fire season in Quebec on record and led to a deterioration

go back to the financial crises of 2008–2009, the Covid-19 pandemic, and the Russian war against Ukraine that not only led to suffering in the region but globally due to the country's role as a supplier of food staples.

of air quality all across North America. Or

Although the reasons for these emergencies are surely diverse, most of them have one feature in common: they are—at least partly—consequences of the under-provision of a global public good.

From an academic point of view, the criteria identifying a global public good—that it's impossible to exclude someone from consuming them (non-excludable) and that they can be enjoyed without diminishing others' benefits when consuming them (non-rival)—only apply rarely in practice. Nevertheless, the underlying mechanism is highly relevant for most of the recently experienced disasters.

As defined in our new study, the provision of global public goods is mainly characterized by the production of what economists call cross-country externalities—providing the good brings benefits not only to the country providing it, but to other nations and people too.

Consider climate change, for example. Investing in mitigation measures, such as renewable energies, benefits people globally. Thus, climate change mitigation can be considered a global public good. Another example

# THE INTERNATIONAL ECONOMY

## THE MAGAZINE OF INTERNATIONAL ECONOMIC POLICY

220 I Street, N.E., Suite 200 Washington, D.C. 20002 Phone: 202-861-0791 Fax: 202-861-0790 ww.international-economy.co

www.international-economy.com editor@international-economy.com

Hannah Zick is an economist at Oxford Economics.

is pandemic preparedness. Vaccinating large shares of the population not only benefits the local population but all people across the globe as the measure contributes to the containment of the spread.

### **INCENTIVE STRUCTURE MATTERS**

Yet although global public goods provide meaningful benefits to a large number of people, making them highly desirable, they end up being underprovided for. That is because the provision of these goods needs to be organized at the local level with, of course, the costs of provision arising there as well. Thus, the providing countries choose to fund the good only if the benefit to their economy or population exceeds the cost.

However, if they were to take the benefits to a much broader area into account, it would be obvious that providing a greater amount would still be beneficial from a global point of view. To illustrate the incentive structure, consider the following example: would you be willing to invest in building a new road so you could get to the next grocery store more quickly? You probably wouldn't, as the cost is way out of proportion to your benefit. Yet considering that all your neighbors would reach the grocery store faster too, the cost may be worth it for the neighborhood.

This unfortunate incentive structure leads to the underprovision of global public goods even though the whole of humanity has already agreed they are highly desirable. Thus, despite these agreements, implementation is lacking: we all want to mitigate climate change, preserve biodiversity, prevent the spread of the next pandemic, avert violent conflict, and counteract financial crises. However, agreeing on these goals has only rarely led to action appropriate to achieving them.

### **DEFINE THE COMMON GOAL**

So what can be done? To tackle a problem, it is essential to understand its root causes. And they differ fundamentally between global public goods and most development goals, such as providing sanitation or eradicating hunger.

Once understood, it is necessary to coordinate at a global level and define the goal you are aiming to achieve. Consider, for instance, the new road that gets you and your neighbors to the grocery store more quickly. A prerequisite would be to talk to your neighbors and find out whether the road is in their interest too. If it is, the next step would be to define the common goal: what would the optimal road look like to maximize your benefit considering the community's willingness to pay for it?

To solve the coordination problem, international agreements and institutions are needed to legitimize and guide any enhancement of the provision of global public goods. They specify that there is a globally acknowledged need for collective action, a common global target to be reached, and—in the best-case scenario—ambitious national contribution targets for reaching global goals.

A legitimate institution for most global public goods is the United Nations, as it is uniquely positioned to coordinate globally. For the global public goods discussed before, these agreements have already been achieved. A recent

The provision of global public goods is mainly characterized by the production of what economists call cross-country externalities—providing the good brings benefits not only to the country providing it, but to other nations and people too.

example is the adoption of the Kunming-Montreal Global Biodiversity Framework at last year's COP15 biodiversity summit, under which the Parties agreed to halt and reverse nature loss.

### A KEY TOOL

Cost-benefit analyses provide a useful tool. At the global level, these help to identify the optimal provision level. On the country or even project level, they help to identify where the provision of global public goods can be supported in the most effective way. Although it may not be straightforward, our study shows that cost-benefit analyses are possible and are getting easier to perform due to improvements in data availability.

Drawing on the Oxford Economics Model, for example, we find that a successful global transformation to net zero could generate a return of about US\$40 for every dollar invested in climate change mitigation compared with the scenario of a climate catastrophe.

Generally, our analysis shows that the benefit of providing a global public good is typically much higher than the associated cost. Thus, the returns on investment are usually immense from a global perspective.

The cost-benefit calculations from a country's perspective or at the project level are likely to produce quite different results because only local and not cross-country externalities enter the calculation.

Thus, the cost-benefit analysis on a project level helps to understand and potentially alter the incentive structure for the implementing country. More precisely, the cost of the project, the nationally occurring benefit, and the benefit occurring in other countries should be demonstrated. If the incentive structure is unfavorable—that is, the cost exceeds the nationally occurring benefit—two options are available to convince the country to implement the globally beneficial project: increasing the national benefit or decreasing the cost. The latter can be understood as "buying cross-country externalities," as this could in practice mean contributing financially to the green transformation of a country's energy system, for example.

Here, the difference between global public goods and development objectives once again becomes clear. While development assistance, such as financing schools, can be understood as aid, supporting the provision of global public goods cannot be understood as aid as these countries receive a benefit in return by supporting the provision. In that sense, the contributing countries are paying the providing country for the provision.

Considering the climate change example, a country aiming to transform its energy sector towards renewables could receive payments by other countries for every tonne of greenhouse gases saved. The equivalent for you and your neighbors would be if they contributed to your cost for building the new road as they are also benefitting from it.

### UNLOCKING GLOBAL ACTION

Enhancing the provision of global public goods is central to unlocking global action, as their underprovision is at the core of most global crises. Understanding and acknowledging their special incentive structure is fundamental to finding ways to address it.

Global public good provision must be anchored in international regimes. For most global public goods, these already exist, so the agreement exists but action is missing. A tool to enhance the provision of global public goods by addressing the problem at the core is a cost-benefit analysis that can demonstrate the nationally occurring benefit as well as well as the cross-country gains.

Thus, the benefit and cost structures can be analyzed, and the burden may be shared in a way that can be considered just. Solving this financing challenge is the key to unlocking global action leading both to sustainable development and a creating a new, positive cycle of news headlines.