Learning from success stories

in addressing global catastrophic risks

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Introduction

The world is facing risks with potentially catastrophic consequences. Most recently, COVID-19 has shown the devastating effects of communicable diseases. At the same time, carbon dioxide levels in the atmosphere continue to rise, a slower process than a pandemic but already causing many deaths related to extreme weather events.

Over the years, global governance has been developed to manage catastrophic risks, but there still are significant shortcomings.[1] Learning from earlier progress can facilitate action today, both on the global environment and on other challenges.

This paper describes some success factors in previous environmental reform, as a starting point for further studies on lessons for addressing global catastrophic risks. It is based on semi-structured interviews with several key actors, as well as on earlier research literature.

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The importance of success stories

The ozone layer is beginning to heal. Acidification in Europe has been drastically reduced. Carbon pricing is applied in more than 50 countries.

There are many more examples of environmental improvements during the last 30 years. Awareness of positive results can help us to act decisively in addressing today´s problems.

Certainly, there is a need for such actions. Climate change is one of the main threats to humanity, and there are other difficult global environmental problems. For example the UN Panel on Biological Diversity reported in May 2019 that thousands of species are threatened with extinction.

Even if climate change and biodiversity loss pose special challenges, it is possible to learn from how other environmental problems have been addressed successfully.

The interplay between pioneer countries and international negotiations was an important factor in protecting the ozone layer, as was political leadership. Sweden's decision to phase out all CFCs affected key American actors, and Germany´s subsequent measures also had strong effects. The cooperation between ambitious states in the Toronto Group since the 1970s provides general lessons for other environmental topics. The gradual institutional development, and support for the capacity of developing countries, are other areas of interest from the ozone layer success story.

Although there are still shortcomings, the control of hazardous substances has taken important steps forward. This includes the Stockholm Convention on Persistent Organic Pollutants (POPs), the Minamata Convention on Mercury, and the global cooperation on lead. This illustrates the role of science and of constructive cooperation between countries with very different circumstances. OECD has contributed to a global classification and labelling system, and the EU chemicals regulation REACH has become a global model.

There are also lessons to be learned from national and international work against acidification when it comes to today´s global risks and possible "tipping points". The interplay between science, good governance and political leadership has been significant in combatting air pollution and the resulting acidification. Domestic reforms have been combined with strategic work for better international governance. The Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) is another example that can inspire efforts against environmental risks.

Regarding climate change, carbon pricing shows how the dissemination of good examples can be part of improved global governance with the hope of closer coordination in the long run. In the early 1990s, some European countries introduced carbon taxes. Today, more than 50 countries apply some form of carbon dioxide pricing. Even if a globally binding agreement on carbon pricing is not easy to achieve, this bottom-up development can together with cooperation on standardised measurements and verification provide important impetus to the fight against climate change. The introduction of climate laws with quantitative goals and independent climate policy councils in many countries also provide lessons for reforms of global governance.

Success factors

There are recurring themes in stories about environmental reform, that may also be relevant for addressing other global risks. The following non-exhaustive description of some success factors builds on existing literature and on interviews with several key actors in negotiations.

Agenda-setting based on science

Many analysts have pointed to the importance of scientific research for agenda-setting, negotiation, and compliance with global environmental agreements. The Montreal Protocol is often mentioned in this regard. But there is also a need for decision-makers to be proactive and apply the precautionary principle.

”We acted on the ozone layer even though the evidence was not universally accepted”, former German Environment Minister Klaus Töpfer says. “Scientists from the Max Planck institute knocked on my door and said: you must act now for the future of mankind. And we did. But there was resistance from industry and from other scientists.”

Groups of scientists working within the same area - epistemic communities – can play a crucial role. The Intergovernmental Panel on Climate Change (IPCC) is a well-known case. ”It has been demonstrated that the presence of scientific networks (epistemic communities) and strong international organisations yield distinctively comprehensive negotiated outcomes and more efficient regimes” researcher Norichika Kanie and his co-authors note. [2] They also highlight the role of institutions such as UNEP: “International organisations have an important role in managing scientific networks and linking them with inter-governmental or governmental processes, be it agenda setting or negotiation.”[3]

Jos Delbeke, for many years Director-General for Climate in the European Commission, emphasises the need to get intellectual elites in different countries aboard. The European Commission worked together with leading scientists and institutes in Member States to assess inter alia the economic consequences of climate action. Since models were widely known and accepted, it was easier to get governments aboard, according to Jos Delbeke. ”If the intellectuals in a country are already up-to-speed with what is coming, they can more easily help to explain. If they say to their national peers: this makes sense, this is workable, then you are in business.” Similar experiences can be drawn from the modelling of acid rain used in negotiations under the Convention on Long-Range Transboundary Air Pollution (CLRTAP). Acceptance of the “critical loads” concept was important for success.

Leadership is crucial

“The role of individuals should not be understated”, notes veteran diplomat Bo Kjellén who played a key role at the Rio conference in 1992[4]. This is true both in domestic policies and in international negotiations. For example, Mostafa Tolba played a crucial role at the 1972 Stockholm Conference on the Human Environment, for the start of IPCC[5], in protecting the ozone layer and for the decisions taken at the 1992 Rio Earth Summit.[6].

In 2013, a global convention restricting the use of mercury was signed in Minamata, Japan. The Chair of the negotiations, Fernando Lugris, played a key role for the success of the negotiations. Some countries who have difficult relations in other fora could find a positive tone to discuss issues related to mercury and finally to agree at the fifth meeting of the negotiations committee.

Leaders need to communicate a vision of the future. Hope is a more powerful message than fear, according to Gina McCarthy (former US EPA Administrator and now White House National Climate Advisor): “We have said forever that this is a big catastrophic problem. And the science tells us that it is bigger and that it is going faster than we ever thought. But the question is: do you ride the same pony and keep saying ´it´s terrible, and terrible, and terrible´? Or do you talk about the hopefulness of a clean energy future?” She continues: “I understand that we need to move further and faster but my experience in government says that to be a leader you need to give hope and a clear understanding of what the future is where you are heading. If you do that, people will follow you.“

The European Green Deal is such a vision, articulated by Ursula von der Leyen when she took office as President of the European Commission in 2019, and implemented largely by the strong leadership of Executive Vice President Frans Timmermans.

Developing long-term strategies and using windows of opportunity

Many significant improvements are the results of long-term policy processes. Reducing acidification in Europe, protecting the ozone layer and the gradual diffusion of carbon pricing are some examples. Decision-makers need both to initiate progress and to institutionalise further development, for example by dynamic design of agreements such as the Stockholm Convention on Persistent Organic Pollutants (POPs).

At the same time, it is important to use windows of opportunity. The successful negotiation of the global convention on mercury is a case in point. It was a special time in international relations, especially with the change of the US administration after Barack Obama won the presidential election in 2008. UNEP Governing Council decided on a clear mandate for the negotiations and that they should be finalised by 2013, and negotiators concluded an agreement in time.

Every journey begins with a single step

Agreement on individual issues or innovative institutional solutions may at first seem small compared to catastrophic risks such as climate change, but such positive steps can create momentum that opens greater opportunities.

The Minamata Convention is a case in point. It was not possible to address a full phaseout of coal burning although that activity is a significant source of mercury emissions, according to researcher Henrik Selin: ”Decision-makers should be conscious of trade-offs in trying to identify high-impact interventions. Moving away from the use of coal would have substantial benefits for the mercury problem, but the Minamata Convention would likely not be in force today had national delegates and policy advocates focused on pushing this most ambitious solution. This would have left mercury emissions from coal burning as well as other aspects of the mercury issue unregulated globally.”[7]

Understanding and respecting differences

Many obstacles in international negotiations are created or reinforced by a lack of understanding between countries or different groups in society. A key component of the successful negotiations of the Minamata convention was listening to all involved parties.

Social sustainability and solutions to environmental problems are closely linked. Rich countries should fulfil their promises of development cooperation and trade facilitation. “At the time of the Rio conference, we wanted to avoid a new cold war between poor and rich after the cold war between ideologies”, Klaus Töpfer remembers: ”But we didn´t concentrate enough on financial issues.”

Institutional capacity and skilful management

Adil Najam and his co-researchers state: ”The institutions that make up the Global Environmental Governance system should be well-managed; they should have the resources they need and should use these resources efficiently; and they should be effective in implementation.”[8]

Organizational culture is important. The ambition and strength to move forward despite obstacles is a key factor, although not always easy to quantify. This is true both on the international and the domestic level. “Spirit is the most important factor”, notes former director Teruyuki Ohno regarding the achievements of the Tokyo Municipal Government in combatting air pollution and climate change.

How negotiations are structured influences the outcomes. Oran R. Young has for many years spearheaded research on the importance of “regime design” in global governance.[9]

Negotiators within the environmental conventions create a common picture of what can be discussed, while other ways forward might not be assessed sufficiently. An example is the climate convention, where path dependence has led to the possibilities in the original text not being fully utilised.

Other success factors

Other success factors include a broad commitment in society, well-functioning implementation and compliance regimes, integration of environmental aspects in all policy areas, regional cooperation, informal alliances between pioneer countries, and support from the highest political level.

Managing global risks

When it comes to the management of global catastrophic risks in general, an interesting initiative is the Together First network, supported by Global Challenges Foundation, where more than 100 experts develop proposals. The network's report How to save the world discusses past successes in global cooperation and outlines possible ways forward regarding five threats: climate change, ecosystem collapse, pandemics and antibiotic resistance, weapons of mass destruction and risks with new technologies.[10] Some of the conclusions:

- Solutions often have different focus than the risks. Often there is already sufficient knowledge about the threats. A crucial task is instead to identify obstacles, get around them and to build a broader institutional capacity to prevent and manage dramatic changes.
- In a medium-term perspective (until at least 2030), most important is to build on frameworks that already exist, such as the Convention on Climate Change. It is difficult to make plans for radical changes in the long term given all the uncertainties. On the other hand, it is important to ensure that there is good knowledge when crises occur. This includes institutions that can manage, among other things, "contrarian ideas", thoughts that seem unrealistic today, but which become possible in a crisis.
- Political will is not a constant. It is possible for smart coalitions of social movements, progressive business leaders and international officials to create conditions for increased ambitions.
- Capacity for strategic analysis in international organizations such as the UN is a key issue, but member states have often opposed financing such activities. Overcoming this resistance is an important task.

Others have written about global cooperation against serious threats, with recommendations that also cover climate and biodiversity. Common to many is the importance they attach to "risk multipliers" such as poverty and inequality, violent conflicts, and weak institutions. General measures in these areas are an important part of reducing global threats. Efforts to increase gender equality are often seen as a positive factor.

Conclusions

The Annual Report of Global Catastrophic Risk provides an overview of the current situation.[11] Paths forward have been discussed in earlier texts published or supported by Global Challenges Foundation, including the seminal book *Global governance and the emergence of global institutions for the 21st century.*[12]

As shown in these and other pieces, there are similarities regarding global governance of different catastrophic risks. Based on the analysis of environmental success stories in previous sections of this paper, some aspects appear to be particularly promising to further explore.

- Science-based agenda setting, applying the precautionary principle
- Bold and strategic leadership
- Combining long-term strategies with agility in using windows of opportunity
- Designing short-term reforms to facilitate more radical reform in the future
- Putting social sustainability at the core of reform
- Bridging the North-South divide by building trust (including regional approaches when appropriate), and by real action on financial commitments
- Skilful management of international organisations
- Careful design of negotiations for example regarding the structure of actors
- Empowering civil society including on implementation and compliance

A deeper analysis of such issues will be the topic of a report published by Global Challenges Foundation later this year.

Endnotes

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