TOGETHER FIRST
A global system that works for all

ID:	Is anonymous?	Is organisation?
118	No	Yes

Is form complete:	Organisation name:
Yes	International Environment Forum

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Global catastrophic risks mitigated	Risk multipliers managed	Implementation timeframe
Climate change	**Conflict or political violence**	**Short**
Eco-system collapse	**Institutions that lack inclusivity or accountability**	
Pandemics and anti-microbial resistance	**Poverty and inequality**	
The threat from new and emerging technology		
Unknown risks		

Governance, Science and the Climate Crisis

For climate and other catastrophic risks, science is the foundation for public education, policy-making and action, requiring strengthening formal science-policy inputs to UN and government decision-making, while building public support for action as an ethical responsibility

DETAILS

The International Environment Forum is a Bahá'í-inspired professional organization for the environment and sustainability, founded in 1997 and now with over 400 members in more than 75 countries. IEF is a virtual organization that functions largely over the Internet, with an extensive web site (https://iefworld.org), a monthly newsletter, annual conferences somewhere in the world often in partnership with other organizations, and educational activities. It is accredited by the United Nations in the scientific and technological community major group, collaborating in relevant UN activities with the International Science Council and other organizations including ebbf-Ethical Business Building the Future, the Global Governance Forum, and the Bahá'í International Community. As such, it bridges the scientific community and the wider circle of non-governmental organizations. It has organized events at the Copenhagen and Paris Climate conferences and plans to be at Glasgow. It contributes to the public discourse on the role of science in addressing the multiple risks the world is now facing, and is open to collaborating with others.

As an organization predominantly of scientists, we see the importance of the science of complex systems and an integrated perspective on the multiple challenges facing the world, including the climate catastrophe, the biodiversity crisis, the degradation of natural resources and irresponsible approaches to pollution and wastes on the environmental side; inequality reflected in extremes of wealth and poverty, migration, fragmentation and extremism on the social side; and a materialistic economic system plundering the planet for the benefit of the few while leaving most of the population behind. We contributed to the formulation of the 2030 Agenda and actively support the SDGs. But scientific knowledge, by itself, does not change individual behaviour or guide system change. From our Bahá'í-inspired perspective, the ethical dimension of human values and a vision of a higher human purpose are required to motivate change and to accept short-term sacrifices for the long-term common good, learning to live within planetary boundaries. We see changing values as fundamental to progress, and scientific and ethical approaches as complementary. We need to create momentum from many stakeholders beyond the scientific community for a strong voice for science in UN reform and responding to the climate crisis.

For environmental risks such as the climate crisis and the collapse of biodiversity, natural science is the primary warning mechanism, but it still has too little impact on decision-making in the UN or on fundamental systems change as required by the 2030 Agenda. We need to work to change this. Two of our members shared in the 2018 New Shape Prize of the Global Challenges Foundation for their proposals on global governance, and many of our members are scientists working at the science-policy interface, so we can speak from experience. We also have an interest and

experience in strengthening the role of science at the local level, building local responsibility, resilience and innovation.

The International Environment Forum proposes launching a campaign with Together First and others, with a major focus on the climate crisis, to strengthen the science-policy interface in the UN system with formal links to decision-making processes, in order to overcome the inertia of present governance mechanisms. This will also mean new efforts to explain the challenges and their ethical implications and to build public support for actions, including at the local level. Since the General Assembly can create subsidiary advisory bodies without approval required by the Permanent Members of the Security Council, we can try to build sufficient momentum among interested countries, and adequate public pressure, to strengthen scientific advisory bodies in the UN.

The main risk addressed is the failure of political processes at the national and global levels to listen to scientific warnings about climate catastrophe, biodiversity collapse, pollution impacts and other environmental threats, and instead to continue with business as usual. The science of complex systems shows that all these risks are interlinked, and could lead to a complex catastrophe with major social and economic consequences as well. The interest created in improved global governance during the UN 75th anniversary could create opportunities to push this issue as part of wider UN reform. One early aim should be to give the UNFCCC the power to determine binding limits on greenhouse gas emissions and to negotiate their equitable distribution.

One need is to move from science as the source only of negative news and warnings of disaster, to a source of positive solutions and visions of the better world that can emerge from the necessary economic and social transition. This can be coupled with ethical arguments around justice, equity, solidarity and moderation in lifestyles that can also build wider support in civil society, youth movements and faith-based organizations.

Strengthening the role of independent scientific advice can increase the effectiveness of governance in the fundamental transformation required to move towards sustainability, and reduce the rapidly-accelerating costs of inaction. We need to develop arguments that listening to science leads to better outcomes, and build momentum for reform. Some countries are leading the way, and they will demonstrate that transformation is both possible and beneficial. There has already been a significant shift in public opinion in recent years, so further improvement in the next five years is certainly possible. The challenge is to channel that into institutional change at the global level, but there are also positive proposals for this that can gain momentum.

These concepts are further developed in the attached pdf file and on our web site at https://iefworld.org/node/1023. In our full proposal, we consider the role of science in governance, strengthening science in policy making, and how these proposals fit into the larger effort to reinforce global governance through fundamental reforms to the United Nations. We provide further details on the development of scientific advisory and technology assessment process at the UN, and consider broader issues of global environmental governance. The role of science in responding to the climate crisis is developed as an example. Two other relevant issues discussed are education for transformation, and universal access to science.

WIDER IMPLICATIONS

Alleviating poverty and inequality

All global catastrophic risks will increase poverty and cause widespread suffering. Using science to predict, anticipate and if possible prevent risks will facilitate the ultimate elimination of poverty around the world.

One specific issue addressed in this proposal is inequality in access to scientific information and to knowledge in general. The abuse of the concept of intellectual property by large multinational scientific publishing houses and other corporate interests for profit has resulted in the privatisation of the commons of scientific knowledge, so that only wealthy libraries and institutions can make such knowledge available to those within them, and the poor and those without institutional affiliations must pay high prices for even the most limited access to individual papers. This has become a global problem and requires solution through improved global governance of scientific knowledge in the common interest. The response to many catastrophic risks will in many cases require diverse approaches at the local level adapted to each particular situation, for which local and regional scientific capacities need to be developed, supported by the flow of information from the global level. Science needs to be accessible to everyone.

Enhancing inclusivity and accountability in national and global governance

The requirement that governance decisions need to take into account objective realities as defined by natural science provides an additional measure of accountability. Everyone can see whether the actions taken will deliver what science requires, or fall short. In the case of the climate crisis, it was already obvious in the Paris Agreement that the announced Nationally Determined Contributions to greenhouse gas reductions would fall far short of the goal set in the Agreement and a ratcheting mechanism was incorporated in the Agreement to pressure governments to increase their commitments in subsequent periods. Such voluntary mechanisms are clearly not up to the challenge that climate change represents. The next steps need to be to allocate reduction targets to countries based on the science and agreed principles, and then to make meeting those targets binding, with penalties for falling short, in a more strict form of accountability.

Reducing conflict and political violence

The pressures on populations from the impacts of climate change can lead to conflict and political violence. Prolonged drought in Syria drove rural populations to the cities, identified as one of the causes of the prolonged Syrian conflict. If plans are not made to anticipate and organize the massive displacements of coastal populations from sea level rise, and people fleeing drought and extreme heat that will make regions uninhabitable, conflict and violence are certain to increase massively. Adequate scientific assessment can identify the areas and people at risk, so that their forced displacement can be anticipated and organized without excessive human suffering. Efforts will also be needed to determine the countries with resources to receive these migrants and to educate the receiving populations to welcome them rather than reject them.

THEORY OF CHANGE

Implementation strategy

The International Environment Forum proposes launching a campaign with others, preferably through Together First and with a major focus on the climate crisis, to strengthen the science-policy interface in the UN system with formal links to decision-making processes, in order to overcome the inertia of present mechanisms. This will also mean new efforts to explain the challenges and their ethical implications and to build public support for actions, including at the local level. Since the General Assembly can create subsidiary advisory bodies without approval required by the Permanent Members of the Security Council, we can try to build sufficient momentum among interested countries, supported by adequate public pressure, to strengthened scientific advisory bodies and their role in the UN.

The main risk addressed is the failure of political processes at the national and global levels to truly listen to scientific warnings about climate catastrophe, biodiversity collapse, pollution impacts and other environmental threats. While they do pay attention to scientists and adopt global goals for transforming the world in a more sustainable direction, they continue in practice with business as usual. The science of complex systems shows that all these risks are interlinked, and could lead to a complex catastrophe with major social and economic consequences as well. The interest created in improved global governance during the UN 75th anniversary could create opportunities to push this issue as part of wider UN reform. One early aim should be to give the United Nations Framework Convention on Climate Change (UNFCCC) the power to identify binding limits on greenhouse gas emissions that would be required to meet the objectives of the Paris Agreement and to negotiate their equitable distribution.

For the IEF, as a small organization operating without funding, this will be implemented through:
- Information on our web site, newsletter and outreach to our members
- Participation in major events in partnership with others (ebbf-Ethical Business Building the Future, Together First, Global Governance Forum, Baha'i International Community, etc), including at the United Nations and COP 26
- Contributions to our major group, the Scientific and Technological organizations, in collaboration with the International Science Council
- Preparation and distribution of statements on social media and in video clips
- Contribution to on-line courses on climate change and other educational activities
- Empowering our members and others to take action in their local communities.

We can only do a small part of what is required, and welcome partnerships to extend these activities.

Political will exists to realise this proposal

Given the difficulties in the UNFCCC and the number of governments that are turning away from multilateral action and even from accepting scientific realities, it will be a challenge to build support in some countries for strengthening scientific advisory mechanisms. However, many other countries are setting objectives and targets, parts of the private sector see responding to the climate crisis as a good business opportunity, and consumers are shifting their life-styles and demand. Public acceptance of the changes required to respond to what science is revealing about

the havoc done to natural systems is generally more widespread, especially among the young, as the calls for climate justice demonstrate. The potential is there for a widespread movement to accelerate change, both to bring the advice and knowledge of scientists more directly into global decision-making, and to work around the obstacles that some countries will certainly try to put in the way.

One need is to move from science as the source only of negative news and warnings of disaster, to a source of positive solutions and visions of the better world that can emerge from the necessary economic and social transition. This can be coupled with ethical arguments around justice, equity, solidarity and moderation in lifestyles that can also build wider support in civil society, youth movements and faith-based organizations. Given the acceleration of the climate and biodiversity catastrophes, there is no rational alternative to the ultimate adoption of these proposals if we want a dignified life for future generations on this planet.

What if political will does not exist yet

Political will in too many countries is linked to powerful economic interests, political expediency and ideological positions that resist change, and decades of science advice have done little so far to alter this. There is also the common focus on short-term national interests in the political and diplomatic machinery of governance. Strengthening the role of objective scientific advice can increase the effectiveness of governance in the fundamental transformation required to move towards sustainability, and reduce the rapidly-accelerating costs of inaction. We need to develop arguments that listening to science leads to better outcomes, and build momentum for reform. Some countries are leading the way, and they will demonstrate that transformation is both possible and beneficial. Accelerating climate change impacts and the consequences of collapsing biodiversity will ultimately force governments to change their position, so making rational arguments now will facilitate this. There has already been a significant shift in public opinion in recent years, so further improvement in the next five years is certainly possible. The challenge is to channel that into institutional change at the global level, but there are also positive proposals to move forward that can gain momentum.

Realisation by implementing or making adjustments to current roadmaps

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Decision makers and implementers

null

Why is this a long term proposal

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MITIGATING RISKS

Mitigating climate change

Given the urgency of action on climate change, everyone in the world needs to be informed. Even the small impact of an organization like ours, with messages that resonate with people's values and motivation, may help to increase consciousness of the worst climate risks. If this can become a theme across many Together First partners, it could have significant impact. The advent of any major crisis would make decision-makers and the public more receptive to these messages if they have heard them in advance.

The well-grounded scientific advice from the IPCC provides an objective basis for setting planetary limits for greenhouse gas concentrations, but it does not have a mandate to propose solutions. The institutional challenge is to turn the planetary boundary into binding emissions limits for each country and other relevant entities such as corporations. Mechanisms for determining the criteria for responsibility and allocating shares equitably are the next step forward in strengthening the global response to the climate crisis.

Climate change governance, because of the urgency and impact of the climate crisis, as well as the strong and objective scientific justification for action, could be the first step towards broader global governance reform. Once some trust is built in the equity and effectiveness of constraints on national sovereignty in the global common interest in this narrow area, the way will be open to extending the experience to other areas of global risk.

Mitigating pandemics and anti-microbial resistance

While the focus of this proposal is on the climate crisis as one of the most urgent priorities, the resulting strengthening of the science-policy interface in the UN and other international organizations will serve as a model for a similar response to the threats of pandemics and the rise of anti-microbial resistance. Similar scientific advisory mechanisms are needed to protect human health, building on what already exists in the WHO, but extending them where necessary to risks not yet adequately covered. In particular, what needs strengthening is the use of that science to adopt binding regulations at the global level, and to provide the means for enforcement.

Mitigating eco-system collapse

Climate change is one of the major threats to ecosystems and biodiversity around the world, with one estimate suggesting that 2ºC of global heating would threaten 20 percent of global biodiversity, and a 4ºC rise would exterminate half of the world's biodiversity. The IPCC has already warned of the continuing collapse and possible extinction of coral reef ecosystems around the world.
The available data on ecosystems and biodiversity are also inadequate and much more difficult to collect, requiring significant investment in scientific research, monitoring and assessment to prevent crises being discovered too late to be corrected. A coherent multinational scientific assessment and advisory process building on the IPBES is thus a priority to be included in the effort to increase the use of science for global policy-making.

Mitigating the threat from new and emerging technology

Scientific advice is also necessary for technology assessment, and an increased role for science in decision-making must include a technology assessment component able to evaluate and estimate the risks from, for example, geoengineering for climate change mitigation; the threats to biodiversity from the release of genetically-modified organisms; the impacts of present and proposed releases of chemicals, plastics, nanomaterials and other novel substances; the development of artificial intelligence; and other technologies. Again, global governance must provide for the capacity to use this scientific advice to regulate and if necessary prohibit technologies with substantial risks, applying the precautionary principle.

Mitigating unknown risks

Risk identification and assessment is largely a scientific process, and scientific research is generally the human activity that first identifies new risks. One problem at present is the long time it takes for research to be undertaken and formally published, confirmed by other research, communicated effectively to the public and decision-makers, accepted as requiring a response despite resistance from special interests that may be harmed by any action taken, incorporated into the necessary institutions and regulations, and effectively enforced at the global level, while problems are accelerating. The latter steps in this process are still weak if not entirely lacking in present global governance. Scientific advisory processes need to be built into every relevant part of the UN system. This proposal would help to build momentum for improvements in this area, reinforcing the many other efforts that need to go in the same direction.