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Climate risk management for international organizations

Ideas for improving strategic planning

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Summary

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- Roughly two dozen international organizations, mostly in the United Nations family, foster cooperation and set the global agenda on a range of critical issues, including health, water, energy, the environment, food, migration, security and development. Most of these organizations were created between the end of the Second World War and the 1970s, before the impacts of anthropogenic climate change were widely understood.
 - These organizations face a multitude of daily challenges in delivering their mandates. Climate change brings additional direct risks (floods, droughts, storms), which lead to an increase in indirect risks (hunger, increased mortality, fragile livelihoods) that in turn fuel systemic risks (political instability, mass migration). These risks have profound implications for the ability of the international system to operate effectively: they increase demand for services, undermine the effectiveness of programmes, and impact staff safety and security.
 - This paper investigates the extent to which international organizations are incorporating climate change into their strategic planning and risk management. The UN, as a whole, recognized the importance of effective risk management more than 15 years ago. Over the past decade several international organizations have introduced enterprise risk management (ERM) systems in their operations. However, progress on implementation has been patchy: some organizations now have elaborate, fully functioning structures, but others are just beginning to develop their ERM systems.
 - The risks associated with climate change rarely figure in ERM systems. This is perhaps because climate change is not considered a discrete ‘point source’ of risk, unlike the corruption, terrorist or funding threats that typically concern risk management professionals. Fifteen of the 22 organizations examined for this paper have ERM systems, but only eight have publicly available risk registers, with just six of those listing climate risks as challenges that need to be managed.
 - This paper argues that climate change requires more than reactive solutions implemented at the last minute at project level. International organizations need to move away from ‘defence-oriented’ mindsets towards more proactive, ‘offence-oriented’ approaches – ones that include an understanding of how the climate is changing, what that means for their organization at a strategic level, and how they can better institutionalize climate risk management. How international organizations manage climate risk will be critical to their ability to meet their objectives, deliver their mandates, improve the delivery of their services, achieve value for money and anticipate external shocks.

01

Introduction

Most international organizations were not designed to deal with the consequences of climate change. An overhaul of risk management, taking specific account of climate-related risks, is needed to ensure the continued operational effectiveness of UN bodies and other agencies.

Since the Second World War, a network of international organizations has evolved, mostly in the United Nations family, to promote cooperation on a range of issues crucial to global stability and human well-being: health, food, water, finance, migration, energy, international security and development.

These institutions have helped set the agenda on critical issues. They have facilitated international dialogue and functioned both as early-warning systems and as safety nets, particularly for the world's most vulnerable people and communities. And they can point to important successes: smallpox eradication, arms control negotiations, disaster relief, and improvements in access to energy, water and food, to name but a few examples.

These organizations have been forced to evolve in the face of emerging risks and geopolitical change. In some instances, reforms have been driven by leadership within an organization, the emergence of new research, or high-profile summits. In others, unexpected crises, such as environmental disasters, conflicts or economic shocks, have provided the impetus for a new approach to risk management. Regardless of the specific trigger for reform, however, an organization's institutional and decision-making structure determines its capacity to respond to shifting contexts.¹

Most international organizations already have ambitious objectives, and even large institutions have limited capacity relative to their missions. There is no shortage of risks in the global landscape for them to monitor – indeed, many of these risks are interconnected. But one risk – climate change – will aggravate the threats

¹ Born, C. and Mabey, N. (2016), *United we stand: Reforming the United Nations to reduce climate risk*, London: E3G, <https://www.e3g.org/publications/united-we-stand-reforming-the-un-to-reduce-climate-risk>.

posed by all these interconnected risks. Climate change is placing pressure on all the world's essential systems, potentially rendering unmanageable certain shocks that would otherwise be manageable.

In the World Economic Forum (WEF)'s *Global Risks Report 2020*, environmental or water-related risks accounted for more than half of the top 10 risks in terms of both likelihood and impact.² Climate change is already affecting lives and livelihoods in all countries, including through more frequent and severe wildfires, droughts and hurricanes. It is projected to accelerate the spread of infectious diseases, destroy property and critical infrastructure, and limit access to food and water.³ In addition to risks that will cascade across society, there is also a significant risk of climate change triggering irreversible 'tipping points' such as the dieback of the Amazon rainforest or the collapse of the Western Antarctic ice sheet. The rate of global sea level rise is accelerating well above current projections, and the retreat of Arctic sea ice has been much more rapid than predicted.⁴

In the World Economic Forum (WEF)'s *Global Risks Report 2020*, environmental or water-related risks accounted for more than half of the top 10 risks in terms of both likelihood and impact.

Nor are physical impacts and their related effects the only concern. Governments, companies and international organizations are also facing 'transition risks' associated with the policy changes needed to respond to climate change. Major economies, including the US, China, the European Union and the UK, have pledged to shift away from the use of fossil fuels towards net zero emissions. Achieving this shift will bring about enormous socio-economic changes that will impact industries, labour markets and the financial sector.

Most international organizations were not designed to deal with the consequences of climate change or transition risks. But climate change may have profound impacts on their ability to operate in the future. It will increase demand for their services, sap available funding, undermine the effectiveness of programmes, impact staff safety and security, and hinder their ability to fulfil their mandates.

² World Economic Forum (WEF) (2020), *The Global Risks Report 2020*, Geneva: WEF, http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf.

³ Intergovernmental Panel on Climate Change (IPCC) (2014), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)], Geneva: IPCC.

⁴ Grinsted, A. and Christensen, J. H. (2021), 'The transient sensitivity of sea level rise', *Ocean Science*, 17, pp. 181–86, <https://doi.org/10.5194/os-17-181-2021>.

About this paper

This paper is an attempt to ‘climate stress test’ the international system and provide an early measure of its level of preparedness for the consequences of climate change. To this end, the authors have studied the extent to which international organizations are specifically integrating climate change risk into their strategic planning and operations. This research has been guided by the following questions:

- Does the organization mention climate change in its **organizational strategy** or external reports?
- Does the organization have a **risk management framework**? Is climate change included in the framework?
- Does the international organization measure its own performance against a set of **climate risk indicators**?

The findings presented here are based on an extensive, although not exhaustive, desk review of official publications from roughly two dozen international organizations. Focus was placed on a ‘shortlist’ of organizations working to improve critical climate-affected systems in areas that include economic development, public health, the food system, the energy system, peacebuilding and security. The literature review included strategic planning documents and public-facing reports, as well as shorter blogs or articles. The desk-based research was followed by in-depth interviews with staff at most of the organizations reviewed, typically with a representative responsible for organizational risk management, climate change or both. In addition, the paper was informed by several workshops, including events held as part of the Berlin Climate Security Conference and London Climate Action Week 2020.

Chapter 2 begins with a definition of the term ‘climate risk’ and an explanation of what it means for international organizations. A distinction is made between strategic and operational risks, and between the responses to each. This is followed in Chapter 3 by an overview of the concept of enterprise risk management (ERM). Chapter 4 summarizes the findings from our mapping of international organizations’ approaches to climate risk management. The paper concludes in Chapter 5 by offering recommendations for how international organizations can continue to achieve their missions by strengthening their climate risk management frameworks.

02 What does climate risk mean for international organizations?

Managing climate risk means dealing both with strategic risks to organizations' core missions and with operational risks that may disrupt fieldwork and specific projects.

Every day the agencies, funds and programmes of the multilateral system (mostly, but not all, within the United Nations) face a multitude of internal and external risks. These risks arise from a wide spectrum of causes and carry an equally diverse set of institutional consequences. International organizations face these risks within an ever-changing operating landscape.⁵ One of the major drivers of this evolving 'risk landscape' is the speed and scale with which climate change is reshaping our planet

Defining climate risk

There is no universally agreed definition of risk, and different institutions will define risk in different ways. **Risk** is understood here as the probability of an

⁵ Partnership for Public Service and Deloitte (2020), *Mastering Risk: Ways to advance enterprise risk management across government*, <https://ourpublicservice.org/wp-content/uploads/2020/05/Mastering-Risk.pdf>.

outcome multiplied by the severity of its consequences.⁶ Two factors therefore determine whether a risk is high or low: its likelihood and its potential severity. An outcome that is highly likely but will have minimal impact may not need to be managed at all, while an event that is highly unlikely but would have a significant impact may warrant a substantial investment in prevention or preparation. At its most basic, **risk management** works to reduce the likelihood of an outcome, the severity of its consequences, or both, depending on the nature of the risk and the management opportunities available.⁷

Based on the Intergovernmental Panel on Climate Change (IPCC)'s definition of disaster risk, **climate risk** can be defined qualitatively as 'the likelihood over a specified time period of severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects'.⁸

The nature of climate risk means that it has implications for every international organization. First, climate change is **regressive**, in that its impacts disproportionately affect the poor,⁹ women and those from marginalized groups. Many international organizations have a mandate to support vulnerable populations. Second, climate change is also a **systemic** risk, in that its direct impacts can have knock-on effects across regions and systems. For example, severe drought in Eastern Europe in 2010 was one of the drivers of the introduction of export bans on agricultural commodities, which was one factor that led to a significant increase in food prices,¹⁰ the popular response to which eventually contributed to the Arab Spring.¹¹ International organizations whose work focuses on issues such as food security or financial stability need to be prepared for unexpected scenarios resulting from direct and indirect climate impacts. Third, climate is now **non-stationary**. While weather will always vary, the climate has been remarkably stable over thousands of years as human civilization has developed. Yet the assumption of a stable climate no longer holds. International organizations that are programming investments in infrastructure, for example, now need to make decisions without being able to rely on previous experience.

⁶ Yohe, G. W. (2010), 'Addressing Climate Change through a Risk Management Lens', in Gullette, J. L., Richardson, L., Adkins, L. and Seidel, S. (eds) (2010), *Assessing the Benefits of Avoided Climate Change: Cost-Benefit Analysis and Beyond, Proceedings of the Workshop on Assessing the Benefits of Avoided Climate Change, 16–17 March 2009*, Arlington, VA: Pew Center on Global Climate Change, <https://www.c2es.org/site/assets/uploads/2010/05/workshop-proceedings-assessing-benefits-avoided-climate-change.pdf>.

⁷ Mabey, N., Gullette, J., Finel, B. and Silverthorne, K. (2011), *Degrees of Risk: Defining a Risk Management Framework for Climate Security*, Washington and London: E3G, <https://www.e3g.org/publications/degrees-of-risk-defining-a-risk-management-framework-for-climate-security>.

⁸ IPCC (2012), 'Summary for Policymakers', in Field, C. B., Barros, V., Stocker, T. F., Qin, D., Dokken, D. J., Ebi, K. L., Mastrandrea, M. D., Mach, K. J., Plattner, G.-K., Allen, S. K., Tignor, M. and Midgley, P. M. (eds) (2012), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, a Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change, Cambridge, UK and New York: Cambridge University Press.

⁹ McKinsey & Company (2020), 'Confronting Climate Risk', *McKinsey Quarterly*, 15 May 2020, <https://www.mckinsey.com/business-functions/sustainability/our-insights/confronting-climate-risk>.

¹⁰ Martin, W. and Anderson, K. (2011), *Export restrictions and Price Insulation during Commodity Price Booms*, Policy Research Working Paper 5645, World Bank, <https://documents1.worldbank.org/curated/en/583201468337175309/pdf/WPS5645.pdf>.

¹¹ Brinkman, H. J. and Hendrix, C. (2011), *Food Insecurity and Violent Conflict: Causes, Consequences and Addressing the Challenges*, World Food Programme, https://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp238358.pdf?_ga=2.139031605.721857705.1585313829-844667249.1585313829.

This paper distinguishes between two separate but related ways in which international organizations can integrate climate risk into their activities and decision-making: at a **strategic** level, and at an **operational** level:

- **Strategic:** integrating climate risk into short- or long-term strategies and decision-making.
- **Operational:** integrating climate risk into operations, such as fieldwork and projects.

Strategic risk

Strategy sets the overall direction of travel and the objectives that an international organization is trying to achieve. For most international organizations, climate change is not only a risk at the project level but also represents a challenge for meeting the organization's core mission or mandate. Climate change represents a strategic risk when it could result in the failure of an organization to:

1. Meet its objectives;
2. Deliver its mandate;
3. Operate efficiently; or
4. Be prepared for external shocks.

Climate change represents a strategic risk for many of the international organizations examined in this paper, particularly for those engaging with the following key sectors:

Health: Climate change is likely to increase the spread of infectious diseases and the probability of pandemics.¹² In recent decades, the number of emerging infectious diseases that either have the potential to be transmitted to people or have jumped to humans has significantly increased. The socio-economic and political impacts of the COVID-19 pandemic have highlighted all too clearly the risks involved. Meanwhile, long droughts remain one of the most significant environmental causes of premature mortality, impacting sanitation and hygiene, increasing malnutrition, and reducing crop yields.

Food security: At least 40 per cent of crop-growing areas across all continents will likely experience reductions of at least 10 days in crop duration periods by 2050; this is true for a number of major crops, including maize, soya beans, wheat and rice. Projections by the UK's Meteorological (Met) Office suggest that the likelihood of multiple harvest failures in any two of the world's major 'breadbasket' regions could increase from 1 in 100 years to 1 in 25 years by 2050.¹³ A greater than 10 per cent yield shock to grain production is now likely (69 per cent)

¹² Curseu, D., Popa, M., Sirbu, D. and Stoian, I. (2010), 'Potential Impact of Climate Change on Pandemic Influenza Risk', in Dincer, I., Hepbasli, A., Midilli, A. and Karakoc, T. H. (eds) (2010), *Global Warming: Engineering Solutions*, Boston, MA: Springer, pp. 643–57, doi:10.1007/978-1-4419-1017-2_45.

¹³ Woetzel, J., Pinner, D., Samandari, H., Engel, H., Krishnan, M., Boland, B. and Powis, C. (2020), *Climate risk and response: Physical hazards and socioeconomic impacts*, McKinsey Global Institute, <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts>.

to occur by 2030.¹⁴ The global spikes in food prices in 2007–08 and 2010–11 arose from relatively modest climate impacts, but these impacts interacted with other factors (such as biofuel policy diverting grain supplies for use in the production of ethanol, low stock transparency) to create a run on grain markets; this led to the implementation of export bans, further amplifying the price effect.

Finance: Sharp and sudden asset write-downs resulting from policy changes aimed at reducing greenhouse gas emissions could result in a massive shift in capital allocation and in shocks to financial markets. BlackRock, the world's largest asset manager, expects climate change risk to result in a 'fundamental reallocation of capital'.¹⁵ The Bank for International Settlements has warned that so-called 'green swan' events (expected or unexpected climate-driven catastrophes) could cause the next financial crisis.¹⁶

The Bank for International Settlements has warned that so-called 'green swan' events (expected or unexpected climate-driven catastrophes) could cause the next financial crisis.

Migration: Climate impacts are likely to influence migration patterns and have large-scale implications for the many international organizations that work to protect vulnerable populations.¹⁷ The World Bank estimates that climate change is likely to displace around 140 million people by 2050.¹⁸ While many factors lead to the displacement of people, changes in climate have been causally linked to migration at various points in human history. According to recent research, in the next half-century 1 to 3 billion people are projected to live in areas that will fall outside the relatively stable climate conditions of the past 6,000 years.¹⁹

Energy security: Climate change poses risks to energy systems in at least two ways: firstly, through the direct risks of climate impacts on energy infrastructure; and secondly, through potential disruptions caused by the transition from fossil fuels to renewable energy sources. Global warming will increase demand for electricity for cooling purposes, as well as for electric vehicles and renewable power generation. Reductions in water availability will cause problems for thermal power plant cooling systems and for hydropower generation. Extreme weather also

¹⁴ Woetzel, J., Pinner, D., Samandari, H., Engel, H., Krishnan, M., Denis, N. and Melzer, T. (2020), 'Will the world's breadbaskets become less reliable?', McKinsey Global Institute, <https://www.mckinsey.com/business-functions/sustainability/our-insights/will-the-worlds-breadbaskets-become-less-reliable>.

¹⁵ Fink, L. (2021), 'Larry Fink's 2021 letter to CEOs', BlackRock, 26 January 2021, <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>.

¹⁶ Bolton, P., Despres, M., Pereira da Silva, L. A., Samama, F. and Svartzman, R. (2020), *The green swan: Central banking and financial stability in the age of climate change*, Paris: Bank for International Settlements, <https://www.bis.org/publ/othp31.pdf>.

¹⁷ UN News (2019), 'Migration and the climate crisis: the UN's search for solutions', 31 July 2019, <https://news.un.org/en/story/2019/07/1043551>.

¹⁸ Rigaud, K. K., de Sherbinin, A., Jones, B., Bergmann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S. and Midgley, A. (2018), *Groundswell: Preparing for International Climate Migration*, Washington, DC: World Bank Group, <https://openknowledge.worldbank.org/handle/10986/29461>.

¹⁹ Xu, C., Kohler, T. A., Lenton, T. M., Svenning, J.-C. and Scheffer, M. (2020), 'Future of the human climate niche', *Proceedings of the National Academy of Sciences of the United States of America*, 117 (21): pp. 11350–55, doi: 10.1073/pnas.1910114117.

poses a risk to electricity transmission and distribution systems. The International Renewable Energy Agency (IRENA) has published a summary of potential geopolitical impacts from the transition away from fossil fuels, which includes the possibility of political and economic instability in major fossil fuel-exporting countries – especially those with low per capita GDP.²⁰

International security: The evidence is growing that direct, indirect and systemic climate change impacts, including scarcity of critical resources and disruption of strategic supply chains, contribute to social and political instability and increase the risk of conflict, particularly in fragile states. Hence, climate change is now commonly referred to as a stress multiplier by many defence ministries, security agencies and intelligence agencies, even if it is unlikely to be the sole cause of any given conflict.

Operational risk

For the purposes of this paper, ‘operational’ factors refer to the delivery of organizational services at the technical, or field, level. If organizational strategy sets the destination of travel, organizational *operations* constitute the means for getting there. Most international organizations engage in a range of activities: field operations to deliver services, data collection and reporting, convening of stakeholders, and so on.

Many international organizations have staff, infrastructure or other assets in locations that are directly exposed to climate risks and at high risk of social and political instability. These situations present operational risks that have very real implications for staff safety and security.

For international financial institutions such as the World Bank, climate change will have implications for the technical and financial support provided at the project level. For example, the bank funds infrastructure in developing countries that may be at risk from physical climate impacts such as flooding, extreme heat or weather events as global temperatures continue to rise. Not every project will be fundamentally threatened by climate impacts, but financial institutions may need to adjust their operational approaches in some cases.

Which risks matter most?

Strategic and operational risks both matter, and the relative importance of each category of risk varies considerably depending on the international organization involved. In some cases – for example, for the World Meteorological Organization or the IPCC – understanding climate risk is central to an organization’s mission as a provider of data, assessment and analysis. Organizations that have extensive activities in the field are more exposed than organizations working on global policy,

²⁰ Global Commission on the Geopolitics of Energy Transformation (2019), *A New World: The Geopolitics of the Energy Transformation*, http://www.geopoliticsofrenewables.org/assets/geopolitics/Reports/wp-content/uploads/2019/01/Global_commission_renewable_energy_2019.pdf.

and organizations with extensive infrastructure in climate-vulnerable regions are particularly exposed. Organizations focusing on climate-sensitive issues (food, agriculture, water supply) are likely to see greater increases in demand for their services.

However, better understanding of climate risk may also bring opportunities – including for an enhanced appreciation of the importance of resilience relative to growth and efficiency, and for the development of new models of risk management. It may also lead to increased momentum for international cooperation, elusive in recent years due to geopolitical headwinds such as trade disputes or other conflicts.

Minimizing the challenges and maximizing the opportunities associated with climate change will require international organizations to build their capacities for assessing climate risks, to be clear-sighted in how these risks affect their operations, and to work to integrate climate risks into their strategic planning and ERM systems.

03

Enterprise risk management in international organizations

Enterprise risk management (ERM) systems that could enable climate risks to be addressed more comprehensively are slowly gaining traction among international organizations, but ERM remains insufficiently embedded in institutional cultures and structures.

Enterprise risk management (ERM) is a broad term that describes a structured process for identifying, prioritizing and acting upon risks at an institutional (or ‘enterprise’) level.²¹ The approach first gained currency in the 1990s, and was initially used in the private sector before being taken up by many governments.²² However, only in the past decade and a half has the international system started – slowly and unevenly – to adopt ERM.²³ There are a variety of iterations and degrees of formality of ERM, but most share four common elements.²⁴

²¹ Partnership for Public Service and Deloitte (2020), *Mastering Risk: Ways to advance enterprise risk management across government*.

²² Lam, J. (2014), *Enterprise Risk Management: From Incentives to Controls*, Hoboken, NJ: Wiley.

²³ Deloitte (2013), ‘A Framework for Improving Risk Management for Federal Agencies’, *Wall Street Journal*, 26 September 2013, <https://deloitte.wsj.com/riskandcompliance/2013/09/26/a-framework-for-improving-risk-management-for-federal-agencies>.

²⁴ The International Standards Organization (ISO) has even codified best-practice management into a specific standard (ISO 31000) for entities to follow. See <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100426.pdf>.

The first is a **structured risk assessment** to prioritize risks objectively through a calculation of their likelihood and impact. These risks are typically documented in a **risk register**. This permits the second main element of ERM: the **implementation of risk mitigation measures**. These measures may seek to reduce the risk itself (such as by improving security protocols for staff in conflict zones) or to mitigate the consequences of hazards that are out of the direct control of the organization (such as relocating stores of humanitarian supplies away from flood-prone areas).²⁵ The third element is **continual monitoring of the risks, as well as of the mitigation measures** to keep track of whether the latter are having the desired effect. The final element is **reporting and learning** to ensure that risk management remains a dynamic process that responds to the needs of the organization and the risks that it faces in its daily work.

The ultimate aim of ERM is to help organizations deliver their core objectives by identifying issues that would otherwise derail their achievement. It integrates risk management into the strategic and decision-making processes across an organization, replacing the outdated practice of managing risks within functional silos. Done well, ERM helps international organizations and similar agencies identify, prioritize and respond to the risks they face in a manner that can improve decision-making and programme outcomes in the face of uncertainty.²⁶

The ultimate aim of ERM is to help organizations deliver their core objectives by identifying issues that would otherwise derail their achievement.

The UN has recognized ERM as an essential element of good governance.²⁷ In 2006 the UN General Assembly passed Resolution 61/245 endorsing the adoption of ERM across the UN system. In 2010 the UN's Joint Inspection Unit (JIU) conducted a review of ERM in the UN.²⁸ The review noted that the implementation of ERM had been slow and was often based on ad hoc decisions rather than defined policy. The JIU proposed 10 benchmarks to encourage other UN agencies, funds and programmes to integrate ERM into their organizational processes and culture.²⁹

A decade later, in 2020, the JIU revisited the issue to evaluate how effectively the UN had implemented risk management systems. The review did find progress in terms of ERM adoption: 25 of the 28 agencies, funds and programmes surveyed

²⁵ Kaplan, R. S. and Mikes, A. (2012), 'Managing Risks: A New Framework', *Harvard Business Review*, June 2012, <https://hbr.org/2012/06/managing-risks-a-new-framework>.

²⁶ Partnership for Public Service and Deloitte (2020), *Mastering Risk: Ways to advance enterprise risk management across government*.

²⁷ Terzi, C. and Posta, I. (2010), *Review of Enterprise Risk Management in the United Nations System: Benchmarking Framework*, Geneva: UN Joint Inspection Unit, https://www.unjiu.org/sites/www.unjiu.org/files/jiu_document_files/products/en/reports-notes/JIU%20Products/JIU_REP_2010_4_English.pdf.

²⁸ Kamioka, K. and Cronin, E. A. (2020), *Enterprise risk management: approaches and uses in United Nations system organizations*, Report of the Joint Inspection Unit, JIU/REP/2020/5, Geneva: UN Joint Inspection Unit, https://www.unjiu.org/sites/www.unjiu.org/files/jiu_rep_2020_5_english.pdf.

²⁹ Terzi and Posta (2010), *Review of Enterprise Risk Management in the United Nations System: Benchmarking Framework*.

by the JIU had an ERM policy of some sort. However, the review also noted that many organizations were still developing or refining their policies and practices, and that several entities had only recently begun to develop ERM systems.³⁰

Examples of ERM systems in international organizations

In general, large, field-based organizations have made the greatest progress in instituting ERM systems across their operations. The 2018 ERM policy of the World Food Programme (WFP) stipulates that risks be assessed at three levels: the entity level, programme level and activity level. WFP has created a number of tools to inform and professionalize its risk approach: a risk catalogue, a dashboard for risk monitoring, risk ‘heat maps’ to indicate areas of elevated and reduced risk, and so on. This process is overseen by a chief risk officer who reports to the assistant executive director for resource management, and who oversees risk and compliance advisers based in regional bureaus and country offices. A corporate risk register is maintained to ensure that high-level risks faced by WFP are regularly monitored by its executive management group.

The office of the UN High Commissioner for Refugees (UNHCR) introduced a formal ERM policy in 2014. At UNHCR headquarters in Geneva, a chief risk officer, reporting directly to the deputy high commissioner, leads an ERM unit and coordinates a network of field-based risk experts. Between 2017 and the end of 2019, the number of such risk experts increased from three to 33 (out of more than 17,000 staff), including two roving risk advisers supporting country teams with technical assistance and training. UNHCR is currently revising its ERM system: 2,600 staff have completed an ERM e-learning course, and the organization is introducing the concept of ‘risk appetite’ in its strategic planning.

Barriers to better risk management

On the whole, international organizations have been slow to adopt professionalized risk management. There are several reasons for this.

One is a lack of ‘risk literacy’, meaning that international organizations often undervalue the importance of risk management *per se*.³¹ This may be because the relationship between risk and performance in the international sector is not as obvious as in other sectors, such as banking and insurance, where poor risk management can have an immediate impact on the bottom line. One person interviewed in the research for this paper noted that different people within a given organization tend to have very different understandings of risk. This seems to result in a somewhat binary combination of approaches: at one extreme, major risks may be entirely ignored; at the other end of the scale, there can be an overly cautious effort to reduce all risks to zero. Neither approach is sustainable over the long term.

³⁰ Kamioka and Cronin (2020), *Enterprise risk management: approaches and uses in United Nations system organizations*.

³¹ Author interviews with international organization representatives.

A second reason for the slow uptake of ERM is the nature of strategic planning (and its timetabling) in the international system. Most organizations arrange their work based on four-year or five-year strategic plans. However, planning in UN organizations can be a lengthy process. The time needed for consultation – both internally and with member states – before a strategic plan is implemented means that three to four years can often elapse between the initiation of a planning process and the start of the relevant plan’s implementation. By the time each programme is finished, eight or so years may therefore have passed since its conception, meaning that the risk environment may have changed significantly compared to what was originally envisaged.

A third constraint on ERM adoption is the way in which international organizations are governed and funded, with each organization answerable to a governing ‘board’ that can consist of up to 195 member states. This arrangement favours leaders who stick with tried and tested methods of governance. It builds path dependency into the system, and inhibits reform. In addition, UN strategic plans are often more like politically negotiated statements of intent rather than documents based on a genuine discussion of risk. The need to cater to the political interests of member states can impede or obscure frank discussions about risk, and can occasionally result in a focus on political rhetoric rather than on finding pragmatic ways to deal with real-world problems.³²

A fourth issue is that organizations may ignore or avoid risk management as it almost always involves costs and difficult trade-offs.³³ Risk mitigation takes time and effort, and may be resisted internally if seen as constraining, rather than enabling, policy action.³⁴ This tends to result in a hazard-by-hazard approach to risk reduction, where different risks (such as those around fraud, business disruption and threats to staff security) are dealt with separately, rather than as part of an overall risk and resilience system.³⁵ As a result, despite the fact that many international organizations operate in increasingly complex environments, internalizing risk management into governance processes is still a work in progress for many organizations.

Meanwhile, the fragmented nature of the multilateral system itself can complicate risk management, especially in relation to multifaceted challenges such as climate change that cascade across sectors in an increasingly connected world. The international system is largely split into silos of expertise (health, agriculture, environmental issues, and so on). The incentives of funding and self-preservation often result in organizations jealously guarding their own institutional ‘turf’. This inhibits cooperation in respect of multidimensional risks, such as the health impacts of environmental change and the impacts of climate change on trade.

³² Author interview with international organization representative.

³³ Opitz-Stapleton, S., Nadin, R., Kellett, J., Calderone, M., Quevedo, A., Peters, K. and Mayhew, L. (2019), *Risk-informed development: from crisis to resilience*, London: Overseas Development Institute (ODI), <https://cdn.odi.org/media/documents/12711.pdf>.

³⁴ Stoddard, A., Haver, K. and Czwarno, M. (2016), *NGOs and Risk: How international humanitarian actors manage uncertainty*, February 2016, Humanitarian Outcomes, InterActive, https://www.humanitarianoutcomes.org/sites/default/files/publications/ngo-risk_report_web.pdf.

³⁵ UN System Chief Executives Board for Coordination, High-level Committee on Programmes (2017), *Adopting an analytical framework on risk and resilience: a proposal for more proactive, coordinated and effective United Nations action*, Annex 3, CEB/2017/6, New York: UN, https://unsceb.org/sites/default/files/imported_files/RnR_0.pdf.

04 Climate risk management in the international system

International organizations are increasingly highlighting climate risks in their external communications and advocacy. But integration of climate risk considerations into internal systems still often lags behind.

Climate risk management is a subset of ERM that focuses on the challenges to organizational effectiveness and continuity posed by climate change. It is a structured process that helps to incorporate information about climate-related events, trends, forecasts and projects into decision-making and long-term strategic planning.³⁶

Done well, climate risk management is both an art and a science: it uses the best possible data without allowing uncertainties to slow action; it identifies what is known, what is unknown and what cannot be known.³⁷ But whereas ERM overall has gained ground among international organizations over the past 15 years, climate risk management is still very much in its infancy. This is despite its potentially profound consequences for the operations, mandates and effectiveness

³⁶ Travis, W. R. and Bates, B. C. (2014), 'What is Climate Risk Management?' in *Climate Risk Management* (2014), Volume 1, 2014, pp. 1–4, doi: <https://doi.org/10.1016/j.crm.2014.02.003>.

³⁷ Born and Mabe (2016), *United we stand: Reforming the United Nations to reduce climate risk*.

of international organizations, and despite the fact that climate change could exacerbate several of the ‘standard risks’ faced by international organizations – these include fiduciary, legal, reputational, operational and information risks.

External dimension: setting the agenda

All the organizations examined for this paper (listed in Table 1 below) mentioned climate change in their outward-facing reports and advocacy documents, which help to set the agenda about climate risk in their respective sectors. Many organizations also provide essential research and data that are used by a wide range of public and private stakeholders. International organizations have made a great deal of progress in recent years in integrating climate risk into their external communications. For example, the International Monetary Fund (IMF) publishes the *World Economic Outlook* twice a year and has included a chapter on climate change since 2018. The IMF also devoted the December 2019 issue of its magazine *Finance & Development* to the economics of climate change. The Organisation for Economic Co-operation and Development (OECD) has also published extensively on climate change, and has teamed up with the International Energy Agency to form an expert group on the issue.

In addition, all of the organizations reviewed mentioned climate change in their strategic planning documents – mostly in the sense of describing the larger context within which they were operating. The Food and Agriculture Organization of the United Nations (FAO), for example, mentions ‘addressing climate change and the intensification of natural hazards’ as one of the 10 challenges most pertinent to its work. There is widespread recognition among international organizations that climate change has implications for their areas of work. Several international organizations have also set up climate change units or programmes, and provide analysis or advice to governments or local communities. For example:

- The World Health Organization (WHO) publishes data and analysis on the links between climate change and health impacts, including case studies on climate change and health, and a series of profiles on climate change and health in island states. WHO also coordinates reviews of the scientific evidence on the links between climate change and health.
- The WFP provides analysis highlighting the links between food security and climate risks, as well as analysis on the present and future impacts of climate change on food security and nutrition. In conjunction with the UK’s Met Office, it has also developed a food insecurity and climate change vulnerability map.³⁸
- The World Bank has long recognized climate change as a major risk to positive development outcomes. The bank publishes data on various climate change indicators, provides extensive climate and disaster risk screening tools,³⁹ and

³⁸ UK Met Office (undated), ‘Food Insecurity & Climate Change’, <http://www.metoffice.gov.uk/food-insecurity-index>.

³⁹ World Bank (undated), ‘Welcome to the World Bank Climate and Disaster Risk Screening Tools’, <https://climatescreeningtools.worldbank.org>.

reports on extreme climate scenarios. For example, in 2012 they published *Turn Down the Heat: Why a 4°C Warmer World Must be Avoided*.⁴⁰

- The FAO has developed an institutional climate change strategy and action plan, and has committed to integrate this work across all its strategic objectives, aiming to achieve three mutually reinforcing outcomes: (a) enhanced national capacity on climate change through FAO leadership on the provision of technical knowledge and expertise; (b) improved integration of food security and nutrition, agriculture, forestry and fisheries considerations within the international agenda on climate change; and (c) strengthened coordination and delivery of FAO work on climate change.⁴¹

Collectively, such external-facing efforts constitute a ‘decision support system’ for political decision-makers. This helps governments plan for the future, sets a common understanding of the climate challenge and facilitates the sort of cross-border collaboration that is a prerequisite for adequately managing climate risk, given that it is a global ‘public goods’ problem.

Internal dimension: managing climate risks

On the other hand – and while there has been undoubted progress in the past decade – international organizations are not yet incorporating climate change into their internal strategic planning and risk management systems with the levels of enthusiasm that are implied in their external communications on the issue.

Just over two-thirds (16) of the international organizations surveyed for this paper include indicators on climate change in their strategic planning (see Table 1). Climate change is, for example, mentioned as one of four cross-cutting themes in the FAO’s new Strategic Framework 2022–2031, which was presented to member states in December 2020.⁴²

Fifteen of the 22 organizations have a full ERM policy. However, only eight of those make their risk registers publicly available. And only six list climate risks such as flooding, storms or weather-induced displacement as risks that need to be managed. The United Nations Development Programme (UNDP), for example, lists climate change and natural disasters as one of 66 ERM risk subcategories.⁴³ Another UN agency, the Department of Political and Peacebuilding Affairs (DPPA), lists climate change as one of the global challenges presenting key risks for the organization.⁴⁴ In 2020 UNHCR added climate change to the list of cross-cutting major risks (now numbering 17) shaping the agency’s work. Its risk register notes

⁴⁰ World Bank (2012), *Turn Down the Heat: Why a 4°C Warmer World Must be Avoided*, report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics, <http://documents1.worldbank.org/curated/en/865571468149107611/pdf/NonAsciiFileName0.pdf>.

⁴¹ Food and Agriculture Organization of the United Nations (FAO) (2017), *FAO Strategy on Climate Change*, Rome: FAO, <http://www.fao.org/3/i7175e/i7175e.pdf>.

⁴² FAO (2020), *Outline of the Strategic Framework 2022–2031 and Outline of Medium Term Plan 2022–25*, 165th Session of Council, CL 165/3, Rome: FAO, <http://www.fao.org/3/nd976en/nd976en.pdf>.

⁴³ United Nations Development Programme (UNDP) (2018), *Enterprise Risk Management (ERM) Policy and Procedures* (approved November 2018), New York: UNDP, https://popp.undp.org/UNDP_POPP_DOCUMENT_LIBRARY/Public/AC_Accountability_Enterprise%20Risk%20Management%20Policy.pdf.

⁴⁴ United Nations Department of Political and Peacebuilding Affairs (DPPA) (2020), *2020 Mid-Year Risk Register – DPPA*, New York: DPPA, https://dppa.un.org/sites/default/files/2020_erm_for_myra.pdf.

that the risk revolves around ‘failure to adapt our strategic positioning, internal processes and operating posture in response to climate change’.⁴⁵ In 2021 UNHCR endorsed a strategic framework for climate action, noting that states with the highest number of refugees per head of population tend to be more vulnerable to climate change impacts.⁴⁶

However, according to one interviewee, even where international organizations do consider climate risk, this often seems to be more of a cursory ‘box-ticking’ exercise than a serious attempt to include climate change in ERM systems. For example, climate change is mentioned in WFP’s corporate risk register, but only in terms of whether staff have sufficient skills to engage in climate and disaster risk reduction programmes.⁴⁷ A further seven organizations do not make their risk assessments publicly available, so it is not possible to gauge the weight they attach to climate risks.

⁴⁵ UNHCR (pending publication), *Summary of Strategic Risks to UNHCR*, Geneva: UNHCR.

⁴⁶ UNHCR (2021), *Strategic Framework for Climate Action*, Geneva: UNHCR, <https://www.unhcr.org/604a26d84/strategic-framework-for-climate-action>.

⁴⁷ WFP (2019), *Update on the implementation of the 2018 Enterprise Risk Management Policy and WFP’s Anti-Fraud and Anti-Corruption Action Plan (2018–2020)*.

Table 1. Overview of international organizations’ approaches to climate risk in strategic planning

International organization	Mentions climate change in strategic planning?	Includes indicators on climate change?	Has an ERM system?	Climate risks mentioned in publicly available risk register?
Disease pandemics				
World Health Organization	Yes	Yes	Yes	Not publicly available
Food security				
World Food Programme	Yes	Yes	Yes	Yes
Food and Agriculture Organization of the UN	Yes	Yes	Yes	Not publicly available
Economic shocks and trade				
International Maritime Organization	Yes	Yes	Yes	No
World Trade Organization	Yes	No	No	No
International Monetary Fund	Yes	No	No	No
World Bank	Yes	Yes	Yes	Not publicly available
Organisation for Economic Co-operation and Development	Yes	No	Yes	No
UN Department of Economic and Social Affairs	Yes	Yes	No	No
Movement of people and migration				
International Organization for Migration	Yes	Yes	Yes	Not publicly available
UN High Commissioner for Refugees	Yes	Yes	Yes	Yes
Energy supply shocks				
International Energy Agency	Yes	Yes	No	No
International Renewable Energy Agency	Yes	No	No	No
National and international security				
UN Security Council	No	No	No	No
UN Department of Political and Peacebuilding Affairs	Yes	No	Yes	Yes
Development, disasters and the environment				
UN Framework Convention on Climate Change	Yes	Yes	Yes	Yes
UN Environment Programme	Yes	Yes	No	No
World Meteorological Organization	Yes	Yes	Yes	Yes
UN Office for Disaster Risk Reduction	Yes	Yes	Yes	Not publicly available
UNICEF	Yes	Yes	Yes	Not publicly available
UN Development Programme	Yes	Yes	Yes	Yes
UN Women	Yes	Yes	Yes	Not publicly available

Source: Authors’ compilation from publicly available documents supplemented by interviews with representatives of international organizations.

Many of the barriers to more effective management of climate risks echo those affecting ERM systems in general: organizational ‘blind spots’ in relation to risk, path dependency in strategic planning, governance structures that do not incentivize professional risk management, and the perception that risk management constrains rather than facilitates action. The gradual nature of slow-onset climate change impacts such as desertification and rising sea levels means that the cumulative impact of these changes over time may be missed. Decision-making is often based on scenarios that may be opaque and unquestioned; moreover, such scenarios are often linear and conservative, and fail to identify the key sectors that are at risk. In analysing future scenarios, organizations may fail to anticipate the cascading impacts of climate change, which can ripple across interconnected sectors in significant but unpredictable ways. At the same time, the multifaceted aspects of climate change make it hard to address impacts across sectors in the international system, especially given that the system is segmented into individual silos of expertise and programming. This encourages a poverty of ambition when it comes to guarding against future climate risk.

So, what can organizations do to better integrate climate risk into their risk management processes and strategic planning?

Climate risk assessments

The first step to more effective climate risk management is to improve climate risk assessment at the strategic level of the organization (as opposed to improving it within individual project-level activities). A variety of methods exist for conducting such assessments: these include expert judgment, sensitivity studies, impact studies, participatory assessment, risk mapping, scenario analysis and so on. What is important, however, is that strategic planners and risk officers are able to conceptualize and characterize climate risks in ways that give decision-makers the information they need to make informed judgments.

Climate change is not a linear process, and there are several potential climate ‘tipping points’ of concern (such as changes in the Gulf Stream, the accelerated loss of polar ice caps, or the dieback of the Amazon rainforest) that could trigger runaway impacts over relatively short time scales. Climate risk assessments therefore need to consider the full range of plausible outcomes.⁴⁸ Meanwhile, analysing potential risks in terms of how they cascade across systems can help to identify both the complex relationships among risks and the often surprising ways in which challenges in one sector can affect others.⁴⁹

⁴⁸ Born and Mabey (2016), *United we stand: Reforming the United Nations to reduce climate risk*.

⁴⁹ UN System Chief Executives Board for Coordination, High-level Committee on Programmes (2017), *Adopting an analytical framework on risk and resilience: a proposal for more proactive, coordinated and effective United Nations action*.

Box 1. UNHCR's Sahel Predictive Analysis Initiative

The Sahel Predictive Analysis Initiative is a pilot initiative launched in 2019 by UNHCR. It aims to harness artificial intelligence, statistical algorithms and machine-learning techniques for better scenario forecasting in the Sahel region of Africa. The initiative focuses on the interconnected challenges of displacement, climate risks, food insecurity and increased violence. It seeks to encourage whole-of-system engagement beyond the humanitarian sector to bring in diverse, cross-sector capacities from across the UN system to try to anticipate future events in a holistic manner.⁵⁰

Risk registers

Climate risks can be documented in a risk register or risk log, and prioritized in terms of their likelihood and impact. Successful risk management should be an organization-wide exercise involving all staff. It should not only be a top-down process, as project staff are often best placed to understand which risks threaten the success of their work.

Box 2. Strategic risk management at UNDP

The risk management system employed by UNDP requires every project team to submit annual risk logs as part of the corporate internal planning process. However, the experience of the COVID-19 pandemic that began in 2020 has forced a recognition that UNDP needs a new approach to deal with multidimensional risk. UNDP is now designing a strategic risk management system that helps staff analyse and manage risks, and goes beyond a series of 'tick boxes' by making risk logs less static while improving processes for escalating decisions up the chain of command.⁵¹

Risk appetite

Having a clear view of the potential entity-level risks associated with climate change enables an informed discussion about risk tolerance and risk appetite: i.e. what kind and degree of risks do leaders find acceptable in the pursuit of institutional goals? This requires an honest discussion about programme criticality – which services are so central to an organization's mission that the organization should accept a higher degree of risk, if necessary, in delivering them? Such assessments also help inform

⁵⁰ UN System Chief Executives Board for Coordination, High-level Committee on Programmes (2019), *Report of the High-level Committee on Programmes at its thirty-eighth session*, 19 December 2019, CEB/2019/6, New York: UN, https://unsceb.org/sites/default/files/imported_files/CEB_2019_6%20%28HLC%2038%29_0.pdf.

⁵¹ Author interview with international organization representative; UNDP (2020), *Strategic Plan 2022–2026 – SparkBlue consultations, 16 September to 16 October 2020: Synthesis of key points*, New York: UNDP, <https://www.sparkblue.org/system/files/2020-10/SP%202022-25%20SparkBlue%20Consultations%20-%201st%20Synthesis%20Report-2.pdf>.

the related conversation: which investments in time, effort and funds are needed to enable the development of more elaborate risk mitigation measures that would enable critical functions to continue?⁵²

Box 3. Risk appetite metrics at WFP

WFP's strategic plan includes the goal of building ERM into its country-level strategic planning, so that risk appetite can be articulated for the different countries in which WFP operates. To this end, the organization has developed risk tolerance and risk appetite measures and thresholds for designated 'higher-risk' countries. Risk management and categorization are carried out by country offices based on their own operations, enabling them to build yearly plans around these categories.⁵³ However, none of this is possible without a positive risk culture that encourages openness and the discussion of real strategic issues. Everyone, from the leadership down, has a role in establishing that culture.⁵⁴

A sense of the range of climate-related risks facing an organization, as well as the range of acceptable risks, allows the design of risk mitigation measures. The international community is well versed in the language of climate adaptation, but also needs to turn its attention to building organizational climate resilience.

Box 4. Country Partnership Frameworks at the World Bank

The World Bank Group Action Plan on Climate Change Adaptation and Resilience, launched in 2019, allocated \$50 billion over five years to help countries shift to systematically managing and incorporating climate risks and opportunities across policy planning, investment design and project implementation. The action plan calls for the integration of climate risks within each stage of the group's operation design, project implementation, and performance monitoring and evaluation. Any new Country Partnership Framework is supposed to integrate risk considerations into country development priorities.

Changing the risk culture

Effectively implementing risk mitigation measures might also involve rethinking staffing and policies around human resources – i.e. getting the right people to help an organization 'think differently'.

⁵² Stoddard, A., Haver, K. and Czwarno, M. (2016), *NGOs and Risk: How international humanitarian actors manage uncertainty*, February 2016, Humanitarian Outcomes, InterActive, https://www.humanitarianoutcomes.org/sites/default/files/publications/ngo-risk_report_web.pdf.

⁵³ WFP (2019), *Update on the implementation of the 2018 Enterprise Risk Management Policy and WFP's Anti-Fraud and Anti-Corruption Action Plan (2018–2020)*.

⁵⁴ Cheshire, I. and Manzoni, J. (2017), *Management of Risk in Government: A framework for boards and examples of what works in practice – a Non-Executives' Review*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584363/170110_Framework_for_Management_of_Risk_in_Govt_final_.pdf.

Box 5. Innovative human resource management

The United Nations Environment Programme (UNEP) is looking to encourage greater agility within the organization by supporting ‘intrapreneurs’. Intrapreneurs are those people already in the organization who have a vision for how things can be improved, who understand the system, and who can navigate the institutional politics to make things happen. The challenge is to encourage these kinds of staff while still aligning them within the overall vision of the organization.⁵⁵ Meanwhile, UNDP is hiring people with uncommon skill sets, such as a ‘head of exploration’, ‘horizon scanners’, ‘future thinkers’ and ‘network specialists’. This is a deliberate way of infusing new skills and experiences into the organization to challenge received wisdom. UNDP has also created ‘Accelerator Labs’ in more than 60 of its country programmes. These Accelerator Labs are three-person teams that develop innovative solutions to local problems and that also develop the necessary skills to address them *in situ*.⁵⁶

Risk mitigation also entails being open to a range of different views and to public participation in strategic planning processes. UNDP has been engaging in open-access discussions around the future of the organization, through SparkBlue, an online public engagement platform.⁵⁷ A SparkBlue thread on UNDP’s 2022–2026 Strategic Plan ran in November–December 2020, and involved more than 400 people trading ideas on how UNDP should evolve to meet new challenges. Widespread public participation is important, because it maximizes the number of points of view that inform strategic planning and avoids the dangers of ‘groupthink’ and path dependency.

Monitoring and evaluation

Monitoring and evaluating the accuracy of climate risk assessments and the impact of climate risk mitigation measures are essential if an organization is to learn from and improve the overall process. Another necessary element is to ensure that risk management is checked, verified and updated. Back in 2010, the UN’s Joint Inspection Unit (JIU) recommended a ‘three lines of defence’ approach to structured risk management as one of the 10 proposed benchmarks for the adoption of ERM.

Under this approach, the first line of defence comprises the units or individuals who have the responsibility to ‘own and manage’ a particular risk, who are closest to the issues and who are in charge of putting mitigation measures in place. The second line of defence consists of those units within the organization that oversee or specialize in risk management and provide internal quality control. The third line of defence consists of external bodies that provide independent assurance. In the case of climate risk management, an organization such as the UN Framework Convention on Climate Change (UNFCCC), or a bespoke climate risk management entity within the UN system, could play an important role not only in improving

⁵⁵ Author interview with international organization representative.

⁵⁶ Author interview with international organization representative.

⁵⁷ See <http://www.SparkBlue.org>.

risk management among specific institutions but also in encouraging better risk management at a systemic level and even in underpinning a larger reform agenda for the UN as a whole.⁵⁸

Learning and knowledge-sharing

Finally, it is important that UN agencies, funds and programmes share and learn the lessons concerning the challenges they face, and what is working for them, so that the overall process of risk management is iterative and cyclical.

Box 6. The UN's Risk Management Forum

Several mechanisms for the sharing of risk management experience in international organizations already exist. For example, the UN Strategic Planning Network is an informal grouping of strategic planning professionals from across the UN system who meet regularly to share ideas on strategic planning. There is also the OECD High Level Risk Forum, an annual meeting of risk managers, which provides a platform for discussion of the most critical risks facing the public and private sectors and for sharing ideas on how to address these risks.⁵⁹

In 2018, the UN's High-Level Committee on Management (HLCM) agreed on the need for better system-wide harmonization of risk management practices, and created a Risk Management Task Force. Over the past couple of years, the task force has worked to institutionalize better system-wide risk management. It has issued a reference maturity model for risk management (in other words, a model of what 'mature' institutional risk management should look like) as well as guidance papers on risk appetite, embedding risk management, and managing risk in the field and in decentralized organizations.⁶⁰ In 2021 the UN decided to upgrade this task force into a permanent forum for sharing knowledge and developing new material, serviced by a small secretariat.⁶¹

⁵⁸ Born and Mabey (2016), *United we stand: Reforming the United Nations to reduce climate risk*.

⁵⁹ For more information, see OECD (undated), 'Risk governance', <https://www.oecd.org/gov/risk>.

⁶⁰ UN System Chief Executives Board for Coordination (2019), 'Reference Maturity Model for Risk Management (38th session, Oct 2019)', <https://unsceb.org/reference-maturity-model-risk-management-38th-session-oct-2019>.

⁶¹ UN Economic and Social Council (2021), *Annual overview report of the United Nations System Chief Executives Board for Coordination for 2020*, 1 March 2021, E/2021/47, <https://unsceb.org/2020-annual-overview-report>.

05

Conclusions and recommendations

International organizations need to move from reactive, ‘defensive’ approaches to climate risk management to proactive, ‘offence-oriented’ approaches. Agencies will need to anticipate the effects of climate change and have a clear vision for their own roles in addressing climate risks.

[UNDP’s] governance models were designed for a world of categorisation, compartmentalisation, linearity, and predictability, where the intent was to tame and colonise and control. [...] We have been confronted by our inability to detect the interdependencies between and effectively connect scenario planning, risk management, political decision-making, policy, budgets, provisions, and strategic innovation investment.⁶²

Over the past decades the expansion of the responsibilities and operations of the UN has resulted in its affiliated organizations facing more, and more complex, challenges.⁶³ We live in a new age of uncertainties that are giving rise to destabilizing risks at exactly the time when our collective will to tackle them together seems to be receding.⁶⁴ COVID-19 has taught us that immense upheavals can be wrought by cascading, global risks.

Climate change is challenging the imperfect, bureaucratic structures created to cajole and guide collective policy action on numerous critical issues: how we combat extreme poverty, how we produce energy, how we prevent pandemic diseases, how we stop financial crises rippling around the world, how we

⁶² UNDP (2020), *A Way Forward: Governing in an Age of Emergence*, New York: UNDP, p. 30, <https://awayforward.undp.org>.

⁶³ Terzi and Posta (2010), *Review of Enterprise Risk Management in the United Nations System: Benchmarking Framework*.

⁶⁴ UNHCR (pending publication), *Summary of Strategic Risks to UNHCR*.

manage flows of people moving from one country to another, and so on. Ultimately, climate change could inhibit the UN from fulfilling its core mission to maintain peace, rights and stability.⁶⁵

How international organizations manage climate risk will be critical to their ability to meet their objectives, deliver their mandates, improve their delivery of services, achieve value for money and prepare for external shocks. International organizations need to be agile: their responses cannot be limited to incremental, evolutionary risk management alone.⁶⁶

Organizations that have historically focused on short-term, project-level risks now need to change their governance models to take longer-term, systemic challenges into account.

International organizations need to be able to address uncertainty proactively. Genuine risk management should not be a bureaucratic procedure that happens independently of other institutional processes. Organizations that have historically focused on short-term, project-level risks now need to change their governance models to take longer-term, systemic challenges into account. International organizations are often reactive and cautious, but they need to move away from what could be termed a ‘defence-oriented’ mindset towards a more proactive, ‘offence-oriented’ approach. They need to anticipate how the climate is changing, what that means for their respective mandates and operations, and how they can be at the forefront of institutionalizing climate risk management. The Sendai Framework for Disaster Risk Reduction is working towards similar aims for preventing new and reducing existing disaster risks and could offer interesting lessons in this context.

On the positive side, international organizations are adopting increasingly professionalized risk management systems. While risk management in this context is not as mature as in the private sector, international organizations are starting to systematize the assessment and management of risks; to a certain extent, this includes climate risks that underlie and complicate other financial and institutional risks. However, more needs to be done. If a company fails to manage risk, it will go under, perhaps to be replaced by a start-up. This is not an option for international organizations responsible for helping to maintain peace and stability. They need to do even more to manage climate risk than the private sector (in some instances) does.

During the research and interviews conducted for this paper, the authors have considered the kinds of roles that international organizations should be expected to play in terms of improving climate risk management. We propose that they focus on functions in four categories:

⁶⁵ Born and Mabey (2016), *United we stand: Reforming the United Nations to reduce climate risk*.

⁶⁶ UNDP (2020), *A Way Forward: Governing in an Age of Emergence*.

1. **Mission resilience:** Every international organization should be able to preserve its mission under a range of realistic global temperature scenarios. Each organization will need to choose the extent of this range based on its understanding of the best available science. Global warming of 3°C is proposed here as a reasonable central planning assumption, with 1.5°C and 4°C as the lower and upper limits respectively.
2. **Foresight and early warning:** Each international organization should aim to be a resource of expertise in understanding the risks to its mission and communicating these both internally and to other parts of the international system. For UN agencies, this could include reporting back to the UN General Assembly or the UN Security Council. International organizations should know the threat to their mission better than anyone else.
3. **Support to nation states:** International organizations should aim to act as thought/change leaders *vis-à-vis* national governments, to help the latter adapt and improve their own policies and governance. This has implications for internal management: if an international organization is not managing risks to its own core functions, it will not be able to support its member countries, particularly those most vulnerable to climate impacts.
4. **Learning and best practice:** Learning and dissemination is a critical issue for climate change for several reasons: 1) the challenge of climate change is highly complex and systemic; 2) the world is running out of time to avoid worst-case scenarios; and 3) there is no single country, company or institution with all the answers. Beyond just understanding the risks of climate change to core mission resilience, international organizations have a critical role to play as learning hubs of best practice that will benefit other institutions.

Improving climate risk management will require international organizations to think about their risk management policies in three domains: building blocks (essential elements of effective risk management), routine processes (actions that should occur regularly), and periodic activities (actions that need to happen less frequently).⁶⁷

Building blocks

- **Creating a positive risk management organizational culture:** Member states need to demand risk management leadership from international organizations, and the latter's leaders need to 'set the tone at the top' to invest in climate risk management. Within organizations, staff should be encouraged to identify and act on potential climate risks.

⁶⁷ Cheshire and Manzoni (2017), *Management of Risk in Government: A framework for boards and examples of what works in practice – a Non-Executives' Review*.

- **Building risk management capacity:** Risk management is the responsibility of every staff member across an organization, but specific staff should be given the responsibility of championing this function, to ensure coordination and quality control.
- **Establishing boundaries and risk appetite:** International organizations need policies that outline their expectations regarding the management of risks over the long term. They need to articulate their ‘climate risk tolerance’ when it comes to the strategic goals of the organization.
- **Creating a common guidance framework:** Elaborating a common set of guidelines for climate risk management would improve overall risk management, and could address some of the systemic aspects of addressing climate risk that may otherwise fall into different silos.

Routine processes

- **Identifying climate risks:** Risk managers should present the results of climate risk assessments in ways that are useful to decision-makers. Such assessments should make the full range of climate risks evident to people relying on services from the international community, especially the poor, women and those from marginalized groups.
- **Involving stakeholders:** Organizations should work with those who manage risks, as well as those working in areas of inherent risk, to develop analytical tools and recommendations for addressing risk. Such stakeholders often know the consequences of effective and ineffective risk management.
- **Sharing information:** Information needs to be ‘pushed’ out into the community as well as ‘pulled’ from it. Information needs to be made available to project managers dealing with risks, and must also be aggregated at the institutional level.

Periodic activities

- **Reporting on climate risk:** Given that climate change has systemic, cascading impacts, it is important that there is capacity within the international community to monitor how these risks are evolving at a systemic level. This should include a responsibility to help translate how climate risks interact with, and possibly multiply, other risks that international organizations face.
- **Ensuring robust governance of climate risks:** Member states should ensure that climate risk management is included, as appropriate, in the governance and oversight of international organizations. This could be supported by empowering a specialized agency, such as the UNFCCC, with the responsibility of monitoring risks across the system. Each year the relevant UN agencies, funds

and programmes could disclose their exposure to climate risks: this would both provide a platform for better climate risk management and identify systemic fragilities linked to climate change.⁶⁸

- **Sharing lessons:** International organizations need to document their processes and procedures so that other organizations can learn from their successes and mistakes. Mechanisms such as the UN Strategic Planning Network, the OECD High Level Risk Forum and the Risk Management Task Force of the UN's HCLM are vehicles for the sharing of information and for lessons on climate risk management.
- **Supporting peer review and auditing:** International organizations should be monitored at arm's length by independent entities that can review their climate risk management processes and advise on improvements.

The growing impacts of climate change imply potentially profound constraints on international organizations' ability to operate. Climate change is likely to shift, and most likely increase, the demand for the services of these organizations. Unless robust climate risk management processes are put in place, climate risks could undermine the effectiveness of agency programmes, impact staff safety and security, and hinder the ability of international organizations to fulfil their core purpose.

⁶⁸ Born and Mabey (2016), *United we stand: Reforming the United Nations to reduce climate risk*.

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About E3G

E3G is an independent European climate change think-tank accelerating the transition to a climate safe world. E3G is made up of world leading strategists on the political economy of climate change, dedicated to achieving a safe climate for all.

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Cover image: A fire rating display showing high alert as a bushfire burns at the Mangrove Dam in Central Coast, some 90–110 kilometres north of Sydney, Australia, on 7 December 2019.

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