Global Risks 2015

Part 1 – Global Risks 2015:

Environment – High Concern, Little Progress

Over the past decade, awareness has grown regarding the threats posed by environmental change to social, political and economic security. As the Global Risks Perception Survey 2014 highlights, three of the top 10 risks in terms of impact over the next 10 years are environmental risks: water crises, at the top of the table, and failure of climate-change adaptation as well as **biodiversity loss** (see Figure 1). [15]

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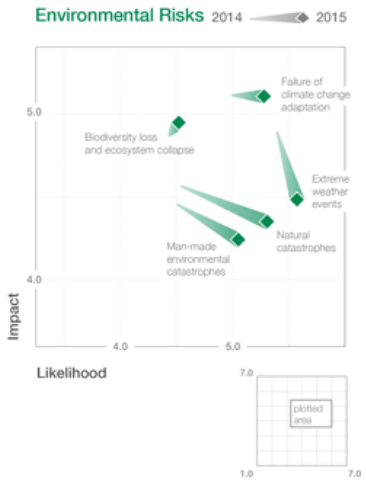
Figure 1.5: The Changing Global Risks Landscape 2014-2015, Environmental Risks



Source: Global Risks Perception Surveys 2013 and 2014, World Economic Forum.
Note: See endnote 25

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Both **water crises** and **failure of climate-change adaptation** are also perceived as more likely and impactful than average (upper right quadrant of Figure 1 and Figure 1.5). Global water requirements are projected to be pushed beyond sustainable water supplies by 40% by 2030. [16] Agriculture already accounts for on average 70% of total water consumption and, according to the World Bank, food production will need to increase by 50% by 2030 as the population grows and dietary habits change. [17] [18] The International Energy Agency further projects water consumption to meet the needs of energy generation and production to increase by 85% by 2035. [19]

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The Intergovernmental Panel on Climate Change notes that weather extremes in food-producing regions are already causing price increases and suggests that the impact of climate change on weather patterns and rainfall – causing either floods or droughts – could cut crop yields by up to 25%. [20]

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The nexus of food, water, energy and climate change has been identified by the US National Intelligence Council as one of four overarching mega trends that will shape the world in 2030. [21] The risks interconnections map (see Figure 2) shows how survey respondents perceived this nexus to be related also to other risks, including **large-scale involuntary migration.**

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Decision-makers will be forced to make tough choices about allocations of water that will impact users across the economy (Part 3 of this report highlights an approach developed in Australia's Murray-Darling Basin, for addressing this issue). The situation will worsen further if more **man-made environmental catastrophes** causing shocks to the system happen: more recent examples include the Fukushima power plant disaster threatening to contaminate both freshwater and seawater, or the Deepwater Horizon oil spill contaminating large sections of coast along the Gulf of Mexico.

Overfishing, deforestation and the inadequate management of sensitive ecosystems such as coral reefs are increasing the stress on food and water systems. Major

biodiversity loss and ecosystem collapse was assessed as high impact by respondents, but below average in terms of likelihood (see Figure 1); the latter seems to reflect a misperception. The World Bank estimates that 75% of the world's poor, or 870 million people, make a living from ecosystems, including tourism and the goods they produce, while 350 million are affected by the loss of coral reefs.[22] Increasingly, decision-makers are realizing that biodiversity loss is not a second-order issue but is intricately linked to economic development, food challenges and water security.

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The urgency of coordinated global action on climate change was reinforced in April and November 2014 by the Intergovernmental Panel on Climate Change's release of its Fifth Assessment Report and the associated update. It reconfirms that warming is unequivocally happening and it is "extremely likely" that human influence has been the dominant cause. Atmospheric concentrations of three major greenhouse gases (carbon dioxide, methane and nitrous oxide) are at their highest level in 800,000 years. Strong evidence of the effects of climate change is already apparent, in terms of sea level rise, shrinking glaciers, warmer oceans and the increasing frequency of weather extremes.

Even though all of these risks are well known, governments and businesses often remain woefully underprepared, as illustrated by respondents' perceptions that relatively little progress has been made on these risks in the last decade (see Figure 3.1). At the heart of the problem is a risk-management approach based on responsive measures that assume things go back to normal after a crisis – an approach that falls short with complex or slowly evolving environmental risks such as climate change. Stakeholders have been slow to address the underlying causes of environmental risks or to address their economic, social, political and humanitarian consequences.

Box 1.6: The road to Paris – is 2015 make or break for climate change?

In 2015 the international community has a once-in-a-generation opportunity to align the climate change and development agenda. A series of global summits on climate change, disaster risk reduction, financing for development and sustainable development goals could embed into the post-2015 global governance architecture a coherent agenda for tackling interlocking environmental risks.

Convergence among governments on these decisions could kick-start the next generation of sustainable growth and poverty reduction – through catalysing private finance and scaling low-carbon, climate-resilient investment, especially but not only in developing countries. However, the opportunity will be missed if governments continue to value narrow short-term concerns above the prospect of longer-term global prosperity and environmental security. More vulnerable populations will be consigned to the negative spiral of poverty and environmental degradation.

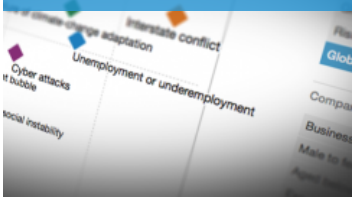
Until recently, the expectation was that governments would struggle to finalize a strong global climate accord in time for the Paris climate conference in December 2015. But is the tide beginning to turn? At the United Nations Secretary-General's Climate Summit in September 2014, over 1,000 businesses and investors signalled their support for global carbon pricing. So did some 73 countries, covering 52% of global GDP and 54% of global emissions.

Major consumer companies and financial institutions see the need to reduce global climate risks and have mobilized action along their supply chains, for example through the New York Declaration on Forests and the move towards climate-friendly coolants. The Oil & Gas Climate Initiative signalled refreshed engagement from major energy producers.

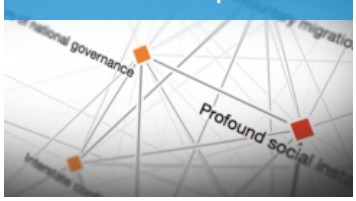
The hope is that these coalitions of committed businesses could both inject concrete solutions and create a more positive global atmosphere for governments to collectively make decisions in 2015. A positive signal is the agreement between China and the United States in November 2014. A strong set of clear policy signals to the wider business community is needed from the world's governments on their ambition to tackle environmental risks. The year 2015 is not an opportunity the world can afford to miss.

25. Global risks may not be strictly comparable across years, as the names and description of the risks were revised between 2014 and 2015. The risks introduced in 2015 are not displayed in the figures and only the risks for which the name or the description were slightly revised between 2014 and 2015 are presented. Water crises was categorized as an environmental risk in 2014 but as a societal risk in 2015. To ensure legibility, the names of the global risks are abbreviated. Please see Appendix A for the full name and description.

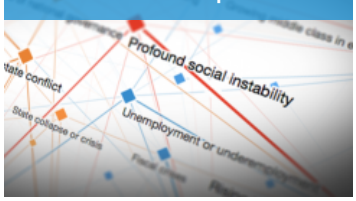
Global Risks Landscape 2015



Global Risks 2015 Interconnections Map



Risks-Trends 2015 Interconnections Map



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