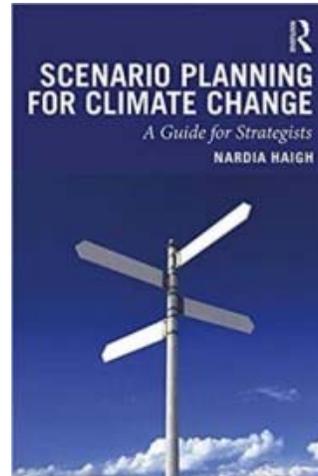


# Summary of Potential Climate Change Impacts: Climate-related Conflict

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This summary of current and potential future climate change impacts accompanies the book *Scenario Planning for Climate Change: A Guide for Strategists*, available online from [Amazon](#).



## Overview

A recent study by researchers at Stanford University found that "climate has affected organized armed conflict within countries"<sup>1</sup>

Scenarios for climate change conflict often involve conflict over water. Ismail Serageldin, former Vice President for Special Programs of the World Bank warned in 1995: "If the wars of this century were fought over oil, the wars of the next century will be fought over water."

*Water is overtaking oil as the world's scarcest critical natural resource. But water is more than the new oil. Oil, in the end, is substitutable; but water's uses are pervasive, irreplaceable by any other substance, and utterly indispensable.*<sup>2</sup>

As Allan,<sup>3</sup> Bierman & Boas,<sup>4</sup> Solomon<sup>5</sup> and others illustrate, the state of world peace and the future of human civilization is balanced on each nation state's supply and access to fresh water.

The altering of the planetary water cycle, the inequitable redistribution of available water from changing climatic conditions, the growing earth's population and increasing demands on available water combined with the depletion of fossil groundwater that has allowed civilizations to grow unsustainably are all potential pathways to conflict.

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As Wolf and Hammer have noted, ‘the more valuable lesson of international water is as a resource whose characteristics tend to induce cooperation, and incite violence only in the exception.’<sup>6</sup> However, in the past, it was relatively easy to conclude water agreements when there was enough water to go around. How will these agreements be concluded when there isn’t any water left to share? Water conflict as a result of changing climate is already upon us. Syria has a long history of conflict over water rights, due to the region’s dryness. Data on groundwater levels in the Middle East taken by satellites shows that an alarming level of depletion occurred between 2003 and 2009. A 2006 drought forced many of Syria’s farmers into cities, setting the stage for social upheaval.<sup>7</sup> The ensuing conflict and refugee crisis was devastating to the Syrian population and resulted in increased nationalism, closed international borders and violence that overshadowed humanitarian efforts.

### How Is Climate-related Conflict Affecting Businesses Now?

Companies and investors are becoming aware of potential conflict brought by climate change. Following the water example, multi-national companies that have hastened the depletion of local groundwater supplies have faced conflict with the communities in which they operate. One example is Coca Cola, which is still in conflict with the town of Plachimada in India after depleting local water resources as far back as 2000.<sup>8</sup>

Following experiences like those of Coca Cola, and the prospect of operating in conflict zones or “high-risk zones” as a result of climate change, companies are now considering how to engage in conflict-sensitive business practices. Water conflict can affect not only water systems and resources directly, but also planning, construction, operation, and management of water systems.<sup>9</sup>

### How Could Climate-related Conflict Affect Businesses 25 Years from Now?

Businesses could experience operational disruption, or changing supply or market conditions, resulting from climate-induced conflict. For instance, drought and water scarcity due to climate change could contribute to climate-related migration, affecting geographic markets or supplies. A temperature increase of 2–3 degrees Celsius could cause around a billion people to suffer from water and food shortages, which could increase conflict and significantly alter the state of markets and supplies in affected areas.

Climate change could stress food production lands, transportation and distribution networks and logistics, processes, quality and safety control all while dealing with the stresses of migrating laborers in search of protecting their own livelihoods. Given these possibilities, businesses stand a chance of being affected by conflict as nation states attempt to deal with mass migrations and an increasing number of climate refugees<sup>10</sup> (such as the recent wave of refugees leaving Syria).

On the supply side, corporations that have offshored and outsourced manufacturing operations could be affected by conflict (or at least disagreements) arising from supply disruptions. For instance, Barbie Dolls and Fisher Price toys are manufactured in Mattel’s factories in Guangdong,

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China, as are countless other products from over 60,000 Walmart supplier factories. Guangdong and other areas of China are subject to climate change impacts<sup>11</sup> that could include storm surge damage to ports, and reduced operational capacity, or supply disruptions.

In post-disaster situations there is often a breakdown in governance and institutions, even if only temporarily, giving criminal elements opportunities to exploit businesses and people when they are most vulnerable. A recent example of this came in the wake of Hurricane Irma. Saint Martin, a small island state that's divided into two with a Dutch and a French side, was decimated by the storm. When the winds subsided, looters started robbing stores and homes with impunity. The security forces had been ordered not to focus on the looters, but on saving lives<sup>12</sup>.

In summary, in the next 25 years, climate change could bring conflict to businesses in various ways, including conflicts with communities or other organizations over scarce resources like water, conflict emerging from disasters and post-disaster recovery, and supply disruptions.

## What can Businesses do now?

- Investigate how exposed the business may be to potential conflict by engaging in conflict-sensitive business practices, including high quality stakeholder engagement, close communication, and participatory decision-making where needed
- Examine any current conflicts, and if energy, water or other climate-related issues may be involved
- Investigate how conflict might emerge from other climate drivers, such as drought, extreme weather, water/irrigation rights, activist investors, etc.
- Investigate what the business is currently doing to mitigate potential conflict, and reconsider strategies or approaches that seem inadequate for the long term

You can prepare for this and other plausible climate impacts by undertaking a scenario planning project. **If you would like to learn how to use scenario planning to develop strategic responses to climate change issues such as this, order *Scenario Planning for Climate Change* from [Amazon](#).**

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