The Economist

Security and the environment

Climate wars

Does a warming world really mean that more conflict is inevitable?

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AS THE planet warms, floods, storms, rising seas and drought will uproot millions of people, and with dire wider consequences. Barack Obama, collecting his Nobel peace prize, said that climate change "will fuel more conflict for decades". He took the analysis not from environmental scaremongers but from a group of American generals.

The forecast is close to becoming received wisdom. A flurry of new books with titles such as "Global Warring" and "Climate Conflict" offer near-apocalyptic visions. Cleo Paskal, at the Royal Institute of International Affairs in London, predicts that floods, storms, the failure of the Indian monsoon and agricultural collapse will bring "enormous, and specific, geopolitical, economic, and security consequences for all of us…the world of tomorrow looks chaotic and violent". Jeffrey Mazo of the International Institute for Strategic Studies, also in London, calls climate change an "existential threat" and fears it could usher in "state failure and internal conflict" in exposed places, notably Africa.

Yet surprisingly few facts support these alarming assertions. Widely touted forecasts such as for 200m climate refugees in the next few decades seem to have been plucked from the air. Little or no academic research has looked at questions such as whether Bangladeshis displaced by a rising sea would move a series of short distances over a long period, or (more disruptively) a greater distance immediately.

So scientists preparing the fifth report of the Intergovernmental Panel on Climate Change, due in 2013, are for the first time including a chapter on threats to human security. An early effort came at a conference last month in Norway, under the auspices of the Peace Research Institute in Oslo.

One idea is to find previous occasions when big environmental changes came alongside social, political and military shifts. Droughts in the Central Asian steppe, for example, led to mass westward migration and the "barbarian" invasions that helped topple the Roman Empire (pictured

above). Hunger and drought led to the collapse of Mayan civilisation a millennium ago. Sudden cooling wiped out an early European settlement on Greenland. The Dust Bowl of the 1930s forced over 2m people to migrate within the United States.

Those examples may be relevant in Africa, where in many countries around three-quarters of the population survive by cultivating a few varieties of crops watered directly by rain, the form of farming most vulnerable to climate change. Africa has warmed by 0.5°C on average in the past half century, and may heat by 1.5-4°C more this century. Heat hits cereal yields (especially maize), perhaps by 10-20% for a 1°C rise. Rainfall patterns will also shift.

The hardest evidence for a link so far comes from a team led by Marshall Burke of the University of California, which studied African wars from 1980 to 2002 and found that rising temperatures are indeed associated with crop failure, economic decline and a sharp rise in the likelihood of war. It predicted a “50% increase” in the chance of civil war in Africa by 2030.

But that claim is now heavily revised, since researchers redid their sums to take account of the more peaceful period of 2002-08. Others say that political and other factors such as ethnic conflict and outside intervention are far better indicators of the likelihood of fighting.

Take the widely cited case of the war in Darfur, the western region of Sudan. Ban Ki-moon, the UN secretary-general, described it as “an ecological crisis, arising at least in part from climate change”. Environmental problems have probably worsened the Darfuris’ dreadful plight, offering grist to those who call climate change a “threat multiplier”. Average rainfall in the region fell abruptly (by a third or more) in the early 1970s and Darfur repeatedly suffered droughts. Clashes over grazing and then displacement of villagers were followed, from 2003, by horrific war.

Yet the connection is elusive. Roughly three decades elapsed between the rain stopping and war starting. Many other factors—political, ethnic, demographic and economic—conspired to stoke violence. Those were specific to Darfur, whereas the sharp drop in rainfall hit the whole Sahel, without intensifying conflict elsewhere.

Another commonly cited example is violent competition for scarce grazing between nomadic herdsmen in the Horn of Africa. Yet a study of fighting among pastoralists on the border between Kenya and Somalia in the past 60 years (presented at the conference) showed instead that conflict worsened when grazing was abundant and fell during droughts. Hungry people were too busy staying alive, or too exhausted, to fight. By contrast, when rains made herdsmen’s lives easier, they could release surplus young labour for the violent sport of raiding other groups.

Other researchers look at the political or military consequences of phenomena unrelated to weather, such as rapid urbanisation, migration or earthquakes. Yet the evidence here too is mixed at best. Where natural disasters do show predictable political outcomes, they are very slight. A study of the short-term impact of hurricanes on Haiti and the Dominican Republic from 1850-2007, for example, suggests that the storms have grown more intense (if not more frequent), but their arrival is not associated with more political violence. Another study showed that natural disasters usually produced short-term economic pain but no sign of increased political violence.

Earthquakes, too, tend to produce mixed outcomes. A Mexican quake in 1985 may have stoked an insurgency. But the tsunami of 2005 offered a moment for secessionists in Aceh and the central Indonesian government to co-operate. Climate change could indeed cause woes aplenty. That is all the more reason to be precise about them.

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