

The geopolitics of global warming: Some thoughts

The Arctic Region is not often in the news headlines and is often considered unimportant. But as a result of the effects of global warming, it is a region of growing importance to the five countries under whose jurisdiction it falls. Canada, Norway, Russia, Denmark and the USA all have territories that fall north of 66°. Under international law, the high seas, including the North Pole and the region of the Arctic Ocean surrounding it, are not owned by any country. The five surrounding Arctic countries are limited to an exclusive economic zone (EEZ) of 200 nautical miles adjacent to their coasts (including the continental shelf below this zone). The waters and seabed beyond the EEZs of the five coastal states are considered to be international waters and the heritage of all people.

While there has long been, and still is, much wrangling and uncertainty over who has jurisdiction over what, and how wide the EEZ should be, two things are certain: the extent of the Arctic ice sheet is decreasing, and the ice at the edge of the sheet is thinning. Since 2012, Russia has been expanding its military presence (building 6 new bases to supplement 18 existing bases) along its Arctic coast and islands, and intensifying research in the seabed, ostensibly to protect shipping in the Barents Sea – but the underlying reason is that the shrinking and weakening of the ice sheet will allow easier access to the extensive gas and oil resources below the seabed. There is little doubt that the other four 'polar' nations will not be entirely happy with these developments. This is a very visible and immediate (if geographically confined) example of the geopolitics of global warming: the primary effects are those that affect the physical world and nature; the inevitable consequences are political.

Mr Trump, the tweeting President of the USA, may wish to believe that global warming is a Chinese hoax, but consequences of the reality, beyond Russian resource opportunism, are approaching. Drought in the Horn of Africa, for instance, has left some 12 million people hungry and several hundred thousand animals dead in the past 18 months. The drought last year was the result of the La Niña phenomenon; this year El Niño is having the same effect.

But climate experts predict that global warming will serve to worsen the situation over time and put even more people at risk of facing famine and death in the years ahead. Oxfam's regional director in the Horn of Africa has, for example, stated that climate change is a real and current problem in East Africa, while research undertaken by The Center for Climate and Life at Columbia University's Lamont-Doherty Earth Observatory found that the region is growing steadily drier - and that it will continue to do so as carbon emissions rise. In an explicitly political move, Mr Trump instructed the US Environmental Protection Agency to remove such data from its website, denying the public access to scientific information although there is, now, some confusion regarding this order. Meanwhile, in Kenya, the seriousness of the drought has led to violence, with cattle herders attacking lodges, ranches and conservancies in desperate attempts to find fresh pastures for their herds. Tourism in the Laikipia region is threatened by these developments and the Kenyan government has deployed members of the military to the area in an attempt to stop the attacks, but with little effect. In addition to the desperation of the pastoralists, there is a growing concern that local politicians will use the situation to instigate further violence to advance their own interests.

Not unrelated to the problems of famine, death and related violence, is a growing understanding of the effect that climate change has on migration - both locally and internationally. While wars, terror, extreme political oppression, dwindling resources and poverty are clearly major drivers of migration, more and more scientific evidence is emerging, showing that the effects of global warming – whether drought or extreme hurricanes, for instance - play a significant role in intensifying the rate at which migration is increasing. Migration within countries, in the form of displacements, serves to contribute to social unrest as people crowd into already heavily populated but (apparently) safer or better resourced areas. Alternatively, as in the case of severe hurricanes, large numbers of people are left homeless and even poorer than before, facing disease and a lack of food and potable water. Repeated events of this kind often result in people moving away from vulnerable areas to safer (and sometimes urban) areas, which creates major problems for local and national authorities.

The same combination of factors — including drought, flooding and water shortages — are also emerging as part of the growing challenge of international migration. An obvious example of this effect of global warming is the international immigration of people from the Philippines to find work — in the Middle East and the USA in particular. The Philippines is highly vulnerable to increasingly severe storm events, which have the effect of repeatedly damaging both agriculture and building work, leaving many Filipinos with no option but to find employment in other parts of the world.

While drought and extreme weather conditions are directly associated with displacement and migration, rising sea levels are an additional consequence of global warming that will, in the future, present major problems for millions of people. Some will experience displacement (50% of the population of the USA lives in coastal areas), while others will present the world with the serious problem of finding ways of moving, and then accommodating (and possibly finding employment for), people whose home islands have been gradually reduced. NASA estimates that, without serious attention given to reducing human-generated climate change, sea levels will have risen by a metre by the end of this century. The islands most immediately affected are home to almost a million people - while more than a billion people (one sixth of the world's population) live in the most vulnerable parts of the Asian coastline. What is more, the US National Oceanic and Atmospheric Administration points out that higher sea levels result in deadly and destructive storm surges pushing farther inland than they once did, which also means more frequent nuisance flooding. Both disruptive and expensive, nuisance flooding is estimated to be from 300% to 900% more frequent within US coastal communities than it was just 50 years ago.

Professor Peter Kahn of the University of Washington has developed a simple explanation as to why so little is done to face the implications of global warming for the world's geopolitics. He calls it environmental generational amnesia. Let us hope that those marching around the world in support of science, will not only restore belief in science, but also help to eliminate the amnesia.



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