"The Great Climate Migration" by Abrahm Lustgarten

Part 2:

For most of human history, people have lived within a surprisingly narrow range of temperatures, in the places where the climate supported abundant food production. But as the planet warms, that band is suddenly shifting north. According to a pathbreaking recent study in the journal Proceedings of the National Academy of Sciences, the planet could see a greater temperature increase in the next 50 years than it did in the last 6,000 years combined. By 2070, the kind of extremely hot zones, like in the Sahara, that now cover less than 1 percent of the earth's land surface could cover nearly a fifth of the land, potentially placing one of every three people alive outside the climate niche where humans have thrived for thousands of years. Many will dig in, suffering through heat, hunger and political chaos, but others will be forced to move on. A 2017 study in Science Advances found that by 2100, temperatures could rise to the point that just going outside for a few hours in some places, including parts of India and Eastern China, "will result in death even for the fittest of humans."

People are already beginning to flee. In Southeast Asia, where increasingly unpredictable monsoon rainfall and drought have made farming more difficult, the World Bank points to more than eight million people who have moved toward the Middle East, Europe and North America. In the African Sahel, millions of rural people have been streaming toward the coasts and the cities amid drought and widespread crop failures. Should the flight away from hot climates reach the scale that current research suggests is likely, it will amount to a vast remapping of the world's populations.

Migration can bring great opportunity not just to migrants but also to the places they go. As the United States and other parts of the global North face a demographic decline, for instance, an injection of new people into an aging workforce could be to everyone's benefit. But securing these benefits starts with a choice: Northern nations can relieve pressures on the fastest-warming countries by allowing more migrants to move north across their borders, or they can seal themselves off, trapping hundreds of millions of people in places that are increasingly unlivable. The best outcome requires not only good will and the careful management of turbulent political forces; without preparation and planning, the sweeping scale of change could prove wildly destabilizing. The United Nations and others warn that in the worst case, the governments of the nations most affected by climate change could topple as whole regions devolve into war.

The stark policy choices are already becoming apparent. As refugees stream out of the Middle East and North Africa into Europe and from Central America into the United States, an anti-immigrant backlash has propelled nationalist governments into power around the world. The alternative, driven by a better understanding of how and when people will move, is

governments that are actively preparing, both materially and politically, for the greater changes to come.

Last summer, I went to Central America to learn how people like Jorge will respond to changes in their climates. I followed the decisions of people in rural Guatemala and their routes to the region's biggest cities, then north through Mexico to Texas. I found an astonishing need for food and witnessed the ways competition and poverty among the displaced broke down cultural and moral boundaries. But the picture on the ground is scattered. To better understand the forces and scale of climate migration over a broader area, The New York Times Magazine and ProPublica joined with the Pulitzer Center in an effort to model, for the first time, how people will move across borders.

We focused on changes in Central America and used climate and economic-development data to examine a range of scenarios. Our model projects that migration will rise every year regardless of climate, but that the amount of migration increases substantially as the climate changes. In the most extreme climate scenarios, more than 30 million migrants would head toward the U.S. border over the course of the next 30 years.

Migrants move for many reasons, of course. The model helps us see which migrants are driven primarily by climate, finding that they would make up as much as 5 percent of the total. If governments take modest action to reduce climate emissions, about 680,000 climate migrants might move from Central America and Mexico to the United States between now and 2050. If emissions continue unabated, leading to more extreme warming, that number jumps to more than a million people. (None of these figures include undocumented immigrants, whose numbers could be twice as high.)

The model shows that the political responses to both climate change and migration can lead to drastically different futures.

As with much modeling work, the point here is not to provide concrete numerical predictions so much as it is to provide glimpses into possible futures. Human movement is notoriously hard to model, and as many climate researchers have noted, it is important not to add a false precision to the political battles that inevitably surround any discussion of migration. But our model offers something far more potentially valuable to policymakers: a detailed look at the staggering human suffering that will be inflicted if countries shut their doors.

In recent months, the coronavirus pandemic has offered a test run on whether humanity has the capacity to avert a predictable — and predicted — catastrophe. Some countries have fared better. But the United States has failed. The climate crisis will test the developed world again, on a larger scale, with higher stakes. The only way to mitigate the most destabilizing aspects of mass

migration is to prepare for it, and preparation demands a sharper imagining of where people are likely to go, and when.