Exploring the Connection between Climate Change and Political Instability

Arun Agarwal

Arun Agarwal is a Professor at the School of Natural Resources & Environment at the University of Michigan. His research and teaching emphasize the politics of international development, institutional change, and environmental conservation. He has written critically on indigenous knowledge, community-based conservation, common property, population and resources, and environmental identities. He coordinates the International Forestry Resources and Institutions network, which is a coalition partner of the Rights and Resources Initiative (RRI). The following comments are extracted from a fireside talk addressed to RRI members and staff in January, 2014.

Three key questions arise while exploring the relationship between climate disasters and political instability. They are:

- Do climate disasters lead to political instability generally?
- Does it make more sense to ask how politics and climate-related disasters are related?
- And finally, what does the relationship between climate disasters and political instability have to do with the goals that Rights and Resources (RRI) aims to accomplish?

Before addressing these questions, it is useful to determine what we may understand as disasters, and as political instability.

What are climate disasters—not just climate-change disasters, but also climate-linked disasters? Certainly floods, cyclones, typhoons, and droughts qualify. But what about wars, genocides, and epidemics? There are studies that connect higher incidences of these disasters to climate and heat as well. For the sake of simplicity, I will exclude wars, genocide, and epidemics from this discussion.

What is political instability? I suggest we can think about instability at least at three levels: Changes in political systems; change in political regime/groups in power; and increase in political and therefore investment risks because of social unrest/demonstrations/riots. All three are important to consider for RRI, and it is possible that the really important one for RRI’s operational plans in the short run is the last one. Although it might seem inconsequential in comparison to system and regime change, it may be more directly relevant to land and forest tenure related work.

The basic argument for the relationship between climate disasters and political instability often works as follows:

There is a disaster. People are affected adversely (death, loss of assets, loss of income, hunger, etc.). People affected adversely are dissatisfied with their leaders. This dissatisfaction creates political instability at one or all of the three different levels mentioned above. Ergo, natural disasters lead to political instability.
The big question is if this set of causal relationships really is the way things work? The first seems plausible—disasters affect people adversely. We cannot be too certain about the latter two, however. Not all people affected adversely blame their leaders. In fact, depending on what people think is the cause of the disaster; they may not blame anyone at all. If climate disasters are really climate disasters alone, why would you blame your leaders for it? It is a particular feature of the climate change discourse in the early 21st century that people have come to blame humans for climate events—but for most of human history, climate disasters, like other natural disasters, have been acts of nature.

The last link—dissatisfaction leading to political instability is also not evident. There is an immense literature on poverty, hunger, and marginality. Some of it says that relative deprivation leads to major political change and transformation. According to an even larger body of work, there is no easy conversion of deprivation into demonstrations, riots, regime change, or system change. Mobilization of discontent is made extremely difficult by the standard collective action problem, and the translation of discontent into mobilization requires political entrepreneurs, resources, and leaders: these are typically least available to those who suffer the effects of natural disasters most.

And just as importantly, it appears that there is at least some research suggesting that natural disasters in the long run may not be all bad. They may be associated with a positive effect on economic growth because they allow the emergence of new elite and decision makers that are better able to take advantage of available opportunities than old, entrenched elite.

This theorizing can make one’s head spin, so instead of trying to connect all these relationships conceptually, I sought data relevant to the links of the above causal chain.

I started by looking at the deadliest and costliest natural disasters in history. If you search for lists of deadliest disasters in the world, you find floods, earthquakes, tsunamis, hurricanes, cyclones, and typhoons. And certainly, both floods and cyclones are clearly climate related.

The lists you find are also striking in their impacts—hundreds of thousands of people dead; scores to hundreds of billions of dollars lost. Big events on the list of the worst natural disasters since 1900 include floods in China and India, cyclones and hurricanes in Bangladesh, India, Central America and the Gulf Coast, and earthquakes and tsunamis in Haiti, China, Turkmenistan, and Italy.

All this information suggests that the first part of the causal relationships listed above is probably right—climate disasters lead to human suffering and losses.

But when I looked for whether these specific disasters were associated with system change, regime change, or large scale demonstrations in the streets, I came up mostly empty. At worst, in some cases, there were demands for a little more food or a little more assistance. And there was little difference in the political effects of climate vs. other natural disasters. It seemed that the very scale of the disaster made it really hard for people to mobilize; it made it difficult for people to blame anyone. So, one generalization I think we can make is that really big disasters may make it hard to blame leaders and may have more limited political implications.
One small exception to this generalization arises when you look at climate-related disasters that are somewhat smaller, and more recent. In some cases—Nargis in Burma, Katrina in the US, Haiyan in Philippines—people did blame leaders, and the political effects are probably more clear. These disasters are smaller than the really deadly floods and typhoons and earthquakes that killed millions or hundreds of thousands of people. But they are also more recent. The effects of these disasters still were not really regime change or system change. So, perhaps an added generalization is that it is not just about the size of the disaster—it is also what people expect in response to the disaster. In the three cases I mentioned above—Nargis, Haiyan, and Katrina—the relief effort was mismanaged according to many, and perhaps it is for that reason that climate disasters have political effects. People blame leaders not for the disaster but for mismanagement of relief, and for what the leaders fail to do in the aftermath of the disaster.

The story doesn’t end here. I wondered why famines and droughts were not on the list of deadliest disasters. I had just finished a paper on food insecurity in South Asia, and it was clear that the deadliest disasters in India have been famines, mostly caused by the indifference of political leaders or by their mismanagement. Between 1850 and 1950, India suffered from eight major famines that likely led to nearly 50 million people dead. So many people died that India’s population declined between 1850 and 1901!

So, I looked for the deadliest famines and their political effects. Seven of the 10 deadliest famines in the 20th century occurred in India and China (other three in Ukraine, Bangladesh, and Russia)—more than 125 million lives lost. But again, when you look at the political implications, it is not clear that they led to regime change or system change.

So, to see if more recent famines, even if smaller ones had similar political effects as more recent cyclones and typhoons, I looked at famines since 2000. This last decade is the one for which the UN has declared that a billion people were going hungry. I found that famines and hunger in the last decade have caused fewer deaths than those in the early years of the last century—indeed, than in any decade in the previous century. Key natural disasters and related impacts on food and hunger including famines have occurred in Afghanistan, Pakistan, Syria, Gaza, North Korea, Somalia, Sudan, Ethiopia, Zimbabwe, and Niger. These are nearly all are the result of political instability rather than the other way around (with the possible exception of floods in North Korea and drought in Niger). In all cases the negative effects on human welfare has been exacerbated by the political system in place.

Another key set of food security and hunger-related demonstrations, riots, and mobilizations occurred in the wake of the spike in food prices between 2007 and 2009. There clearly, food insecurity and price increases are closely associated with increased political unrest.

All of this suggests some speculative answers to the first two questions I posed at the beginning:

- The deadliest climate related disasters may paradoxically dampen the ability of people to mobilize.
- Climate disasters have an effect on politics not because of their magnitude, but because of the extent to which the expectations of those affected by climate disasters are met or not met by decision makers.
The most important set of climate disasters that affect political stability or have political implications are those related to hunger and food. In other words, the most important channel for climate disasters to translate into politics is through food insecurity.

Finally, it is not always climate disasters that translate into political instability, but political instability translates into food insecurity particularly in the context of authoritarian regimes. In such cases, a vicious circle may very well create a positive feedback loop. Consider the ongoing Syrian conflict as an example. Continuing droughts during 2006-11 reduced the availability of water for irrigation. Exports of wheat from the reserves held by the government worsened food supply. Its crackdown on demonstrators protesting against corruption, worsening economic conditions, resentment against surveillance all combined to create the conflagration that is Syria today. The decline in economic prospects resulting from lower food availability may not be the ultimate cause of political instability. But it provides a ready context in which flawed policies, repressive governments, and popular resentment constitute a recipe for unstable politics.

This leads to a useful conclusion that’s important for RRI’s work in tracking insecure forest tenure among Indigenous Peoples and local communities. It implies that food insecurity and hunger are probably key indicators for RRI to track closely, especially in countries where substantial land transactions are occurring. By itself, hunger is probably not directly associated with political unrest—but rapid changes in the numbers of hungry or in food insecurity are likely to be associated with social mobilization and political unrest, and thereby have implications for land transactions and the conflicts that arise out of them.