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V

Conclusion

Losses (Still) Going Up

Despite some successes during the United Nations International Decade for Natural Disaster Reduction, it was sadly ironic that even as this much-publicized event was coming to a close, Hurricane Georges and especially Hurricane Mitch would devastate three countries. Indeed, Mitch has now joined the pantheon of legendary hurricanes (including Agnes, Andrew, David, Gilbert, Hugo, and others) whose names have been retired because they inflicted such horrific losses.

With this in mind, we need to step back and look at the entire situation for the Dominican Republic, Honduras, and Nicaragua (and many other countries, for that matter). A relatively simple equation can outline why disaster losses are going up, not down:

Population Growth
+
Urbanization
+
Mass Poverty-High Inequality
+
Deforestation and Other Environmental Degradation
+
Lack of Mitigation (Land Use and Building Standards)
+
Institutional (National Emergency Organization/Civil Defense) Weakness
=
Increasing Vulnerability and Eventual Catastrophe

As a list, this is hardly novel, but the combination of the first three variables sets the stage for Mitch-type catastrophes. In many countries population growth continues at a rate that doubles population in less than 30 years. Moreover, most of the growth takes place in urban areas, pushing the population-particularly the poor, who are always the most vulnerable and almost always the most affected by extreme events-into ever more hazardous zones. Environmental degradation and deforestation in particular weaken natural defenses against extreme events (in a hurricane, for example, valleys in denuded watersheds become flood "highways"), and the lack of effective land-use regulation and building standards allows people to occupy the wrong places and substandard structures. Weak national emergency institutions then cannot deal with the ensuing vulnerabilities and generally collapse or are marginalized when they try to respond to a major event. Again, the result is Mitch-type mass casualty events.

PAHO's "Event Lessons"

Interestingly, in mid-February 1999, the Pan American Health Organization (PAHO) conducted a three-day "Evaluation of Preparedness and Response to Hurricanes Georges and Mitch," in Santo Domingo, the Dominican Republic. Drawing from the presentations and written reports, PAHO summarized nine major lessons:

1. While vulnerability analyses are essential for disaster management, the required data are "sketchy or non-existent."
2. Response coordination "within countries and between countries and international agencies and with donors" was inadequate.
3. Real-time evaluation of assistance was poor, resulting in it being "misdirected and inappropriate or [even] detrimental."
4. High levels of personnel turnover in disaster management agencies was problematic. ("The coordinating agencies within countries are subject to changes with politics, and consequently it is difficult to achieve continuity in preparedness and mitigation.")
5. Contingency plans for future emergencies "are inconsistent or non-existent."
6. Community and civil society involvement in disaster response is not "clearly defined" and is generally underdeveloped.
7. International help generally arrives "too late to be of assistance during the immediate post-event phase, and communities and national organizations must rely on local and national resources during this period."
8. "National and international policies and guidelines on disaster management often are too difficult to understand at the community and individual level."
9. Hurricanes Georges and Mitch essentially recentralized disaster response and "interrupted ongoing efforts at sectoral decentralization."

Perhaps PAHO's most important finding, however, came in a separate and more general discussion:

> It has been concluded that despite the advances achieved in some sectors in the field of disaster preparedness, they are still not sufficiently developed to have a permanent institutional capacity. [PAHO, 1999]

The PAHO recommendation is also hard to dispute:

> A single coordinating institution for all disaster management activities should be pres ent in each country. Representatives of all sectors and the civil society in disaster-prone areas must participate in the planning and implementation of coordination activities and must have a clear definition of their respective roles in the process. The national coordinating agency is responsible for coordinating all interactions between each of the stakeholder agencies and with international organizations. [PAHO, 1999]

Our Conclusion and the "Accordion Option"

We agree with all of the PAHO lessons and recommendations but would take an even stronger position. First, as we demonstrated in our previous study (Olson et al., 2000), disasters must be understood as innately political events because they place enormous demand and decisionmaking stresses on governments that rather suddenly find themselves in situations of fluctuating resources, creating a variety of opportunities and constraints. While resources are indeed lost in disasters, others are freed up internally or are supplied by external donors, generating both political conflict and cooperation.

Second, institutional readiness is the result of political and policy decisionmaking, because such decisions authoritatively allocate resources (personnel, budget, access, public/ political profile) among competing agencies and different social groups. Unfortunately, disaster management agencies are usually low in the political hierarchy and have a hard time competing for priority status in "normal" time. Then, because they are weak, and as we have seen with the Dominican Civil Defense, COPECO in Honduras, and Nicaraguan Civil Defense, disaster management agencies are then marginalized in times of disasters and catastrophes, which tends to make them even weaker,

especially with regard to public esteem and internal morale. This is more than a vicious circle; it is a downward spiral.

Therefore, the international community and national governments must pay more attention to disaster management institution building in "normal time" so that they can have stronger national counterparts in "disaster time." This will, however, require a more proactive-and more overtly political-strategy. Without such institution building, the international community and national governments will continue to see, most of the time in most of the cases, the marginalization/sidelining of the very organizations upon which they are supposed to rely for disaster leadership and coordination. The situation actually becomes quite absurd: temporary, ad hoc response "organizations" try to carry out/coordinate disaster management while simultaneously inventing the very processes and structures required to achieve that coordination-all during a period of national calamity and (often) media frenzy.

The ideal solution, of course, would be strong, well-connected, well-funded, and high-profile disaster management institutions capable of both pre-event (mitigation, preparedness) and response missions. Standing in the way of this ideal solution are two problems, one obvious, one less obvious and quite delicate: 1) host country lack of resources, and 2) a possible institution-building disincentive.

On the first point, all governments point out that even in "normal" time there are far more demands and programs than they can possibly meet or fund, and the problem is more acute as one moves down the economic development ladder to such countries as Honduras and Nicaragua. Given pressing daily priorities and competition for resources, it is difficult to entertain seriously proposals for a strong national emergency organization that will spend most of its time on stand-by (or at least will be perceived that way), regardless of the number and severity of a country's hazards. As one national expert opined when the possibility of a strong national emergency organization was posed, "That won't happen here" ("*Eso no pasará acá*").

Again, the second point is delicate and revolves around the question of whether or not the international donor community has created expectations of post-disaster assistance that actually work *against* host countries building strong, or at least stronger, national emergency organizations. The issue is simple: if countries with major natural hazards are reasonably certain of emergency assistance and then recovery and reconstruction funding from the international community in the event of disaster, where is the incentive for their governments to build stronger domestic institutions capable of effective mitigation, preparedness, and response? As we saw with Nicaragua and especially Honduras, there can even be "competition" for international relief and reconstruction funding after a disaster (funds that often dwarf traditional international development investments). With this pattern now apparently well established, what motivation is there for mitigation and preparedness that actually holds down disaster losses?

A middle ground or more practical solution is the "accordion option" for national emergency organizations that we suggested in our previous ENSO study:

> Under this option, as an event approaches the emergency-disaster firebreak, it is civil defense [or a national emergency organization] itself that articulates something like the following: "Mr. President, the situation is beyond our capabilities and requires a national-level response and attention from the highest levels of several ministries. We have anticipated this contingency, and here is a plan to organize the required response. We have also drafted most of the necessary decrees and procedures and stand ready to become the core, the infrastructure, of this higher-level organization." [Olson et al., 2000, p. 36]

The accordion plan has several advantages. First, it does not require major additional resources in normal or non-disaster time. Second, it does not affect the existing power relationships between ministries and offices in most executive branches, again at least in normal time. Third, it provides a blueprint for institutional expansion-but one that is only temporary for the national emergency organization and therefore not (permanently) threatening to other actors in the government. Hence, after the disaster is "closed," the national emergency organization contracts back to more or less its original size.

From our point of view, and based on the varying experiences of Peru, Ecuador, and Bolivia with the 1997-1998 El Niño, the Dominican Republic with Hurricane Georges, and Honduras and Nicaragua with Hurricane Mitch in 1998, the accordion option merits further exploration for three primary reasons: 1) the *status quo ante* is not acceptable morally (we know too much to let these losses continue to rise); 2) the ideal solution is still politically impossible; so

3) the only politically and financially feasible step forward would be to improve the capabilities of national emergency organizations in Latin America to expand (or contract) as the situation dictates-the accordion option.

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