

Investing in Disaster Risk Management at the local level: Competing with pressing social needs

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Every day we are exposed to a wide range of threats to our physical integrity, our lives and livelihoods; from natural hazards to diseases and even traffic accidents. Nevertheless, the actual disruption in someone's life comes when our ability to face the threat is overwhelmed. In short, we do not have the capacity to cope with the manifestation of the given hazard. So, in order to assess the risk that any hazard poses to us, we need to understand our exposure and degree of vulnerability and our capacity to deal with it. Understanding the hazard, its typology, is critical but not enough.

Through the lens of disaster risk management, statistics on past events, deaths and economic losses related to disasters inform and often drive policy and decision-making. Statistics also allow for establishing priorities and inform investments, particularly at local levels, where social and economic pressing needs are more visible and urgent. This is why, while we might understand at the macro and global levels the need to increase investments to reduce vulnerability to natural hazards, and prevent and mitigate disasters, at the local level, daily, pressing social and economic issues often drive investments away from the implementation of integral and comprehensive disaster risk management approaches.

For instance, let's take a look at the available statistics of these two hazards, traffic accidents and disasters¹. According to the World Report on Road Traffic Injury Prevention, compiled by the World Health Organization (WHO, 2013), traffic accidents are the eighth cause of death around the world. Traffic accidents claim the lives of nearly 1.25 million people world-wide per year, with a global rate for road traffic deaths of 17.50 per 100,000 people (WHO, 2015). Also,

¹ The Centre for Research on the Epidemiology of Disasters (CRED) defines disasters as a situation or event which overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering.



they are the leading cause of death among young people between the ages of 15 and 29; which concurrently represents an important impact on the labor force.

In contrast, according to the Emergency Events Database (EM-DAT) of the Centre for Research of the Epidemiology of Disasters (CRED) of the Université Catholique de Louvain in Belgium and World Health Organization Collaborative Centre, 68,000 deaths in annual average were caused by disasters between 1994 and 2013. And as much as every life counts, this number represents only 0.005% of the deaths claimed by traffic accidents world-wide.

In the Americas, traffic accidents and their impact varies widely based on the levels of economic development, road and transportation infrastructure as well as cultural patterns. Accordingly, developing countries find themselves to be in a very dire situation as more than 84% of the road traffic accidents happen in these countries (WHO, 2014). In 2010, the average death rate from road traffic injuries was 16.10 per 100,000 people, with approximately 150,000 road traffic deaths. The low income countries registered a mortality rate of about 16.40 per 100,000 people, while high income countries presented a lower rate of 14.80 per 100,000 people, as noted in Figure 1 (WHO, 2013).





Figure 1. Mortality Rates due to road traffic in the Americas (PAHO, 2013).

Likewise, disasters show a regional heterogeneity that is evidenced by measuring the impact of disasters in different subregions of Latin America and the Caribbean, generally registering more severe consequences in sub-regions with smaller countries, less developed, higher dependence on the environment for production and lower diversification. In terms of high and low income countries, "more than three times as many people died per disaster in low-income countries (332 deaths) than in high-income nations (105 deaths)" (CRED, 2015, p.7). In 2010, in the Americas, according to the EM-DAT disasters claimed the lives of 225,857 people. Although 222,570 are attributed to the earthquake in Haiti, an abnormal event for all its measures. So, once again, with 150,000 deaths, traffic accidents in 2010 overwhelmed the less than 3,500 deaths claimed by disasters in the Americas.





Figure 2. Number of disasters reported per country (1994-2013) (CRED, 2015).

Adding to the overwhelming impact of traffic accidents in terms of deaths, their costs represent a burden on the health, insurance and legal systems. At the global level, the estimated loss due to road traffic is near to 3% of Gross Domestic Product (GDP); in Latin America and the Caribbean, represents approximately 1% of their GDP annually. For the developed countries such as the United States, traffic accidents represent costs near to 2.50% of their GDP, which are nearly 1.80 billion USD, annually.

On the other hand, costs related to disasters tend to be in a much wider range; with losses in the high-income countries around 0.30% of their GDP and low-income countries with losses near to 5.10% of their GDP. In Latin America and the Caribbean the annual losses are estimated to be 1 to 3% of GDP. For example in Saint Vincent and Grenadines disaster costs are 4.30% of GDP, in Guatemala 4% of GDP, and in Guyana and Jamaica 1.30% of GDP (CRED, 2013).



However, it must be noted that the economic damage estimated is only available for 36% of all reported disasters.

As noted, traffic accidents are one of the leading causes of death in the Americas and the world, representing 2.10% of all deaths. Annual number of deaths by disasters is significantly lower than the number of deaths claimed by road traffic. Therefore, reducing traffic accidents has become a priority for mayors and local government authorities who respond by setting speed limits, restrictions for minors, and alcohol sanctions, among other measures, in order to reduce the mortality rates. Pilot studies have proven that these measures, which protect 7% of the people around the world, reduce the incident of road crash by 35% and the incident of fatal injury by 56% (WHO, 2004). When talking about disasters, according to the United Nations (2015), legal and political reforms have been made by 120 countries and 190 have established focal points for disaster risk reduction, yet there is no projection about the disaster policy impact.

Hazards such as traffic accidents not only claim more lives and disruptions, but their high frequency makes them much more present in everybody's life, which in turn prompt local authorities to increase investments to deal with hazard. The returns can be observed in the short-term and within the term of the same administration that made the investment, which consequently yields tangible political returns. In contrast, when investing in disaster mitigation or prevention, returns are most likely to be observed long after the incumbent mayor or local authority left office.

And while there is daily reported information and annual reports related to traffic accidents, at all levels, information on disasters and reports are often aggregated at the national level and only major disasters are recorded. Moreover, data on affected people and economic losses are collected with different criteria, limiting its analysis, or not reported to protect economies and industries –such as tourism, or political aspirations. The International Disaster Database reflects "the fact that most reporting sources do not cover all disasters or have political limitations that can affect the figures" (CRED, 2010, p. 8). Most reports consist in data aggregated from different sources, including UN agencies, governmental and non-governmental organizations,



insurance companies, research institutes, as well as media and press agencies, leading to distortions in the analysis.

Remarking the differences between the two mentioned hazards, there is a vicious circle based on visibility, information and politics. In the case of traffic accidents, people deal with the hazard on a daily basis, and consequently everyone feels related and perceives the threat. As a result, there is more information to inform policy and planning, and a more pressing urgency to address it. On the other hand, lack of disaster integrated information and lower recurrence create a false perception of risk and make mitigating and preventing disasters less urgent. And in the end, investments for long term disaster mitigation and prevention are often put off.

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