International Risk Management

By
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Back in my instructing days I remember sitting around a hotel in Mexico City listening to a few students telling their story of being mugged. I was a little distracted at the time thinking about the bus we'd just hired with bald tires, no working emergency exits and a driver who seemed predisposed to passing vehicles on blind curves by way of testing his spiritual fortitude. But I didn't want to drive the rentals again, white knuckled and hoping for a clue as to local traffic logic. The all day carries of altitude sick students off Ixtaccihuatl were still to come. The Mexico section of the semester had been preceded by a couple of months in the US southeast hiking, climbing, paddling and caving, which had lulled us into thinking we were competent. Mundane logistics in Mexico were suddenly proving to be unexpectedly daunting.

What makes risk management in developing countries interesting is that the objective hazards are greater, the available resources for coping with incidents are fewer and, unless you are a country national or have had extensive experience in the region, it is unfamiliar.

GREATER HAZARDS
A number of factors contribute to the greater hazards of middle and low income countries including poverty, geography (exposure to natural disasters; flora/fauna/disease issues), underdeveloped infrastructure, political instability, underdeveloped regulatory systems, irregular or non existent enforcement of regulations, underdeveloped insurance industry and torte law, etc. A few points (Peden et al. 2002, Peden et al 2004):

- 85 % of the people exposed to earthquakes, tropical cyclones, floods and droughts live in mid to low income countries.
- People in developing countries are 4 times more likely to die from natural disaster events than those in high income countries.
- 97% of all drowning deaths occur in low and middle income countries. Drowning mortality rates for low and middle income countries (LMIC) per 100,000 population is 7.4. For high income countries (HIC) it is 2.02.
- More than 95% of fatal fire related burns occur in low and middle income countries. 4.8/100,000 for LMICs and 1.2/100,000 for HICs.
- While 75% of all fatal falls occur in low and middle income countries, the #s per 100,000 are generally higher in high income countries. Lest you think that this may be due to extreme sports, the highest demographic for fatal falls is in the 70–79 age range and is indicative of the longer life spans in high income countries.
- If you access www.citybriefs.com (requires password) which rates cities for their security and the likelihood of being a victim of violence (Luxembourg and Reykjavik get a 1; Bogota rates a 6 and Baghdad a 7), you'll note that no US, Australian, Japanese or European city gets a rating higher than a 4. All the 5, 6 and 7s are awarded to cities in developing countries.
- 95% of all homicides occur in low and middle income countries. That is 12.8/100,000 in LMICs and 3.0/100,000 for HICs.
- In 2002 90% of all road traffic deaths occurred in low and middle income countries. It is highly variable by region however as some economies improve rapidly people take to the roads far ahead of the rate of road development and regulatory systems making for sudden jumps in the carnage level.
- There is a higher risk of disease in lower income countries. The lower level of funding for water purification and food regulation, sanitation, education, public health initiatives, i.e., childhood immunizations, vector eradication, etc., all contributes to

higher disease risks. And developing countries in the tropics also simply have more diseases (World Health Organization's Global Atlas for Infectious Diseases).

FEWER RESOURCES
Fewer resources and underdeveloped infrastructure may contribute to the cause of an incident, but they define the environment for coping with an incident. A crisis is the time when many travelers and program managers really learn about their host country's communication, transportation and medical infrastructure.

Communications
Emergency communications are improving exponentially in most developing countries with the mushrooming of cell phone towers that are providing much better service than the obsolete (when they were installed) land lines systems. It is almost to the point that satellite phones are only needed in the most remote areas (although one might choose to keep the satphone as an additional backup for when cell phones don't work, e.g., in London after the July '05 bombings). Routine communication between developing countries and the North American or European home office, that potentially might play a role in avoiding incidents, is also easier and more reliable with the internet, world cell phones, text messaging, etc.

Road Transportation Infrastructure
In middle and low income countries, rapid motorization has quickly outstripped the development of roads, vehicle safety standards, policies, regulations and enforcement (WHO 2004). Instead of a differentiated system of roads with limits for usage and appropriate regulations, there may only be 2 kinds of roads: paved and unpaved. When there is traffic of widely varying masses moving at widely varying velocities, the pedestrians, bicycles, scooters and animal drawn carts don't fare so well against the fast moving cars, lorries and buses. The carnage is especially great when the vehicles are old, don't have anti lock brakes, collapsible front ends, reinforced passenger compartments, airbags, seatbelts, or tread on the tires. And inconsistent or nonexistent enforcement of regulations means that speeding and driving while intoxicated are even more common than in developed nations. Also, you may want to avoid driving at night when accident rates spike up and human predators, where they are a concern, are usually more active. When you identify more with prey than predators, it is prudent to pay strict attention to how prey manages their safety. Stay with the herd especially at night and avoid dangerous areas.

Medical Infrastructure
In most developing countries there is no tradition of citizen first aid training and no Emergency Medical Services (EMS) outside of big cities. There are fewer doctors per capita and most lack specialized training in handling trauma cases. In 1993 developed countries averaged 287 physicians per 100,000 people. Underdeveloped countries had 77(WHO 1997). In the last 20 years many developing countries have created competent homegrown medical training programs but now contend with "medical migration" in which trained professionals are recruited to the UK and Australia, etc. to help cap the costs of their national healthcare systems. In the low income countries where my organization (The School for Field Studies) operates, there is commonly a local clinic which is headed up by a medical officer with 2 years of medical training. They serve the local populace well for minor injuries, parasites, and minor infections with the dozen or so antibiotics and the few other drugs they have. They are very helpful to us if someone has diarrhea or a UTI. The regional hospital might be a short plane ride away or an hour's drive. These facilities have one or more general practitioner doctors, a lot more drugs, a lab (albeit one prone to misdiagnosis with underpowered microscopes, contaminated dyes and a lack of familiarity with how many vaccination produced antibodies will give a positive for a disease in the absence of the actual disease), and you could get an X-ray there. They could take out your appendix, but you might consider waiting if you could. You might be a little concerned about the blood supply and sterilization procedures. The

international standard hospital in a large city might be a longer plane ride or a 4 hour drive. But they have surgeons and other specialists; they will have all the drugs on the World Health Organization's list of essential medicines and then some; they will have reliable laboratories and diagnostic technologies. They do a great job taking out appendixes.

HOW TO MANAGE RISK INTERNATIONALLY
So, greater hazards, fewer resources, sketchier information; how can you manage risk? It depends on what you want to do. If you are only responsible for yourself and are out for adventure, or looking to submit to another culture by way of exorcising your negative high income country karma, just go (keep in mind the definition of adventure being 95% hard work/misery and 5% fear). And consider cultivating acceptance that, without the language/cultural skills or the childhood immunities enjoyed by the locals, you may just get culled from the herd a little earlier than you expected. But, if you are responsible for other people, i.e., clients or students, etc., then you need to do some work. Now I should note here that there are no widespread standards for international programming whether it is adventure education, study abroad, service learning or eco tours, etc. And there are some wonderful small programs doing ambitious trips that do not do a lot of homework or bother with immunizations, chemoprophylaxis, etc and they can't tell you the difference between schistosomiasis and a bot fly. But they are on a first name basis with all the parents (who didn't believe in childhood immunizations in the first place) and they don't have any assets to lose anyway.

Accident/Incident analysis, whether it comes from NASA, the Flight Safety Foundation or Outward Bound, shows that accidents/incidents are rarely the result of one bad decision. Invariably, it is the result of chained links of individual choices and organizational decisions coupled with circumstances. Safety is never an absolute. The best you can do is to pursue your safety potential. To do this well involves 3 steps:
- Step One - Examine what it is that you want to do and break it down into its components parts.
- Step Two - Perform due diligence in getting the necessary information before proceeding. This means really understanding your exposures and the available alternatives.
- Step Three - Using risk/benefit analysis (given restraints of time, money and information) make the best interventions that reduce risk.

There are two levels to step 2. The first you can do without leaving your computer. There are a gazillion websites that cover regional and country specific health issues, crime and security, road safety, cross cultural issues, natural disasters, etc. There are websites that will tell you what websites you should look at (including SFS www.fieldstudies.org). Many of these resources are excellent, but they only take you so far.

For example, let's say that you want to get a group from point A to point B in a low income country. I am choosing a transportation issue because motor vehicle accidents are by far the greatest single cause of non natural deaths of Americans abroad (presumably the US State Dept regards all disease fatalities as natural), accounting for 32% between 10/02 and 12/03 (US State Department 2004). Statistically you'll find that trains are safer than buses and buses are safer than cars (WHO 2004). You can go the Association for Safe International Road Travel website to see how the road safety of the country you are in compares to the rest of the world. You can look at the CIA's country fact sheets or the US State Department's Country road safety evaluations. But when you're done checking all that out, you still need to get your group from point A to point B.

If you break down road travel into its meaningful components, there are four areas where you may find opportunities for reducing risk:
- Exposure – Can you reduce time driving on roads?

- Likelihood of getting into an accident – What is the highest quality vehicle you can get and what is the best driver training you can get? Don't drive at night or in monsoon conditions. Avoid high accident areas. Don't drive when tired.
- Likelihood of injury if you are in an accident – If you can't have airbags, at least insure that there are seatbelts. Ensure that all heavy objects are tied down. Passengers in larger vehicles have fewer injuries.
- Post injury care – Where there is no EMS, emergency medical training is all that much more essential. Have an excellent first aid kit and clear plans for contingencies.

At the School for Field Studies' Kenya Center, research on wildlife management is conducted from vehicles. Reducing exposure is not an option. So, the likelihood of having an accident is reduced by having excellent Land Cruisers with full time mechanics and extensively trained drivers. Driving at night is avoided. Time spent on the Nairobi-Mombassa Highway is minimized. Everyone has a seatbelt. 95% of our staff are Kenyan and have a current WAFA and at least one is a WFR. Groups travel in convoys of 5 vehicles which addresses the evacuation issue as well as reducing the likelihood of banditry and hijackings. Kenya Wildlife Service guards with AK-47s ride along (for deterrence, not for superior firepower in a fight) when passing through areas of known bandit activity. Each vehicle has a first aid kit, a radio and a cell phone and at least one vehicle is carrying a satphone.

But, if you only needed one or two transports a program, a bus would likely be the best choice. How do you choose the company? You could request copies of all current insurance certificates, safety records and the company's driver safety program. And when you got tired of waiting for those to show up, due diligence would mean that one of your staff or a representative would need to ride on the company's buses. They should document the year of bus manufacture, the presence/absence of functional emergency exits and fire extinguishers. Is there tread on the tires and are the inspection stickers current? And most importantly, does the bus driver comply with the rules of the road? How good is the driving? How long do drivers go without a break or a replacement? Is the company open to accommodating any concerns you may have even if it means doing things differently?

Conclusion

Risk management in low and middle income countries is significantly more challenging than in the developed world. The risks are greater and there are no standards for many aspects of safety. In lieu of standards, you need to conduct due diligence in finding out a broad range of information. Part of the challenge is wading through the overabundant resources available online and part of it is figuring out how to structure the questions and the investigations in country and then being able to conduct them within your time and financial constraints. On the other hand, the recent increase in travel into developing countries is exactly because it promises more "adventure".

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