

Challenges for Risk Management in Developing Countries of Tropical America

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Introduction

Working as a foreign or local outdoor company in developing countries of the American Tropics presents a very particular set of challenges in risk management. Culture is the first gap generator and point of resistance since local people have a different way of measuring risk and attributing responsibility. The second major challenge in promoting and managing risk is measuring real risks and balancing them with perceived risks that have been pushed through international media for many years.

Tropical environments face us with poisonous critters and different illnesses that threaten clients and visitors while local medical services are in many cases limited and/or do not have the appropriate equipment or supplies. While International training in wilderness medicine has improved consistently, access to tropical curriculums and locally trained personnel is difficult and unreliable since there are no established standards. Furthermore, local legal systems and mechanisms are weak and generally have little experience or jurisprudence on cases related to outdoor activities and companies leading trips.

With so many apparent challenges and limitations, is it realistic to lead programs in the Tropical Americas and adequately manage their risks? What are some strategies that can help in reducing real risks in developing countries?

Breaching the Cultural Gap

One of the first challenges any outdoor company working with international standards will face in developing countries of tropical America is local idiosyncrasy. The way people and organizations perceive their surroundings and understand concepts like risk, responsibility, quality and training is going to affect programs operating in these countries. Expectations set by program administrators can be rapidly destroyed and minor incidents can rapidly escalate to complex problem solving and conflict resolution situations. Language and its meaning as well as the understanding of concepts might differ substantially from culture to culture. This cultural gap can cause confusion, misunderstandings and many surprises.

In many (not to say most) countries of the Caribbean, Central and tropical South America, a dominant factor contributing to local perception of risk and responsibility is the "*Shit happens!*" culture. Programs work for many years with little to no training of their staff and minimal safety precautions only to respond to incidents with "... well, these things happen!" Prevention and planning has not been ingrained in the day-to-day way of thinking. I believe this attitude and behavior is directly related to the impact on human

development and behavior tropical environments and available resources produce. There are no substantial variations on season changes, food is abundant and available throughout the year both on land and water, and in general the weather is warm and moderate so housing and clothes can be very basic. Very little planning is necessary for daily life and surviving during the year.

Once an incident or operations problem occurs it is not uncommon to hear "it's your problem" or the common Caribbean saying "no problem man" without seeing a potential solution. Assuming responsibility and responding to unforeseen situations is done as it comes out at the moment, improvising. Limited economic resources, access to training and appropriate equipment as well as the extremely high cost (relative to local economy standards) of investing in these aspects has slowed down local development of higher standards and investing in risk management. From my experience it is even uncommon to see some investment in emergency planning. This is not surprising when we look at the outdoor industry in most tropical countries being still in its childhood even though there are a few companies and services with trajectory and working at high standards. Growing up is a process where learning and change is inevitable. It is important to remember and consider this when working with local outfitters, instructors, guides and outdoor companies in general.

Local outfitters that have worked in partnership with international organizations and for the more specialized international adventurer market tend to have higher standards. For foreign organizations lacking much experience working in a specific country, these experienced local outfitters become an important source of support and information in establishing new programs.

How risky is a developing country?

Media images: real or fantasy?

International media and news have generated an incomplete image of developing countries, many times amplifying isolated events and making them look like they were generalized. This is not to say that there are many risks for visitors and especially for outdoor enthusiasts besides the environment and nature. When defining *wilderness* in developing countries we should not exclude people and rural communities since it is difficult to find clear line dividing the two. Some special risks related to people that are important to take into consideration when operating in neo-tropical countries include political instability, theft and common criminals, and insurgency groups. These risks are of special importance due to their dynamic nature and the implications they have for clients.

Political instability is a common problem we see now a day in developing countries. Media has done an incredible job of keeping the public informed of many events as well as omitting some events from public knowledge. First hand local information is necessary to get close to what is really going on and to understand/interpret media. Government and tourism organizations as well as media tend to show situations from a limited point of view or with out including the whole story. Local contacts that understand both local problems as well as the programs outdoor companies want to implement will have the insight necessary to make appropriate decisions during the planning process.

Theft and common criminals are probably the most common risks that will be encountered when traveling to developing countries. Fortunately, in most cases, this problem is concentrated to larger cities and towns where being more aware and not "giving papaya!" is going to reduce incidents. Common criminals in countries such as Peru, Guatemala and Ecuador where international visitors have been present for a long time have also developed the most advanced techniques for theft on travelers. As a general rule in developing countries, never give papaya!

Last but not least, strikes, insurgency groups, kidnapping and other public order issues are fundamental to take into account. Even though research on the location where the program will take place will probably reduce the possibility of intentionally encountering situations of this kind, it has increasingly become a possibility that could surprise us.

As an example, the Uyuni Salt Flats in Bolivia (1996), a usually calm community, which is the gateway to the flats, had an overnight transformation due to problems with the railroad. People suddenly set out to the streets; all roads were blocked, cars and people retained forcefully if necessary (a form of kidnapping), basically complete chaos. There had been no previous information in the news that could lead us to foresee this situation, even less after a month of being in the mountains with no communication with the outside.

An important question to answer is: Can we generalize the situation to a region, a country? On one hand, if we panic and generalize too much there will be almost no appropriate places to work outdoor programs in developing countries. On the other hand if we disregard current happenings and history we can walk directly into the "wolves' mouth" finding ourselves in a complex and highly dangerous situation. Research about the locations is the most fundamental part of

reducing these risks. In the case of countries like Colombia and Peru, where because of media it is easy to generalize, scrutiny and precision in research is fundamental. Areas that are peaceful can suddenly become dangerous, and many areas thought to be dangerous are stable and peaceful. There is no formula and as the last couple of years have showed us revolt can happen anywhere.

Wilderness program risk management in developing countries must include these special risks during the planning process even though they are not strictly related to wilderness. It is important to identify local persons that have not only the knowledge of what is happening at one moment in time but also the capacity of creating a clear overview of the dynamics different problems have, as well as communicating all of this to program managers using common grounds and language that will enable clear understanding of the situations.

Tropical aggression: snakes, viruses and other nasties
Going back to what we would generally consider wilderness risks, there are specific environmental risks and management issues to the tropics. The tropics present us with a myriad of new environmental challenges, poisonous critters and illnesses. Even though many are different from what you would find in North America, after dealing with them for many years, I now see management of these risks not differing substantially from those in the north as long as some special precautions in critical issues are taken.

Antivenoms
This is a critical point when operating in snake infested countries such as Costa Rica, Panama, Colombia, Venezuela, and Ecuador. Availability of antivenoms is limited in most developing countries and antivenoms made in North America do not usually work for neutralizing tropical venoms. Finding and purchasing locally produced reliable antivenoms requires research and time so it is important to foresee and plan ahead in order to be able to cover your needs. Hospitals, especially in rural areas close to wilderness, most of the times do not have antivenoms or they do not have enough. During planning stages of your program it is important to contemplate the need to purchase and have available in the field the necessary dosage of local antivenom for an emergent situation.

Know your critters! Take the time to learn about local edible and poisonous plants, dangerous insects and animals. By far the most universal and useful management technique is to emphasize to clients to be careful where they put their hands and feet, avoiding dark places where they have no visual. Trying plants for edibility is a risky business in the tropics if done with out guidance. A good example of this happened in Costa Rica. In Rincon de la Vieja National Park in Guanacaste a couple of years ago a Canadian visitor started eating an abundant sweet and tasty wild berry. He really enjoyed the flavor of the berries and ate many of them. As he got close to the volcano's crater he felt dizzy losing his balance and falling into the

¹ **Giving Papaya:** The act of placing and leaving a ripe papaya on a table for anyone to cut it open and eat it. Local saying which metaphorically represents situations such as leaving a backpack in a bus station or walking around a rural town showing bundles of cash, where you are asking for something to happen.
Wilderness Risk Management

crater! Fortunately a small ledge in the way down caught his fall. After four days and a massive rescue operation he was rescued safely even though he had substantial damage from the fall.

Tropical Diseases and Vaccines

Tropical diseases have been portrayed as killers in many movies. It is true that the tropics is home to many nasties including dengue, yellow fever, malaria, leishmaniasis and cholera. Fortunately there is much we can do to reduce the possibility of being affected by them. Vaccines are available for yellow fever and other tropical diseases. Finding out about locally present diseases and what vaccines are appropriate for the location of a program is a step done before leaving home that can help.

Vector transmitted diseases are mostly transmitted by insects, being mosquitoes number one. Insect protection and proper clothing will help prevent exposure to these insects. Other problems such as parasites and bacteria that can affect our digestive system are wide spread, usually being present in contaminated water and food (poorly cooked, questionable origin and bad management). By including in a programs risk management plan straightforward actions to guarantee purified water and to assure food is reliable many of the nasties are eliminated. Specific research of local diseases is important due to the occurrence of very localized problems. This is common in the Chocó and Darién as well as in the Amazon and Pantanal. Finally good hygiene policies and procedures during the programs will strengthen and support other risk reducing strategies. Remembering clients that many tropical diseases have dormant periods that make diagnosis in hospitals difficult and in case of, after returning from the trip, going to a hospital mentioning your recent visit to the tropics.

Lack of documentation and availability of statistics regarding incidents during outdoor programs running in the tropics limit us in being able to accurately assess the difference in incidents (more or less), if any, tropical critters and illnesses cause during outdoor programs or activities.

Evacuation and Medical Services in Remote areas of Tropical America

Developing countries are characterized by a limited emergency response system. Response times can normally range in urban situations from 20 minutes to hours, while in wilderness situations several hours to days. Availability of ambulances, hospitals, helicopters, air medical services is reduced and sometimes difficult to arrange. Specialized wilderness rescue equipment is usually not available and rescue groups not well established, trained or equipped. Even though in many places while in a wilderness program you can find yourself on a road, in a small town, in terms of emergency response you might feel like you are alone in the most remote backcountry situation.

Recently I was working in Dominican Republic's Los Haitises National Park when we had an evacuation of a stable head trauma with possible c-spine compromise. Even though our Evacuation and Emergency Response Plan had the contact numbers of the only Ambulance service available and we had directly made contact with them before starting our program when they assured us they could cover emergencies 24/7, they had no availability of an ambulance. Fortunately by having a backup plan in our emergency response plan that contemplated this situation, we had vans available in port that had the capacity of carrying a boarded patient inside safely and adequately as well as a person sitting next to the patient monitoring. When we reached the highest level hospital of Samana, we found that the doctor was not available at the moment, x-ray machine was down and there were no sutures available in the hospital.

This brings us to our next challenge. Many times I have asked myself entering a local hospital in a developing country: Is this a real hospital? Limited medical resources are going to be an important factor affecting emergency response plans. I had previously mentioned antivenom serum as being a major limitation only because of its importance as a specific treatment. Researching and finding out about medical services available is not enough due to the variations and misinformation you will find. It is worthwhile taking the time to visit hospitals and other related services to get a first hand evaluation of the limitations and possibilities available avoiding future surprises. This will help provide the information necessary to elaborate emergency response plans and consider having medical support kits to fill in voids present in the local healthcare system you might not want to come face to face with.

Going back to my example in Dominican Republic, once the doctor showed up, several hours later, he started liberating the spine with out asking for a mechanism (45 kg solid wood ramp falling 2mts straight onto to the head) and disregarding pain in the neck around and on C3, x-rays had to be taken in another center so he figured that walking to the x-rays was easier than having to take the full backboard.

Higher level training for staff working in these programs is a plus when leading groups in developing countries. It is common to assist doctors and nurses in local hospitals when incidents occur, and more important knowing when to say STOP (as in my example) and avoid a potentially larger problem.

The following table shows the minimum standard we suggest and use in OpEPA's programs:

	Lead Instructors	Assistant Instructors
Expeditions 1 week or more	WEMT	WFR
Remote locations	WEMT	WFR
Short Programs 1 week or less	WFR	WAF-A-WFA

Looking at the North American Wilderness Medicine curriculum it is also important to strengthen instructor's knowledge by complementing their training with a tropical disease module and strengthened emergency management and evacuation modules. It is beneficial if instructors have some pre-hospital and ER practical experience. Besides medical training, having instructors being fluent in local language is going to be a critical factor in solving problems and managing unforeseen incidents.

When working with local services and staff it is difficult to expect the same level of experience and training you usually require. The need and access to training and certification for local programs and staff is a limitation that has slowed down the quality growth curve in developing countries. In most developing countries standards and requirements for certification have not been set or are not believed to be necessary. Local industry standards are usually not comparable with international standards and the high cost of training and equipment in order to reach international standards is far from accessible.

General Service Providers

When we talk about risk management we have to include local services such as transportation and food that have the potential to pose a risk to our clients. Finding quality control in service companies of the tropics is going to be challenging as well. Documentation is rarely done so things like checking for service records on vehicles is not an easy task. Hygiene and proper food management/storage in restaurants, especially in rural areas is very questionable.

Finding local providers that strive for quality and guiding them through time in assuring the quality expected by your program will help your organization provide the service clients expect of you and at the same time it will help local service companies improve their own business.

Legal Considerations

Due to the low level of knowledge and understanding regarding the reality and conditions of tropical developing countries in many North Americans, it is fundamental to help clients understand where they are going and what are the risks they might encounter while participating in the program. Informing the client previous to the program how the company is prepared to reduce these risks and respond in case of an incident is also fundamental.

Do not expect local legal and penal systems to work the same way as they do in the US or Canada. Even though most developing countries have well-structured legal systems, it does not mean the system is efficient or it works at all. Many times problems are solved through a more complex informal system person to person. Cultural aspects such as those exposed at the beginning of this paper (*shit happens, your problem*) have made the industry and people less

aggressive in using tools such as lawsuits to solve problems caused by negligence or mere accident. When these tools have been used, the inefficiency of some legal apparatuses end up burying the process before it comes to a completion. Jurisprudence in subjects relating to outdoor programs or wilderness activities is almost nonexistent in the best cases and specific legislation has not been developed to give clear guidance to judges.

Researching foreign organization liability in the country you will be operating and understanding how liability is attributed to local staff, organizations and service contractors will also help in getting a clearer picture and develop an action plan in case legal actions are necessary or are taken on your program.

Conclusion

When considering the many challenges and limitations in risk management for outdoor programs and other wilderness activities in tropical developing countries, it is sometimes a valid question to ask why even go there. Neo-tropical environments represent some of the richest natural systems, with highest diversity and complexity, not to forget the beauty of the forests, birds and animals. Adding to this, local people, native forest communities and their cultures are increasingly becoming of interest to travelers and adventurers. The potential for wilderness experiences in these environments has not been fully tapped into and in the future it is foreseeable to see an increase in programs running in these countries. It is important to have a holistic view of the risks involved and to start working towards reducing those risks at various levels in order for the industry, as well as pioneer companies heading south, to be prepared.

Education is the most general and beneficial (long term) strategy. Assisting local outdoor education, ecotourism and adventure outfitters in understanding their responsibility and the importance of setting local industry standards to those internationally established as well as increasing local awareness of wilderness medicine and emergency response systems and techniques will produce a stronger support base for international organizations running programs in developing countries. Additionally, guidance, access to low cost training and certification, as well as involving local partners when working in developing countries of the American Tropics will help direct the growth of local industry to best support international organization's work in the long term reducing operational costs, increasing quality and ultimately reducing risk. Investing in strengthening local capacity is not only good in an operational sense but it will also help strengthen the local industry in general and provide a broadened sense of community for the local and international outdoor industry.

As I have exposed throughout this paper, many unexpected events can surprise us while working in developing countries, conditions change without previous signs. Having flexible locations, alternate routes, and backup plans will help in managing

complex situations and avoid being affected by the dynamic nature of the tropics. As part of the planning process, considering special protocols (ex. public disorder situations) and equipment (ex. medical support kits), as well as being diligent in doing first hand research of local possibilities and services will facilitate a better response to incidents. Focus on prevention is still a key point. When elaborating your program's Emergency Response Plan it is fundamental to find out real limitations of the location and local services not believing blindly what health and service providers claim they can provide.

Increasing the level of staff training in subjects such as wilderness medicine and decision making during emergencies and evacuations will strengthen an organization's capacity to respond and prevent increasingly dramatic results during incidents. Local cultural framing and knowledge, negotiation and conflict resolution skills mastered in local language will provide additional tools for program leaders to deal with unexpected situations and local limitations. Additionally, researching local legal systems, working with local partners and having an open information policy on the risks and how the company is prepared to manage them will provide the client a transparent and accurate picture of what they are getting into. This is fundamental in order to avoid surprised clients who made inaccurate assumptions.

After being surprised a few times during a program by unexpected situations (almost inevitable) and dealing with all the challenges exposed in this paper adequately, the payoff will be clients that go home having felt the tropics and carry a big smile on their face, and heart saying: "I was in the jungle and it is awesome!"

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