

*Key Lessons and Recommendations for Post-Tsunami Recovery and for the
Aftermath of Global Natural Disasters*

*by
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Overview

Tsunamis, hurricanes, earthquakes, floods, and volcanoes are natural disasters that destroy lives and property. In 2011 alone over 250 million people's were affected and costs exceeded \$350 billion in damages.

Regardless of whether we are dealing with a tsunami or a hurricane or flood, all disasters have devastating effects on people's lives, natural resources, and economies. Therefore lessons learned in one disaster can often be applied in others.

Immediately following a natural disaster, the first priority must be the safety and wellbeing of people. After that, rebuilding lives and the resources on which those lives depended is key.

Natural resources are often the mainstay of economic and social health in a community. In a disaster, these resources are damaged. This in turn exacerbates suffering, hampers recovery, and can increase conflicts.

Human needs and clean up can be so overwhelming that in the aftermath of a disaster the link between humans and their natural resources is frequently overlooked. This prolongs human suffering and adds to economic costs.

In our experiences in several natural disasters we have found that:

Intact habitats and ecosystems frequently offer greater protection to people against the full force of the impact. They save lives, property, and economies. They do not eliminate damage but they ameliorate it.

Intact ecosystems provide essential services immediately after the disaster. For example, after the SE Asia tsunami, people in Indonesia, Sri Lanka, and Maldives turned to rainforests for shelter and to reefs for food and to built homes because there were no other available sources of shelter or food.

Natural resources are often an essential source of solace and refuge for people affected by natural disaster. In the aftermath of the tsunami and hurricanes, people (who had

themselves lost loved ones and/or property) kept asking national park staff how long before they could revisit their parks and wilderness areas.

Damaged ecosystems are less resilient and suffer more destruction. Tragically, these damaged ecosystems are often ones that people depend on the most.

When natural resources are damaged, they can provide fewer services and this often leads to increased conflict among communities who need food and/or water.

In places where habitats are intact, damage is less and recovery is also faster. This is because there are resources for people to draw upon, and because sources of revenue such as tourism (e.g., reef diving and fishing tourism) rebound quickly.

An important part of recovery is providing resources to restore habitats and ecosystems that sustain communities e.g. fishing communities and dive communities. This helps the community rebound faster and helps avoid additional conflicts.

Recommendations

Recognize the essential economic, social, and spiritual connection between people and their natural resources. Recognize that planning for damage to natural ecosystems is essential to minimize damage and to respond effectively. Restoring natural resources for people is a critical recovery issue.

1. Assess the damage and its consequences for people as quickly as possible and develop a recovery plan. Use scientific expertise in assessment.
2. Engage the local community in assessment, planning and rebuilding their environment. This not only rebuilds lives and economies; it provides disaster victims with a sense of dignity, value and purpose. Remember that by “healing one you heal the other.”
3. Pay attention to over-exploitation of natural resources in the immediate aftermath of a disaster. People put more pressure on resources after a disaster. This can push an ecosystem from sustainability to collapse.
4. Engage the brightest scientific minds, with the best engineering/technological advances and with the community leaders. This ensures sustainable solutions that will fit the culture and needs of the community.

5. In recovery efforts it is important to identify the local leaders, entrepreneurs, and most skilled, who are committed to helping their communities rebuild. Train and support them. Local people know best how to help each other and are attuned to the sensitivities of the community. Help them to help their community.
6. External expertise is often needed and it should be brought in when appropriate, but external expertise is best appreciated and effective when it is linked with local people and when there is good technology and information transfer.
7. Good intentions can often go awry. Concerned but poorly trained or equipped volunteers or staff can often exacerbate a difficult situation and create additional damage. This includes damage to the natural resources as well as to communities and to the volunteers themselves.
8. Reliable information and good communication are two of the scarcest commodities in the aftermath of a disaster. This often results in efforts being duplicated and wastes valuable time and effort. Good coordination essential to link needs with resources and to link complementary or similar recovery efforts. This is especially true with natural resources but also in other efforts.
9. Document and celebrate the successes and advances along the way to recovery. They will be important to the community but also provide important lessons for others who may face similar disasters.
10. Natural disasters are transformative events, but the transformations can create positive outcomes. There are opportunities to build new and more sustainable relationships between people and their environment in the aftermath of a natural disaster.
11. Remember that there is a short window of opportunity. Act smart but act fast. People who have neither food, shelter, nor income cannot wait for scientific or policy debates on sustainable redevelopment.
12. We know that natural disasters happen. Plan ahead so that we can respond in a timely and effective way for natural resources and the people who need them. Invest in scientific assessments and follow up evaluations as they are key to future security. Leverage the experiences and lessons learned from previous disasters so that we may save lives and the resources on which they depend.

(Piece adapted from Dr Brosnan's summary report to the UN 2006 in the aftermath of her work on the SE Asia tsunami)

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