

future. The Tsunami Warning System is made up of 26 participating member states throughout the Pacific basin. The system has the capacity to provide several hours of early warning of tsunamigenic activity; with sufficient funding and international will, it could be adapted and introduced throughout the Indian Ocean. The larger issue, however, is the development of rapid communication and evacuation systems in remote areas with marginalized populations.

Despite the massive scale of this emergency, we are better prepared than ever to deal with the immediate health threats created by the tsunami. What remains uncertain is the extent to which donors and implementers will be able to support the tran-

sition to long-term rehabilitation and reconstruction; in the past, we have been far less proficient at this second crucial task. Yet we know that the need for long-term success has never been more urgent than it is now.

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## Recovering from the Tsunami

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The media reports on the tsunami that hit South Asia the day after Christmas did little to prepare me for what I saw firsthand when I visited Sri Lanka and India. Working as a missionary, I have visited destroyed towns in war-torn Sudan and witnessed deep, grinding poverty in Uganda and Kenya. The challenges in South Asia are as daunting as any I have seen. Flying over the coastline in a helicopter, we saw an unending scene of devastation. All told, more than 150,000 people are dead and over 5 million have been left homeless.

Many of the tragedies we encountered defied simple solutions. At one overburdened hospital, I met an eight-year-old boy with infected leg abscesses. He had spent nine days in a futile search for his family — his parents and siblings had all perished — rather than seek immediate treatment for the injury he received in the initial deluge. Even those who are physically uninjured have sustained severe psychological wounds. Thousands of children will grow up without parents. And the rudiments of normal life — electricity, schools, houses of worship, and a functional economy — will take years to rebuild.

Although the most pressing needs I saw are intimately related to health, medication and medical personnel cannot fulfill them all. Most prominent, in

many areas, the tsunami contaminated wells and destroyed water-treatment plants. Unclean water makes it difficult to prepare food, bathe, or drink. Without pure water, it is impossible to perform many medical procedures. The shortage of potable water increases the chances of an outbreak of cholera, typhoid, or dysentery. Moreover, the large pools of stagnant water I saw along South Asia's coastlines may become breeding grounds for mosquitoes carrying malaria and dengue fever. We have already seen some outbreaks in affected areas. It may be months before we can rule out the possibility of a major epidemic.

Although clean water ranks as the number-one need, adequate shelter, warm clothes, nutritious food, bandages, and medicines such as antibiotics also remain in short supply. Even providing these basic necessities will prove difficult.

Schools, for example, serve as shelters in many devastated areas. One shelter I visited — a camp that housed more than 400 displaced Tamils in Sri Lanka — will have to be emptied of refugees so that classes can begin. Yet people I spoke with there had only begun to make plans for relocating the refugees. If circumstances force these people to sleep in the open, their risk of contracting diseases will skyrocket.

Despite many difficulties, I saw inspiring signs of hope. International relief agencies have done yeoman's work: they have pitched tents, run clinics, and

handed out countless relief packages. Examples of human kindness abound. One doctor we met, a man who had taken care of more than 500 patients in the immediate aftermath of the disaster, had e-mailed a call for help just as the wave swamped his hospital. A team of Scandinavian doctors saw the e-mail and arrived 48 hours later to set up a pediatric ward.

Although the developed world has responded with billions of dollars in aid, damaged roads and crippled railways make the flow of supplies uncertain. Whatever problems may exist in India and Sri Lanka — both of which have moderately strong economies — poorer countries will face even greater hurdles in averting a second wave of death.

Even under the best circumstances, recovering from the tsunami will take years. But the devastation offers a few lessons. First, clean water has emerged as the most pressing medical need; the situation underscores the importance of broad improvement of access to clean water in developing countries. Second, as the Scandinavian doctors showed, individual contributions of medical assistance can rank among the world's most precious and meaningful currencies. And above all, the world's governments should view the tsunami's devastation as a public health crisis. Confronting it will require money, infrastructure, and just as important, the expertise, knowledge, and compassion of countless health care professionals.

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