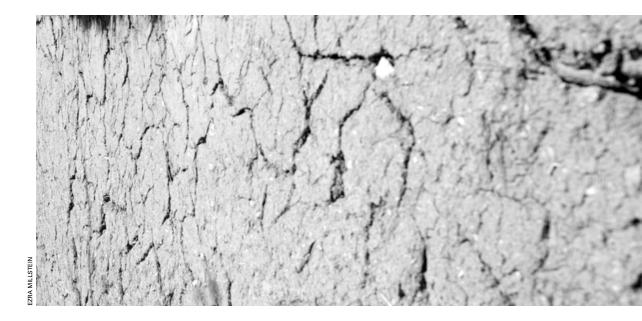


The diseases that wreak havoc on the lives of the poor are notoriously diverse and highly adaptable.



The thatched roof and mud walls of this traditional house in San Rafael, Honduras, offer ideal conditions for the insects that cause Chagas' disease, an illness that kills about 14,000 people a year in Latin America, according to Doctors Without Borders.

The diseases that wreak havoc on the lives of the poor are notoriously diverse and highly adaptable. They are spread around the global village by, among other modes, insects that live inside mud walls and microorganisms in tainted water; they can be propelled across a crowded room by a sneeze or unknowingly transmitted during sex.

And while science and public health have made great strides in recent years to reduce the death and disability toll these diseases have exacted, they remain stubborn foes.

One of the primary defenses against these health risks starts by making adequate shelter available to the displaced and the poor. Properly constructed homes provide protection from the risks to health associated with poverty. There is no international standard on construction specifications. Local government regulations vary greatly. Access to construction material, costs and sustainability also greatly influence how houses are built.

But there is universal agreement that a healthy home is not just structurally safe but constructed in a way to minimize health risks,

# **Chapter 2**

# The relentless assault of disease



Twenty children in Maseru East, Lesotho, lived in a precarious metal shack in an area used as a garbage dump. They now have two Habitat homes, one for boys and one for girls, connected by a walkway.

#### Housing quality standards at a glance

These performance standards—drawn from the United Nations' Millennium Development Goals, the International Residential Building Codes, UN-HABITAT, and the SPHERE Guidelines for disaster response—define the quality of a new or rehabilitated house by Habitat for Humanity International or a partner organization.

#### 1. Design

- a. Each person in the house has a usable covered area of no less than 3.5 square meters, or the covered area comprises at least two rooms.
- b. Local materials and labor are used without hurting the local economy or environment.
- c. The house is safely located; risks from natural hazards—earthquakes, volcanic activity, landslides, flooding or high wind—are minimized, and the area is not prone to significant diseases.

#### 2. Durability

- a. In disaster-prone areas, construction and material specifications mitigate against future natural disasters.
- b. Structural materials are durable enough to allow safe refuge and exit in case of a natural disaster.

#### 3. Secure tenure

a. Land and property ownership or use rights are established prior to occupation. Where use rights do not exist, there is de facto no protection against eviction.

#### 4. Water

- a. Water is palatable and of sufficient quality to be drunk and used for personal and domestic hygiene.
- b. There is safe and equitable access to or adequate storage of a sufficient quantity of water for drinking, cooking and personal and domestic hygiene.

#### 5. Sanitation

- a. Communities have adequate numbers of toilets sufficiently close to their dwellings to allow them rapid, safe and adequate access at all times of the day.
- b. Toilets are constructed and maintained so they are comfortable, hygienic and safe to use.
- c. Health and other risks posed by standing water and water erosion are minimized.

with hard-covered floors, roofs and walls that do not leak or harbor insects. It has adequate space of no less than 3.5 square meters per person and separate rooms for girls and boys, which helps prevent rape and abuse. It has access to clean water and adequate sanitation and transportation. It is free of airborne and chemical contaminants; uses low-toxicity building materials such as lead-free paints and wood products, paints and carpets low in volatile organic compounds; and can be maintained to ensure that those who dwell within it are not exposed to undue risk. Moreover, the surrounding neighborhood and community are an integral part of maintaining a healthy home.

Building on guidelines created in the late 1990s, Habitat and other humanitarian NGOs have endorsed a set of minimum shelter performance standards for the reconstruction of homes in areas of the world hit by natural disasters. Wherever practical, those standards are being implemented in new and reconstruction projects in nondisaster areas as well.

In most developed and middle-income countries, meeting these standards means little change or difficulty. But in low-income countries, national organizations will need to strike a balance between housing adequacy, cost and targeting the neediest populations. Seen from another perspective, such need provides an opportunity for Habitat for Humanity and other groups to influence the global development community in creating clearer standards for what constitutes decent housing.

### Q-and-A with USAID Administrator Dr. Rajiv Shah

Dr. Rajiv Shah has led the United States Agency for International Development, the principal U.S. agency offering assistance to countries struggling with poverty, disease and disasters, since Dec. 31, 2009. USAID provides assistance in more than 100 countries in such areas as health, agriculture, economic growth and trade, and education and training.

Before joining USAID, Shah was director of agricultural development in the Global Development Program at the Bill and Melinda Gates Foundation. He also served as the foundation's director of strategic opportunities and as deputy director of policy and finance for its Global Health Program.

# **Q:** What role, in your opinion, does housing play in development and assistance?

A: Safe and secure shelter is a critical component of long-lasting, sustainable development in both rural and urban areas. However, the rapid rate of urbanization in developing countries means that governments and privatesector markets in particular struggle to provide adequate city services, and housing is foremost among them. Today more than 1 billion people around the world live in slums. Most of these people lack secure rights to the places in which they live and are at constant risk of eviction. Housing allows people to have an asset and to be connected to a supportive community, both in a physical and cultural sense.

Overall, USAID sees housing as one key component of its Making Cities Work strategy. This strategy recognizes that improving housing and other essential basic urban services requires an integrated approach that addresses constraints on municipal finance, local governance "Safe and secure shelter is a critical component of long-lasting, sustainable development in both rural and urban areas." capacity, effective civil society and private-sector engagement, and more secure property rights.

**Q**: What lessons have been learned in recent years about the connection between healthy housing and healthy communities?

A: Housing is an anchor for communities. But of course building houses alone won't create communities. Equally integral would be creating economic and educational opportunities, and providing municipal services such as water supply, sanitation and transportation. Together these elements create communities in which people can be healthy and prosperous. Broad international support for this perspective is being highlighted this year by the World Health Organization. WHO chose to highlight the important links between the built environment and health when they chose the theme "Urbanization and Health" for World Health Day 2010.

**Q**: Are there standards USAID uses to evaluate the quality of housing in the communities you serve, and if so, how specifically do they relate to health?

A: In humanitarian shelter reconstruction support, USAID adheres to the Sphere Project's guidelines, the minimum standards to which most international humanitarian organizations adhere. Beyond that, though, USAID strives to ensure that local cultural and contextual norms are also adhered to in housing programs. For example, this perspective is guiding current support in Haiti on the transition of people out of temporary camps and into more secure housing so that Haitians can begin to rebuild their lives after the terrible earthquake.

**Q**: What kind of public health infrastructure does the agency look to develop—talking about water, sanitation here mostly—and how

does residential housing developed by governments or NGOs play into that? Are there new innovations that seem to be working better than traditional methods?

A: In response to the Senator Paul Simon Water for the Poor Act of 2005, USAID has increased significantly its efforts to improve water supply and sanitation infrastructure for those in greatest need. Successful residential housing development usually goes hand-in-hand with such improvements, but often household-level fixes need to be made, as well. The most important household-level investment typically includes connecting a home to networked water pipes and sewers or constructing on-site sanitation facilities. Such investments can be applied to largerscale housing development through two relatively recent means: (1) providing access to microcredit to overcome the barriers that low-income households face in affording onetime water or sewer connection charges; (2) whole community behavior change to encourage household on-site sanitation investments, an approach most often referred to as the Community-Led Total Sanitation approach.

**Q**: What should governments and NGOs be doing better to improve health and housing opportunities?

**A:** The United States has made a bold commitment to invest in healthy and productive lives as part of President Obama's Global Health Initiative. USAID will be working to support governments and NGOs that are committed to the goals guiding this effort. In addressing the needs of the populations in Global Health Initiative countries where cities are confronting rapid growth while coping with tight budgets, we must do all we can to strengthen public-private partnerships and enforce good governance.



For Mauro Gómez (left), a new wheelchair-accessible bedroom built with Habitat Chile means he can live comfortably at home, with his family.

## THE HEALTH-HOUSING CONNECTION

#### Chile: Home from the hospital

Habitat for Humanity Chile and hospitals in the country have established a new program directly tying improved housing to better health for children.

Although the government in Chile pays for medical treatment for poor children, families often lack the resources to improve the condition of their homes. Doctors recommend that some terminally or chronically ill children stay in long-term medical facilities, rather than return to overcrowded, poorly insulated or badly constructed homes.

Partnering with hospitals in the Santiago region, Habitat for Humanity Chile has created new, healthy living environments for 45 children since 2009, enabling them to return home to their families. With the help of partner hospitals, families, volunteers and donors, Habitat Chile aims to serve at least 200 families through this project by May 2011.

Ana Chavez, director of pediatrics at Hospital Exequiel Gonzáles Cortés in Santiago and a partner with Habitat on the project called "Our Children Return Home," has become an advocate for housing as well as health.

For 13-year-old Mauro Gómez, a new bedroom in the wheelchair-accessible home built with Habitat meant he could live comfortably at home despite the effects of muscular dystrophy.

His parents' US\$300 monthly income could cover only medical costs associated with their son's illness in addition to normal living expenses for the five-member family.

Gomez is a happy child whose face reflects hope, especially when playing with his brother Juan Pablo, 4, who sees Mauro as his hero.

"I want to travel and see the world," Mauro said. "I will not allow my illness to affect my goals."