



# Services for the Urban Poor

## Lessons Learned

### Environmental Health Project

May 1999

According to the U.N. Center for Human Settlements (HABITAT), in 1990, an estimated 600 million people in the developing world lived in urban environments that constantly threatened their lives and health. Harsh conditions due to inadequacies in housing, water, sanitation, drainage, solid waste disposal, and vector control, combined with poor health care, contribute to a heavy disease burden in such communities. The burden from infections and parasitic diseases is particularly heavy—it may be up to 50 times that of developed countries.

In the last decade, a number of usually rural parasitic diseases—such as malaria—have emerged in cities, due to a combination of rural migration and the proliferation of urban breeding sites. Cholera returned to Latin America in 1991 and gained a firm foothold.

Respiratory diseases are more likely to be prevalent in urban areas because crowding promotes the transmission of infectious organisms.

Providing basic urban environmental health services, such as water supply, excreta collection and disposal, solid waste management, and drainage, to

families living in the ever-growing peri-urban, or informal, areas of the developing world, though clearly a high-priority need, has remained for the most part an elusive goal: the number of families living in peri-urban areas without basic services continues to increase.

The Water and Sanitation for Health (WASH) Project, a predecessor of the Environmental Health Project (EHP), began to focus on the problems of the urban poor in the early 1990s. EHP has followed its lead by continuing to advocate for more attention to peri-urban environmental health and by playing a leadership role in the Collaborative Council for Water Supply and Sanitation's Working Group on Services for the Urban Poor.

Both WASH and EHP have published reports documenting project experience and providing guidance and encouragement for other external support agencies involved in the challenging peri-urban environment.

EHP's goal in peri-urban environmental health is focused on capacity-building for institutions positioned to play an important role in delivering environmental health services in those communities, especially nongovernmental organizations (NGOs).

Through work with USAID Missions in Jamaica, Haiti, and Peru, EHP has had the opportunity to apply principles and approaches for work with the urban poor to field conditions in Montego Bay, Port-au-Prince, and Lima. In each location, demonstration projects provided urban environmental services to families living in peri-urban areas. In addition to providing technical

***EHP Goal: Increase the capacity of NGOs and other institutions to improve the quality and availability of key environmental health services for the urban poor.***

assistance during implementation, EHP contributed to monitoring and evaluation efforts. The three demonstration projects provided a range of environmental services including water supply, sanitation, solid waste management, and drainage. EHP technical assistance to these projects has ended, but project activities continue. In addition to these

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## Household Environmental Indicators in Poor, Middle-Class, and Wealthy Neighborhoods of Accra, 1991-92

Percent of Sample Households

Indicator	Poor	Middle-Class	Wealthy
No water source at residence	55	15	4
Share toilets with more than 10 households	60	17	2
No home garbage collection	94	77	55
Wood or charcoal as main cooking fuel	85	44	30
Flies observed in kitchen	91	56	18

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A survey of environmental health conditions in 790 poor, 160 middle-class, and 50 wealthy households in Accra, Ghana, conducted in 1991-92 by the Stockholm Environment Institute and University of Ghana, found startling differences in environmental conditions between poor and wealthy neighborhoods. These, and data from other studies, point to the urgent need to improve health-related environmental conditions in poor urban areas.

Source: *World Resources Report 1996-97*, page 46.

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In all cases, EHP assisted the NGOs to experiment with their approach, monitor their effectiveness, and develop a sustainable model to serve as an example for the municipalities. Along the way, the NGOs were also able to identify the policies and regulations that needed to be reformed for their efforts to be replicated and scaled up.

### **Lesson Two: Providing environmental health services to peri-urban communities requires a range of disciplines, not just engineering.**

The traditional urbanization paradigm is based on the use of national or municipal utilities overwhelmingly dominated by engineers. They see the problem of service provision as fundamentally technical, requiring an engineering solution, i.e., building infrastructure. Experience has shown, though, that this paradigm does not pertain in peri-urban or informal areas. There the urbanization process is more complicated. Families settle on poor quality (often illegal) land and put up their houses before urban infrastructure is built. In formal urban areas, the process is reversed.

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\* In 1988, 25% of the “absolute” poor—individuals with incomes the equivalent of a dollar per day or less—lived in urban areas; in 2000, 50% will.

\* In developing countries, 25%-50% of urban residents live in slums or squatter areas.

Source: *World Resources, 1996-97*

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In peri-urban areas, families often earn their living in the informal economy and may not be able to afford infrastructure and service levels designed for formal settlements. To provide environmental services in this setting, planners must draw from a wide range of disciplines including institu-

efforts, EHP has helped communities and local authorities in Tunisia, Zambia, Benin, and elsewhere to adopt a more broad-based, participative approach to urban environmental management.

The projects in Jamaica, Haiti, and Peru have demonstrated that it is feasible to provide urban environmental services in a cost-effective way and that urban environmental health conditions—even the most dire—can be improved.

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## LESSONS LEARNED

The first three lessons confirm the feasibility of EHP’s overall approach. The next three address the difficult issue of financial feasibility, the single most important element of sustainability.

### **Lesson One: NGOs can play an effective role in providing environmental health services in peri-urban areas where municipal structures are weak or absent.**

A major constraint to providing environmental services to the urban poor is the disconnect between the urgent needs of peri-urban communities and the political will, legal mandate, and technical and institutional capacity of municipalities. As demonstrated in the

EHP experiences in Jamaica, Haiti, and Peru, NGOs can often step into the gap. They are socially committed, flexible, and able to improve their ability to work effectively with poor urban communities.

Key to their success was the willingness of the NGOs to put aside their normal role of *implementor* and to play a new role—that of *facilitator* or broker between the informal communities and the formal private and public sectors. In Jamaica, the Construction Resource and Development Centre (CRDC) served as a bridge between the communities and the Ministry of Health, private sector contractors, and the banking sector to finance and build sanitary solutions that were responsive to household demand, affordable, and in compliance with public health standards.

In Haiti, *Centres pour le Développement et la Santé* (CDS) led a process to create a brand new utility (called a special water district) that effectively involved the communities as partners and is currently operating and maintaining a community water supply system in a financially sustainable manner. In Peru, *Alternativa* helped to create micro-enterprises to provide the peri-urban community with solid waste management services including household collection, transfer, recycling, and sanitary disposal.

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tional development, public health, social science, law, urban planning, and finance, as well as engineering.

The implementing NGOs in Jamaica, Haiti, and Peru recognized that the problem was more than just technical and that the solution required integrated multidisciplinary teams. For example, in Jamaica, the senior staff of the SSU (Sanitary Support Unit), the local office of CRDC, was composed equally of those with technical skills and those with skills in community organizing and health education. This combination of skills allowed the SSU to work effectively in the communities, to involve residents in decision making about interventions, and then to adapt the technical solutions and levels of service in keeping with residents' preferences and willingness to pay.

### ***Lesson Three: Communities will provide the support needed to make community-based institutions effective if the NGO gives them full-partner status.***

A significant amount of time was spent at the start of each project consulting with the communities on their needs, anticipated problems, and ideas about realistic solutions. The process insured that the solutions were appropriate, but, more important, it created an effective relationship between the NGOs and the communities and helped develop a sense of ownership for the solutions among residents.

In the Peru project, most households pay for solid waste collection; those who continue to dump solid waste in the community are subjected to community pressure to change their behavior. In the Haiti project, households pay for water obtained from the special district fountains; individuals who illegally tap the water lines are also subjected to community pressure. Because they have full-partner status, residents are willing to take responsibility for the projects.

### ***Lesson Four: Community-based institutions can provide quality environmental health services in peri-urban areas at a competitive price.***

In Haiti, a careful pre-project analysis revealed that households were paying significant amounts of cash for water from private vendors. CDS calculated that the special water district being established could charge the same amount or somewhat less and still be able to provide more reliable and better quality water, operate and maintain the water distribution system, and end up with a surplus that could be used to finance other critical environmental health services such as solid waste collection. In fact, that is what happened. By the fifth month of operations, the special district had sold enough water to pay for its core administrative and water supply operations and management and had a surplus of \$16,250 for solid waste activities.

### ***Lesson Five: The level of environmental health services in peri-urban areas should be appropriate to income levels.***

The NGOs in the three locations carried out a careful analysis of the communities' demand and willingness to pay for services and then provided services at those levels. Charging for their services allowed all three institutions to recover all costs and to become self-sufficient financially.

In Jamaica, for example, traditional waterborne sewerage was not affordable by the households and would not have been financially sustainable. SSU came up with a solution that involved on-site septic tanks and cartage. It was affordable and still met public health standards and environmental protection needs. Monthly loan repayments were about 5% of average monthly household income. In addition, SSU charged a fee

for its "broker" services that, once a critical mass of households was being served, allowed the institution to be financially sustainable.

In Peru, the service providers were small-scale private sector micro-entrepreneurs who understood that in order to get paid, they had to provide an appropriate level and quality of service. Instead of collecting solid waste with conventional vehicles, they used much-lower-cost modified tricycles. Instead of using large excavation trucks for the landfill, they designed a landfill that used manual methods.

In Haiti, because household-level water connections were unaffordable, the NGO planned for community standpipes—but made sure that there would be enough of them to reduce the waiting time previously required.

### ***Lesson Six: Demand for environmental health services can be created among residents of peri-urban areas.***

Environmental health experts generally agree that service levels should be consistent with community demand and willingness to pay. But they are skeptical that demand can be created. EHP's experience is that, if an attempt is made to understand and respond to the perceptions and priorities of the community, it is possible to create demand.

In each of the three EHP projects, the NGOs provided information on the effect of environmental conditions on the health of families—particularly on children. Information was made available on possibilities for improving those conditions and their costs. Demand for environmental services was thus created—even for services that are usually considered low priority, such as solid waste collection and sanitation.

In Peru, for example, *Alternativa* invested significant time in the community fostering dialogue on the impact of solid waste on the community's health. In addition, the organization promoted

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environmental education in area schools and organized a variety of activities including fairs, poster contests, plays, and so on. In Haiti, CDS carried out a campaign to promote the purchase of water from the new district.

The most prominent policy constraint is the unwillingness of formal authorities to address the question of legal title. Most peri-urban residents are considered squatters and have no prospect for obtaining legal title to the

**Formal institutions must change significantly if they are going to be able to serve the urban poor.** Even as municipalities and utilities begin to recognize the effectiveness of a more flexible, interdisciplinary, community-based approach in peri-urban areas, they still resist developing the skills and management systems needed to serve the urban poor.

**Health data on peri-urban or informal urban areas should be disaggregated from data on formal urban areas.** According to increasing anecdotal evidence, health conditions are significantly worse in peri-urban areas than in formal urban areas (and even worse than in many rural areas). Even so, health and municipal officials devote little attention to peri-urban areas. A partial explanation for this inconsistency is that health and environmental data on peri-urban areas are rarely disaggregated from urban data, or data-collection systems may miss peri-urban areas entirely, since they are neither rural nor urban. So long as the urban poor and their health conditions continue to be “invisible,” their problems will not be effectively addressed.

—*Eduardo Perez, EHP Technical Director for Engineering and Technology*



Two objectives of equal weight guided the CRDC project in Montego Bay: extend sanitation coverage and improve hygiene behaviors related to diarrheal disease. Neighborhood leaders distributed educational materials—like the flyer above—and modeled tips for healthy living. The result: significant improvements in hygiene behavior.

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### OUTSTANDING ISSUES

In spite of successful experiences in Haiti, Peru, and Jamaica, this area continues to be challenging. Unresolved issues discussed below point the direction for work in the future.

**Existing policies and regulations are constraints to providing services to the urban poor.** While EHP demonstration projects showed that services could be effectively provided, the NGOs, for the most part, showed creativity and boldness in “bending” the rules to achieve their results. Political will to lower barriers created by municipal or national policies or regulations is often lacking. The ultimate goal is to change policies, not to bend them.

land on which they have built. Thus, a sense of impermanence reduces households’ incentives to make improvements, such as latrines.

**The urban poor still do not have ready access to credit.** In spite of repeated demonstrations that the urban poor operate in the cash economy and will pay for the services they want, access to credit remains a major obstacle. The successful activity in Jamaica provided households with market-rate credit for the capital to build their sanitary solutions. This was an exceptional case, and it is unclear whether new sources of credit will be made available in the future.



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### Reports Available from EHP

- “Constraints in Providing Water and Sanitation Services to the Urban Poor” (WASH T.R. 85).
- “Designing a Sanitation Program for the Urban Poor. Case Study from Montego Bay, Jamaica” (EHP A.R. 34).
- “Evaluation of the Jamaica Urban Environmental Program for On-Site Sanitation” (EHP A.R. 35).
- “Health and the Environment in Urban Poor Areas: Avoiding a Crisis through Prevention” EHP Capsule Report No. 1.
- “A Plan for CDS to Establish a Water and Sanitation District in Cité Soleil, Haiti” (EHP A.R. 21).
- “The Unique Challenges of Improving Peri-Urban Sanitation” (WASH T.R. 86).

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To request technical assistance or to find out more about EHP, contact:  
Dr. John Borrazzo, Environmental Health Advisor, Office of Health and Nutrition, RRB 3.07-026, Bureau for Global Programs,  
Field Support and Research, U.S. Agency for International Development, Washington, D.C. 20523-3700  
Tel: (202) 712-4816 • Fax: (202) 216-3702 • E-mail: jborrazzo@usaid.gov

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