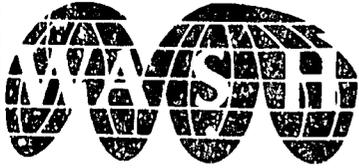


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WATER AND SANITATION
FOR HEALTH PROJECT

A.I.D. WORKSHOP ON URBAN HEALTH & ENVIRONMENT IN AFRICA: PERCEPTIONS FROM THE FIELD

Nairobi, Kenya

Operated by
CDM and Associates

Sponsored by the U.S. Agency
for International Development

1611 N. Kent Street, Room 1001
Arlington, VA 22204-2111 USA

Telephone: (703) 243-8200
Fax (703) 525-9137
Telex WUI 64552
Cable Address WASHAID

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Prepared for REDSO/East Africa
under WASH Task No. 328

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CONTENTS

PARTIAL ACRONYM LIST	iii
ACKNOWLEDGMENTS	iv
EXECUTIVE SUMMARY	v
1. BACKGROUND AND RATIONALE	1
1.1 Workshop Goal and Setting	1
1.2 Overview of Urban Conditions	1
1.3 Demographic Implications	3
1.4 Public Health Implications	3
1.5 Economic Implications	4
2. SPECIFIC CONSIDERATIONS	7
3. CONSTRAINTS	11
4. RECOMMENDATIONS FOR COLLABORATION/COOPERATION WITHIN A.I.D.	13
4.1 A.I.D. OFFICES (Africa Bureau Relations)	13
4.2 Ways to Collaborate	13
4.3 Potential Linkages to Existing A.I.D. Programs	14
5. MENU OF OPTIONS	17
5.1 Building Awareness	17
5.2 Preliminary Studies and Assessments	17
5.3 Project/Program Options	18
6. NEXT STEPS	21
6.1 Overview	21
6.2 Next Steps: Priority One	21
6.3 Next Steps: Priority Two	21
6.4 Next Steps: Priority Three	22

APPENDICES

A.	Participant List	25
B.	Workshop on Urban Health and Environment for Africa	27
C.	Workshop Agenda	29
D.	Bibliography	33

TABLES

1.	Urban Annual Growth Rates 1980-1989	2
2.	Percentage of Urban Poor in Substandard Housing with Inadequate or No Services	3
3.	Urban/Rural Economic Indicators: Aggregate Data for Sub-Saharan Africa, 1965-80 and 1980-89	4
4.	Actors and Interventions in Urban Health	10
5.	Next Steps	23

PARTIAL ACRONYM LIST

AA	Assistant Administrator
AAAS	American Association for the Advancement of Science
AFR	Africa Bureau
AIDS	Acquired Immune Deficiency Syndrome
AMREF	African Medical Research and Education Foundation
ARTS	Analysis Research & Technical Support Division
CDIE	Center for Documentation, Information and Evaluation
CHW	Community Health Workers
CMR	Child Mortality Rate
CPSP	Country Program Strategic Plan
DFA	Development Fund for Africa
DHS	Demographic Health Surveys
EPA	Environmental Protection Agency
FP	Family Planning
GOK	Government of Kenya
HHRAA	Health and Human Resources Assistance for Africa
HPN	Health Population and Nutrition
HRD	Human Resource Development
IMF	International Monetary Fund
IMR	Infant Mortality Rate
MER	Monitoring, Evaluation and Reporting
NCC	Nairobi City Commission
NCIH	National Conference on International Health
NGO	Non-governmental organization
NPA	Non-Project Assistance
PC	Peace Corps
PHC	Primary Health Care
PRE	Bureau of Private Enterprise
PRISM	Program Performance Information for Strategic Management
R&D/H	Research and Development/Health
REDSO	Regional Economic Development and Support Office
RHUDO	Regional Housing and Urban Development Office
STD	Sexually transmitted disease
TB	Tuberculosis
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WASH	Water and Sanitation for Health Project
WHO	World Health Organization
WS&S	Water Supply and Sanitation

ACKNOWLEDGMENTS

The success of the Nairobi, Kenya, Workshop on Urban Health and Environment for Africa was due to the contributions of a large group of people.

Special thanks go to REDSO/ESA/PH for hosting the conference and to WASH for making the necessary logistical and administrative arrangements which are so important for conducting such an activity. Their support throughout the entire workshop made it possible for the participants to devote their full attention to the technical matters at hand. The workshop group is especially grateful to Vic Barbiero and Richard Martin (RHUDO) for arranging the participation of local guest speakers who contributed a field perspective to the proceedings.

Thanks go also to those people at USAID/Kenya and RHUDO for their participation in the workshop. They helped us test our ideas and see how we might create awareness of the importance of urban health and environmental issues for the Agency.

Last but not least, deepest gratitude is due to the workshop participants, whose unflagging attention to the task despite the long and intense hours of work and whose professional competency and expertise combined to produce the workshop's exceptional outcomes.

EXECUTIVE SUMMARY

From December 9 to 13, 1991, REDSO/ESA/PH and R&D/H sponsored a workshop in Nairobi, Kenya, on health and environment (HE) in the urban setting. It was attended by 11 participants and addressed by a number of outside guest speakers.

Workshop Goal—The goal of the workshop was to examine the present status of urban health and environment in Africa (with an emphasis on eastern and southern Africa, or ESA countries) in order to make senior management in the Africa Bureau more sensitive to the gravity of urban issues. Increased awareness within the Africa Bureau could lead to the development and implementation of urban projects addressing important issues of environment and health.

Specific Objectives

- To articulate the rationale for Bureau attention to urban HE in Africa
- To generate a list of activities that A.I.D. might consider in the area of urban HE
- To develop a set of next steps to increase awareness of urban HE issues within the development community

Africa's Urban Situation

- Urbanization of African cities is proceeding rapidly. By the year 2020, 50 percent of the African population will be living in urban centers, most of them in slums which breed disease.
- Cities worldwide, but especially in Africa, were not planned to accommodate their present populations, much less those anticipated within the next 5-10 years. Consequently, preventive and curative health services, waste disposal, water supply, air quality, and other social services are declining and will continue to do so unless given serious attention. African urban centers will deteriorate, leaving millions to face political and economic chaos.
- If urban environment falters, so too will Africa's general economy. Urban areas in Africa account for greater economic output than rural areas. Their contribution has grown from 59 percent to 65 percent between the periods 1965-80 and 1980-89. Since the urban population was 28 percent of the population in 1989, it is clear that urban areas are responsible for a disproportionate share of economic growth and production.

Major Findings

- **Urban HE as an Africa Bureau Priority**—The Bureau has shown only moderate interest in urban HE. Endorsement by senior management of the option to explore urban HE issues is a critical first step.
- **Change in Donor Investments**—Several other donors are increasing their attention to urban HE issues, a development that gives A.I.D. the opportunity to influence and collaborate with these organizations.
- **AFR/ARTS' Analytical Agenda**—As an analytical agenda item, urbanization is a natural choice; it is a regional trend that directly affects the economic development of many countries, as a multisectoral issue (linking HPN, the environment, and private sector priorities).
- **Areas of Policy Reform and NPA**—Major policy issues regarding urban housing, land tenure, squatter settlement, taxation, utility supply, service delivery, and waste disposal could be undertaken within the urban framework.
- **Privatization Initiative**—Encouraging private sector participation in the improvement of urban services fits well within with present Agency initiatives.
- **Linkage to Existing USAID Projects**—Urban issues can be approached through existing Agency policies, mechanisms, and mission portfolios (via project/program amendments).
- **Data on Urban Poor**—Inadequate data on the urban poor contribute to the difficulty of problem identification, policy planning, implementation, and evaluation of urban health projects.
- **Understanding Urban Behaviors**—An in-depth understanding of urban behavior is essential for sound policy development and implementation. There is a wide gap in applied research in this area.

Priority Actions

The group proposed several priority actions for Bureau consideration. They are classified in three categories: building Bureau awareness of urban HE issues; conducting preliminary assessments; and selecting program options.

A. *Building Awareness*

- **Establish an Urban Task force**—AFR/ARTS should establish an intra-Agency task force to explore urban HE issues and derive a Bureau position for the 1990s.
- **Mission Directors' Conference**—A brief presentation on urban HE should be made at the next Africa Bureau Mission Directors' Conference.

B. Preliminary Assessments

- **Urban Policy Assessment/Analysis**—AFR/ARTS, within its analytical agenda, might conduct preliminary assessments of urban health policies and planning procedures to gain a better understanding of the political and economic policy climate in urban Africa.
- **Technical Assessments of Urban HE**—In conjunction with the policy assessments, AFR/ARTS might conduct epidemiological, ethnographic, and environmental health assessments in selected countries.
- **Identification of Priority Countries**—If the Bureau endorses special attention to urban HE in the region, priority countries for urban HE initiatives should be identified.

C. Program Options

- **CPSP Consideration**—With Bureau guidance, missions should incorporate an urban HE assessment in their CPSP and program logical framework exercises.
- **Capital Development**—The Bureau should consider capital development activities in the urban environment, but only if these are linked to policy reform.

Chapter 1

BACKGROUND AND RATIONALE

1.1 Workshop Goal and Setting

From December 9 to 13, 1991, REDSO/ESA/PH and R&D/H sponsored a workshop in Nairobi, Kenya, on health and environment (HE) in the urban setting. It was attended by 11 participants and addressed by a number of outside guest speakers. The goal of the workshop was to examine the present status of urban health and environment in Africa (with an emphasis on ESA countries) in order to make senior management in the Africa Bureau more sensitive to the gravity of urban issues.

The specific objectives were:

- To articulate the rationale for Bureau attention to urban HE in Africa
- To generate a list of activities that A.I.D. might consider in the area of urban HE
- To develop a set of next steps to increase awareness of urban HE issues within the development community

1.2 Overview of Urban Conditions

Current projections indicate that 50 percent of the world's population will be urbanized by the year 2000 and that 50 percent of Africa will be urbanized by the year 2020. To prepare for this eventuality, African governments and major donors, particularly A.I.D., must consider urbanization in the context of overall development, and the economic and political stability of the region. Clearly there is a growing need for policy reform, private sector stimulation, environmental conservation, and democratic initiative in the cities and towns of Africa. The trends are clear:

- If pressing urban needs are not addressed, governments and nations will face growing stress from social inequity, poverty, discontent, and political instability.
- Social breakdown inhibits economic development through resources that must be devoted to law enforcement and security because of crime and political unrest and through the drag on productivity of a poor-quality, undisciplined work force.
- Social problems provide fertile ground for radical swings in political orientation.

A.I.D.'s Africa Bureau (AFR) is in a unique position to address urbanization within the context of health and environment¹ (HE). Urban HE fits in with the Development Fund for Africa (DFA) action plan and Congressional attention to health, AIDS, family planning, and natural resource conservation. It also relates to the Agency's privatization and family initiatives and will likely encompass democratization/governance in the context of municipal policy reform affecting urban slum-dwellers. Capital investment needs (housing, water supply and sanitation, waste removal, transport, and general industrial planning) might be considered. **The exploration of urban HE is tailor-made for the new Analysis Research and Technical Support (ARTS) Office's analytical agenda** since it represents an emerging issue in Africa and will impact significantly on the general development potential of the continent.

Table 1

**Urban Annual Growth Rates
1980-1989**

Country	Average Growth Rate (%)
Tanzania	10.8
Mozambique	10.7
Botswana	10.1
Kenya	8.2
Rwanda	8.1
Lesotho	7.1
Madagascar	6.3
Malawi	6.3
Zambia	6.2
Zimbabwe	6.0
Burundi	5.6
Somalia	5.5
Ethiopia	5.3
Uganda	5.1
Sudan	3.9
Mauritius	0.4
AVERAGE URBAN GROWTH RATE	6.6

Source: World Bank. World Development Report,
1991

¹ For the purposes of this document, "health" should be considered in its broadest context, i.e., general health, child survival, AIDS control, family planning, nutrition, water and sanitation, and environmental/occupational health.

1.3 Demographic Implications

The average rate of urban growth in east and southern Africa is 6.6 percent, which represents a population doubling time of less than 12 years. Table 1 illustrates the range from 10.8 percent in Tanzania to 0.4 percent in Mauritius. In squatter settlements growth rates approach 15 percent per year. Between 1975 and 2000, urban populations in Africa will have increased by 382 percent (from 66 to 186 million). Secondary and tertiary cities are also expanding steadily from the influx of the rural poor and intrinsic growth rates. Providing social services for millions of urban Africans now and in the future is a major concern for African governments. **The economic and political stability of urban centers directly affects the development potential of entire nations.**

1.4 Public Health Implications

The percentage of urban residents of African cities living in substandard housing with inadequate basic service delivery is large. As can be seen in Table 2, in most cities more than half the population is living in poverty. The urban poor often have little or no access to services and public health information. Thus they subsist in a vicious cycle of poverty, ignorance, discontent, and disease. Recent outbreaks of meningitis, cholera, and yellow fever attest to the significance of urban centers as conduits of transmission (maintaining and spreading outbreaks). The AIDS epidemic remains characteristically urban, with urban core groups thought to be the principal sources of infection.

Table 2

Percentage of Urban Poor in Substandard Housing
with Inadequate or No Services, 1980

Angola	44-60
Ethiopia (Addis Ababa)	79
Kenya (Nairobi)	40
Lesotho	59
Malawi	80
Mozambique (Maputo)	80
Sierra Leone	80
Somalia (Mogadiscio)	60-80

Source: Tabibzadeh et al. 1989

Disaggregated data on HPN indicators for urban populations (and particularly the urban poor) are scarce. Information from the Nairobi City Commission indicates that the infant mortality rate (IMR) for Nairobi slum dwellers is about 2.6 times the national average (200/1000 vs. 76/1000). Anecdotal nutritional data indicate that chronic and acute undernutrition in urban children below 5 years is significantly higher than the national average. Asian data indicate that the crude mortality rate for slum-dwelling children is three to six times higher than for children who are better off (the difference

is probably wider in many African cities). Occupational risks for workers in small and large industries from toxic contamination, air pollution, accidents, and other dangers (including violence) are growing health concerns. Given the rates of urbanization, the contribution of urban centers to national GDPs (see below), and the political importance of urban populations, **improvements in the health status of urban dwellers will influence the growth of national economies and enhance productivity and stability.**

1.5 Economic Implications

Urban areas in Africa account for greater economic output than rural areas. Their contribution to national production has grown from 59 percent to 65 percent between the periods 1965-80 and 1980-89. Since the urban population was 28 percent of the population in 1989, **it is clear that urban areas are important factors in the national economy of many African states.**

Table 3

Urban/Rural Economic Indicators
Aggregate Data for Sub-Saharan Africa, 1965-80 and 1980-89

INDICATOR	1965-80	1980-89
Percent Urban Population ¹	14.0	28.0
Urban Proportion of Total Gross Domestic Product	59.0	65.0
Overall Annual Growth in Production for Sub-Saharan Africa	4.2	2.1
Mean Annual Growth in Rural Production	2.3	3.3
Mean Annual Growth in Urban Production	5.5	1.6

¹ Percent urban population figures are based on 1965 for 1965-80 period and 1989 for 1980-89 period. In 2015, urban population in Africa will be 50.7 percent of the total.

Source: World Bank, 1991. World Development Report, 1991. Oxford University Press, June 1991; 290 pp.

The most dynamic private sector is found in urban areas. The transformation of poor, stagnant economies to high growth has to come from urban areas, built on a strong base in agriculture. It is important to have a stable agricultural sector, but it is recognized that agriculture is unlikely to be the source of rapid growth.

The growth of output in Africa slowed markedly between 1965-80 and 1980-89 (Table 3), declining from about 4.2 percent to 2.1 percent per annum. The rural economy grew from an annual rate of 2.3 percent in 1965-80 to 3.3 percent in 1980-89. Over the same period the mean annual growth rate of the urban economy slowed from 5.5 percent to 1.6 percent. Thus, the slowing of growth came almost entirely from declining growth in urban production.

Income within urban economies is very unevenly distributed, resulting in a wide disparity between rich and poor. **Policy adjustments in taxes and in pricing systems for publicly provided services would divert resources from the rich to subsidize the poor.** Many of A.I.D.'s present efforts in health care financing are based on this premise.

Chapter 2

SPECIFIC CONSIDERATIONS

Many compelling reasons exist why the Africa Bureau should devote some of its resources to urban HE. Some discussed by the group follow.

- **Humanitarian Need**—Urbanization in Africa is expected to reach critical densities within the next 5-10 years. Slums constitute 30-50 percent of African cities and house the poorest of the poor. Outbreaks of communicable and infectious disease are becoming more common. Services are often limited by land tenure policies that deny the existence of squatters. Women are destitute and often turn to thievery and prostitution to survive. Children bear the brunt of suffering, with infant mortality (IMR) and child mortality (CMR) rates well above national averages. The structure of the family often breaks down in single-parent (female-headed) households; children are forced into begging and/or prostitution; and unemployed itinerant males fuel the spread of crime and violence. **This enormous humanitarian problem, if ignored, will only cause great stress on the future of African society.** Addressing urbanization in Africa and its social, demographic, and public health implications is a matter of grave urgency.
- **Linkage to Existing USAID Projects**—Health Population and Nutrition (HPN) priorities in family planning, health (child survival and AIDS prevention), safe motherhood, and so on can be addressed within existing projects/programs and mechanisms even if the analysis and resolution of urban problems require different approaches. Furthermore, Title III programs can be utilized as can the capital project initiative in missions where a greater urban focus is desired.
- **Consonance with AFR/ARTS HHRAA Project**—Urban issues need to be further examined by the Bureau before a management decision is made on how or whether to proceed. The proposed HHRAA project is the logical mechanism to pursue this analysis. **As an analytical agenda item, urbanization is not only a natural choice, it is also a regional trend that directly affects the economic development of many countries, and it represents a multi-sectoral issue** (linking HPN, environment, and private sector priorities). Since some groundwork has already been done on urbanization in Africa, AFR/ARTS/HHRD (via HHRAA) could "jump start" the analysis and develop a Bureau position more expeditiously.
- **Nationwide Regulatory and Standards Policy**—Major policy issues regarding housing, land tenure, squatter settlement, taxation, utility service delivery, waste disposal, and so on could be addressed within the urban framework. Such policy "reforms" would apply to existing and burgeoning urban centers and go far to minimize the negative impact of urbanization.

- **Private Sector Involvement**—Both formal and informal private sector institutions thrive in the urban environment. **Encouraging private sector participation in the improvement of urban services ties in with present Agency initiatives.** Linkage to NGO/PVO efforts and the FHA child survival/AIDS grant process might also be considered. Private (and parastatal) income generation and service delivery can go far to improve the urban environment. The expansion of the private sector role is an appropriate objective given recent Agency initiatives and DFA guidance.
- **Linkage to Other Multilateral Agencies**—The World Bank, UNDP, UNICEF, WHO and other multilateral agencies are beginning to acknowledge the "urban imperative" in their programming for the future. At present, much of this is in the formative stages of development. But **A.I.D. should thoroughly investigate what other donors are planning for Africa and identify "niches" for involvement and linkage.**
- **Urban Centers as Economic Engines**—Urban areas are the centers of manufacturing, industry, processing, export, import, and wholesale and retail trade. More than half of total national production (GDP) is urban-generated. Wealth and power are concentrated in the urban elite. Thus, **any real economic reform ultimately must be developed, approved, and implemented through the urban network of fiscal and political power. How to combine structural adjustment initiatives with an urban orientation is a question that merits serious consideration by the Bureau.**
- **A.I.D.'s Comparative Advantage**—A.I.D. has the analytical skills to assess urban policy and technical issues and to identify problems and propose solutions to decision makers. **Technically, analytical capacity and the development of policy tools in urban economics and planning in the U.S. have grown and many important lessons have been learned.** The Agency's PRE/H Bureau has accumulated experience in construction and financing in the urban environment, and the idea of linking HE and PRE/H (RHUDO) activities is appealing. Field missions can engage in policy dialogue with local authorities and other donors (with the assistance of appropriate TA).
- **Linkage to Title III Programs**—New Title III legislation permits a more flexible use of food-aid revenue. Local currency generated by food sales can be used to stimulate private investment in urban areas and also to influence urban policy reform (witness Ethiopia's proposed program). **The orientation of Title III programs towards urban development is an appropriate use of local currency and can promote important and lasting policy reform.**
- **Environmental Imperative**—Cities worldwide, but especially in Africa, were not planned to accommodate their present populations, much less those anticipated within the next 5-10 years. Waste disposal, water supply, power, transport, air quality, and social services will all continue to decline if they are not given serious attention. **African urban centers will continue to deteriorate, leaving**

millions to face political and economic chaos. Evidence from Latin America and Asia support this prediction. The challenge is how to act before the decline becomes irreversible.

- **Link to Women in Development**—Evidence indicates that women are important in social organization, particularly in slum environments. It is estimated that 80 percent of slum households are headed by women. Women encourage health-seeking behavior and provide a network for formal trade and barter. They tend to repay loans and initiate numerous informal income-generating activities. They play an important economic role as small business owners and tend to be more involved in social organizations. Women also pollute the environment, encourage child labor, and hold to traditional practices (particularly regarding preventive and curative care). Those who are destitute often turn to prostitution as a source of income. **Addressing the social, economic, and health needs of women will be a cost-effective means of improving the welfare of a large proportion of urban dwellers.**
- **The Cost of Inaction**—The inevitable consequence of inaction will be the spread of disease, increased environmental degradation, depressed economic growth, and political unrest in major African cities. **The Bureau needs to be proactive in exploring how A.I.D. can assist in averting the impending crisis of urbanization in Africa.**
- **Balance with Rural Development**—There is a need for a balance between urban and rural development. The experience of the last thirty years has shown that a strong agricultural base is needed for most African economies. Further, the rural economy cannot be successfully exploited to the benefit of the urban. In the social sector, rural social services continue to need strengthening, both for the welfare of rural populations and to mitigate tendencies to migrate to cities. Further, improvement in rural health services can take some pressure off of urban services (e.g., self-referrals to hospitals).
- **Opportunity for Self-Improvement**—The lack of formal sanction for urban slums means that their populations are, in essence, forbidden to take many vital steps to self improvement (e.g. establish law and order, ensure environmental health, make infrastructure investments, establish basic education), which inhibits the mobilization of their own resources and sustainability of any actions they are able to take for themselves.

A framework for A.I.D. involvement in urban HE was developed in the workshop. Table 4 presents tiers of involvement which might be pursued to initiate and implement urban HE activities. The level of mission interest and maturity of program will dictate where specific missions might enter the urban HE arena. At this stage of concept development, most missions will focus on the first level, i.e., analyzing policy and technical issues and providing TA for planning. This would be promoted through dialogue with national and provincial leaders. Later, more traditional TA might be provided in the form of project/program assistance. Policy reform and provision of services might then be pursued. Assistance could be directed through the government system to the city and local governments. Actual

implementation at the community level and impact on the family/individual would likely be coordinated through NGOs, formal private sector entities (for example the Aga Khan Foundation in Kenya), or community organizations. The salient issue is that initial discussions will likely take place at relatively high levels within host governments and within the donor community, followed by program/project assistance to local governments, NGOs, and perhaps directly to communities.

Table 4

Actors and Interventions in Urban Health

Direct Actors	Levels of Intervention	Type of Intervention
Donors	National Government "Provincial Government"	Policy ■ Laws ■ Procedure ■ Practices ■ Financing Planning Service Provision
Donors Private Sector	City Government	Policy ■ Laws ■ Procedure ■ Practices ■ Financing Planning Service Provision
NGOs Government Services Private Sector	Communities ■ Leaders ■ Women ■ Volunteers ■ Others	Group Action ■ WS & S ■ Environment ■ Services ■ Outreach/Education
NGOs Government Services Community Leaders	Families Individuals	■ Behavior Change ■ Household Infrastructure

Chapter 3

CONSTRAINTS

The following major constraints might hamper the Agency and Bureau in recognizing and dealing with urban HE issues:

- **Urban HE as a Bureau Priority**—The Bureau has shown only moderate interest in urban HE, and the Agency generally is misinformed about the economic, social, and political importance of the urban poor in Africa; missions have had little experience with large-scale urban projects. Endorsement by the Bureau's senior management of the option to explore urban HE issues is a critical first step.
- **Policies, Plans, and Standards**—In some cases, host country urban policies exist but have not been implemented; in other cases, policies on urban HE are not appropriate in the existing situation (e.g., land tenure and housing standards). Generally speaking, a comprehensive urban HE policy/planning review is required in most African countries with significant urban growth.
- **Understanding Urban Behaviors**—An in-depth understanding of how people behave in the urban environment is an important element of sound policy development and implementation. Little is known about the points at which interventions might occur, the choices that the urban poor face, and the most effective ways of communicating with them. Cultural determinants of motivation and health-seeking behavior are unclear. There is a wide gap in applied research here (as there is in other areas such as AIDS prevention).
- **Data on Urban Poor**—There is a lack of disaggregated data on urban issues, especially as they relate to the poor (e.g., health status, ethnic mix, income status, employment status, and migration and natural population growth), which contributes to difficulties in problem identification, policy planning, implementation, and evaluation of urban health projects.
- **Institutional Capacity**—Institutional and human resource capabilities in many countries facing large-scale urban problems are weak, showing up in a lack of analytical planning and management skills and the institutional depth to implement urban programs effectively. Often, personnel in municipal structures have responsibility for programs but little real authority to implement them effectively. A multi-donor effort is needed to address this issue through institutional development and training for long-term improvement.
- **Internal Coordination**—Coordination among federal, provincial, municipal, and informal entities is often unsatisfactory. Conduits for information feedback of administrative and technical decisions are inadequate. The delineation of roles and responsibilities among federal and municipal governments and public

and private sector providers is unclear. These deficiencies require correction for effective urban change.

- **Maintenance of Status Quo**—Those with vested interests in urban areas (the most wealthy and politically powerful) may resist change. Overcoming this will require robust political leverage by the donor community on behalf of the urban poor and a defense of the concept of human rights and equity.
- **Zero Sum Game**—The urban-rural imbalance in resource allocation is a constant theme in promoting attention to the urban environment. It will call for creative thinking about resource allocation by donors and host countries alike.
- **Dearth of Capital**—The health sector is often a low priority in national budgets, and most of the funds allocated are absorbed by civil servant salaries and the maintenance of large medical infrastructures. Generation of capital within the private and parastatal sectors is an appealing option for urban HE in Africa. In-depth analyses will be required to determine the availability of resources outside the public sector that can improve and sustain services within the urban environment. Such analyses could show the return that would be earned by domestic investment to all sectors of society. Also, policy reforms recognizing urban slums would allow mobilization of self-help capital from the poor.

Chapter 4

RECOMMENDATIONS FOR COLLABORATION/ COOPERATION WITHIN A.I.D.

4.1 A.I.D. OFFICES (Africa Bureau Relations)

- **AFR/ARTS**—AFR/ARTS/HHRD should organize an intra-Agency task force on urban HE to be linked to proposed HHRAA activities and as part of the ARTS analytical agenda. Core members might include AFR, R&D, and PRE staff. Ad hoc members could be invited from other bureaus and federal agencies and also from universities and other research institutes.
- **AFR/ARTS and Subregional Offices**—ARTS/HHRD should coordinate activities in urban HE, establishing direct liaison with the subregional offices (EA, SA, WCA). AFR/DP and AFR/ONI should also be involved in the planning and implementation of the urban HE initiative.
- **R&D BUREAU**—R&D Bureau (H/POP/ENR/NUT) interest in urban issues is growing. The Africa Bureau should work with R&D staff to set the urban agenda for Africa. Once this is done, co-financing of activities should be pursued.
- **PRE/H, RHUDO/ESA**—The PRE Bureau and RHUDO Offices are directly involved in urban development. Every effort to coordinate activities in the field and in A.I.D. should be pursued. RHUDO/mission urban activities (planned or underway) should examine the health implications of their efforts and dedicate funds as appropriate.
- **REDSO/ESA and REDSO/WCA**—The two REDSO offices can initiate and coordinate field-based research on urban HE, and manage preliminary country-specific urban HE assessments (technical, policy, economic). Field activities could be co-financed by REDSO PD&S funds, OYB transfers from REDSOs, or HHRAA-supported TA.
- **FHA (NGO/PVO GRANTS)**—FHA could be approached by ARTS to establish a subset of their child survival grants as part of urban HE. Furthermore, FHA could be asked to encourage future NGO/PVO attention to urban HE.

4.2 Ways to Collaborate

- **TA for Policy and Technical Assessments**—Initially, ARTS/HHRD (through HHRAA), REDSOs (via PD&S), and R&D (via central project resources) could support external TA to conduct policy and technical

assessments of urban HE. Policy assessments might cover: land tenure, housing standards, utilities delivery, squatters' rights, long-term national (environmental) planning, and so forth. Technical assessments might include: urban demography, infectious disease epidemiology, options for financing and cost recovery, water supply and sanitation needs, waste disposal, health service delivery, industrial pollution, etc. TA could also be provided to other donor efforts in conjunction with the Bureau's analyses.

- **Mission Level**—Technical and program offices at the mission level could collaborate with A.I.D. (AFR+R&D), REDSOs, and RHUDOs to explore urban HE issues at the country level. If an initial assessment is conducted as part of the Bureau's analytical exercise, missions could assume a field coordinator role as appropriate.
- **TA for Design of Urban Projects**—In some countries, donors are already considering health sector programs with an urban emphasis. An Africa inventory of planned donor activities is not available. However, options for collaboration with the World Bank, UNDP, and other multi- and bilateral donors should be considered by A.I.D. and field missions. If an urban emphasis is endorsed by Bureau management, co-financing of urban programs might also be considered to take advantage of A.I.D.'s comparative advantage in providing TA and policy assistance.
- **Coordination at Country Level**—If a Bureau position is developed and missions agree, they can catalyze discussions of urban HE at local Donor Coordinating Meetings.
- **Consideration of Urban HE in CPSP Development**—Bureau guidance on urban HE might contain a suggestion that an urban HE analysis be conducted as part of a mission's CPSP exercise and program logical framework development. In-depth attention would apply only to countries with relevant urban demographic, economic, and social trends.
- **Missions as Urban HE Mobilizers**—If there is agreement among mission management that urban HE merits attention, technical and program offices can organize inter-sectoral meetings among local government officials, private business representatives, chambers of commerce, local and expatriate PVOs, and other groups (Rotary, etc.) to discuss priorities and needs in urban HE.

4.3 Potential Linkages to Existing A.I.D. Programs

- **Environmental Initiative**—Congressional interest in the environment is growing. Part of the environmental situation in Africa is urbanization. Conservation of natural resources ranks high in preserving the integrity of urban life. Pollution, water supply and sanitation, waste removal, occupational health, and industrial growth have special aspects related to the urban

environment. How they might be addressed within an urban HE orientation requires further analysis.

- **Privatization Initiative**—The resources of the private sector should be tapped for financing, service delivery, job creation, and environmental regulation. Policy reform affecting tax structure (including incentives), land tenure, and construction and delivery of utilities and commodities fits in well with Agency policy of private sector enhancement.
- **Capital Projects Initiative**—Urban centers will require infrastructure upgrading. Overburdened by growing populations, urban areas will continue to experience deterioration in communications, sewer, water, power, and housing services. The potential for capital investment might be explored as part of the Bureau's urban analysis agenda.
- **HPN/AIDS Control**—Child survival, family planning, nutrition, and AIDS all require attention in the urban environment. Urban-specific technical policy adjustments of traditional interventions may be required.
- **Specific Project Linkages**—Urban issues could be pursued via a number of A.I.D. projects, notably the AFR/ARTS HHRAA project and centrally funded RD/H/POP/ENR/NUT projects. Data banks exist and technical assistance is available. Other federal agencies such as the EPA, HHS/CDC, Peace Corps, and BUCEN might be able to assist via Bureau PASAs and RSSAs. University linkages (especially urban universities and urban HBCUs like Howard, Morgan State, and Clark Atlanta) could also contribute to policy/technical analysis and training.
- **Potential Linkage to Existing Programs**—A number of donor agencies are engaged in urban programs in ESA countries. More information on these programs is required for a comprehensive understanding of potential linkages. Some groups' activities noted to date are:
 - UNDP/WB Regional Water & Sanitation Group (Nairobi)
 - World Bank (Urban HPN Sector Assessments)
 - UN Habitat (Housing Development)
 - UNICEF (Urban Child Survival)
 - Rotary Club (Urban Polio)
 - Scandinavian Aid Organizations (WS/S)
 - Bilateral Donors (GOI, JICA, Scandinavians)
 - African Development Bank

Chapter 5

MENU OF OPTIONS

Activities that the Africa Bureau might consider in the area of urban health and environment are proposed as **feasible, cost-effective, related to DFA strategy, and realistic in light of the Agency's present capabilities**. They can be classified in three categories: bureau awareness of urban HE issues; preliminary studies and assessments; potential programming options.

5.1 Building Awareness

The following steps could be taken to build awareness of urban HE.

- **Analytical Agenda**—Urban HE should be placed on the AFR/ARTS/HHRD analytical agenda.
- **Establish Task Force**—AFR/ARTS should establish an intra-agency task force to explore urban HE issues and derive a Bureau position for the 1990s.
- **Mission Directors' Conference**—A brief presentation on urban HE thinking to date should be made at the next Africa Bureau Mission Directors' Conference.
- **REDSO/RHUDO TDYs**—In East and West Africa, REDSO and RHUDO should plan joint TDYs to promote urban HE in selected missions under their jurisdiction.
- **Joint Training Course**—Joint training of HPN, environment, program, and housing officers should be conducted in urban issues.
- **Information Sharing**—A.I.D. and the field should share information within and outside A.I.D. (academicians, Congress, other donors, etc.) regarding urban health/environment.

5.2 Preliminary Studies and Assessments

The following steps would build the knowledge base about urban HE, permitting the importance of the problem and its facets to be quantified. This would provide the information needed to assign urban HE its proper priority and identify and focus opportunities for intervention.

- **Urban Policy Assessment/Analysis**—AFR/ARTS might conduct preliminary assessments of urban health policies, planning, and standards (related to land tenure, housing, employment, education, economic activity,

law enforcement, environmental pollution, health status, outbreak management, etc.) to gain a better understanding of the political and economic policy climate in urban Africa. These analyses could be performed via literature and field surveys in three or four countries, depending on available resources and statistical requirements, and would provide field guidance on urban priorities and how A.I.D. might address them in the future.

- **Technical Assessments of Urban HE**—In conjunction with the policy assessments, AFR/ARTS might conduct epidemiological, ethnographic, and environmental assessments² from which the Bureau could derive a methodology to standardize MER activities in the urban environment. Although technical assessments may require more time to plan and complete, they will be important in assisting the Bureau to decide on its orientation to urban HE. A starting point might be the respective REDSOs, which could be tapped to gather existing information. Perhaps such assessments could be linked to mission HPN projects and supported with mission or REDSO PD&S funds or R&D central resources in addition to HHRAA resources.
- **Inventory of Existing Activities**—Linked to the policy and technical assessments could be an inventory of NGO, PVO, university, corporate, and donor activities at the urban level in specific countries. This could also include an analysis of private sector care provision and the potential to expand private sector curative and preventive service delivery.
- **Identification of Priority Countries**—If the Bureau endorses special attention to urban HE in the region, priority countries for urban HE initiatives should be identified.

5.3 Project/Program Options

The program options below are predicated upon a well-defined Bureau position on urban HE. It is anticipated that programming action might occur in late FY 93 or early FY 94.

- **CPSP Consideration**—With Bureau guidance, missions should incorporate an urban HE assessment in their CPSP exercise.
- **Capital Development**—The Bureau should consider capital development activities in the urban environment but only if they are tied to specific policy, planning, and standards reform.

² Assessment elements for the urban poor (and other groups at risk) might include: estimates of population; family and household composition; health status; health-seeking behavior; income; employment; shelter; nutritional status; educational attainment and access to education; access to services; motivation; behavior; community organization; pollutants inventory; and access to water supply and sanitation.

- **Small Grants Program**—A small grants program for NGOs for urban health should be developed.
- **Provision of Long- and Short-Term TA for:**
 - Urban trend analysis (HPN and environmental)
 - Development of industrial environmental standards
 - Coordination of national environmental planning
 - Training of national counterparts
- **Project Development**—Urban HE amendments to existing HPN/ENR projects (child survival, family planning, AIDS, NRMS, etc.) might be developed. The option(s) for new urban HE bilaterals could be explored. The concept of a joint PRE-AFR Bureau urban HE project might be considered.
- **Attention to Urban Poor**—Via NPA, credit mechanisms should be developed for housing and sanitation improvement loans for the urban poor. Private sector investment should be encouraged to increase wealth (jobs) in urban areas and thereby the ability of the poor to pay for services.

Chapter 6

NEXT STEPS

6.1 Overview

The next steps are intended to maintain urban HE momentum within R&D and arouse interest within the Africa Bureau. They are set down in order of priority.

6.2 Next Steps: Priority One

- Summary cable to ESA prepared by REDSO/PH (2/92)
- Memorandum to Africa Bureau (FCF to RC) (2/92)
- Report reviewed by participants and finalized by WASH (2/92). Distributed to missions and A.I.D. (3/92)
- Urban issues put on ARTS agenda (HHRAA) (3/92)
- Urban HE presentation placed on agenda of next Mission Directors' Conference (6/92)
- Urban health component incorporated into R&D Environmental Health Project PID (2/92)
- Bureau urban HE coordinator identified (6/92)
- Constitute AFR task force (6/92)
- FTE approved, identified, and assigned to AFR urban HE (10/92)
- R&D worldwide reporting cable³ dispatched (4/92)
- Inventory AFR projects conducted and programming trends analyzed (7/92)

6.3 Next Steps: Priority Two

- AFR and R&D collect/analyze data formally (7/92-2/93)

³ R&D/H has convened two workshops on urbanization (March and June 1990). To date, an information cable has not been distributed worldwide.

- AFR establishes operational links with PRE/H (Fred Hanson, et al.) (8/92)
- REDSO/ESA and R&D/H staff prepare technical and FRONTLINES articles (6/92)
- AFR discusses urban HE with R&D Bureau (3/92)
- CDIE develops list of UNDP/World Bank urban projects (6/92)
- AFR/ARTS establishes link with World Bank/EDI (5/92)
- AFR initiates talks with F. Zobrist and J. Gaudet (5/92)
- Priority country analysis (10/92)
- Joint AFR/R&D white paper produced on urban HE (10/92)
- Get urban issues on agency professional conferences (Ed., Ag., HPN, Econ., etc.) (10/92)

6.4 Next Steps: Priority Three

- Mission/contractor personnel dialogue with counterparts (10/92)
- NCIH session on urban issues developed and submitted (Oct. 92 for abstracts) (10/92)
- WCA workshop developed and implemented (10/92)
- Amend existing HPN and ENR projects to include HIS for urban HE (9/92)
- Build urban HE into Sister Cities Project (8/92)
- Conduct urban HE assessments in selected African countries (1/93)
- Establish links with U.S. urban studies programs and the "Big 8" (11/92)
- Explore links with U.S. foundations (11/92)
- AFR promotion of HE at missions (9/92)

Table 5

NEXT STEPS

ACTION	FEB 92	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN 93	FEB
PRIORITY ONE													
Summary cable to ESA prepared by REDSO/PH	XX												
Memorandum to Africa Bureau (FCF to RC)	XX												
Report reviewed by participants and finalized by WASH	XX												
Report distributed to missions and A.I.D.		XX											
Urban issues put on ARTS agenda (HHRAA)		XX											
Urban HE presentation placed on agenda of next mission directors' conference					XX								
Urban health component incorporated into R&D Environmental Health Project PID	XX												
Bureau urban HE coordinator identified					XX								
Constitute AFR task force					XX								
FTE approved, identified, and assigned to AFR urban HE									XX				
R&D worldwide reporting cable dispatched			XX										
Inventory AFR projects conducted and programming trends analyzed						XX							
PRIORITY TWO													
AFR and R&D collect/analyze data formally						XXX	XXX						
AFR establishes operational links with PRE/H (Fred Hanson, et al.)							XX						

102

ACTION	FEB 92	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN 93	FEB
REDSO/ESA and R&D/H staff prepare technical and FRONTLINES articles					XX								
AFR discusses urban HE with R&D Bureau		XX											
CDIE develops list of UNDP/World Bank urban projects					XX								
AFR/ARTS establishes link with World Bank/EDI				XX									
AFR initiates talks with F. Zobrist and J Gaudet				XX									
Priority country analysis									XX				
Joint AFR/R&D white paper produced on urban HE									XX				
Get urban issues on agency professional conferences (ED., AG., HPN, Econ, etc.)									XX				
PRIORITY THREE													
Mission/contractor personnel dialogue with counterparts									XX				
NCIH session on urban issues developed and submitted									XX				
WCA workshop developed and implemented									XX				
Amend existing HPN and ENR projects to include HIS for urban HE								XX					
Build urban HE into Sister Cities Project							XX						
Conduct urban HE assessments in selected African countries												XX	
Establish links with U.S. urban studies programs and the "Big 8"										XX			
Explore links with U.S. foundations										XX			
AFR promotion of HE at missions								XX					

24.

Appendix 1

PARTICIPANT LIST

Workshop on Urban Health and Environment
Nairobi, Kenya
December 9-13, 1991

Full time participants

Margaret Neuse	Chief, REDSO/ESA/PH
Victor Barbiero	Public Health Advisor, REDGO/ESA/PH
Tom Leonhardt	Consultant, WASH Project
Holly A. Fluty	R&D/Health, Urban Health Coordinator
Craig Hafner	Deputy Director, WASH Project
Rita Klees	AAAS Fellow, R&D/Health
Diana Silimperi	Management Sciences for Health
Barry Levy	Management Sciences for Health
Agma Prins	PRITECH Regional Office, Yaounde
Mary Pat Selvaggio	Director, HPN, USAID/Mozambique
Andre de Georges	Environmental Office/REDSO
Marty Makinen	Technical Director, Health, Financing, and Sustainability Project, Abt Associates, Inc.

Guest participants

Mike Lippe	Director, RHUDO/ESA
Richard Martin	RHUDO/ESA
Carol Steele	Program Office, USAID/K
Stafford Baker	Projects Office, USAID/K
Pat Fleuret	Projects Office, REDSO/ESA
Mukami Mwiraria	UNDP/World Bank
Veli Aalto	World Health Organization
Davidan Lamba	Mazingira Institute
Fatima Mohammed Ali	Nairobi City Commission
Ingrid Monroe	African Housing Fund
Melvin Woodhouse	African Medical Research and Education Foundation
Lynette Ochola	UNDUGU Society
John Blaxall	UNDP/World Bank Regional Water Supply Group
Leandre P. Okoth	Nairobi City Council

Appendix 2

WORKSHOP ON URBAN HEALTH AND ENVIRONMENT FOR AFRICA

REDSO/ESA
December 9-13, 1991
Nairobi, Kenya

Workshop Goal

To document the rationale for attention to urban health and environment, examine the present situation, identify obstacles, and propose appropriate activities so that those responsible for programs and projects will be made more aware of the need to include urban health and environment as an integral part of on-going and future USAID initiatives.

Workshop Objectives

- Define the rationale/justification for an urban focus in health and environment
- Propose operational definitions for underlying concepts such as "health," "urban," and "environment"
- Examine the dimensions of the present situation including what is being done by other agencies (to be supported by data and information)
- Identify possible AID and non-AID obstacles to working in the urban environment
- Review the DFA's strategies to ensure agreement of workshop recommendations with their goals
- Generate a list of activities that AID might undertake in the area of urban health and environment
- Develop a set of next steps for increasing awareness of urban health and environmental issues within the development community



Appendix 3

WORKSHOP AGENDA

Urban Health and Environment
December 9-13, 1991

December 8, 1991

1600 Participant Introductions
Discussion of Workshop Goal, Objectives, and Agenda

December 9, 1991

0900 Opening Remarks: Victor Barbiero, REDSO/HPN
0930 Goal and Objectives: Tom Leonhardt, WASH Consultant
1000 Background Information: Holly Fluty, R&D/H
1100 View from the Field: Mike Lippe & Richard Martin, RHUDO
1400 Overview of Urban Health in Africa: Barry Levy and Diana Silimperi, MSH
1530 The Changing Urban Environment: Craig Hafner, WASH Project, and Rita Klees, R&D/H
1700 Participant Meeting: All participants

December 10, 1991

0900 Introductions and Background Information: Vic Barbiero
1000 Kibera Case Study: Mukami Mwiraria, UNDP/WB
1100 WHO Activities: Veli Aalto, WHO
1300 Mazingira Institute: David Lamba, Exec. Dir.
1400 Nairobi City Commission: Fatima Mohammed Ali,

Public Health Commission

1500 African Housing Fund: Ingrid Monroe
1600 AMREF: Melvin Woodhouse
1700 UNDUGU: Lynette Ochola, Head
Social Welfare
1800 Participants work on agenda for the following days

December 11, 1991

0830 Health Care Delivery: Diana Silimperi and Barry Levy, Management
Sciences for Health
1030 Policy and Planning: Marty Makinen, Health, Financing, and
Sustainability Project
1330 Political Realities: Barry Levy
1530 Financing Health Care: Marty Makinen, Health, Financing, and
Sustainability Project
1630 View from the Program Office: Three program people
1730 Review of the Day Full group

December 12, 1991

0830 Presentation: Andre de Georges,
Environmental Officer, REDSO
1000 Definitions and Rationale: Agma Prins, Barry Levy, Marty Makinen
1300 Situational Analysis and Constraints: Holly Fluty, Mary Pat Selvaggio
(USAID/Mozambique), Rita Klees
1500 Collaboration: Craig Hafner, Vic Barbiero, Diana Silimperi
1600 Next Steps: Full group
Group Brainstorming

December 13, 1991

0830	Review Constraints:	Full group
1000	Prioritize Next Steps:	Full group
1130	Generate A.I.D. Activities:	Full group
1330	Discuss Activities in Light of Constraints and Next Steps:	Full group
1530	Discuss Workshop Report Timeframes:	Full group
1630	Review of Workshop Objectives:	Full group

Appendix 4

BIBLIOGRAPHY

General/A.I.D. Policy

1. African Urban Population Growth. Joe Denver. PPC/CDIE/DI, 1991.
2. Background Paper for Urban Health Discussion: An Urban Point of View. Kenneth Olivola. Unpublished paper, n.d.
3. "Third World Urbanization and American Foreign Aid Policy: Development Assistance in the 1990s," D.A. Rondinelli and R.W. Johnson. IN: Policy Studies Review, Winter 1990, 9(2): 246-262.
4. "Ten best readings in ... urban health planning," Carolyn Stephens. Health Policy and Planning, 1990, 5(4): 389-391.
5. "Planning in Squatter Settlements: An Interview with a Community Leader," Donald T. Lauria and Dale Whittington. JPER, Vol. 9, No. 3.
6. "Maybe I can look forward now...", Lindsey Hilsum. UNICEF News.
7. "My children, there has been an uncontrollable stampede," Alkaly Kaba. UNICEF News.
8. "Towards an urban world," Winthrop P. Carty. Earthwatch, 1991 4th Quarter, No. 43.
9. "Urbanization without health," Sandy Cairncross, Jorge Hardoy and David Satterthwaite. Earthwatch, 1991 4th Quarter, No. 43.
10. "Family planning for the growing cities," Pouru Bhiwandi, Jason B. Smith and Malcolm Potts. Earthwatch, 1991 4th Quarter, No. 43.
11. "Life and love in the barrios," Sarita Kendall. Earthwatch, 1991 4th Quarter, No. 43.
12. "Is population the real problem?" Paul Harrison. Earthwatch, 1991 4th Quarter, No.

Health Policy/Finance

1. Access to Basic Infrastructure by the Urban Poor, Aurelio Menéndez. Economic Development Institute of the World Bank Policy Seminar Report No. 28. 1991.

2. "Door-to-Door Canvassing for Immunization Program Acceleration in Mozambique: Achievements and Costs," Felicity T. Cutts, Margaret Phillips, Simone Kortbeek, and Apolinario Soares. International Journal of Health Services, 1990, Vol. 20, No. 4.
3. Urban Health- The International Perspective, WHO. Geneva, 1989.
4. Urbanization and Its Implications for Child Health: Potential for Action, WHO. Geneva, 1988.
5. Urbanization and Sustainable Development in the Third World: An Unrecognized Global Issue, HABITAT. Nairobi, 1990.

Environmental Health

1. "Parasitic diseases and urban development," K.E. Mott, P.Desjeux, A. Moncayo, P. Ranque and P. de Raadt. Bulletin of the World Health Organization, 1990, 68(6):691-698.
2. Relative health impacts of environmental problems in urban areas of developing countries, Sandy Cairncross, Trudy Harpham and Carolyn Stephens. London School of Hygiene and Tropical Medicine Publication. London, 1990.
3. Urban Environmental Health and Hygiene in Sub-Saharan Africa, Erik Nordberg and Uno Winblad. Swedish International Development Authority, Stockholm, 1991.
4. "Urbanization and Health in Developing Countries," Trudy Harpham and Carolyn Stephens. World Health Statistics Quarterly, 1991, No. 44.
5. Urbanization: Water Supply and Sanitation Sector Challenges, HABITAT. Nairobi, 1991.
6. "Water Supply, Sanitation and Health in Peri-Urban Areas," Peri-Net, October 1991, Vol. 1, No. 1.

African Studies

1. "Building a community in Bungoma, Kenya," Settlements Information Network Africa. Environmental and Urbanization, April 1990, Vol. 2, No. 1.
2. "Child health in the spontaneous settlements around Khartoum," Mohammed Ibrahim Ali Omer. Environmental and Urbanization, October 1990, Vol. 2, No. 2.
3. "Hawking as a survival strategy for the urban poor in Nairobi: the case of women," Winnie Mitullah. Environmental and Urbanization, October 1991, Vol. 3, No. 2.

4. "Implementing a new approach to urban health problems: the case of Addis Ababa," Wendmu Dejene. Environmental and Urbanization, October 1991, Vol. 3, No. 2.
5. "Lower standards, higher welfare," The Economist, September 15, 1990.

Documents from the Workshop

1. "Despair and Hope in the Slums of Nairobi," UNDUGU Society of Kenya.
2. "Environmental Health Components for Water Supply, Sanitation, and Urban Projects," James A. Listorti. World Bank, Washington, D.C., 1990.
3. "The Health of Adults in the Developing World," Richard G.A. Faehem (ed.) et al. World Bank (Population and Human Resources Dept.), Washington, D.C.
4. "Housing and Health: An Agenda for Action," WHO, Geneva, 1987.
5. "Images of UNDUGU and Friends," UNDUGU Society of Kenya.
6. "Occupational Health and Safety in Developing Countries," Barry S. Levy, M.D. Paper presented at NCIH conference, June 19, 1990.

Newsletters

1. Community Builders Bulletin, African Housing Fund, P.O. Box 41479, Shelter-Afrique House, Mamlaka Rd., Nairobi, Kenya.
2. Environment and Health in Developing Countries, Management Sciences for Health, 400 Center St., Newton, MA, USA 02158.
3. Sina, Settlements Information Network Africa, Mazingira Institute, P.O. Box 14550, Nairobi, Kenya.
4. Urban Directions, African Research Network for Urban Management (ARNUM), same address as above.
5. Urban Perspectives, c/o Editor, Urban Perspectives, RHUDO, P.O. Box 30261, Nairobi, Kenya.