



Children's experience of the physical environment in poor urban settlements and the implications for policy, planning and practice

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1. This calculation was presented in Hardoy, Jorge et al (editors) (1990), *The Poor Die Young: Housing and Health in Third World Cities*, Earthscan, London; and subsequently endorsed by the World Commission on Health and Environment (1992), *Our Planet, Our Health*, WHO, Geneva.

2. The Convention on the Rights of the Child, adopted in 1989 and ratified by all but two member countries of the United Nations, recognizes children's right to a standard of living adequate for physical, mental, spiritual, moral and social development (Article 27). Also relevant here are the right to the

SUMMARY: *This paper describes how children's needs are routinely ignored or misunderstood by urban development policy, plans and practice – and the very high costs this brings for them in terms of ill-health, injury, premature death and impaired physical, mental and social development. For instance, provision for water, sanitation and housing often fails to address the main requirements for child health while neighbourhood-wide development fails to understand the significance of play for children's development, including the extent to which adequate provision reduces accidents. The impact on children of evictions, overcrowding and neighbourhood violence is also considered. The paper also describes, with examples, how acting on children's needs and priorities can be incorporated into existing interventions without major cost increases, and the benefits this brings for children and for other inhabitants.*

I. INTRODUCTION

THE WORLD HEALTH Organization estimates that more than 600 million urban residents in the South live in life and health-threatening conditions – on dangerous land sites, in overcrowded, precarious housing and in neighbourhoods that lack basic amenities and services.⁽¹⁾ These living conditions have particularly far-reaching consequences for children and adolescents as they are more vulnerable than adults to a range of environmental concerns and more likely to be affected in ways that have long-term repercussions. This paper will describe some of the particular impacts on children of adverse living conditions and some responses that take these differences into account.

There are practical reasons for considering this subject. In spite of the significance to children of their everyday living environments, both for their immediate health and well-being and for their longer-term development, and in spite of their legally established right to an adequate standard of living,⁽²⁾ this is an area that does not receive much attention. It is a reflection of the generally low priority given to the living conditions of the urban poor both by international donors and by national and local governments.⁽³⁾ But even within the context of the interventions that *do* exist in this area, children's needs are routinely overlooked as a result of some common assumptions and perceptions.

- Planners and policy makers involved in housing, infrastructure and community upgrading tend not to know much about children's

CHILDREN AND URBAN ENVIRONMENTS

concerns or to understand what impact their work may have on children. Interventions are generally targeted at households or communities and, in the attempt to establish more general priorities, children's needs can easily be overlooked. There is an implicit assumption that improved conditions for a community at large will affect children in the same way that they affect everyone else. This is not always true, as will be discussed in more detail below.

- It is assumed also that the problems that most seriously affect children are most effectively dealt with by specialized children's organizations and agencies – or conversely, that the range of interventions undertaken by these organizations define the full scope of children's requirements. Such groups, at every level, have done much to improve the quality of children's lives but they do not pretend to respond to all the issues that affect children and they generally do not address such issues as housing and community upgrading. Because these issues affect all residents, and not just children, it makes little sense to address them with separate, child-centred interventions. Some children's organizations have, in fact, made significant investments in improving living conditions.⁽⁴⁾ These interventions, however, are a small (and often shrinking) proportion of overall programming⁽⁵⁾ and, while they have introduced some innovative solutions, they do not have the capacity to take these solutions to scale.
- It is often assumed that families will be the primary guardians of their children's welfare. But in conditions of urban poverty, it can be difficult for even the most committed caregivers to respond adequately to their children's needs. What might in other circumstances appear to be neglect can be a reflection simply of the most challenging conditions and time burdens. Caregivers are repeatedly faced with unforgiving choices. Should young children drink contaminated water or should they go thirsty? Should they play beside streets with heavy traffic or be kept indoors where there is little space and an open fire to contend with?
- Some children's issues attract a disproportionate amount of attention. The plight of children on the street is a good example. Although their problems are very real and deserve attention, street children represent a small percentage of the those at risk in the cities of the South. An experienced practitioner in this area has gone so far as to suggest that street children have "hijacked" the child agenda.⁽⁶⁾ The needs of more visibly and dramatically affected populations can distract attention from the basic requirements of the millions of children subjected to the more silent emergencies of routine poverty.

If the full range of children's concerns is to receive the necessary attention, it is essential that the impact on children of conditions within their homes and neighbourhoods be recognized and understood. Many of the pertinent issues are not well-documented by formal research from the South – our knowledge is especially limited with regard to children's psycho-social welfare and development. Where formal data is lacking, however, it is possible to draw on the wealth of experience of practitioners, mothers and children from the South as well as on relevant research from the North.

II. HEALTH

WE KNOW THE most about the risks to children's health. There are

highest attainable standard of health (Article 24), the right to play and recreation (Article 31) and the right to be protected from all forms of negligence and abuse (Article 19) (since, as will be discussed below, abuse and negligence can be unfortunate responses to overly challenging living conditions).

3. Satterthwaite, D. (1997), *The Scale and Nature of International Donor Assistance to Housing, Basic Services and Other Human Settlements Related Projects*, WIDER, Helsinki.

4. Save the Children's international coalition, for instance, has been involved in the provision of basic services in a number of areas; and Plan International focuses a good deal of attention on the physical environment as part of its "habitat" programmes. UNICEF has dedicated a larger percentage of its budget to water and sanitation than is the case, on average, for most donor countries and development agencies although most of this assistance goes to rural areas; see Satterthwaite, D. and N. Crawhill (1997), *Development Assistance to Water and Sanitation: A Partial (draft) Overview*, prepared for a January 1997 workshop for a collaborative research project on Domestic Water Use and Environmental Health in East Africa, IIED, London.

5. See reference 4, Satterthwaite and Crawhill (1997).

6. Rakesh Rajani, in a presentation at the Urban Childhood conference, Trondheim, Norway, June 1997. I have also found, repeatedly, that even knowledgeable development professionals, on hearing that I am involved in 'children's issues', assume that I do research on street children.

7. Stephens, C. (1996), "Research on urban environmental health" in Atkinson, S., J. Songsore and E. Werna (editors), *Urban Health Research in Developing Countries: Implications for Policy*, CAB International, Wallingford, UK.

8. WHO (1995), *The World Health Report 1995: Bridging the Gaps*, World Health Organization, Geneva.

9. Stephens, C. (1996), "Healthy cities or unhealthy islands? The health and social implications of urban inequality", *Environment and Urbanization* Vol.8, No.2, pages 9-30; also UNICEF (1998), *The State of the World's Children 1998*, Oxford University Press, New York.

10. Murray, C.J.L. and A.D. Lopez (1996), *The Global Burden of Disease*, Harvard University Press, Boston.

11. Hawes, H. (1994), "Children and water", *Oasis, WaterAid, Intermediate Technology*, Autumn/Winter 1994.

12. Omer, M.I.A. (1990), "Child health in the spontaneous settlements around Khartoum", *Environment and Urbanization* Vol.2, No.2, pages 65-76.

13. Aina, T.A. (1990), "Housing and health in Olaleye-Iponri" in Hardoy, J.E., S. Cairncross and D. Satterthwaite (editors), *The Poor Die Young*, Earthscan, London.

14. UNICEF (1999), *The State of the World's Children 1999*.

15. Afsar, R. (1999), "Rural-urban dichotomy and convergence: emerging realities in Bangladesh", *Environment and Urbanization* Vol.11, No.1, pages 235-247.

16. Cairncross, S. (1990), "Water supply and the urban poor" in Hardoy, Cairncross and Satterthwaite (see reference 13).

17. Lindskog, P. and J. Lundqvist (1998), *Why Poor Children Stay Sick: The Human Ecology of Child Health and Welfare in Rural Malawi*, Scandinavian Institute of African Studies, Uppsala.

18. Nicol, A. (1998), *Carrying the Can: Children and their Water Environments*, Save the Children UK, London.

ample data to indicate that children are disproportionately affected by many of the environmental challenges that face residents in poor urban settlements.⁽⁷⁾ Almost 12 million children under the age of five still die each year, mostly from causes related to their living environments.⁽⁸⁾ One child in ten in the South still dies before the age of five and in many poor urban communities the rates are far higher.⁽⁹⁾ The Global Burden of Disease study, reported in 1997, found that three of the four leading contributors to the burden of disease worldwide are disorders that primarily affect children – lower respiratory disease, diarrhoeal disease and perinatal disorders.⁽¹⁰⁾ In 1992, 80 per cent of all those worldwide who died of diarrhoeal disease were children.⁽¹¹⁾ Local studies confirm children's greater vulnerability: in a low-income settlement in Khartoum it was found that children were almost twice as likely as adults to fall ill.⁽¹²⁾ In a poor community in Lagos, over a six-month period, two-thirds of the mortalities were children.⁽¹³⁾ Those children who survive are frequently compromised in health and development. Provision of water and sanitation, drainage and waste removal are essential for combating the diseases that still affect children in such vast numbers. But the priority given to such provision does not reflect its importance to children; nor do the standards set for such provision routinely take into account the particular requirements of young children and the particular challenges faced by parents in urban poverty.

a. Children and Water Provision

Consider water provision, for example. Many communities that are reported to have adequate access to clean water may, in fact, be coping with provision that is quite inadequate for households with young children. In urban Bangladesh, 99 per cent of households are considered to have access to safe water.⁽¹⁴⁾ But most of those living in Bangladesh's "urban slums" do not have water piped to their homes and the median time needed to collect water from a communal standpipe or well is 30 minutes per trip. At least two trips are necessary, on average, just to collect a family's drinking water.⁽¹⁵⁾ If a water source is too distant, if lines are too long, if supplies are too irregular, overworked caregivers are unlikely to have the time to carry water in the quantities required for the care of young children. It is important to recall that the quantity of water available to a household is considered even more important than water quality in ensuring the conditions necessary for children's health and survival.⁽¹⁶⁾

There is also household water management to consider: when water is not piped directly to a house or yard it needs to be stored and this can create problems when there are young children. If there is a scoop to take water out of a bucket, children may leave it on the ground or contaminate it with dirty hands. Health education programmes suggest hanging the scoop out of children's reach. But when children are thirsty, they may dip into the bucket with their hands rather than waiting for an adult to help them.⁽¹⁷⁾

Often, it is the children who carry water. A distance that might be reasonable for a grown person can be punishing for a child. Damage to neck, head and spine can result from carrying overly heavy loads.⁽¹⁸⁾ Carrying water can also be a serious energy drain for children who may already be undernourished. The time required for water-carrying, especially for girls, can be sufficient to prevent school attendance. In some situations, placing pumps next to schools has been noted to increase school attendance because of the time savings for children.⁽¹⁹⁾

CHILDREN AND URBAN ENVIRONMENTS

Sometimes, improved provision can have perverse effects on children. When water sources are placed closer to home, or when pumps are installed that are easy to operate, adults may be more likely to send children for water.⁽²⁰⁾ It is clear that there can be no formulae for adequate provision (outside of the ideal goal of water piped to every house or yard). Local realities, and the full complexities of life for both children and their caregivers, need to be taken into consideration. It is sufficient to note here that the assessment of adequacy and the placement of water supplies may be quite different when the impacts on children are considered.

b. Children and Sanitation

The quality of provision for sanitation also has distinct implications for children. Many of the illnesses related to inadequate sanitation and contact with excreta affect children most heavily. This may be, in part, a function of children's behaviour – the fact that they are in closer contact with the ground and have less appreciation of hygiene can result in higher rates of infection. But it is also due to their relatively lower immunity to diarrhoeal pathogens. Children's stools are more frequently infected and they often have higher worm burdens.⁽²¹⁾

Solutions that are workable for adults may be completely impractical for young children. Where resources are tight, shared latrines may appear to be a reasonable alternative in urban communities, a great improvement over no provision at all. But a latrine even 50 metres away can present significant problems. Young children have trouble waiting when they need to use the toilet, especially if they have diarrhoea, a common enough occurrence in communities with poor environmental health. Taking a young child to the latrine is not an activity that can reasonably be planned in advance. It may mean a long wait in line or leaving other children at home unattended. If children go to the latrine alone, they may be elbowed out of the way by adults waiting in line.

For many children, latrines are frightening places; they are dark and smelly and the pit openings are designed for adults. The fear of falling in

19. See reference 18.

20. Johnson, V., J. Hill et al. (1995), *Listening to Smaller Voices: Children in an Environment of Change*, Actionaid, Chard, Somerset UK; also reference 18, Nicol (1998).

21. Feachem, R.G., D.J. Bradley et al. (1993), *Sanitation and Disease: Health Aspects of Excreta and Waste Management*, John Wiley and Sons, for the World Bank, Chichester, UK.

Box 1 Taking Children's Toilet Needs Seriously at Viyamshala Gymkhana

Viyamshala Gymkhana is one of the oldest, most crowded slums in the heart of Bangalore. Until this year, the community's 300 families had no functioning toilets. This children's latrine and six-seater community toilet were designed and built by members of the 200 strong Viyamshala *Mahila Milan*, who had visited Bombay and met women in Byculla who are veterans of dozens of toilet-building projects around India.

In crowded slums like Viyamshala, kids get elbowed out of long toilet queues and end up soiling the ground outside. This is one of the biggest contributing factors to deteriorating communal toilets. The Bangalore *Mahila Milan* understood this and took the needs of small children seriously when they planned this special children's latrine on the site of a former garbage dump. There are no cobwebs, no lizards, no unlit stalls and no deep latrines to be afraid of falling into. Mothers can keep a look-out nearby while they wash clothes at the tap or chat with friends in the queue. Also, boundary walls have been brightened with Mickey Mouse tiles and inset with patterns of pebbles so that children can practise counting during their visits to the latrine.

The latrine cost just Rps 7,200 and is technically very simple: its ten positions have sturdy handlebars and drain into a central channel and hence into a single gully trap down at the end. Both the children's latrine and the adjacent toilet block drain directly into city sewers. A few handfuls of wash water are enough to flush, and everybody shares in the task of keeping the latrine clean.

SOURCE: SPARC, *Mahila Milan* and National Slum Dwellers Federation (1998), *Citywatch: India* No.6, Bombay, page 20.

22. See reference 17; also UBS (1990), *Urban Basic Services: A Community Profile, Biratnagar, Nepal*, prepared for Biratnagar Municipality, Ministry of Local Development, HMG/Nepal and UNICEF.

23. SPARC, *Mahila Milan* and National Slum Dwellers Federation (1998), "Bangalore: taking children's toilet needs seriously at Viyamshala Gymkhana", *Citywatch: India* No.6, page 20.

24. Cairncross, S. and E.A.R. Ouano (1990), *Surface Water Drainage in Low-income Communities*, World Health Organization, Geneva.

25. See, for instance, Awasthi, S., H.A. Glick, and R.H. Fletcher (1996), "Effect of cooking fuels on respiratory diseases in pre-school children in Lucknow, India", *American Journal of Tropical Medicine and Hygiene* Vol.55, No.1, pages 48-51; also Collings, D.A., S.D. Sithole and K.S. Martin (1990), "Indoor woodsmoke pollution causing lower respiratory disease in children", *Tropical Doctor* Vol.20, No.4, pages 151-155; Clauson-Kaas, J., C. Surjadi et al. (1997), *Crowding and Health in Low-income Settlements: Kali Anyar, Jakarta*, Avebury, Aldershot UK; and Yang, C.Y., J.F. Chiu, H.F. Chiu and W.Y. Kao (1997), "Damp housing conditions and respiratory symptoms in primary school children", *Pediatric Pulmonology* Vol.24, No.2, pages 73-77.

26. Davey, and Lightbody (1987), *The Control of Disease in the Tropics: A Handbook for Physicians and Other Workers in Tropical and International Community Health*, 5th edition (revised by David Stevenson) H.K. Lewis and Co., London

27. UNICEF (1998), *State of the World's Children 1998* is devoted to nutrition and provides an excellent summary of the issues.

28. See reference 27.

is not unreasonable – it happens. Reports from both Malawi and Nepal point out that children rarely use latrines until they are five to seven years old because of their fear of falling into the pit.⁽²²⁾ There are good reasons why children choose to squat outside – and their caregivers can be excused for allowing them to do so. It does not require many small children taking this option for an area to become completely fouled. Considering the number of young children in any poor urban settlement, it is no wonder that community latrines fail in most cases to be an adequate solution. There are some fine exceptions, such as *Mahila Milan's* toilets in India – an excellent example of child focused provision (see Box 1).⁽²³⁾

Problems with sanitation can be exacerbated by inadequate drainage and waste removal, which also present particular challenges for children. Children tend to play wherever they can find open space; when they play on ground contaminated with uncollected refuse, or in standing water contaminated by blocked sewers, overflowing septic tanks and defaecation in the open, they are especially exposed to infection.⁽²⁴⁾

c. Household Conditions and Respiratory Disease

A leading cause of death and morbidity in young children in the South is respiratory disease and it has been clearly established that this is related in part to household conditions. Overcrowding and poor ventilation encourage the spread of infection, and both dampness and poor indoor air quality, resulting from open fires or poorly vented stoves, increase susceptibility to respiratory illness.⁽²⁵⁾ Young children and their caregivers are also likely to spend more time indoors than other family members. Overcrowding is a difficult problem to resolve – but moisture-proof housing materials, ventilation openings, proper smoke exits from cooking fires, the availability of affordable and efficient stoves, and subsidization of appropriate fuels could all help to reduce children's vulnerability to this major cause of mortality for under-fives.⁽²⁶⁾

d. Household Conditions and Malnutrition

More than half of child deaths in the South are directly or indirectly attributable to malnutrition. When children are malnourished their bodies' defences are weakened, they get sick more easily and their illnesses are more severe. Malnourished children have less energy and curiosity, and this can also impair their mental development. Their interest in food diminishes when they are undernourished and so the cycle perpetuates itself.⁽²⁷⁾

Malnutrition is not only a function of the amount of food available within a household; especially for young children it is also dependent on the ease with which food can be prepared and stored. When cooking facilities are inefficient and time-consuming, households often settle for preparing meals less frequently. But young children can hold only limited quantities of food in their stomachs at one time. In order to obtain enough calories, they need frequent small meals. This is particularly the case when the available foods are bulky rather than concentrated and when large amounts are needed to meet nutritional needs.⁽²⁸⁾ The situation becomes still more difficult if cooked food cannot be safely stored and is easily spoiled. Here again, practical interventions could have disproportionate effects on children and their caregivers. Cooking stoves that are fuel efficient, well-ventilated and easily operated could have beneficial effects

CHILDREN AND URBAN ENVIRONMENTS

both on young children's nutritional status and respiratory health, and would also make more time available for overburdened caregivers.

Nutritional status is also affected by the presence of intestinal parasites – even a relatively mild infestation can consume 10 per cent of a child's total energy intake as well as interfering with digestion and absorption.⁽²⁹⁾

III. PLAY AND SAFETY

MANY OF THE environmental hazards that children face become hazards in large part because of their drive for play. In this context, it is important to discuss why play is so critical for children especially since it is seen by many as a frivolity in the context of real hardship.

a. The Significance of Play for Children

Given a reasonable level of health and security, and given the opportunity, most children choose to play – to engage passionately with the world around them through exploration, manipulation, physical exuberance, experimentation and pretence, either alone or with others. Play is a basic human drive and is fundamental to children's development. Data from the fields of neuro-psychology and psycho-pharmacology indicate that distinct changes in the brain occur as a result of play, and that both social behaviour and the capacity for learning are affected. The effects are particularly significant early in life when there is dramatically greater potential – eight-month olds, for instance, have up to 2,000 times as many synaptic connections as adults, which attenuate when they are not actually used.⁽³⁰⁾ This enormous potential for learning is activated by the child's playful interaction with the world which, in turn, is encouraged by diverse and stimulating environments.⁽³¹⁾

This does not mean that children need expensive toys and equipment or specially designed playgrounds. They play ingeniously with whatever comes to hand and are resourceful and creative in drawing stimulation from their surroundings. In fact, experience from around the world has demonstrated that even when more formal provision is made for play, children tend to prefer the spontaneous opportunities offered on the streets, sidewalks, alleyways and vacant lots. Even the poorest households and neighbourhoods can be rich environments for play, full of stimulating objects and opportunities. Supportive adults at home, within childcare, at school and in the community can do a great deal to ensure that these opportunities are available.⁽³²⁾ But environmental conditions within these households and neighbourhoods can also present unacceptable levels of risk for children.

b. Unintentional Injuries

Hundreds of thousands of children around the world are killed or disabled every year from injuries occurring within their homes or neighbourhoods. In the North, injuries are the leading cause of child death. In countries where communicable disease and nutritional problems still take many lives, the problem of injury is relatively less significant – but only relatively.⁽³³⁾ Available figures are incomplete and unreliable but there is every reason to believe that unintentional injury in the South is much more of an issue, especially for children in poor communities. Open fires and exposed kerosene heaters, unprotected stairways, rooftops and elevated walkways, lack of

29. Satterthwaite, D., R. Hart and others (1996), *The Environment for Children*, Earthscan, London; also see reference 27.

30. Hughes, B. (1999), "Does playwork have a neurological rationale?", *Proceedings of the 1999 PlayEducation Conference*, PlayEducation, Ely, UK.

31. Wohlwill, J. and H. Heft (1987), "The physical environment and the development of the child" in Stokols, D. and I. Altman (editors), *Handbook of Environmental Psychology*, Wiley, New York.

32. Bartlett, S., R. Hart, D. Satterthwaite et al. (1999), *Cities for Children: Children's Rights, Poverty and Urban Management*, Earthscan, London.

33. Manciaux, M. and C. Romer (1991), *Accidents in Childhood and Adolescence: The Role of Research*, World Health Organization, Geneva.

34. Zimba, R.F. and B. Otaala (1991), "Child care and development in Uukwaludhi, northern Namibia", paper presented at the workshop on Child Rearing Practices and Beliefs, Windhoek, Namibia, October 26-29, 1993.
35. Pfeffer, K. and P. Barnecutt (1996), "Children's auditory perception of movement of traffic sounds", *Child Care Health Development* Vol.22, No.2, pages 129-137.
36. Kibel, M.A. and L.A. Wagstaff (editors) (1995), *Child Health for All: A Manual for Southern Africa*, Oxford University Press, Capetown.
37. Berger, L.R. and D. Mohan (1996), *Injury Control: A Global View*, Oxford University Press, Delhi.
38. Edet, E.E. (1996), "Agent and nature of childhood injury and initial care provided at the community level in Ibadan, Nigeria", *Central African Journal of Medicine* Vol.42, No.12, pages 347-349; also Janson, S., M. Aleco et al. (1994), "Accident risks for suburban pre-school Jordanian children", *Journal of Tropical Pediatrics* Vol.40, pages 88-93; and Reichenheim, M.E. and T. Harpham (1989), "Child accidents and associated risk factors in a Brazilian squatter settlement", *Health Policy and Planning* Vol.4, No.2, pages 162-167.

storage for chemicals and poisons, piles of debris and heavy traffic are all hazards that expose children to a high level of risk.

Children tend to be more vulnerable than older people. Their curiosity and desire to explore are not always matched by their developmental capacity to understand danger. Very young children have to be watched constantly and this can be difficult given the burdens and often conflicting responsibilities of caregivers. Siblings, often left in charge of younger children, may not have the foresight or concentration to keep them out of trouble. A survey in Namibia found that 33 per cent of injuries occurred when children were unattended.⁽³⁴⁾ Even when children appear old enough to understand danger, they are not always equipped to respond as adults would. The capacity to interpret how fast a car is moving, for instance, or to locate accurately the sound of an approaching car has been found to be somewhat limited before the age of six or seven.⁽³⁵⁾ In South Africa, traffic accidents are the leading cause of death for children over the age of one, and this is not an unusual statistic.⁽³⁶⁾ Even when they are old enough to understand danger and able to respond, the inborn drive for play can override the need for caution. In adolescents, this can be complicated by the tendency to be drawn to risk-taking.

Because of the realities of size and physiological maturity, children are also likely to be more seriously affected by their injuries. Damage to growing bones, for instance, can result in permanent disfigurement, small airways increase the risk of asphyxiation and a thin epidermis increases the severity of burns.⁽³⁷⁾

Most of the limited research in the South on child injury is hospital based and does not analyze causes. Those few community based studies that are available point to high rates of injury related to environmental conditions and exacerbated by the lack of access to emergency services.⁽³⁸⁾ Deaths and disabilities due to injury cause untold suffering and hardship for children and their families. Yet, the issue is seldom addressed; few programmes to our knowledge are actively tackling injury prevention for children in poor communities. There tends to be a fatalistic attitude towards accidents. The very word "accident" suggests a kind of inevitability, something that cannot be controlled or prevented.

Effective responses would have to be based on the raising of awareness as well as careful assessment within any community. Those involved in housing and community upgrading efforts should have the safety implications for children in mind in all planning and decision-making. A decision to improve the roads into a settlement, for instance, might be a positive step for the community at large, providing easier access in case of emergencies and also for a range of other services. But if these same roads are the only open space where children can play, this improvement will be a net loss for them. This does not mean that the roads should not be improved – although that might be the decision in some cases. It means, rather, that children's need for play is one factor that should be given careful attention during the planning process and that finding safe alternatives should be a priority.

IV. CHILDREN'S EMOTIONAL AND SOCIAL WELL-BEING

THE QUALITY OF housing and community space affects not only physical health and safety and the capacity to learn but also children's emotional and social well-being.

CHILDREN AND URBAN ENVIRONMENTS

a. Children and Evictions

A significant source of distress for many poor urban children is the reality of forced eviction. The costs are enormous. Evictions can lead to homelessness and economic upheaval within households. Possessions are often destroyed and the means of livelihood may be threatened. Evictions can lead to family separation when breadwinners are forced to look for new work at a distance; and the loss of social networks can undermine a family's capacity to cope. Schooling is frequently interrupted and financial difficulties related to eviction often make it difficult for children to resume school in a new location. Not infrequently, they are pushed into the labour market or onto the street as a result of eviction.⁽³⁹⁾ Children faced with violent eviction may also experience significant trauma with long-term effects. In Manila, where housing demolitions affect many thousands each month, Urban Poor Associates have recorded the experience of some young victims (see Box 2).⁽⁴⁰⁾ The impact of such events tends to be greater for the youngest children. Research in the North has indicated that pre-verbal children may be the most seriously affected and that children under the age of ten, when faced with traumatic experiences, are significantly more likely than adults to respond with long-term psychological disturbances.⁽⁴¹⁾

39. *Environment and Urbanization* Vol.6, No.1 (April 1994) focuses on evictions and discusses many of these concerns; also Lynette Ochola's paper, "The impact of evictions and homelessness on children in sub-Saharan Africa", presented to the UNICEF/UNCHS workshop on Children's Rights, Housing and Neighbourhood, 1996.

40. Dizon, A.M. and S. Quijano (1997), *Impact of Eviction on Children*, Urban Poor Associates/Asian Coalition for Housing Rights (ACHR)/United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP).

41. Garbarino, J. and C. Bedard (1996), "Spiritual challenges to children facing violent trauma", *Childhood* Vol.3, No.4, pages 467-479; also Osofsky, J.D. and

Box 2 Evictions and Children

In Metro Manila, evictions affect, on average, more than 450 families each month. Urban Poor Associates, as part of a collaborative research project, organized a workshop for children whose communities had been demolished, the objective being to document their experience in order to gain a better understanding of the impacts of eviction on children. Twenty-one children, aged four to 14, from three evicted communities took part in recollection, drawing and group discussions, describing their old homes and neighbourhoods, the evictions and the changes brought about in their lives. Children as young as four remembered the violence and confusion, the presence of heavily armed police, the bulldozers destroying homes and valued possessions, the teargas fumes, the family members and friends wounded or even killed. They spoke of sleeping rough after the evictions, of becoming separated from family, of being hungry and sick. They mourned the loss of friends, playmates and familiar surroundings, and described the disruption to their families. Many of these children showed symptoms of anxiety and disturbance long after the event. Some had recurring nightmares and feelings of panic, others became apathetic and withdrawn. Some were unable or unwilling to remember the eviction, despite the recollections of other children who were their friends and relatives. Many said they were fearful when they saw people in uniform. The general sense of fear among these children was observed to be similar to that among children in situations of armed conflict.

SOURCE: Dizon, A.M. and S. Quijano (1997), *Impact of Eviction on Children*, Urban Poor Associates, Asian Coalition for Housing Rights (ACHR) and United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP).

The capacity of households to negotiate legal tenure is essential not only as a component of children's emotional security but also as the basis for long-term family stability and for the willingness of poor residents to invest in their communities. As long as economic growth and development are given priority over the requirements of poor families, tenure on habitable land is unlikely to be secure and poor children will live in large numbers on polluted and disaster prone sites, coping with anxiety and impermanence.

E. Fenichel (editors) (1994), *Caring for Infants and Toddlers in Violent Environments: Hurt, Healing, and Hope*, Zero to Three/National Center for Clinical Infant Programmes, Arlington, Virginia.

b. Overcrowding and Stress

The home environment can become a source of distress in other ways as

42. Evans, G.W., S.J. Lepore, B.R. Shejwal and M.N. Palsane (1998), "Chronic residential crowding and children's well-being: an ecological perspective", *Child Development* Vol.69, No.5, pages 1514-1523.

43. Bartlett, S.N. (1998), "Does poor housing perpetuate poverty?", *Childhood* Vol.5, No.4, pages 403-421; also Peterman, P.J. (1981), "Parenting and environmental considerations", *American Journal of Orthopsychiatry* Vol.5, No.2, pages 351-355; and Sharp, C. (1984), "Environmental design and child maltreatment" in Duerk, D. and D. Campbell (editors), *Environmental Design Research Association* No.15.

44. Akinware, M.A. and A.A. Ojomo (1993), "Child-rearing practices and their associated beliefs in Nigeria: a paper based on the baseline studies conducted in five local government areas in Nigeria", paper presented at the workshop on Child-rearing Practices and Beliefs, Windhoek, Namibia, October 26-29 1993.

45. For a practical discussion of some of these measures in the South see, for instance, Marcus, M. (1995), *Faces of Justice and Poverty in the City*, European Forum for Urban Security, Paris.

46. Chawla, L. (editor) (2000) (in press), *Growing Up in an Urbanizing World*, Earthscan/UNESCO, London; also Hart, R. (1997), *Children's Participation: The Theory and Practice of Involving Young Citizens in Community Development and Environmental Care*, Earthscan/UNICEF, London.

47. Guerrero, R. (1993), "Cali's innovative approach to urban violence", *The Urban Age* Vol.1, No.4, page 17.

48. The Trust for Public Land (1994), *Healing America's Cities: How Urban Parks Can make Cities Safe and Healthy*, The Trust for Public Land, San Francisco, CA.

49. Article 4 of the Convention on the Rights of the Child requires that children's rights be implemented to the maximum

well. Overcrowding, for instance, has been related by a number of researchers to increased stress. Research with working-class children in India has linked chronic crowding to behavioural difficulties in school, poor academic achievement, elevated blood pressure and impaired relationships with parents.⁽⁴²⁾ A number of studies from the North relate overcrowded conditions to more punitive parenting.⁽⁴³⁾ There are also data from the South pointing in this direction. In Nigeria, for instance, in a comparison of an urban and rural sample, rural parents, fathers in particular, were found to be more tolerant of children's behaviour; it was suggested that this was because there was more space.⁽⁴⁴⁾ Overwork, fatigue and anxiety, and the frustrations imposed by crowded and sub-standard conditions can all undermine parental patience. Tensions are often released against those who are weakest and least able to defend themselves, and children and women can easily become the victims of violence and abuse.

c. Neighbourhood Violence

Violence and insecurity at neighbourhood level also affect children's lives. It would be simplistic to pretend that these phenomena are related just to environmental conditions – the problems of urban violence are clearly more complicated. But the quality of common space certainly influences social interaction. When people have reason to make frequent use of neighbourhood space, the very level of activity can inhibit anti-social behaviour. Well-lit streets and alleyways, places to sit and socialize, the presence of plants and trees, the availability of shops and other facilities can all contribute to the kind of active community presence that makes neighbourhoods safer and more lively places.⁽⁴⁵⁾ Supportive, safe neighbourhoods are especially important for children. When community life breaks down, children may be deprived of opportunities for companionship, recreation and social learning at a time in their lives when these are extremely important. Not only do such opportunities make a difference to children's quality of life here and now – they are also conducive to a healthy productive involvement in civic life.⁽⁴⁶⁾ Neighbourhoods where children's presence is encouraged and supported tend to be safer and more pleasant places for everyone else as well.

In many communities, vandalism, drug use and criminal behaviour may be, at least to some extent, a response to boredom and a lack of opportunity for older children and adolescents. When young people have involving and productive ways of spending time together, there can be dramatic improvements for all. In Cali, Colombia, for instance, four gangs gave up their weapons in return for ID cards that gave them free access to recreational facilities in the city. Over the course of a year, this programme snowballed and 1,200 gang members became involved in job-training, continuing education and recreation in return for a commitment to non-violence.⁽⁴⁷⁾ In Phoenix, Arizona, in the USA, when recreational facilities were kept open until late at night, crime rates dropped by 55 per cent. In a Philadelphia neighbourhood, when police helped neighbourhood volunteers to clean up vacant lots and plant gardens, burglaries and thefts dropped by 90 per cent.⁽⁴⁸⁾

V. IMPLICATIONS FOR POLICY AND PLANNING

IT IS A moral and legal responsibility for both governments and civil society to ensure as far as possible that children are able live in conditions that support their well-being.⁽⁴⁹⁾ It is also a highly practical measure. Chil-

CHILDREN AND URBAN ENVIRONMENTS

dren and adolescents represent a substantial proportion of the population – up to 50 per cent in the poorest countries and communities. Policies and interventions that fail to address their interests are also failing to realize an important opportunity and one that, for each generation, will not offer itself again. Initiatives that do not consider the needs of children and their caregivers are unlikely to be as effective overall. Investment in clean water, as has been noted, will have less of an impact on public health if it fails to take into account the capacity of women and children to access it; the improvement of local roads for traffic will not be an overall improvement if these roads are the only open areas children have for play. Similarly, the more traditional “children’s” interventions will have limited value if they do not take place in the context of a system of community development that acknowledges the particular priorities and concerns of children – education for mothers on hygiene, for example, will be more effective if local sanitation provision works for children.

- In order to respond reliably to children’s requirements, their interests have to be mainstreamed into the processes that affect community change. Responding to children should be a routine component of more general efforts, embedded in community development and not added as an afterthought or allowed to fall between the cracks. This means, of course, targeting directly those traditional areas of concern for children such as education, immunization, attention to breast-feeding and so on. But it also means thinking about how broader responses to community development can be modified to become more child oriented. A child focused analysis should be brought to all decision-making and evaluation. The attention that has increasingly been brought to women’s issues over recent years provides a useful precedent. Few people would dispute the advantages that have accompanied this change in perspective. A focus on women has been widely recognized as having significant consequences for the overall process of development.⁽⁵⁰⁾
- All those responsible for policy, planning and management should be willing and able to incorporate a child focused perspective and should have a basic understanding of children’s rights and their development. Connections should be developed with child focused organizations and programmes for help in developing standards and guidelines that are relevant to children’s developmental priorities.
- Assessing children’s needs in any situation also means encouraging the involvement, and accepting the views, of both children and their caregivers. Decisions made by others on their behalf may miss the point. This is not to say that professional opinion is unnecessary – technical expertise is essential in many areas – but it is not a substitute for an inside perspective. Increasingly, children are recognized as being capable of representing their own interests and having a real contribution to make to community processes.⁽⁵¹⁾ There is still much to be learned before we can expect the involvement of children to be accepted and supported as a habitual part of local planning and decision-making, but professionals at every level can contribute to this growing field.
- Attempts to improve the quality of children’s environments cannot be overly prescriptive and formulaic. If they fail to take account of local realities, they may do as much harm as good. In Nigeria, for example, about ten years ago standards were set for childcare provision. In order for providers to receive government recognition and support, there had to be large well-ventilated rooms, ample storage and running water. Although the goals were admirable, standards were unrealistically high

extent of available resources; these resources are understood to include not only the financial capacity of government but also the efforts and means of families, communities and the larger society; see Himes, J.R. (1995), *Implementing the Convention on the Rights of the Child: Resource Mobilization in Low-income Countries*, Martinus Nijhoff/UNICEF, The Hague.

50. Moser, C.O.N. (1993), *Gender Planning and Development*, Routledge, London and New York.

51. See reference 46.

52. 'Guidelines on pre-primary education from the Federal Ministry of Education in Nigeria' cited in *The Coordinator's Notebook: An International Resource for Early Childhood Development* No.17.

53. Personal communication, Martin McCann, Plan International.

and most childcare providers had to go underground, thereby losing access to all the other resources that might have been available to them as legitimate providers.⁽⁵²⁾ Another programme was designed to improve domestic air quality and children's respiratory health by building chimneys. In the absence of smoke, the prevalence of mosquitoes rose substantially and malaria rates increased dramatically.⁽⁵³⁾ In the area of children's living environments, as in any other area, responses must carefully consider local conditions.

It has been widely acknowledged that attention to children's well-being is reflected in the increased well-being of entire societies. Better water and sanitation helps everyone. Secure housing provides the basis for investment and involvement in local neighbourhoods. Streets that are safe for children are also better for old people and better for promoting a sense of community. Providing a fair start for children means taking a long-term view and investing in human potential, and experience has shown this to be a productive venture.

