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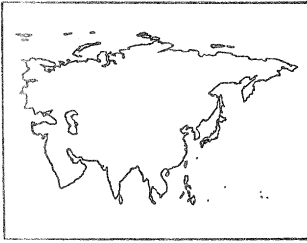
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The political economy of urban poverty and environmental management in Asia: access, empowerment and community based alternatives

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I. INTRODUCTION

THIS PAPER ADDRESSES the major environmental problems facing the urban poor in Asia and is directed toward a search for alternative avenues of action for their alleviation. The focus of the discussion is on community level initiatives, including constraints on and pre-conditions for empowering and mobilizing the poor to manage the environment. The central proposition guiding the discussion is that improving the capacity to manage the environment rests, first, on increasing people's access to key economic and environmental resources and, second, on empowering households and communities to participate as active decision-makers in the use and management of these resources. In most instances, a strategy based on this proposition will call for a significant departure from current practices and institutional arrangements underlying government-community relations in planning and decision-making. Section two begins the discussion by presenting the case for enhancing community based environmental management in the cities of Asia. Section three then identifies both the major constraints and the elements of successful experiences in empowering poor households and settlements to participate in the planning and management of their habitats. Section four concludes by briefly setting forth a framework and an agenda for action oriented research on community based environmental management.

The term "environment" is used to refer to basic natural resources - water, land and air. As an issue of access, discussion on the urban environment begins with broad considerations of the social, political and economic dimensions of urbanization in Asia. It raises questions about how land is obtained in the city, by whom and under what type of property regime; who has access to clean water and the infrastructure that goes along with its delivery; and how access to clean air is viewed by governments, the private sector and urban residents. It also includes access to the means (whether physical or institutional)

of protection against pollutants and pathogens generated by commercial and other interests in the urban economy. Discussion on the environment as a management issue gives consideration to development policies and planning styles in Third World countries, citizen activation and mobilization, and mechanisms of empowerment. It raises questions concerning government priorities towards improving the quality of the urban environment, how policies are implemented, particularly at the community level, and whether or not citizens, including the poor, are given voice and a meaningful role in decision-making, planning and management processes.

Questions of access and management involve analysis at several levels of social, political and economic organization. At the most intimate social level is the household and its economic life. How households are inserted into urban economic, social and political realms of activity greatly determines how they will gain access to environmental resources and cope with environmental stress and deterioration stemming from their use. Access and management issues also appear at a second level, that of inter-household relations at the lane, neighbourhood and community levels. These relationships are functionally and spatially defined by inter-personal and inter-household patterns of reciprocal assistance. Above this level, but outside the officially designated realm of politics, are other associations, particularly non-governmental organizations (NGOs), which have proved to be the catalyst for community based organizations throughout the world.

All of these elements of society are the sources and hosts of the institutional means for contriving rules of access to and management of environmental resources outside of the state. They thus co-exist with the formal exercise of political power by the state which, in many Third World countries, exhibits the contradictory position of seeking legitimization as a source of development and redistribution toward the masses, while at the same time serving class and corporate interests of accumulation. In all too many instances, the contradiction has been played out through, on the one hand, populist rhetoric about intended assistance and, on the other, actions to limit the emergence of a political community outside of the state. This is manifested in a variety of ways, one of which is to promise housing and clean habitats for the poor while, in practice, classifying the attempts of the poor to build housing as illegal and deeming their communities to be unqualified for public support. Where governments have remained unresponsive to questions of access and the environmental management needs in low-income urban habitats, the poor have frequently organized themselves within communities and with broader national and international coalitions to invade and develop unused urban land, to build houses, deliver water, and engage in other environmental resource access and management activities. Conversely, where governments have responded to the claims of the poor, state-citizen partnerships have yielded positive, if partial, results.⁽¹⁾ In most instances a positive response has required an increase in the powers of the local state to respond in novel ways to the expressed needs of citizen groups.

Regardless of the combination or style of involvement by governments, NGOs, communities and households, the evidence presented in the next section suggests that in the cities of Asia success stories are not occurring at a scale or pace which is reversing trends of impoverishment and environmental deterioration found in most Asian countries.

1. See Eckstein, Susan (1990), "Poor people vs. the state and capital: anatomy of a successful community mobilization for housing in Mexico City", *International Journal of Urban and Regional Research*, Vol. 14, No. 2, pages 274-296; Cairncross, Sandy, Jorge Hardoy and David Satterthwaite (1990), "New partnerships for healthy cities", in Hardoy, J.E., S. Cairncross and D. Satterthwaite (editors), *The Poor Die Young*, Earthscan, pages 245-265; and Poerbo, Hasan (1991), "Urban solid waste management in Bandung: towards an integrated resource recovery system", *Environment and Urbanization*, Vol. 3, No. 1, April, pages 60-69.

II. THE IMPERATIVES FOR A COMMUNITY BASED APPROACH TO ENVIRONMENTAL MANAGEMENT

a. The Urban Environment in Asia

AS THE WORLD moves into the first century in which more than half of its population resides in cities, the world's urban environmental problems will shift toward the Third World. While it will be true that for many decades ahead most of the world's energy and environmental resources will be consumed in a handful of high-income countries, the majority of the world's urban population is already living in Third World countries, and recent reports show that the most rapid rate of pollution increases in the world are associated with urban industrial growth in the Third World. As cities expand, they will also intensify the mix of more modern chemical and industrial forms with more traditional forms of pollution and environmental degradation to create potentially catastrophic consequences for huge segments of their societies and for the world. Most of the Third World's urban population lives in Asia where new factories and high-rise commercial office buildings compete with small-scale agriculture, artisanal crafts and slum and squatter settlements for land and water, with each contributing to various forms of environmental stress.

At the same time that environmental stress is increasing, poverty remains a persistent feature of urban life in Asia. A UN study carried out in the early 1980s predicted that 60 per cent of the urban population of Asia would be found living in slum or squatter settlements by the turn of the century unless drastic reforms were undertaken.⁽²⁾ Even where economic "miracles" have occurred, significant proportions of the urban population live in sub-standard housing and receive incomes below basic needs poverty lines. In Seoul, one still finds people making incomes from refuse dumps, and from 1970 to 1986, a period of increases in per capita income, the official percentage of families living in sub-standard housing stock in this city remained at around 17 per cent.⁽³⁾ Two-thirds of the population in Jakarta lives in impermanent or semi-permanent housing.⁽⁴⁾ In South Asia as much as three-quarters of the urban population is below established poverty lines. Although modern forms of urban and industrial pollution may not be as pronounced, gaining access to and managing environmental resources can be as, if not more, daunting.⁽⁵⁾

When viewing environmental distress and poverty together, the major conclusion to be drawn is that the consequences of environmental deterioration fall heaviest on the poor.⁽⁶⁾ The poor tend to locate near polluting industries, public waste sites, and other extremely polluted areas of the city. They are crowded into small areas which have little room for storing garbage within households; the waste they produce is "unprofitable" to even scavengers, and city governments fail to provide garbage and other environmental management related services.

The current debate over how best to address the many social and economic problems associated with environmental deterioration has often been posed as a choice between calling upon governments to do more or, conversely, limiting government through privatization and allowing market solutions to operate.⁽⁷⁾ Missing from this debate has been a third avenue, namely, urban communities organizing in a manner to promote self-management of environmental resources. At

2. Donner, Wolf (1988), *Land Use and Environment in Indonesia*, C. Hurst, London, page 288.

3. Park, Soo-Young, Kim Yong-Woong and Yang Ok-Hyee (1986), "Urban services and the poor: the case of Korea", in McGee, T.G. and Y.M. Yeung, *Community Participation in Delivering Urban Services in Asia*, Ottawa, IDRC, pages 29-57.

4. See reference 2.

5. Centre for Science and Environment, India (1989), "The environmental problems associated with India's major cities", *Environment and Urbanization*, Vol. 1, No. 1, pages 7-15.

6. de Coura Cuentro, Stenio and Dji Malla Gadji (1990), "The collection and management of household garbage", in Hardoy, J., S. Cairncross and D. Satterthwaite (editors), *The Poor Die Young*, Earthscan, pages 109-125.

7. Hyman, Eric (1990), "An assessment of World Bank and AID activities and procedures affecting urban environmental quality", *Project Appraisal*, Vol. 5, No. 4, pages 198-212.

Box 1: Environmental Deterioration in Asian Cities

Seoul (Republic of Korea): Untreated sewage generated in the city flows directly into the Han River, which runs through the core of the metropolis and, along with its tributaries, has become increasingly polluted by industrial effluent, including heavy metals. Air pollution is at a critical level, with indicators showing that it is detrimental to health in one out of every two or three days. Sulphur dioxide and suspended particulate matter in the air are above allowable levels for at least one-quarter of the year. Recent factory deaths have been attributed to pollution related industrial diseases, and have been followed by worker demonstrations.

Kaohsiung (Taiwan): A cloud of dust hangs over the city much of the day while at night one chokes on the sulphurous air. The hills surrounding Kaohsiung have been stripped bare and the city harbour is a massive pool of inky black water.

Hong Kong: Between 1.5 and 5.8 million people have experienced a deterioration in health due to air pollution. The Ho Chung River is now called the "Black River" by local residents, and water pollution has led to the closure of many of Hong Kong's beaches. Between 75 and 90 per cent of liquid factory waste is reported to be illegally dumped into the territory's waters, and the government of Hong Kong has found that at least half of the territory's waste water receives no treatment before being discharged into the sea.

Manila (the Philippines): Manila metropolis produces an estimated 3.4 million tonnes of solid waste per day, but less than half is collected and hauled to dump sites. The city's seven dump sites are filled to capacity; the largest, called "Smokey Mountain", provides the economy for an estimated 12,000 scavengers. The Pasig River that created the lush green vegetation of the city is now biologically dead. Manila's air pollution is said to be among the world's worst, but since the air-monitoring equipment broke down in 1975, the Ministry of Environment cannot say how bad it really is.

Bangkok (Thailand): Ground subsidence, widespread flooding, and seepage of saline water into freshwater aquifers pervade a city in which only 2 per cent of Bangkok's population is connected to the city's antiquated sewer network. Air pollution is said to be more than twice the acceptable level and is officially classified as dangerous. The lower sections of the Chao Praya River are no longer able to support life.

Jakarta (Indonesia): With its population doubling every 15 years, ground water depletion has resulted in seepage of sea water into water tables under the centre of the city. Pollution of the city's waterways has surpassed maximum tolerable limits. Settlement in upland areas in the southern parts of the metropolis is heightening both flooding and drought in the region. In the Java Sea by Jakarta, increasing levels of liquid,

solid and toxic wastes from industrial and processing activities are causing declining fish productivity and are leading to increased morbidity and mortality from the spread of infectious diseases. Mercury pollution in Jakarta Bay has already led to brain disorders among children.

Bombay (India): In terms of air quality and industrial wastes, the city is considered to be one of the most polluted in the world. The water system is antiquated and contaminated from sewage. Most of the rapidly expanding suburbs have no proper sewerage system at all. High incidence of typhoid, malaria, tuberculosis, bronchitis and asthma are found to be related to environmental deterioration and pollution. At the same time, the increasing demand by city populations for charcoal and other household fuels has exacerbated problems of deforestation in rural areas that is part of a larger process of the appropriation by cities of the capacities for environmental sustainability of development in rural and peripheral regions.

SOURCES: Seoul - *Worldwatch* (1990), *State of the World*, Worldwatch Institute, New York. Kaohsiung: *New Straits Times* (1990), "Environment pays price of long neglect", April 23. Hong Kong: *Far Eastern Economic Review* (1987), "Dirty pearl of the Orient", November 11; and, *Government of Hong Kong White Paper* (1989), *Pollution in Hong Kong - A Time to Act*, Government Printing Department. Manila: *The Times* (1990), 29 May; and Jimenez, Rosario and Sister Aida Velasquez (1989), "Metropolitan Manila: a framework for its sustained development", *Environment and Urbanization*, Vol. 1, No 1, April, pages 51-58. Bangkok: *Bangkok Post* (1990), 13 May; and Phantumwanit, Dhira and Winai Liengcharernsit (1990), "Coming to terms with Bangkok's environmental problems", *Environment and Urbanization*, Vol. 1, No. 1, April, pages 31-39. Kuala Lumpur: *The Nation* (1989), 29 September. Jakarta: *UNESCAP* (1989), *Environmental News Briefing: a Selection from the Region's Press*, Vol. 3, No. 9, Bangkok; Douglass, M. (1991), "Land use and the environmental sustainability of the extended metropolis: Jabotabek and the Jabopunjur corridor", in Ginsburg, N. (editor), *The Extended Metropolis in Asia*, University of Hawaii Press, Honolulu; Tarrant, James, et al. (1987), "Natural resources and environmental management in Indonesia: an overview", *US AID, Jakarta*; and Donner, Wolf (1988), *Land Use and Environment in Indonesia*, C. Hurst, London. Bombay: Whitney, J.B.R. (1990), "The carrying capacity concept and sustainable urban development", presented at the meeting of the working group on *Analytical Approaches to Urban Environmental Issues*, *Environment and Policy Institute, East-West Centre Honolulu*, September 17-21.

the same time, most planning at the local level in Asian countries continues in a top-down fashion with little or no participation by the people as decision makers. The absence of participatory channels has pushed many to protest against what is perceived to be the government's complicity in environmental destruction. These actions plus the many day-to-day efforts to manage environmental resources by the poor clearly show that, contrary to popular opinion, low-income is not a hindrance to either the desire or the will to improve environmental conditions.

Far from "causing" environmental deterioration, poverty is more accurately a manifestation of disempowerment, delegitimization, marginalization and exploitation of the lower strata of society.⁸ In many instances, it is the poor who actually are the *de facto* caretakers

8. See Friedmann, John (1989), "Collective self-empowerment and social change", *Ifda Dossier* 69, pages 3-14; and Friedmann, John (1990), "Domination and resistance: the politics of an alternative development", UCLA/GSAUP manuscript, Los Angeles.

of the environment through the types of jobs generated by environmental disregard on the part of the affluent and elites. Whether it is street-cleaning for the government, rag-picking for large-scale paper makers, or scavenging for materials to use for their own house construction, much of the economy of the poor is derived from deteriorating environmental conditions in the cities of Asia.

Box 2: The Environment of Poverty in Asian Cities

Seoul (Republic of Korea): Levels of air pollution are more than four times higher in and around poor communities than in higher-income areas. Much of the air pollution in these communities is related to continued high use of coal for indoor cooking and heating, which is also a cause of death in winter when doors and windows are tightly sealed against the cold but also trap carbon monoxide inside.

Hong Kong: Squatter settlements in Kowloon have been built on steep slopes where a lack of drainage and access roads results in high susceptibility to flooding, fires, sewage overflows and contamination, poor emergency access and other life-threatening problems. Factory locations often add to the poor air quality of low-income communities that tend to be built near the sites of the heaviest polluting industries. The poor condition of the drainage system creates foul smells, allows mosquitoes to breed and leads to skin diseases, particularly among children, a large number of whom are reported to have coughs and respiratory problems, including chronic respiratory tract infections.

Bandung (Indonesia): In most moderate and low-income kampungs a single canal serves as both drainage and sewerage system, with rivers and streams clogged by uncollected garbage and inadequate drainage resulting in periodic flooding of many kampungs. About half of the population meets its water needs from unprotected shallow wells and rivers.

Bangkok (Thailand): One-third of the population lives in slum formations that dot the city. Most low-income communities consist of housing constructed over areas of constant flooding that have no sewerage or public garbage services.

Bombay: About half the population lives in slum areas, with an additional 400,000 people residing in deteriorating tenements and another 200,000 living on pavements. From 1961 to 1981, during which time the urban population of India doubled, the slum and squatter population in Bombay increased ten-fold from 400,000 to 4 million. Communicable diseases, such as typhoid fever caused by unsanitary conditions and poor quality water, are endemic among slum and squatter settlement dwellers.

SOURCES: Bangkok: Yap, K.S. (1989), "Some low-income housing delivery sub-systems in Bangkok, Thailand", *Environment and Urbanization*, Vol. 1, No. 2, October, pages 27-37. All other cities: Douglass, M., L. Kwitko, Y.S. Lee and K. Lowry (1992) (editors), *Urban Community Based Environmental Management in Asia, proceedings from an international conference*, Honolulu, Dept. of Urban and Regional Planning, University of Hawaii.

9. Furedy, Christine (1989), "Social considerations in solid waste management in Asian cities", *Regional Development Dialogue*, Vol. 10, No. 3, pages 13-43.

10. In Calcutta at least 40,000 people make a living from waste-picking. Estimates from Indonesia indicate that scavengers reduce refuse by one-third. Such activities are neither casual nor informal, but are highly organized and integrated into political and economic structures of the city. For the very poor, the recycling of refuse is often a form of direct consumption; with 70 to 80 per cent of incomes spent on food and water, resources to build houses and to supply fuel are often obtained by recycling waste.

11. Douglass, Mike (1992), "Urban poverty and policy alternatives in Asia", UN ESCAP, Division of Industry, Human Settlements and Environment, Bangkok.

12. Douglass, Mike (1991), "Transnational capital and the social construction of comparative advantage in Southeast Asia", *South-East Asian Journal of Social Science*, Vol. 19, Nos. 1 and 2, pages 14-43.

13. Tarrant, James et al. (1987), "Natural resources and environmental management in Indonesia: an overview", Jakarta, USAID.

From a national point of view, Tarrant draws from the Indonesian experience to identify the formidable problems inherent in state approaches to environmental management. First, national debts and the drive for export earnings give top priority to policies that favour short-term resource exploitation and undervalue the long-term benefits and costs of promoting sustainable development. Secondly, they also produce distortions in resource use and stimulate the development of marginal land resources. Thirdly, the structure and behaviour of government, i.e. its composition of highly centralized institutions with weak inter-ministerial coordination and strong bias toward economic forces, relegates local participation in environmental management to low, token status.

Some analysts and even public officials have observed that without the perverse "waste economy" of scavengers and the poor, environmental deterioration would be much worse in most cities. In fact, according to Christine Furedy,⁽⁹⁾ the household economy of the poor, including scavengers, and community based systems of waste recovery and recycling account for most of the solid waste management of Asian cities.⁽¹⁰⁾ The problem, therefore, is not one of how to "control" or get rid of the poor, but how to provide them with positive support both in terms of heightening access to environmental resources and in improving their efforts to cope with the environmental conditions of their households and communities.

Given this background, there are three major reasons why the coming years are unlikely to resolve urban environmental problems in general and the environment related plight of the poor in particular. First, dependence on accelerating economic growth rates to "cure" poverty and environmental issues does not hold bright prospects. Not only is poverty a persistent feature of societies at all levels of per capita income, including the highest, but accelerated economic growth brings its own forms of environmental crises, social dislocation and heightened social inequalities which the market has not displayed any capacity to resolve.⁽¹¹⁾

Second, even if sustained high rates of economic growth were able to reduce the incidence of poverty, the world economy does not hold bright prospects to allow most of the economies of the world to take this path. The current recession is part of a larger process of structural change, debt crisis, and economic instability which is likely to result in a lengthy period of slow world economic growth and reduced markets for the manufactured exports from Third World countries. Over the past 15 years, the number of would-be newly industrializing countries (NICs) has actually declined. Among the 15 nations thought in the 1970s to be on an upward trajectory towards this status already enjoyed by a handful of East Asian and Latin American economies, only three - Malaysia, Thailand and Indonesia - have been able to sustain their expansion.⁽¹²⁾

Third, governments in Asia, as elsewhere in the world, have shown themselves to be largely unable to reverse the environmental deterioration of their cities and have been particularly ineffectual in attempts to assist the poor in their efforts to manage the environments of the slum and squatter settlements being produced and reproduced in and around cities.⁽¹³⁾ The reasons for these failures are manifold and systemic. One is that the general pattern of top-down exercise of political authority works against the inclusion of the needs of much of the population in the routine of governance and planning in the public domain. This concentration of political and planning power has a spatial as well as a social or class dimension. Specifically, local municipal governments are rarely given the power to effectively manage the environmental problems they face.⁽¹⁴⁾ Although problems are often better understood and management more appropriately organized at the local level, local governments in most Asian countries are endowed with neither significant political nor economic power and also remain largely unaccountable to the citizenry in their geographical domain.

The absence of democratic institutions in many countries means that power is channelled through exclusive, often highly personalized, relationships rather than through the political community of the nation. These personalized relationships result in "soft" states which, through their actions, negate most of the environmental regulations

14. Hardoy, Jorge and David Satterthwaite (1990), "The future city", in Hardoy, J.E., S. Cairncross and D. Satterthwaite (editors), *The Poor Die Young*, Earthscan, pages 228-245.

15. Silas, Johan (1989), "Marginal settlements in Surabaya, Indonesia: problem or potential?", *Environment and Urbanization* Vol. 1, No. 2, October, pages 60-70. Silas observes that the top 20 per cent of the population of Surabaya consumes 80 per cent of public services.

16. See reference 8, page 39. Friedmann (1990).

they officially adopt; favouritism and lack of political will to enforce them prevail over policy declarations. A parallel result is the continuation of biases toward higher-income classes in the allocation of public resources.⁽¹⁵⁾ The failure to meaningfully assist the majority of the population exacerbates an expansionary path of cities marked by the widespread absence of basic infrastructure, such as sewerage and water supply and treatment facilities. The division of planning into bureaus, each with their own access rules and each competing with and often contradicting the policies of others, further diminishes chances of a coordinated public effort toward resolving environment and poverty issues.

In all of these practices and uses of state power, conditions of poverty are reproduced and environmental deterioration continues in the areas of the city in which the poor are able to settle. More than just remaining unaccountable to the poor, governments also work to deny the legitimacy of political associations emerging from civil society and are thus actively involved in the disempowerment of the poor and in attempts to undermine political community outside of the state.⁽¹⁶⁾ From a political perspective, the dilemma for holders of power is how to move from their commonly held view that empowering the poor to take greater control over the planning and management of their habitat is a threat to political stability to a realization that the longer-term sustainability of the urban habitat rests on the inclusion of all citizens, especially the poorer ones, into a political and planning process directed toward a simultaneous effort of poverty elimination and sound environmental management. All of the issues raised above can be subject to two types of analysis: one which identifies and explains key obstacles inhibiting community based approaches toward the management of environmental resources, and another which abstracts key elements or "lessons" from successful cases. Although both approaches have limitations in terms of capturing the wide variety of contexts and experiences in Asia, as mirrors of each other, they suggest that overcoming obstacles rests, in the first instance, on community mobilization and empowerment.

III. COMMUNITY BASED ENVIRONMENTAL MANAGEMENT: OBSTACLES AND ELEMENTS OF SUCCESS

THE COINCIDENCE OF extreme poverty and extreme environmental stress is the outcome of political, social and economic relationships that have no single point of entry or resolution. Politically, the urban poor are often legally denied access to both environmental resources, particularly land, and the infrastructure and services necessary for environmental management. Socially and politically, the weakening of neighbourhood and community ties in the urbanization process is coupled with the reluctance of governments to recognize indigenous socio-political networks and leadership. Leadership, to the extent that it is recognized, may also be coopted by governments who, through the awarding of official titles and benefits, further weaken internal mechanisms of accountability.

a. Access to Urban Land

There are few urban issues that are not imbedded in questions of land ownership and tenure. All societies have rules that govern the

17. As summarized in Hardoy and Satterthwaite (see reference 14):

"To a large extent, the future city will be financed, built and shaped by people with low incomes...These people provide the cheap labour and cheap goods and services on which much of the city's economy depends. But they are excluded from land and housing markets, legal health services and very often legal markets for water and transportation."

They predict that without changes in attitudes and policies of governments, the future of urbanization will be one of ever greater numbers of people living in squatter settlements, illegal subdivisions, slums and on sidewalks. Cities will continue to expand into environmentally fragile areas, disrupting the ecologies of entire urban regions. Diseases related to over-crowding in contaminated living environments will increase.

use of land, but the treatment of land as a commodity that can be bought and sold for a market price is historically a recent phenomenon in Asia; in most instances less than a century has passed since land registration was required by governments and real estate markets emerged. Migration to Asia's large cities is, in part, the result of the interplay of these new rules with the vagaries of agricultural production. A bad crop on a smallholding in commercialized rural regions now means land loss and an irreversible move to landlessness. Migration to the cities, while possibly improving the chances of earning higher incomes, proves to be no solution to rural land loss. Urban land markets, vastly more competitive and much more subject to speculative investments, are almost universally too expensive to allow most low-income migrants to effectively enter.⁽¹⁷⁾

The alternatives are those found throughout Asia: crowding into slum and squatter settlements, sleeping at bus depots, train stations, shopping centres, under bridges and anywhere else that acts as a vantage point for securing a daily subsistence. Although buying land may not be affordable, rental markets for even the most polluted and environmentally sensitive areas of the city emerge to cater for the poor, and thus routinely incorporate their settlement into urban areas on land that has low current commercial value, is government owned or has ambiguous legal tenure and ownership status. In some instances, "pirate urbanization" may occur on the fringe of cities where petty land dealers illegally sub-divide and sell off tiny parcels of agricultural land to lower-income urbanites. But tenure remains precarious and public services are rarely provided in these areas. In other cases where governments own very large areas of the cities, such as in the Philippines, Pakistan and in several Latin American countries, the poor have confronted the principle of private property by simply invading large areas of a city in such numbers that the state is compelled to give *de facto*, but not *de jure*, recognition to the settlements they build.

Whatever the means, and despite an adverse system of access to land, the poor continue to settle in Asian cities and are able to form neighbourhoods and communities that have both social continuity and economic life. **The question to be addressed is not how to slow down the migration of the poor to the city (most of the largest Asian cities are doubling in size every 20 years or so) but how to integrate them into urban life in a more equitable manner.** The answer to this question cannot avoid raising issues about land ownership and distribution.

At least five key issues are encountered when exploring the relationships between land, poverty and the environment. First, as noted already, the land that can be obtained by the poor is often unsuited to settlement. Squatter areas develop on steep slopes, in flood-prone areas, and near factories and refuse dumps. The reason for these patterns is simple: such land has little immediate commercial value. Problems of improving housing and communities developed on such land are compounded by a second aspect, namely insecurity of tenure. Since the land is often officially categorized as illegally occupied - even if developed by the private sector - the government may either directly act to try to remove the poor or, in the case of the high economic growth economies of East and South-East Asia, may support private land deals to buy up slum areas for commercial development, which has resulted in widespread evictions of the poor from areas they may have occupied for decades. It is no surprise that insecurity of residence and tenure are associated with low invest-

ments by the poor in community space.

Illegality leads to a third outcome, the denial of infrastructure and public services needed to improve environmental conditions. Governments, fearing that such assistance will be taken as *de facto* legitimization of squatter areas, refuse to service what are in some cases very large sections of the city. The poor may find their own partial solutions by, for example, illegally tapping into water and electricity lines, but this may further compound threats of eviction by the government. The fourth issue, illegality of land settlement, or even status as tenants, is closely related to an unwillingness on the part of governments to recognize community organizations that emerge in poor settlements and who seek government assistance in securing basic infrastructure and services normally provided to all communities.

Finally, the economy of poor households often dictates the need to locate in specific areas of the city where access to incomes and daily work are greatest. In Hettige's study⁽¹⁸⁾ of a slum in Sri Lanka, for example, almost everyone had jobs within a very short walking distance. Yet the poor cannot afford rents in central areas because the land is already developed and too expensive; nor can they live too far away because transport costs are too high. In Bangkok, land development in the centre has pushed the poor to the outer fringes of the city and is leading to extraordinarily long commuting distances to established places of work.⁽¹⁹⁾ Squatting, or sidewalk dwelling in the case of such cities as Bombay, becomes the "affordable" alternative. Thus access to land is a critical issue not merely in terms of ownership and tenure, but equally in terms of where the poor must locate to secure an income in the city. Yet, as Asia's cities increasingly mirror the bid-rent curve of those in the North, declining access to the core of the city has become the reality.⁽²⁰⁾ Even where governments attempt to provide housing for the poor in the city centre, such as in Jakarta's *Kebun Kacang* multi-story development, very few of the original residents are actually able to retain their residence in the area.

Given all the legal, political and economic problems confronted by low-income households in their attempts to gain access to land in the cities, the fact that the poor represent a substantial share, if not the majority, of builders in Asia's great cities is all the more extraordinary. Millions of poor people in cities such as Manila, Bangkok, Bombay and Jakarta have turned unused land into urban settlements. The combination of the type of land that is settled, land tenure status, and the low income of households yield what are in many instances vast areas of sub-standard housing, often of impermanent materials, and built within environmentally unsound habitats. Nevertheless this land development by the poor is better suited to their needs and incomes than that typically developed by governments as sites for low-cost housing.

All of these factors add up to an urban land crisis in the metropolitan regions of the Third World.⁽²¹⁾ The essence of this crisis is that cities are expanding in a manner which exacerbates rather than ameliorates both the plight of the poor and problems of environmental management. Surprisingly, perhaps, most governments have the constitutional and legal means to selectively intervene in urban land markets, but few have chosen to do so, particularly in recent years.

No single solution can be found to this crisis, but a number of possibilities have been experimented with, particularly in urban fringe areas where land prices are lower and the built environment is

18. Hettige, S.T. (1990), "Subsistence production among settled urban poor: a case study from Sri Lanka", *Urban Anthropology*, Vol. 19, No. 3, pages 185-213.

19. Yap, Kioe Sheng (1989), "Some low-income housing delivery sub-systems in Bangkok, Thailand", *Environment and Urbanization*, Vol. 1, No. 2, October, pages 27-37.

20. Bapat, Meera (1989), "Slum improvements: who benefits?" IDRC Report, Vol. 18, No. 1, January, pages 24-25.

21. MacAuslan, Patrick (1985), *Urban Land and Shelter for the Poor*, Earthscan, Washington DC.

22. See reference 21, page 89. Also, as noted by MacAuslan (see reference 21), land-banking can be counter-productive if not used fairly. In New Delhi it was credited with exacerbating land shortages and land price inflation.

23. According to Yap (see reference 19) among the limitations to this approach are the impracticality of dividing land in many of the smaller slums, the failure to recognize the heterogeneity and therefore the existence of different rental markets in slums, and the difficulties in sustaining community solidarity throughout the often lengthy periods of negotiations.

24. See reference 21.

25. McCay, Bonnie J. and James M. Acheson (editors) (1987), *The Question of the Commons; the Culture and Ecology of Communal Resources*, University of Arizona Press, Tucson; and Blaikie, Piers and Harold Brookfield (1987), *Land Degradation and Society*, Methuen, New York. Blaikie and Brookfield conclude that the removal of responsibility of management from the community results in the "green apple syndrome" of everyone trying to pick apples before others get to them, thus reducing the benefit from the land and its natural resources. They go on to argue that governments undermine localized principles of reciprocity and systems of conflict resolution over land access and use issues.

less developed. Land readjustment, alternatively called land consolidation, can be used to create win-win outcomes by pooling the land of existing owners and returning smaller parcels which, through infrastructure and other public investments on portions transferred to the government for public use, has a net higher market value than the larger original lot. In addition to being used for roads and other infrastructure, land received by the state through the readjustment can also be set aside for low-cost housing for the poor.

Land-banking, through which the government buys and keeps land out of the market by setting it aside for a variety of future uses, including exchanges with developers for land elsewhere in the city, has also been advocated as a means of providing land for low-income households and communities. This has been attempted in Bangkok where the National Housing Authority began to purchase land ahead of development in the 1970s, making an estimated 25 to 67 per cent savings over market prices which prevailed in the early 1980s.⁽²²⁾ In recent years, the capacity for land-banking has severely diminished as land prices have risen sharply throughout the metropolitan region and beyond.

Another variation was created by slum dwellers in Bangkok who, having been encouraged by NGOs to resist eviction from the areas they rent from large landowners, negotiated "land-sharing" agreements through which slum dwellers purchase a portion of the land on which they live at below market prices while allowing landowners to commercially develop the remainder.⁽²³⁾ At least two areas, one in Wat Ladbuakaw and another in Klong Toey, have used this technique and variations have been implemented elsewhere. The catalyst for all of these cases was outside government, namely, NGOs and community organization.

Land use control and public land development are not the only avenues for increasing access to land for the poor. Credit foundations aimed at providing housing for low-income households and to fill in gaps between commercial lenders and traditional forms of assistance at the community level have been experimented with in several countries⁽²⁴⁾. In the Philippines the Davao Development Foundation was set up as a non-profit NGO for the purpose of supplying land and building houses at below market costs for the poor, who are excluded by government rules from consideration for public housing assistance. In Bangkok, the residents of a refuse site, after successfully resisting eviction by the Bangkok Metropolitan Authority and with the assistance of an NGO (the Community Relations Group), formed a savings group to purchase land.

These alternatives occur as experiments rather than as national programmes in Asian countries and most governments have become increasingly reluctant to intervene in land markets to assist low-income families gain access to land. At the same time, neither government ownership nor private land developers have held much promise for the poor.⁽²⁵⁾ As discussed above, although government-held land has often unintentionally provided land for settlement by the urban poor, such settlement risks the antipathy of the state and continuing disenfranchisement of the poor. For their part, commercial land developers may also facilitate the creation of rental, if not land, markets for the poor, but such petty land developers co-exist with a much more powerful set of landed and land development interests which make the resulting settlements of the poor equally precarious.

A related problem for land policy is how to link access to land with

26. Bromley, Daniel (1989), "Property relations and economic development: the other land reform", *World Development*, Vol. 17, No. 6, pages 867-877; and see reference 25.

27. Bromley (see reference 26) summarizes the concept of property rights under common property regimes as:

"Property is a right to a benefit stream that is only as secure as the duty of all others to respect the conditions that protect that stream. When one has a *right*, one has the expectation in both the law and in practice that one's claim will be respected by those with *duty*."

In open access systems there are no duties; consequently, there are no rights. The rules of the "prisoner's dilemma" apply, and the over-exploitation of resources results.

28. Brokensha, David and Bernard Riley (1989), "Managing natural resources: the local level", in Botkin, Daniel, Margriet Casell, John Estes and Angelo Orio (editors), *Changing the Global Environment; Perspectives on Human Involvement*, Academic Press, Boston, pages 341-366.

29. See reference 25. Blaikie and Brookfield (1987)

30. See reference 28, page 342.

incentives to sustain sound environmental management practices. The logic of current practices in the market economies of Asia is to privatize the ownership of land and the resources associated with it and to allocate it through real-estate markets. The state is empowered to regulate or place limits on private land use decisions, but such powers are generally weakly applied to cities, even though they may be used to nationalize huge areas of forests in rural areas. Partly in response to the failure of either the market or the state to institute mechanisms that successfully improve environmental conditions, recent interest in tying access to management has focused on traditional common property resource regimes that are still found in rural areas and among fishing communities in almost all countries of the world.⁽²⁶⁾ The argument is put forth that effective management of land and other environmental resources is dependent upon empowering communities to create their own rules which, in structuring rights of access, also impose duties on use and management.⁽²⁷⁾ Under such common property regimes, there is "...no clearly free-for-all open access, but a carefully regulated system involving defined and enforceable rights and duties evolved to meet social and environmental needs."⁽²⁸⁾ The community thus constitutes a collectivity which governs access and establishes rules of use.⁽²⁹⁾

Such common property systems of resource management have existed for millennia and have proven to be dynamic, adaptive and generally appropriate for their specific social and physical environments. However, in modern history, population explosions, new technologies, commercialization, state generated development programmes have all worked to alter "...the social and environmental balance and induce a dependence on the state and erosion of local initiative."⁽³⁰⁾ Although governments have attempted to fill the void of social control over land use by taking on the role of land use regulator, in the metropolitan regions of Asia the ability of landowners to develop land is, in practice, generally much greater than it is in the North. Zoning is rare and, when adopted, it is often easy to circumvent or ignore. Building permits are obtained after the land has been developed, if at all. The outcome of the close-to-absolute rights without responsibilities is manifested in a variety of ways: subsidence of huge areas of cities as groundwater extraction exceeds replenishment; severe pollution of soils and waterways as wastes from households and producers alike are poured into corners of backyards or into drainage systems; air pollution from unregulated burning of refuse.

To date, virtually all of the research and literature on common property regimes has focused on rural areas, small-scale societies, and locations in which human settlement is small in relation to the natural environment. In such situations an image of village hinterland management prevails. Attempting to transfer these images to urban areas raises a number of difficult questions. Nevertheless, grassroots organizations among poor households at the community scale in Asian cities often have the flavour of, if not the complete institutional framework for, common property resource management. In the Wat Chonglom experience in Bangkok, households banded together to invest in common walkways and to remove garbage from the stagnant water underneath their community (see Box 3).

In Wat Chonglom, each household paid a moderate fee to finance the projects and was henceforth required to participate in community based waste collection services. Each household was further encour-

Box 3: Grassroots Development in Wat Chonglom, Bangkok

In the late 1980s community leaders from Wat Chonglom, a slum area of Bangkok near the famous Klong Toey Port Authority, began to work with two professors from Mahidol University and officials from an international bank to obtain interest-free loans for community development. The community agreed that its most urgent need was to improve its walkways, which consisted of planks of wood resting on stilts sunk into the stagnant water over which the community sat. Contracts were signed obligating every household to share in repayment, and a new concrete walkway was built. This was followed by the identification of more projects, including rubbish collection, the construction of a community centre with day-care for children of working mothers, and efforts to form a community based leather goods industry.

"We saw the people hired to clean the place up for us working painstakingly. It was really a dirty job. They had to stand for hours with half their body in the black, filthy sewage infested with rubbish that had been thrown in there for years. Now we feel ashamed of throwing our rubbish away so wilfully" said one resident. "Our chairman always tells us to show our dignity and credibility to the bank. I can't fail him" says another who took out a 30,000 bhat loan to rebuild her burned down home. Over the three years since the loans began, there have been no defaults. The vastly improved community is now scarcely recognizable. A new spirit of community pride and cooperation has appeared. Children can safely play outdoors, people can now leisurely stroll and chat with each other along the pathways. Many new shops have begun to appear in fronts of homes, allowing women with children and the elderly to earn money without venturing far from home. The community has begun to generate its own thriving economy.

A big blackboard was placed in front of the chair's house to announce the status of community projects underway and new ones that were about to be implemented. The community became a centre of attention for politicians and, in 1991, it was declared "community of the year" by the government of Bangkok.

SOURCE: Ard-am, Orathai (1991), "City Background Paper: Bangkok", *International Meeting and Workshop on Urban Community Based Environmental Management in Asia*, October 22-25, Institute for Population and Social Research, Mahidol University, Bangkok.

aged to join in a number of community sponsored activities and campaigns to upgrade the settlement, including the construction of a day-care centre. This process was facilitated by the apparent stability of the community's relation to the land, which is owned by a large landowner in the city who charges relatively low rents and which is located between government land and highway construction that has made it an as-yet unlikely candidate for commercial development. These relationships have allowed for community land to be treated and managed as a commons, and it is important to note that none of

the duties accepted by the community's households was introduced or enforced by the government, and privatization of land ownership by households was not part of the incentive to cooperate.

This and similar experiences suggests that communities can, under certain conditions, act to both enhance security of access to land through land improvement activities and effectively manage their use of land and other environmental resources. The fact that many of these experiences have occurred without opposition, or even in opposition to, government programmes further suggests that the avenues for generating more of them will continue to reside with the communities themselves.

b. Poverty and the Household Economy

A thorough understanding of the ways in which poor communities can mobilize their human talents and social energies must include the household as a key institution linking production with consumption and, in so doing, linking the use of environmental resources with their management. The household is a basic social arena for decisions about status, power, property and work between women and men, generations and kin.⁽³¹⁾ This makes the household economy more precarious than it might otherwise appear to be. Attempts to sustain the household economy thus often involve efforts to create a host of outside relationships, including participation in communal exchange networks, the fostering of patron-client relationships with petty officials, and work in the petty commodity and corporate sectors of the economy. But as noted by Evers,⁽³²⁾ the study of households has tended to mistakenly view them solely as units of consumption rather than as sources of subsistence production as well as the reproduction of labour. In poor communities, households continue to be important institutions in securing incomes and survival; and access to the means of reproduction, particularly urban space and urban housing, is a critical aspect of the household economy. Thus the creation of a livable environment is a central concern of households.

The vagaries of economic life for the poor in the city often prevent low-income households from sustaining their sources of income and even the household as a social unit. Although many researchers have tried to define the household as a co-residential unit, and thus tie the concept to the physical structure of the house or, more narrowly, the kitchen or hearth, such concepts do not serve well to capture the dynamics of social interaction and continuity at the household level. Households are better conceived of as a crossing point for webs of social relationships, none of which are clearly subordinated to or perfectly meshed with the others. As revealed in Jellinek's study of a low-income community in Jakarta,⁽³³⁾ the size and composition of households as residential units can rapidly shift as opportunities for income come and go.⁽³⁴⁾

As an income- and labour-pooling unit, the household is complex rather than simple, and its economy includes an array of activities ranging from wage based to non-market production that defy dualistic informal/formal sector models popularly used to divide the poor from the non-poor. This complexity of employment and income earning ventures among poor households is well documented.⁽³⁵⁾ Each household member may concurrently be engaged in a multiplicity of income-generating activities outside of the home and may move in and out of the market economy as opportunities and needs arise.

31. See reference 8. Friedmann 1990.

32. Evers, Hans-Dieter (1984), "Subsistence reproduction; a framework for analysis", in Smith, Joan, I. Wallerstein and H. Evers (editors), *Households and the World-Economy*, Sage Publications, pages 23-36.

33. Jellinek, Lea (1991), *The Wheel of Fortune; the History of a Poor Community in Jakarta*, Allen and Unwin.

34. Jellinek (see reference 33) identifies four types of household: a) only mother and children (or brother and sister); b) nuclear family (mother, father, children); c) extended family (mother, father, and married children and offspring); d) many breadwinners living together without their families in communal lodging houses.

35. Evers, Hans-Dieter and Ruediger Korpff (1986), "Subsistence production in Bangkok", *Development: Seeds of Change*, 4, pages 50-55; see reference 33; and three papers in Smith, Joan, I. Wallerstein and H. Evers (editors) (1984), *Households and the World Economy*, Sage, Beverly Hills; Smith, Joan, "Non-wage labour and subsistence", pages 64-89; Wallerstein, E., "Household structures and labour force formation in the capitalist world economy", pages 17-23; and Friedman, Kathie (1984), "Households as income-pooling units", pages 37-55.

36. This position does not lead to the view espoused by Norris in his study of Salvador, Brazil (Norris, William, P. (1988), "Household survival in the face of poverty in Salvador, Brazil: towards an integrated model of household activities", *Urban Anthropology*, Vol. 17, No. 4, pages 299-321) that household labour diversity can only be understood as a reaction to external political-economic forces. Such a view negates the existence of discord within the household and the generally porous nature of the household itself, namely the ability of household members to establish personalized linkages with non-household members and activities that do not result in income-pooling within the household. As discovered by Jellinek (see reference 38), for example, husbands and wives in Jakarta often kept incomes separate and accounted money given to household members as loans rather than shared income.

37. See reference 8. Friedmann (1989).

38. See reference 1. Poerbo (1991).

39. See reference 18.

Collectively, the members adopt implicit strategies which, no matter how contentious they may be among household members, are oriented toward constructing an intra-household division of labour that reduces risks associated with the life of the poor in the urban economy.⁽³⁶⁾

Many of these risks are associated with access to and management of environmental resources. Every urban household, including those of the poor, is engaged in activities to reproduce the material and social means of its own existence and, hopefully, to improve its welfare. These activities include those related to the physical environment and its sustenance: securing of water and fuel, growing garden crops, disposing of wastes and maintaining as clean a household environment as possible. The economic struggles by poor households involve both short-term and long-term strategies and are not, either in principle or wholly in practice, opposed to managing environmental resources in a manner which renews the physical basis for economic survival. Health risks and illness associated with environmental deterioration and pollution can have disastrous effects on the household economy and may result in changing strategies and composition of households. Likewise, part of the division of labour in households involves maintaining access to land and water and the food and fuel resources both through and outside of the market.

Environmental management, no matter how rudimentary or even unsuccessful, is an active concern of poor households. Yet, it is also true that the poor have few expendable resources to invest in environmental management. Time may be a principal constraint for many household members. Friedmann states that for the poor women in the *barrios* of Latin America, time spent on gaining cash, buying or otherwise obtaining essentials such as water, food, clothing and transportation consumes as much as 80-90 hours a week.⁽³⁷⁾ The most immediate implication of these observations is that improving environmental management is likely to be best pursued through programmes that link it to income increases in poor households. This may be achieved through income-generating directly based on environmental management (including waste-scavenging), through activities that stabilize land tenure relations, or indirectly through associated programmes to create community based enterprises that allow household members to earn incomes and manage household needs.⁽³⁸⁾ Whatever the avenues chosen, linking income improvements with environmental management can no longer be put at the margins of public policy, but must instead be placed at the centre of any national development model. To do this requires confronting topics that continue to be evaded: urban land reform, legitimization of community organizations, and entitlements to produce and to receive food and basic needs outside of the market.

c. Lane, Neighbourhood and Community

Environmental management, understood in this context as organized efforts to cope with and reverse environmental deterioration, is not confined to households but also rests on inter-household cooperation at the neighbourhood and community level.⁽³⁹⁾ The inability of households to manage production and consumption relations by themselves is partially offset by the existence of inter-household forms of reciprocity and mutual obligation, which underlie the observation that slum settlements are not unplanned. They arise through

40. Evers and Korpff (see reference 33) illustrate this process through the description of house construction carried out in the Bangkok slum of Klong Tuey. Although materials were purchased on the market, labour contributions were not paid for but the future home owner was obliged by custom to provide food and drink for the workers. No land purchase or land rent was involved. Ninety per cent of all Klong Tuey houses were built by their owners with the help of household and community members. Each usually begins as a very small unit, but is expanded as income and resources become available.

41. Racelis-Hollnsteiner, Mary (1984), "Metropolitan growth: poverty eradication through people's participation", Ninth Earoph International Congress, Hong Kong, August 20-24.

42. See reference 32.

43. Sicular, Daniel (1991), "Pockets of peasants in Indonesian cities: the case of scavengers", *World Development*, Vol. 19, Nos. 2 and 3, pages 137-161.

44. Polanyi, Karl (1957), *The Great Transformation*, Beacon Press, Boston; Potter, J. (1976), *Thai Peasant Social Structure*, University of Chicago Press; Scott, James (1976), *The Moral Economy of the Peasant*, Yale University Press; see reference 3; McGee, T.G. and Y.M. Yeung (editors) (1986), *Community Participation in Delivering Urban Services in Asia*, IDRC, Ottawa; and O'Connor, R. (1989), "From 'fertility' to 'order', paternalism to profits: the Thai city's impact on the culture-environment interface", in Siam Society (editor), *Culture and Environment in Thailand*, Bangkok, pages 393-414.

45. Anderson, E. (1987), "A Malaysian tragedy of the commons", in McCay, B., and J. Acheson (editors), *The Question of the Commons*, University of Arizona Press, Tucson, pages 327-343.

46. Racelis-Hollnsteiner, Mary (1986), "Mobilizing people for social development: approaches and

household and multi-stranded inter-household relationships that work to clear land, construct housing, and create habitats largely outside of the market system. Unpaid labour, labour exchanges and reciprocal exchange of materials are the sources of habitat formation by the poor.⁽⁴⁰⁾ Although none of these activities are likely to enter into statistics for the Gross National Product or any other type of national statistic, they comprise a substantial share of the urban economy.⁽⁴¹⁾ One estimate suggests that one-fifth to one-quarter of household consumption in such cities as Bangkok and Jakarta is derived from such non-market (subsistence) production.⁽⁴²⁾

These relations are also sources of self-empowerment through exchanges of knowledge and information, organization to cope with and make demands upon the perceived capricious exercise of political power by the state and unscrupulous treatment by enterprises which, *inter alia*, pursue accumulation through super-exploitation of the poor.⁽⁴³⁾ They are also the latent, if not actualized, sources of environmental management. Households are actively engaged in many types and scales of association, the key ones of which include the extended family, neighbours and neighbourhoods, religious associations, and patron-client relations. A wide array of studies and literature reveals the many ways through which social relationships create communal systems of exchange based not on market relations but on principles of reciprocity and redistribution, which are imbedded in the dynamics of culture and cultural change.⁽⁴⁴⁾ The dissolution of these institutions is associated with the reduction in the capacity to manage environmental resources.⁽⁴⁵⁾ A substantial amount of interest has been generated over the past several years enhancing community participation in the planning process.⁽⁴⁶⁾ The common theme is that citizens at the neighbourhood and community level can, under supportive conditions, manage lanes, waterways, and waste disposal systems, and are capable of devising and enforcing access rules and reciprocal obligations among community members. But translating the reality of urban life for poor into active communities faces innumerable obstacles. Rural communal support systems are weakened in the urban context where neighbourhood continuity may be low, land and other resources cannot be secured, social stratification is high, dependence on the market for much of the household consumption demands constant involvement in the search for wage work which erodes reciprocal and redistributive relations, and the intrusion of outside actors is measurably higher than in the village.⁽⁴⁷⁾ For example, one study of the Kampung Improvement Programme (KIP) in Indonesia found that, contrary to the stated intentions of KIP, most kampung residents were not involved in KIP because community elites, who have a very different view of the problem and needs of the community (eg., beauty courses, food decoration classes, bridal make-up session) were not seen by the poor as being relevant to them.⁽⁴⁸⁾ With difficult-to-comprehend bureaucratic organization of planning by the government and personalized decision-making by the government designated community leaders (*lurah*), the poor were left with no clear understanding of how to receive assistance. The study concluded that very little knowledge has been transferred from elites to the poor.

Such studies support the view that society and social relations have been too transformed in the city to allow for an *a priori* assumption that, given the opportunity to do so, community organizations will somehow spontaneously arise and move toward reversing the already severe forms of environmental deterioration common in poor neigh-

techniques for popular participation", *Regional Development Dialogue*, Vol. 7, No. 1, Spring, pages 58-68; and Korten, David (editor) (1986), *Community Management: Asian Experience and Perspectives*, Kumarian Press, West Hartford, Connecticut.

47. These often espouse the ideological views put forth by the World Bank that "...production and exchange through impersonal markets is strongly preferred to subsistence activities by poor producers and consumers alike. Although family decisions and mutual responsibilities may continue defining some aspects of household economic behaviour, market exchange irreversibly supplants reciprocity and redistribution as the means of acquiring income and wealth" in Jagannathan, N. Vijay (1989), "Poverty, public policies and the environment", World Bank Environment Working Paper No.24, Washington DC. Others (Smith (see reference 35), Evers (see reference 32), Friedman (see reference 35)) show contrary "preferences" by noting the very high and growing shares in European and North American economies of non-market activities.

48. Karamoy, Amir and Gillian Dias (1986), "Delivery of urban services in kampungs in Jakarta and Ujung Pandang", In McGee and Yeung, see reference 44, pages 191-210.

49. Kraus, C. (1983), "The elusive process of citizen activism", *Social Policy*, Fall, pages 50-55; Blaikie and Brookfield (1987), see reference 25; and van der Linden, Jan (1989), "The limits of territorial social movements: the case of housing in Karachi", in Schuurman, Frans and T. Van Naerssen (editors), *Urban Social Movements in the Third World*, Routledge, pages 91-104.

50. See reference 1. Eckstein (1990).

51. Rudé, G. (1980), *Ideology and Social Protest*, Pantheon Books, New York.

52. See reference 25. McCay and Acheson (1987).

bourhoods.⁽⁴⁹⁾ Conversely, these observations point to the likelihood that social mobilization at the community scale is most likely to occur and achieve goals in settings in which people have a sharpened sense of shared destiny. In Eckstein's study of an effort by the urban poor in Mexico to obtain housing, the key factors identified for the success of their housing movement were shared economic deprivation and a common sense of limited alternatives.⁽⁵⁰⁾ The study also found, however, that support from more powerful community members and groups was also required along with a government which seeks legitimization as a mass based democratically elected party, making it less risky for local groups to mobilize publicly for housing than under more repressive regimes.

The pessimism suggested by the observed deterioration in community relations and networks should not, however, lead to a rejection of efforts to promote community empowerment and citizen activism. The very engagement of people in cooperative efforts and interaction with government can promote the type of awareness needed for consensus-building for further action. The experiences also bring an heightened awareness of the possibilities for participation that can endure beyond the success or failure of a single event.⁽⁵¹⁾ Furthermore, community studies have shown that even heterogeneous ones can muster the collective will to address common issues.⁽⁵²⁾ But making those institutions charged with managing common resources accountable to community members must be a central requirement of all such efforts.

Given these observations, the majority of currently popular proposals for enhancing participation turn out, on closer inspection, to be false leads. Steps to enhance popular participation have usually meant opening the state planning process to quasi-public meetings at which selected citizens are asked to comment but are given no decision-making or veto powers.⁽⁵³⁾ Calls for self-reliance turn into excuses for the state to withdraw from providing public resources and into exhortations for the poor to be better citizens. Even if such moves were to enhance community-level management, with no other social and economic reforms such as urban land redistribution and tenure reform, self-help programmes cannot be expected to reverse on-going processes of immiseration and the environmental degradation associated with them. Rather, they perpetuate a political economic system in which programmes involving the poor are carried out as marginal exercises and experiments of little lasting impact.

The task is, more appropriately, one of empowerment of both the poor and their communities by radically enhancing their access to the public domain and to the productive resources of society. In the vocabulary of Friedmann,⁽⁵⁴⁾ it requires a mode of planning which moves away from the paternalism of societal guidance designed and carried out by the state and corporate economy toward one which emanates from processes of social mobilization. This would entail an opening of the hierarchical, non-democratic structure of government by recognizing rights to organize, to make claims on the state, and to enter into struggles over the built and the natural environment. In this regard, the key word is legitimization, without which households cannot sustain their collective voice in public affairs and the state can have no "partners" in development. To put the same argument into slightly different vocabulary, "...the real task is to create and institutionalize a process of social decision-making."⁽⁵⁵⁾

This fundamental task confronts the reality that political association outside of state auspices is "...still viewed with apprehension or

53. Karamoy and Dias (see reference 48) divide participation into four facets: contributing ideas in the planning process; sharing responsibilities in providing inputs (money, labour, materials); administration of projects (including monitoring); controlling decision-making through exercise of veto power. While most of the advocacy has centred on the last, participatory programmes have, in practice, tended to limit participation to the first and second aspects.

54. Friedmann, John (1987), *Planning in the Public Domain: from Knowledge to Action*, Princeton University Press.

55. Cartwright, T.J. (1989), "Urban management as a process, not an output", *Review of Urban and Regional Development Studies*, 2, pages 107-113; or, as expressed by Craig, Gary, Marjorie Mayo and Marilyn Taylor (1990), "Editorial introduction: empowerment: a continuing role for community development", *Community Development Journal*, 25:40, pages 286-290, there is a manifest need for "...an approach, discipline, movement or profession - whatever we choose to call it - which embodies the principles of democratic participation, equity and empowerment in a world which seems to value them less."

56. See reference 46, page 60. Racelis-Hollnsteiner (1986).

57. See reference 46, page 6. Racelis-Hollnsteiner (1986).

58. See reference 46. Racelis-Hollnsteiner (1986).

59. See reference 1. Eckstein (1990).

60. See reference 55. Craig, Mayo and Taylor (1990).

61. Chan, Cecilia (editor) (1986), "The process intervention model in neighbourhood work: the Mount Davis community development project", *Casebook 1988*, Hong Kong Council of Social Sciences, Social Welfare and Training Committee, pages 98-117.

outright disapproval by national and even district-level officials."⁽⁵⁶⁾ But in the slums and squatter settlements of Asian countries, neighbours are still expected to assist each other, community leaders are also called upon to adjudicate in disputes within settlements, and religious orders carry out the roles of redistribution through festivals, ceremonies and charity programmes. Community based mutual assistance programmes are also found to be favoured over outside assistance. Mary Racelis's study⁽⁵⁷⁾ of slum dwellers in the Philippines details the affinity for such association by noting that the residents prefer to draw upon community talent rather than enter into government improvement programmes for a number of reasons: more appropriate skills and better craftwork, faster work completion on a calendar that provides the least disruption to the household division of labour, and maximization of income-producing opportunities.

Such observations suggest that the potential for social mobilization and cooperation exists in many forms. But other inequalities, particularly those related to gender, will have to be overcome if community based planning is to be effective. Empowering both household and community requires empowering women as well as men. As noted by Racelis⁽⁵⁸⁾ women usually have more knowledge and skills in both areas because they are the ones who spend most time in the community, know more about how it works and show great skill in organizing inter-household and community planning efforts. The common pattern of women being kept out of key decision-making circles, particularly those involving government projects, and being denied a voice at public meetings in many Asian countries perpetuates both the incomplete understanding of the stress being placed on households in managing their relations with the environment and the many possible alternatives that could be constructed at the household and community level.

d. NGOs and CBOs

Non-government and community based organizations and other sources of social support outside the community have come to play a critical role in citizen and community mobilization. Eckstein argues that support of "better situated" individuals and groups is a precondition for such mobilization.⁽⁵⁹⁾ Craig, Mayo and Taylor argue that the principal role that NGOs can perform is coalition-building to create linkages between community and wider political processes.⁽⁶⁰⁾ Chan also points to the key role which outside organizations have in mobilizing community resources.⁽⁶¹⁾

The many experiences in Third World countries support these views. NGOs have played a key role in the resistance by slum dwellers to eviction from land in Bangkok and in negotiating the subsequent land-sharing agreements with landlords. Community based organizations can also combine forces to form broader social movements that gain political life outside of a given community. In the Philippines, during a short period in the 1970s, squatters in Tondo, which is considered to be the largest slum area of South-East Asia, united in one large association to demand land rights, urban services and urban land reform. In this instance, however, key leaders were coopted by the government and others were unable to translate political struggles into concrete programmes to improve the squatter areas. Shuurman and van Naerseen argue that this episode confirms the generalization that social movements that emerge in situations

62. Schuurman, Frans J. and Ton van Naerseen (1988), "Introduction", *Urban Social Movements in the Third World*, Routledge, pages 1-8.

63. See reference 62.

64. See reference 14.

"...without a certain degree of democratic space" will not be able to sustain themselves against the state, which will resist any forces that question its "function, legitimacy and ideology".⁽⁶²⁾ NGOs and community based organizations, from the above perspective, often walk a thin line between facilitating community efforts and overtly engaging in the political process. Where democratic institutions are in place, the line may be explicitly crossed as poor households join political parties. In Madras, conflict resulting from the emergence of and competition between three community organizations, two of which were linked to political parties, worked to undermine internal cooperation. In this instance it was the political parties that acted as brokers to gain improvements in physical infrastructure in poor communities.⁽⁶³⁾

Another perspective on the role of NGOs concerns more technical assistance related to skills, information, access to technical inputs, and monitoring and evaluation. Hardoy and Satterthwaite assert, for example, that technical help from outside is a pre-condition for community based efforts to improve and manage the environment.⁽⁶⁴⁾ A dilemma underlying this concern is how to distinguish between technical assistance and decision-making. The ideal usually presented is that the community decides and NGOs assist, but since decisions are often imbedded in or follow on from the type of information and technology put in use, the actual transfer of skills, information and techniques can itself be seen as forming a decision-making process. Having made this observation, the conclusion to be drawn is not to reject external assistance, but rather to make more explicit the institutional and decision-making implications of, for example, the formation of a community credit union or the setting up of a garbage composting system, both of which will call for new management structures, resources, and commitment by community households.

e. The state

One of the most widely identified conditions for enhancing local initiative in planning is that the state must become an active partner with local organizations. But the nature and actual role played by the state in community development remains a highly debated subject. In practice, most governments in Asia remain highly centralized and officially approach planning as a technical rather than a political process. Two central obstacles arise from these characteristics. One is that citizen-state "partnerships" are virtually impossible to establish because of the spatial, social and economic distance between the holders of power and communities. Political power has a spatial dimension, and the continued centralization of power in a single city, often at the expense of the local state and, by extension, local politics, has been one of many sources of popular protest in Asia that represent the long-denied desire to make governments accountable to the citizenry.⁽⁶⁵⁾ From an environmental point of view, Brokensha and Riley note that resource management "...requires administration by a small group of people familiar with the area and with each other, who are united by historical and social bonds."⁽⁶⁶⁾ Such an approach cannot be pursued under highly centralized political regimes. Although widely proclaimed as a government policy, authentic devolution, i.e. increasing access to control over all aspects of planning in the public domain including decision-making, revenue-collecting and financing, plan-making, administration and implementation, is still far from being realized in Asia.⁽⁶⁷⁾

65. See reference 45, page 342.

66. See reference 28, page 343.

67. Slater, David (1989), "Territorial power and the peripheral state: the issue of decentralization", *Development and Change*, Vol. 20, No. 3, July, pages 501-531.

68. Garau, Pietro (1988), "Urbanization and eco-development", International Meeting on Environment and Development, Milan, 24-26 March.

69. See reference 1. Cairncross et al. (1990).

70. See reference 8. Friedmann (1989) and (1990).

71. See reference 8, page 10. Friedmann (1989).

Democratization is equally far away, and the second problem is that planners and planning remain largely unaccountable to the people they purport to serve. Particularly in the case of the urban environment, the possibility that democratization is part of the solution to environmental deterioration has been at best a minor item on the research agenda in Asia.⁽⁶⁸⁾ The lack of accountability has led to several problems in planning: values and priorities that fail to match those of the "clients", inappropriate programme designs, absence of key information and feedback loops, lack of enthusiasm for and compliance with government planning directives, failure to tap local resources and talents, and heightened alienation of citizens from government and the political process. At best these problems result in projects which are technically successful but socially uneven in the delivery of benefits; at the other extreme, they can lead to violent protest and social movements against, for example, land development projects nominally targeted for the poor.

A number of studies assessing these issues have strenuously argued that for community organizations to be successful in achieving their goals, the issues of decentralization and democratization (accountability) must be simultaneously addressed. Cairncross, et al. for example, argue that the pre-conditions necessary for reversing the deterioration of the urban habitat and poverty include the establishment of elected city and municipal authorities which are presumed to be more responsive to community and neighbourhood organizations.⁽⁶⁹⁾ In stating the view that incorporating neighbourhood organizations into planning can mean major savings in time and money by defusing potential reaction to government programmes, they also observe that the poor, whether at the household or neighbourhood level, have a very low capacity to generate "self-help" improvements because of the constraints on their labour time and material and financial resources. In association with representative community organization and through democratic practices, governments must act to assist communities with technical advice, funding, specialist equipment and materials. In other words, state-community partnerships are likely to be more fruitful than either state or community efforts alone. In a similar vein, Friedmann argues that households joining hands is insufficient to the task of empowering the poor.⁽⁷⁰⁾ The state must work to complement and support community efforts at self-empowerment through its social policies. Citing the fact that "...only the state can legalize access to urban land",⁽⁷¹⁾ he further asserts that "...new ground rules for state-community partnerships will have to be drawn" which include "...new roles for the local state, the democratization of the local state, the representative organization of the local community, and the opening up of a new political terrain in the regional and local spaces."

Viewing the various scales of organization, the constraints on each, and the evidence of success in their totality reveals a startling degree of variation in the prospects for enhancing community based environmental management by low-income people and households. Although various authors have asserted that certain pre-conditions exist for any successful efforts, regardless of setting, the details of a given case often reveal unexpected relationships: the *de facto* recognition of the legitimacy of kampung communities through the KIP programme in Indonesia, the reported divisive effects of political parties on community solidarity in Madras, and the routinization of urban invasion in the Orangi Pilot Project, which has reportedly accommodated more than 1 million people, are but a few of the

examples that suggest a need for research efforts which go beyond quantitative analysis and stylized decision-making and management models to explore the avenues for increasing access to environmental resources and empowering low-income households to effectively manage them in their communities. Section four addresses the question of how such efforts might be organized.

IV. TOWARD A RESEARCH STRATEGY

TRANSLATING THE FOREGOING enquiry into an action oriented research programme involves at least two considerations. The first concerns the philosophy and goals that are to guide research. Particularly when research has the intention of leading to real world events that affect the lives of real people, there is a need to justify research not only for its academic usefulness but, more importantly, for its social importance and impact. The second, more technical consideration, is directed toward establishing agreement on a research framework for incorporating concepts and levels of analysis that can serve to move knowledge to action. In this regard, the burden of research is to explain patterns and on-going processes and to link these explanations with an identification of the means for ameliorative action by and with the poor themselves.

a. Research Philosophy and Goals

Community level research, whether by academics, government agencies or other "outsiders", has tended to be a one-way process of intrusion into the community to gather information for analysis and its circulation in all quarters but one, the community itself. This, in part, reflects the implicit view of the poor as targets for assistance rather than as people actively involved in charting their own destinies. The logic of the presentation in the sections above leads to a different position, namely, that research should become part of citizen and community empowerment by fostering a social learning process that is activated through community decision-making processes.⁽⁷²⁾

Much of the discussion on this preferred approach has fallen under the rubric of participatory research. Such a participatory, action oriented approach departs from conventional scientific inquiry and empiricism, namely, its rejection of the notion that "facts" are objective. In the words of Racelis,⁽⁷³⁾ it eschews the practice of researchers "...remaining divorced from their subjects and treating data as though it were value-free and meant solely for the enlightenment of national and international elites instead of the people whose lives generate the data." She goes on to list four other principles for an authentically participatory programme of research:

- Mutual learning based on dialogue with the community which seeks to reveal how its constituent households understand their conditions, what actions they are now taking, and how outside knowledge, resources, and other relations can best improve the existing environmental conditions.
- Enhancement of community level capacity to produce and analyze knowledge.
- Commitment to democratic practice.
- Promotion of a widening access to government planning processes.

72. See reference 55, Cartwright (1989); and Sachs, Ignacy (1986), "Work, food and energy in urban ecodevelopment", *Development: Seeds of Change*, 4, pages 2-11.

73. Racelis-Hollnsteiner, Mary (1987), "Prologue", in Turton, A., *Production, Power and Participation in Rural Thailand: Experiences of Poor Farmers' Groups*, UNRISD, New York, pages xi-xviii.

Each of these elements has been touched upon in the previous sections of this paper. Combining them into a coherent research strategy suggests the following organizational strategy:

1. City-level research teams: a) organization of country level, interdisciplinary teams that are committed to working with community members on a long-term basis; b) identification and/or formation of learning groups/associations within the community; c) linkage with outside facilitators and researchers who assist in organizing national and international forums for discussion on comparative aspects of research.

2. Comparative research: a) establishment of coordinating team to assist in constructing comparative research frameworks, organizing international meetings and bringing research together for dissemination to wider audiences; b) setting up of field visits to each community by representatives of all research teams as a means of gaining first-hand insights into problems and approaches toward resolving them.

3. Research process at the community level: this would, in part, rely on ethnographic study techniques to, first, identify networks and organizations operating in the community, and then to work with these organizations on community development. Collaboration would be accomplished through agreements on the problem to be addressed, the explanation of causes of the problem, the usefulness of research to document the problem, and on how to evaluate progress. Through this process, mutual learning is entered into decision-making processes and, by extension, research facilitates the empowerment of people by helping to expand their knowledge to critically assess the nature of the problems surrounding them and to engage in new forms of practice oriented toward solving these problems.⁽⁷⁴⁾

4. Comparative research: this would involve a) a focus on identifying (abstracting) key components/aspects of problems and explaining reasons for successes and failures in community based environmental management; b) periodic writing up of research in progress to share and discuss with other research teams and invited participants; c) publication of research findings; d) active involvement in local and international forums related to the research programme.

b. Components of a Research Framework

The two major dimensions of research, namely, that which directly involves researchers and communities and that which focuses on its comparative aspects, suggest the need to allow for a dynamic tension between, on the one hand, a tendency for local contexts to lead research foci and goals in different directions and, on the other, to maintain a common framework of analysis for all community research. The position taken here is that neither dimension can be fruitfully followed if it results in the minimization of the other. The singularities of each experience will be as important as the commonalties, and the setting of different goals also broadens the value base for the research while an agreement on some goals reveals insights into variations in pathways to achieve them. Based on this position, the general principles advocated in constructing the framework are to, first, simplify the comparative research framework in terms of agreement on a limited number of major research questions, components of analysis and research outputs and, second, to decentralize the bulk of the specific directions of research to the city-level teams and communities with which they are carrying out research.

74. Curtis, Karen A. (1989), "Help from within: participatory research in a low-income neighbourhood, *Urban Anthropology*, Vol. 18, No. 2, pages 203-217; and see reference 73.

With this understanding in mind, constructing a comparative research framework can begin by considering the inclusion of the following scales and foci for analysis:

1. The household: the most important yet most neglected item in most environmental research, whether rural or urban, is to understand how poor households currently manage their environments. Claims that the poor are incapable of understanding or engaging in environmental management must be investigated, and ways in which households can facilitate improvements in their surroundings need to be explored. Questions about perceptions by household members of causes and possible directions for the amelioration of environmental problems can be used to open dialogue on related issues of access to land and relations with community and outside organizations and actors.

2. Gender: the position and role of women in the household, community and the larger political and economic domains of society needs to be given explicit attention, both from the point of view of understanding the constraints on improving their own positions and, more positively, with regard to creating the social, political and economic space for realizing the goal of greater gender equality in the tasks of environmental management.

3. Inter-household relations and community organizations: in addition to understanding individual household-level management activities, community-wide institutions in which households participate to secure clean water, clean drains, dispose of wastes, and manage common resources need to be identified and their strengths and limitations need to be better understood. Research on access to land and alternative land management regimes can also be included at this scale.

4. NGOs and external agencies and organizations: external sources of support and solidarity, particularly NGOs and political organizations, have consistently been identified as crucial elements in successfully mobilizing communities to both solve problems internally and to approach governments in an organized manner. Identifying these sources and understanding their relationship as well as their agendas in regard to community organization is therefore a crucial component of research.

5. The state: state-community relations are also key aspects of research. Analyzing the policies and programmes adopted with regard to environmental management in low-income communities would be a starting point for this research. State policies and actions with regard to such issues as land distribution, community organizations, and participation would also be important topics for assessment. Comparisons between central and local government policies and actions would also shed light on the many claims that the local level is the preferred locus for state-citizen partnerships.

Each of these components and the issues revolving around them would be researched against a background of knowledge about the national and international context - history of communities under study, national urbanization processes and patterns, levels of poverty, specific features of the political system, structure of the economy and rates of expansion of various sectors, and relative linkages of the urban economy with international actors that influence the composition of the labour force. In exploring these aspects of the national and local context of development, the purpose would be to focus attention on explaining the relationships between actions at the community

level and the social, political and economic parameters impinging on them.

V. CONCLUDING NOTE

BY THE YEAR 2020 the urban population of Africa, Asia and Latin America will have increased from its 1980 total of 1 billion to reach more than 3 billion people. The question addressed in this paper is who will manage the expansion of the vast urban habitats that are appearing with this growth. Observing that up to the present the principal builders of houses, neighbourhoods and communities in Asia's cities have been the poor themselves, the position has been taken in this paper that if low-income households and communities are not empowered to improve their capacity to manage the environment, the future of cities will be one of drastic environmental decline and immiseration that will also deeply affect the economies of cities and nations alike. In the words of Hardoy and Satterthwaite:

"The achievement of an alternative urban future depends on the extent to which poorer groups are able (or allowed) to organize not only within their district but also to become a greater political force within the city and the nation."⁽⁷⁵⁾

Promoting the organization of low-income households at the community scale can be seen as involving a purposeful effort by a set of actors to increase information, knowledge, technologies and organizational skills. These actions are of great importance to the task of strengthening community based organizations, but such a view risks misrepresenting the dynamics of social mobilization and self-empowerment. From this latter perspective, the position has been taken that the issues confronting the poor are less problems of low capabilities than they are ones of access to environmental resources and political community.

In a review of studies of successful efforts to organize at the community level to address these issues of access, the common element identified is that self-empowerment is galvanized by catalytic events that both promote internal solidarity around shared concerns and, equally important, are linked, or quickly become linked, to outside sources of support which together are drawn into negotiating for greater accountability of government and increased room for participatory decision-making. Where these negotiations fail, so do the prospects for improvements in the urban habitat. Where they move forward, successes have been achieved in gaining land, improving housing, expanding infrastructure and public services - all of which provide the basis for improved environmental management. The outline for research sketched above has been put forward with the intention of directing research toward lines of enquiry that will assist communities in making such successes prevail.

75. See reference 14, page 237.