

The poor create tomorrow's cities

Jean-Marc Fleury

Do not look for the city of the future in science fiction novels. You have only to go to Manila, Lusaka, San Salvador or other Third World cities to see it being shaped from meagre resources by the imagination and sweat of the poor. A glance will tell you that this city of the future bears no resemblance whatsoever to the automated glass and steel creations of futurists.

"I'm afraid to say," states Dr A.A. Laquian, expert on urban questions, "that the poor will have to build their own cities. They will also have to collect their own garbage, sweep their own streets, and be their own policemen and firemen."

Because of a phenomenal migration of the rural poor to the cities, the poor are coming to constitute the majority of the urban population in developing countries. If the present rate of urbanization continues, it is predicted that in the year 2000, of the 52 cities that will have a population of more than 5 million by then, 40 will be in the Third World. Unable to generate the surplus necessary to construct cities designed for the rich, most of the new city dwellers will have no choice but to build and run their cities themselves.

The concept of a city built and managed by the majority of its inhabitants is not new by any means. The Latin American sociologist Jorge Hardoy talked about it long before the famous Habitat conference in Vancouver in 1976. What is new is that the ideas and models that were much discussed at Habitat have since been transformed into a large low-cost housing program administered by the World Bank, and its success is being confirmed for millions of people.

However, this achievement leaves a bitter taste in the mouths of politicians and dashes many fond hopes. Heads of state would prefer to inaugurate lovely avenues of bungalows, and heads of households, poor as they may be, still dream of a home to fill them with pride. All that the "sites and services" programs promise the poor is the renovation of their slums, a serviced lot, or the shell of a small house. It is not surprising that the promoters are occasionally accused of perpetuating unacceptable slum conditions. But are there any other solutions likely to bring needy city dwellers essential services?

Three-quarters of the inhabitants of the Third World countries cannot afford housing now being built by the private sector. Some manage to find lodgings through public loan programs and low-rent construction projects. But for millions fresh from the country, the precariousness of their financial situation bars them from any access to official housing programs. Lacking training and permanent employment, the newcomers remain on the fringe of society. Their only choice is to build makeshift dwellings on illegally occupied land — become squatters — or to crowd into slums. Attempts have been made to discourage migration to the cities by allowing the newcomers to stagnate in filthy shantytowns. Some municipalities have tried to force them to leave; governments have even granted them land on the outskirts of the city. All this has been in vain. The poor return to settle near the city core where they have a better chance of finding work.

Ignoring the problem is not a solution, so municipal authorities have taken a more innovative approach, first by

making better located lots available to squatters, then by equipping the lots with sanitary services and electricity. Experience has helped them refine the serviced lot projects to the point of making them a worthwhile solution to the problem of housing the poor. Now there are dozens of sites with a whole range of services, from a simple vacant lot to a small, permanent house. Indiscriminately razing slums to the ground has also stopped. After years of agonizing deliberation as to whether it was reasonable to base community development on slums, planners decided to grant loans for renovation and to bring water, sewers, and electricity to shantytowns. These programs are certainly not the stuff of grand ambitions for either planners or householders, but they do constitute a realistic way of bringing essential services to poor city dwellers and a very efficient method of integrating fringe populations with the rest of the society.

In the face of these achievements, the World Bank decided to extend financing to more than just large physical infrastructure projects, and in the early 1970s, undertook support for such social projects. In doing so, the financial institution made sure that the housing schemes would be replicable, through the provision of low interest and long term loans and a lowering of standards so poor people would be able to pay for their house. Wary of such new adventures, the Bank put a great deal of emphasis on assessment. For its part, the IDRC saw these projects as opportunities to train researchers from developing countries in the field of urban planning. The IDRC and the World Bank decided to finance jointly groups of researchers from the Third World who



Photos: Neill McKee

would assess the projects under way in their countries. This joint program has been in progress for four years. Last October, the Sixth IDRC-World Bank Conference on the Monitoring and Evaluation of Urban Development Projects was held in Ottawa, attended by researchers and project administrators.

Of all the sites and services projects discussed, several of the most successful were located in El Salvador, a small, populous Central American country. A private organization, the Fundacion Salvadorena de Desarrollo y Vivienda Minima (Salvadoran Foundation for Development and Low-cost Housing), administers a very ambitious program there. The Fundacion is well aware that the housing problem goes beyond bricks and mortar, and it uses its construction projects to offer maximum possibilities for slum dwellers to become full-fledged members of the community. Its philosophy is based on mutual aid, which unites families in all kinds of community work, and on the principle of gradual improvement closely linked to the first notion. First, contractors do the major housing work. This is followed by the mutual aid stage, during which the participants do much of the remaining work not requiring professional skills. Finally, the small unfinished houses produced are allotted at random and each family becomes individually responsible for completing its home. Mr Mauricio Silva, project manager at the Fundacion, estimates that his agency's projects represent nearly 30 percent of the houses built in El Salvador. Last fall 12 000 units were under construction.

The houses in the Salvadoran program are built on new sites at the outskirts of cities. Although it is very popular, the program requires purchasing land that inflation and speculation are making increasingly expensive. It also requires that municipal authorities rearrange their priorities, as they must suddenly extend municipal services to poor populations who had previously been ignored. Setting new priorities in this way is not easy. Occasionally a site is not connected to the water system until a year and a half after it has been occupied. The increasing costs of extending telephone and electrical service, public transportation, garbage collection, and water and sewer networks to the new sites have forced planners to seek alternative solutions. A policy of restoring existing structures has become necessary because, in spite of their precariousness, slum dwellings frequently offer the advantage of being close to employment and require less investment in terms of land.

In the bustling Manila neighbourhood of Tondo, the largest shantytown in Southeast Asia, 27 500 families are crowded onto 137 hectares. Here the policy of renovating slum dwellings has perhaps been put to the real test. These families have an average monthly income of \$us57, and live in 17 500 of

what government reports euphemistically call, "structures", built on unhealthy land originally set aside for expansion of the Manila Bay harbour.

The first problem to be resolved was the illegal occupation of the land by the squatters. Since they lived under the perpetual threat of expulsion, it was unrealistic to expect them to invest in their lodgings. Officials began by dividing sections of the shantytown into parcels of 30 to 96 metres square, that they sold for less than a dollar per square metre, payable over 25 years. Next, they presented the population with three possible ways of rationalizing land use. The first changed the arrangement of the structures only slightly, the second involved moving 25 to 50 percent of the houses, and the third required moving up to 75 percent of them.

To the great surprise of the authorities, the squatters have most often chosen the third option because it offers the most harmonious arrangement of lots, and provides a better road system, and allows maximum space for schools and markets. Once the land-use plan is accepted, contractors do the major work on water mains and sewers. However, the population itself decides the assignment of lots and there is no shortage of able bodies when the time comes to move structures.

The families begin improvements on their homes as soon as they have been relocated, or granted the parcel of land they already occupy. They are loaned up to a maximum of \$475 to buy wood, sheets of galvanized iron, nails, and other materials. Several community groups also assist, and small gardens, fences, and flowers soon transform the physical appearance of the renovated sections. By the summer of 1979, 3000 units had been renovated and 20 percent of the homes had been transformed into elegant little two-storey houses of concrete blocks.

Ultimately, of the 170 000 Tondo residents, approximately 22 000 will have to be moved to a site 3 kilometres away. They will have the choice of a serviced lot (water, sewers, and electricity) or a lot with an unfinished house (two walls and a roof). The project also includes training centres in employment sectors with immediate prospects: recycling scrap iron, manufacturing baskets, and crafts.

Having surmounted some initial difficulties, the Tondo project has earned the unflinching support of the squatters, who pressure the authorities to renovate their areas. The project has also shown that renovating existing structures causes less social upheaval than relocating families to peripheral sites. However, since renovation requires clearing space for streets and community facilities, approximately a quarter of the inhabitants must inevitably be relocated. Thus, far from being mutually exclusive, renovation and relocation are complemen-

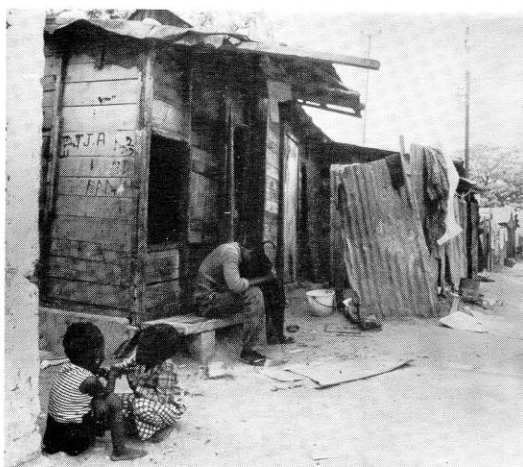
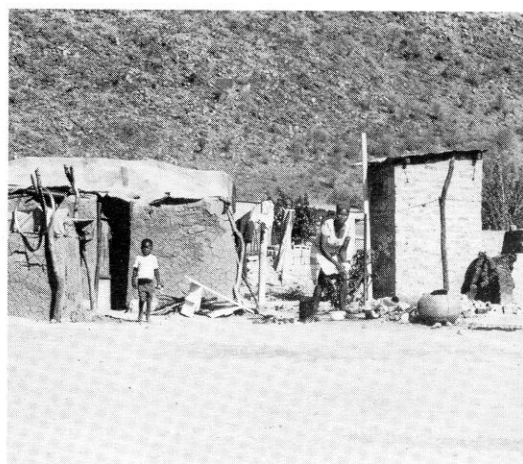


Photo: M.S. Rao

Settlements in (from top) Botswana, Senegal, and El Salvador... "not the stuff of grand ambitions for either planners or householders." Urban resources are stretched to the limit, and low-cost housing must become largely a case of the poor helping themselves.

tary activities.

The World Bank is now financing many low-cost housing projects besides those in El Salvador and the Philippines. The very first one was launched in Dakar, Senegal, in 1970, but it got off to a rather slow start. After 9 years, construction has begun on only 2500 of the 10 500 available lots, and barely 200 families are living in their homes. In Lusaka, Zambia, however, another sites and services project was highly successful. In four years some 7600 homes had been built at an average cost of \$825. Through the cooperative efforts of the IDRC and the World Bank, the projects in El Salvador, the Philippines, Senegal, and Zambia have been thoroughly assessed. At last October's meeting, with representatives of Indonesia, Kenya, Panama, and Colombia looking on, the researchers and administrators were able to begin sketching an overall picture of their experiences.

There was a very clear consensus in favour of public participation. In El Salvador especially, the results proved that from a strictly economic point of view, the mutual aid system reduced construction costs by \$400 to \$600, which is 50 percent of the cost of building a small house. Even if participation in community work entails loss of income, the families feel that this loss is easily offset by the opportunity of obtaining a home they could never afford otherwise. In Senegal, however, construction by the inhabitants has meant only negligible savings so far — from 10 to 20 percent according to Senegalese authorities, who plan to assign an independent labourer to each family from the start. In Zambia, the authorities prefer to channel public participation toward the manufacture of concrete blocks, which are in great demand — even if the quality occasionally leaves something to be desired — rather than toward construction itself.

It seems that the important factor is that families who will have to live together in the new or improved neighbourhood have the opportunity to get to know one another by working together. Once a community spirit has been firmly established, municipal authorities feel that the loans will be paid back more quickly, so that funds will be available to launch other projects.

Although it is a matter for discussion in the case of provision of new sites, public participation is unavoidable in projects for renovating existing structures. Squatters have often had to join forces against the authorities trying to evict them, and it would be unrealistic to completely reshape their environment without seeking their cooperation. In Tondo, Dr Laquian credits the researchers with having legitimized public cooperation in the eyes of planners and officials, who are most often technocrats, engineers, or architects. "They put a lot of emphasis on construction standards and straight roads," he says. "The social scientists,

on the other hand, see the situation from the point of view of anthropologists." The researchers thus explained to the project administrators that brothers, sisters, children, and parents were usually neighbours, and that the small shopkeepers lived in the midst of their clientele. By randomly matching the parcels of land and the names of families to be relocated, they would be causing all kinds of social upheaval. Rather than cling to the illusion of cold objectivity, the researchers recommend that administrators allow the people to decide the allocation of lots among themselves. "If they encounter problems they will have only themselves to blame," the researchers said. Thus, as the project progressed, the administrators acted more as technical advisers, explaining the specifications to be met and allowing the community to assume increasing responsibility.

Today, the population of Tondo has taken over the renovation project and has defended it on many occasions against untimely intervention by the authorities. The only problem in terms of participation is that single mothers, who make up a significant proportion of poor households, have difficulty getting out to participate in collective work. The administrators who gathered in Ottawa indicated that they were aware of this problem.

The researchers also played an essential role in determining the strata of the population being reached. Their main concern was that the poor might eventually be bought out by the upper classes. Fortunately, these fears are unfounded in most cases. In the Philippines and El Salvador, studies show that the population in serviced lot areas is more stable, so the poor are not being forced out because of the improvements made. In Zambia, however, where the authorities claim that the projects remain accessible to 95 percent of the population, a growing number of occupants have twice the income of those for whom the project was designed. Representatives of the World Bank feel that the situation will resolve itself as the number of available units increases. However, it is agreed that the middle class in Zambia is taking sites intended for the poor because it can find nothing better.

The researchers found that shantytown dwellers and squatters had higher incomes than initial estimates suggested. Relatives in the country often contribute financially in order to have a roof in the city, which is very useful when it comes time to send a child to school there. Experience also shows that very poor families manage to make ends meet by planning extra rooms that they rent out, often to even poorer families incapable of purchasing property.

Assessing the impact of the projects tests the imagination of the researchers where methodology is concerned. Some physical improvements speak for them-

selves, but how does one translate into statistics the claims of Tondo residents that, for example, crime has decreased, or that people no longer throw their garbage out the windows, or that they are more tolerant toward one another? Zambian authorities insist that the health of families is improving, but they have not succeeded in showing this, although there is no question that the streets facilitate visits from medical and health personnel. There are no satisfactory statistics on job creation either, although most of the families do hire workers at some point. One thing is certain, however: municipal authorities see the demand for urban services increase suddenly with the servicing of sites. Their difficulties in meeting this demand are such that participants in the October meeting suggested that research be conducted on ways to assist them.

Mr Anthony Churchill, director of the urban projects department of the World Bank, told participants that the sites and services formula, whether it involves renovated slums or serviced sites, had proved itself. Although the project administrators had corrected many errors along the way, Mr Churchill thanked the researchers for their contribution and encouraged them not to be obsessed about the deficiencies of the first projects. "The Bank," he said, "is now working on second generation projects that include grants to municipalities to accelerate the extension of municipal services." Each year it lends between \$500 and \$600 million for sites and services projects, providing homes for at least a million people annually. The Bank hopes that in the near future more than five million people will find homes through these projects. However, Mr Churchill admitted this will still represent a fraction of the one billion additional citizens Third World cities must shelter between 1975 and the year 2000.

In 1976, IDRC published a book entitled *Catastrophe or New Society?* in which a group of Latin American scientists (including Jorge Hardoy) proposed a plan for universal housing. The average cost of a house in the Third World, 50 square metres with two bedrooms and sanitary services, was estimated at \$1750. The extent to which these forecasts coincide with the achievement of sites and services projects is striking.

On the project sites — which, whether we like it or not, are the blueprints of tomorrow's cities — the houses cost on average less than \$2000. They occupy a site averaging 32 square metres in Tondo, 74 square metres in El Salvador, and 350 square metres in Africa. The monthly payments made by house owners vary from \$10 to \$15, and the monthly payments on loans for renovations to "structures" rarely exceed \$1 or \$2. A room is usually rented for approximately \$5 a month. Furthermore, without having recourse to costly high-rises, projects are sure of attaining

economical densities and preserving precious arable land simply by encouraging construction of two- or three-storey houses. In El Salvador a density rate of 90 families per hectare is already being attained without exceeding two-storey buildings.

Dr Laquian is convinced that building their own homes is the only hope for decently housing the Third World poor, who constitute from one-third to three-quarters of the citizens of developing countries. Besides building their own cities, they will also have to run them, which will necessitate, among other things, rethinking municipal services equipment. For example, there will be no question of purchasing magnificent fire trucks equipped with pressure hoses. Rather, the people will have to use their own equipment and count on their own manpower to put out fires. Because all this involves a great deal of dialogue between the residents and the authorities of these self-built cities, Laquian hopes that more research will be carried out on the social structure and dynamics of shantytown and slum communities.

In spite of the fact that the sites and services projects have dealt a cruel blow to many cherished dreams, there is a great promise for the future: in building their own cities the poor will perhaps form strong, dynamic communities. As long as they do not become caught up in the pursuit of solely personal gain, but take their society in hand, the poor will make of each low-cost housing project the seeds of change for urban poor. As one participant in a project in El Salvador said, "The project not only enabled me to have a house, it also taught me to speak in public." □

Information sciences:

China retrieves a tradition

Kieran Broadbent

Mr K.P. Broadbent, Program Officer with IDRC's Information Sciences Division, travelled to China earlier this past year with the Chinese English Translation Advisory Group. Fluent in Chinese, Mr Broadbent is the author of A Chinese-English dictionary of China's rural economy.

This article, extracted from Mr Broadbent's trip report, gives an overview of the state of library and information services in the People's Republic of China. The full report will be published in IDRC's monograph series early in 1980.

Information retrieval has a long history in China. For instance, the Chinese recognized the close connection between food and population as early as 1368 AD when the first Ming emperor, Tai Tsu, decreed that a Yellow Register be compiled every ten years giving the number of mouths to be fed in each household.

The cataloguing of books was undertaken as early as the 1st century AD when Liu Shang started compiling the dynastic bibliographies in a systematic manner that set the standard for later librarians in China. Descriptive and subject cataloguing began as early as 70 BC and the first library collections are said to date back to 2697 BC.

In 1949, the People's Republic of China (PRC) inherited a wealth of library resources and tradition that had hitherto been accessible only to scholars and the literati. But despite the establishment of public libraries in 1912, the facilities were generally inadequate and poorly endowed. The low level of literacy also meant that the users were limited to a minority of educated people.

The political events had hindered the development of library and information services at a time when the demand for more accurate information resources was growing. Information services had, in fact, traditionally held an esoteric position in China, a position that was intensified during the past two decades, and librarians and information scientists have occupied an ambiguous position in the face of social and political forces.

From 1966 to 1976, during the Cultural Revolution in China, libraries were closed, books were burned, and teachers were dispersed to the countryside, events having far-reaching effects on the whole area of science and technology and the dissemination of information.

Today, however, the growing realization of the need for greater communication to advance the pace of modern-