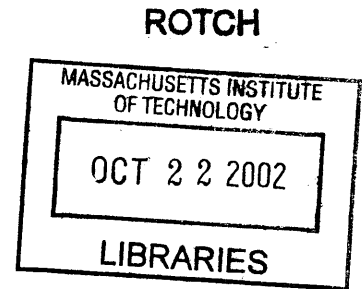


**After Sites and Services:
Planned Progressive Development Strategies in Low Income Housing
during the 1990s**

by

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Master of Architecture
McGill University, 1993

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Submitted to the Department of Urban Studies and Planning on August 21, 2002 in
partial fulfillment of the requirements for the degree of
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Abstract

Planned progressive development strategies and low-income housing have been out of the international development agenda since funding agencies cut-off support to sites and services and similar housing schemes. These projects were among the most widely used approaches to address the need for low-income housing during the 1960s, 1970s and 1980s. The last fifteen years since their abandonment in the mid 1980s have been characterized by the absence of major investments in shelter for the poor in developing countries and the lack of new paradigms in housing.

This study argues that planned progressive development strategies in low-income housing were inappropriately abandoned by international sponsors. The prevalent explanation is that projects were discarded because the minimum standards established by governments and donors in these projects made them unaffordable and unsustainable. While this study finds support for this explanation, it also finds that projects became too complex because of the inclusion of many components to the single idea of experimenting with progressive development under controlled conditions of planning. In addition, implementation criteria were too rigid and contrary to the principle of flexibility which is central in progressive development. The criteria used to assess these projects by donors, focusing on affordability, cost-recovery and replicability, were inappropriate because they assumed that the process of progressive development which had been observed in informal housing would also occur in planned progressive development projects, but failed to evaluate this directly. A central aspect of this housing strategy was thus assumed rather than evaluated directly.

The thesis reviews assessments made to sites and services after international funding of planned progressive developments and shelter projects was withdrawn. In addition, the study collected, organized and analyzed evidence about recent planned progressive development strategies that have continued on a small, local scale in several developing countries around the world. The outcome of these recent experiences demonstrates that these simpler strategies were more viable in addressing low-income housing needs, and that projects can be implemented with very little initial investment and without external support. Thus, planned progressive development strategies are still a promising approach to low-income housing.

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I. A review of the past

1. Introduction

The type of project called “sites and services schemes” effectively disappeared from the international assistance agendas of development agencies in the mid 1980s, about fifteen years after it had entered them.¹ Sites and services schemes were planned progressive development strategies that were intensively promoted and supported in developing countries during the 1970s and early 1980s by international lending agencies.² This low-income housing approach combined land, basic services, self-management and progressive development under formal conditions of planning. Progressive development is the process by which initially precarious forms of shelter are transformed, usually through self-help methods, into permanent housing.

Underlying this shift in development policies was a long list of mismatches between what sites and services attempted and what they actually produced (Laquian, A. 1977, Peattie, L. 1969). Later evaluations also attribute this policy change to the internal politics and dynamics of the international donor institutions (McCarney, P; 1987:15).³ But the abandonment of this important planned progressive development strategy lacked sound rationales. In fact, many of the authors that originally criticized the shortcomings in the outcomes of the projects, subsequently acknowledged this approach as a big step

¹ The paper “Learning by Doing” 1983, is the first signal sent by the World Bank of its intention to withdraw from its project-by-project policy. The paper concludes that the support on sites and services represented a too limited approach to the “complexities or the urban sector” (Zanetta, C, 2001:522, Pugh, C. 2001:408). In 1986 the “urban management program” marked the shift of the World Bank policies away from urban shelter (McAuslan, P. 1997:1708, Ward & Jones 1994:37). In 1991 the paper “Urban Policy and Economic Development: An Agenda for the 1990s” redefines the World Bank’s role in urban policy (Zanetta, C. 2001:522)

² Sites and services in the World Bank were substituted by the “urban management programme” -UMP-, an urban wide strategy that focused in the sector rather than in individual projects. The UMP is not dealt with in this thesis. For critical reviews of the urban management movement see Jones, G. and P. Ward 1994 and McAuslan, P 1997.

³ McCarney argues that international development agencies such as the World Bank, have a pattern of behavior in which new ideas, such as sites and services projects, have a limited life span in which they “are latched onto, promoted and then abandoned at a great rate of speed as a result of organizational pressures to do so,” to be substitute by newer ideas.

within the housing field. In any case, these authors argued the desirable outcomes of sites and services outweighed their undesirable or 'negative' aspects (Peattie, L. 1982, Laquian, A. 1983a 1983b, Van del Linden, J. 1986, McCarney, P. 1987). If not for the poorest groups, sites and services still represented a valid approach for many in the low-income sector (Laquian, A. 1983a, 1983b, Peattie, L. 1982, Rakodi, C. and P. Withers 1995:372). The comprehensive evaluations produced during and shortly after sites and services were implemented provide clear support to the later conclusion (Van der Linden J., 1986, McCarney, P. 1987).

These last 15 years since the mid 1980s when sites and services were abandoned as a housing strategy by development agencies have been characterized by the absence of major investments in shelter for the poor in developing countries, and by the lack of new paradigms in housing. Today, given the lack of alternative approaches to the provision of new housing for low-income groups, it seems worth revisiting planned progressive development strategies as a viable way to produce housing for low-income groups. Basic settlements can be created in new land to be incrementally developed over a period of time with the participation of the inhabitants.

This study argues that planned progressive development strategies in low-income housing, such as sites and services, were inappropriately abandoned by international sponsors and in particular that under the right circumstances it can be a viable strategy. Two reasons will be discussed in this study. First, for almost two decades between the 1970s and the 1980s, assessments of sites and services were limited to the period of implementation of the projects, and were concerned almost exclusively with the key assumptions made by the planners and the agencies that sponsored the projects.⁴ However genuine these concerns were, these evaluations lacked a long-term perspective

⁴ This could represent the particular implementation agenda of the institution. For instance, in the sites and services of the World Bank, effective implementation was based on the triad affordability - cost recovery - replicability of the projects which was the perspective of development that the international funding institution held against subsidized conventional housing (Zanetta, C. 2001:519).

to assess the impact of the projects, which could have objectively permitted to evaluate their long-term outcomes as housing alternatives. Only more recently has this fact been acknowledged.

“... most of them [evaluations] were carried out soon after implementation of particular housing projects and that they consider neither the relationship of these projects to wider housing markets nor their longer term outcomes.” (Rakody, C. and P. Withers 1995;372)

The second reason is that the projects themselves became rather complex because of the addition of too many components to the single initial idea of experimenting with self-managed progressive development under controlled conditions of planning. Thus, the task of implementing and assessing these projects was very difficult.

After these complex projects were discarded and financial support almost disappeared, planned progressive development strategies still continued albeit on a small, somewhat local scale in several developing countries around the world. The outcome of these simplified planned progressive development projects, implemented with very limited resources, demonstrates that these simpler strategies were more viable in addressing low-income housing needs.

This study brings together updated evidence on the effectiveness of planned progressive development strategies based on these more recent, simplified projects, and attempts to contribute to the knowledge base in the area of progressive development, assembling this new information in a comprehensive, coherent way. Most of this evidence is contained in a rather disperse literature produced mainly at the end of the 1980s and during the 1990s about sites and services and other planned progressive developments strategies.

A chronological study of this literature shows the following sequence of additions to the field of housing. Most of what was produced in the late 1980s concentrates mainly in on-going evaluations of late sites and services, and does not relevantly add information to

the existing body of knowledge about planned progressive development strategies. More important at this time were papers that --based in their learning from recent experiences-- proposed alternatives to move on beyond the idea of sites and services within the basics of planned progressive development projects (Van der Linden 1989, Sharma, S.K. 1990, UNCHS 1991). At the same time, some evaluations concerned with a longer-term perspective on the implemented projects shed new knowledge on planned progressive development strategies (Mellin, R. 1987, Navarrete, J 1989, Reimers, C. 1992). Much of this knowledge challenges original assumptions about progressive development and sites and services. Finally, some housing scholars and practitioners reported modest experiences made at the local level in the periphery of cities. These experiences are enlightening, and bring back planned progressive development strategies as a still valid avenue for low-income housing.

Rationale for the study

At the end of the 1980s, planned progressive development strategies such as sites and services programs were abandoned by international development agencies. Even research about these projects was taken out of the funding agenda of international donors. Very little has been said subsequently about planned progressive development because of the lack of additional systematized information about these projects, especially about their long-term outcomes. This has prevented housing professionals and scholars from having a solid knowledge base about the effectiveness of 30 to 40 years of planned progressive development projects.

Nevertheless, progressive or incremental development can still be considered one of the most effective ideas to approach low-income housing. This is evidenced by the recognition many governments made of informal settlements and by the efforts that have been put together through slum upgrading projects and cooperation with informal

settlement actors, i.e., regularization and legalization programs (Van der Linden, 1994; 225).

However, upgrading existing informal settlements is not an adequate strategy if occupation of new land is required. Furthermore, the cost of upgrading is frequently done “at the expense of efficiently planned infrastructure elsewhere” (Brennan, E. 1993:75).

“In Colombia... the costs of post facto upgrading are 2.7 times more for the same level of provision in a planned development” (Aristazabal and Gomez 2001)

Moreover, investments in upgrading are very difficult to recover. The ‘illegal nature’ of land initially developed out of the institutional frameworks of the city makes tax collection impossible and “frustrates land use planning” and “orderly urban growth” (Marulanda, L. and F. Steinberg 1991). Additionally, evidence shows that there is demand in developing countries for progressive development projects under planned scenarios. This is clear in a small, even discrete scale of projects that have been implemented in the developing world under similar forms and names: Planned Upgradable Sites (Sharma S.K., 1990), Progressive Urban Improvement (Reimers, C. 1992), Guided Land Development (Brennan, E., 1993), Incremental Housing Schemes (Siddiqui, T. & A. Khan, 1994), Incremental Land Development (Acioly, C., 1994), Planned Land Occupation (Vanella, R., 1994). All of them rely on the abilities and skills of low-income communities for self-management and construction of their built environment.

Research questions

Several initial questions guided this study:

- . What evidence about planned progressive development in low-income housing has been reported after international development agencies withdrew support to this kind of projects?

- . What does this evidence show about the extent to which planned progressive development strategies are still a valid option to address low-income housing?
- . What new projects based in progressive development have been recently implemented? Where and how were these projects implemented?

While the information addressing the main questions was reviewed, new questions emerged. These are:

- . What new insights have these experiences provided about planned progressive development strategies in low-income housing?
- . Are there any innovations in low-income housing that derived from recent experiences in progressive development?
- . Can this knowledge be applied to new proposals to approach low-income housing in developing countries?

Method

Planned progressive development projects have intrigued me since I first became involved in the field of low-income housing and the study of progressive development in the early 1990s in Venezuela.

My subsequent research was concentrated in the study of housing produced by progressive development in formal and informal contexts specifically in Venezuela. Most of this work has been in new cities where I have had the opportunity to be directly connected to the study of informal invasion settlements known as ‘barrios de invasion’, and planned schemes of progressive development or ‘urbanismos de desarrollo progresivo’. From them I learned that informal housing contains many paradigms that could be adopted housing low-income groups. I remained convinced that formal attempts to address low-income housing are a necessary part of the efforts of architects and planners to address and manage the growing cities of the developing world. The case of

Ciudad Guyana in Chapter 4, rely on my experience working and carrying out research on two occasions about ten years apart in that city.

This thesis, therefore, is the product of my own concern about progressive development in housing and incorporates research and experience over fifteen years in Venezuela. It brings together the experiences I have collected over the years, additional research in Ciudad Venezuela in January 2002 and a survey of related published experiences in other countries.

Scope of research

This study concentrates on planned low-income housing approaches that include progressive development as their main component. It is understood in this work that a coordinated approach to low-income housing using progressive development is feasible only before land is occupied. Sites and services are examples of this kind of projects because they involve providing some form of spatial rationalization and securing basic infrastructure and services in undeveloped land. They were also the last paradigm of housing during the 1960s, 1970s and part of the 1980s.

Strategies such as area and slum upgrading are also based in progressive development. They are, however, out of the scope of this study because they are made on already developed land and involve a different approach to planning.

This research focuses on relevant literature of the past decade and a half after planned progressive development strategies were abandoned by major international funding agencies at the end of the 1980s. This literature was found mainly in refereed journals related to housing, planning and development. Some material was also found in theses and dissertations referred to in the reviewed literature or found pertinent during the bibliographic searches. Information about the Venezuelan experience is based on direct observations and data collected on the site in June 1991 and January 2002 by the author.

Organization

This thesis is organized into three sections.

The first section contains two chapters. This chapter has introduced the study and explained its motivation: the inappropriate abandonment by the international development agencies of planned progressive development strategies such as sites and services. The arguments in support of this thesis are presented in this chapter. These arguments are: a) evaluations of planned progressive development strategies concentrated on the implementation stage and disregarded long-term outcomes of the projects, and b) the projects became too complex and thus, difficult to implement or assess. The need for effective approaches to address the unmet housing needs of large groups of people in the Third World and the need for progressive development strategies that can be used to develop land justifies the study. Primary and secondary questions for the study address the need to review and analyze supporting evidence about the current validity of planned progressive development strategies today.

Chapter 2 presents background information about the concept of progressive development and an account of the sites and services experience from its beginning to its end with the change in shelter and urban policies of the World Bank and other international assistance agencies.

The second section contains also two chapters. Chapter 3 is a critical revision of the literature that reports major findings about planned progressive development strategies after shelter was taken off the international development agenda. It reviews the production on sponsored sites and services during the late 1980s and the 1990s, and collects evaluations that include a long-term perspective of the projects within the same period.

Chapter 4 describes five recent experiences of planned progressive development and one case of a late sites and services project. Then it compares and analyzes these projects

to shed new light on the recent implementation of planned progressive development experiences.

The third section summarizes the research, discusses its results and concludes the study with a list of still unanswered questions that leaves open the possibility for research in planned progressive development strategies.

2. Progressive Development in Low-Income Housing

Introduction. A brief on Progressive Development

Progressive development strategies became the most visible approach to low-income housing for the poor during the 1970s and 1980s. However, the concept can be traced back at least to the middle of the 20th century, though it may have been used even earlier (Mayo, S.K. and D. Gross 1987:302, Brennan, E. 1993:86). During the 1960s, progressive development strategies were implemented in an experimental fashion, usually as part of the regional efforts that characterized planning at the time (in projects such as Brasilia in Brazil and Ciudad Guayana in Venezuela). According to Laquian, by 1974, a survey revealed the existence of at least eighty completed projects that included progressive development –without including upgrading of existing slums-- in twenty-seven countries (Laquian, A. 1977:291). Many international development agencies, but specially the World Bank, supported the implementation of planned progressive development strategies in the early 1970s in the form of sites and services projects. These institutions put a lot of resources and effort in setting pilot projects as demonstration experiences in many countries of the developing world. Some international institutions also seized the opportunity to experiment with their own ideas adding onto the original concept of progressive development. The World Bank saw in sites and services the opportunity to promote its model of affordability – cost recovery – replicability, contrasting it with the shortcomings of conventional housing (Pugh, C. 1991:276, 2001:404, Zanetta, C. 2001:519, Ward & Jones 1994:36). For fifteen years after 1972, sites and services became the most publicized scheme to respond to the housing needs of low-income groups. Many forms of progressive development strategies were categorized under this name as long as there was some form of surveyed land provided and the

promise of some form of basic services (Bijlani. H.U. 1988:50, Brennan, E. 1993:86, Laquian, A. 1983:18). In practice, however, sites and services projects often became complex mechanisms to provide urbanized land with full-service infrastructure and complemented with programs of core, minimal or basic housing, support to local income generating activities, community building and social development, education and health, and other social interventions. This turned out to be problematic; sites and services reached such a high level of complexity that planners had to spend significant resources, time and effort trying to work out and manage the interrelations between the many parts of the human habitat, i.e., economic, social, urban, architectural, etc. (Rakody, C and P. Withers 1995:372). Sites and services revealed the richness and complexities of social interaction within the built environment in our cities and the limitations of planners to control and engineer these processes.

Despite rising criticism and implementation difficulties, sites and services programs continued as the dominant paradigm of planning low-income housing until the mid of the 1980s. The World Bank funded 68 projects between 1972 and 1984 (Mayo, S.K. and D.J. Gross 1987:302) However, in the late 1980s and almost without notice, support from donors for these projects was considerably withdrawn. This action undermined the will of governments in developing countries to maintaining planned progressive development strategies as part of their housing policies. The on-going studies of the implementation of sites and services continued only for a short time. But by the end of the 1980s, very few countries maintained sites and services as part of their programs, and new generations of government officials and planners soon did not know anything about the history of these housing strategies in their countries. Worst of all is that withering support for sites and services was used by the many detractors and interests who opposed the idea of progressive development housing as intellectual ammunition to support a return to conventional schemes of complete housing.

2.a A concept

The term ‘progressive development’ is widely used to group all kinds of approaches that consider the participation of the user in the housing process; from squatter settlements and upgrading existing settlements, to site and services schemes and more complete phased housing developments including spontaneous multistory additions to public housing (Tipple, G. 2000) ⁵.

An old concept, progressive development is the process by which initially basic and precarious forms of shelter are eventually improved into lasting and durable housing. The main characteristic of progressive development is that it is user-managed and user-responsive, thus the dwelling is transformed responding to the household’s evolving characteristics and needs (Reimers, C. 1992:1).

The use of progressive development in planned strategies to house low-income groups can be identified as early as in the 1940s (Mayo, S.K. 1987:302, Brennan, E. 86:1993). These strategies are varied in characteristics and extent. For instance, during the 50s a number of India’s municipalities allotted plots to low-income families in layouts without services (Banerjee, B. & G. Verma, 1994:263). During the first half of the 1960s, Colombia built under the "Minimum Urbanization Program" 12,000 plots with minimum standards (Peattie, L. 1982:133), providing only roads and communal water taps (Goethert 1985:28). Chile’s “Operation Site” (Operación Sitio) provided basic urbanizations with demarcated plots, but the strategy deteriorated into simply laying out plots on the site and became cynically known as "Operation Chalk" (Operación Tiza) (Kusnetzoff, F. 1975: 50) ⁶.

⁵ Tipple, Graham 2000 “Extending Themselves” Liverpool, U.K.: Liverpool University Press. Here Tipple reviews additions on conventionally built government multistory housing.

⁶ Kusnetzoff, Fernando 1990. "The State and Housing in Chile-Regime Types and Policy Choices." In: Housing Policy in Developed Countries by Gil Shidlo. London: Routledge.

2.b Some background information

The systematic learning and experimentation with progressive development started after the attention generated among researchers in housing by the early research work of Charles Abrams (1965),⁷ William Mangin and John Turner (1968),⁸ and Elizabeth and Anthony Leeds (1972).⁹

“The pioneering studies of Abrams, Turner, the Leeds, Mangin, and others chronicled the ways in which the urban poor provided themselves with sites, shelter, and services. The ideas of mutual aid, self-help, community action, core housing, and progressive development were derived from the actual practices of squatters and slum dwellers. These are, at the present, the main ingredients of a basic housing policy.” (Laquian, A. 1983a:7)

These observations were made on squatter settlements and informal housing and led to conceptualize housing as the continuous process in which the successive forms adopted by shelter are always responses to the household’s priorities and needs (Reimers, C. 1992:1).

“The classic sequence of housing locations, from the shared room of the young man or very young family to a rented tenement room of the young family, to the progressively developing settlement needed by the growing family reflects a logical sequence of responses to changing needs within the limits of the growing family's means” (Mangin, W. and J. Turner 1968:158).

This relationship between dwelling and dwellers is bi-directional, that is, not only does housing reflect household’s characteristics but it is also a means to improve their living conditions. Survival and income generating activities such as small yard crops or animal raising, venting stands, small shops, workshops, and room renting allow households to improve their living considerably.

“The possessor of an urban homestead, even if it is not more than a shack on a plot of unserviced land, can rent a part or can use it as a shop or a workshop. The savings will, in general, be invested in the construction by stages of a dwelling

⁷ Abrams, Charles; 1965 “Man’s Struggle for Shelter in an Urbanized World” Cambridge, Massachusetts: MIT Press.

⁸ Turner, John and William Mangin; 1968. "The Barriada Movement" in *Progressive Architecture* Vol. 49, May. pp 154-62.

⁹ Leeds, Anthony and Elizabeth Leeds “Brazil and the Myth of Urban Rurality: Urban Experience, Work and Values in the ‘Squatments’ of Rio de Janeiro in *City and Country in the Third World: Issues in the Modernization of Latin America*, edited by Arthur Field, Schekman Publishing Co., Cambridge, MA..

with modern standards.... After the ten or fifteen years necessary for the completion of the first unit of their dwelling have elapsed, the average family has a higher priority for modern amenities and lower priorities for permanent tenure.... More important at this later stage will be the social status given by the quality of the dwelling environment and the social security given by its equity rather than by the inalienability of its tenure” (Caminos H.; J. Turner; and J. Steffian 1969:vii)¹⁰.

As a formal housing strategy, however, progressive development became widely known only after site and services schemes became supported and implemented by international funding agencies.

2.c The formalization of an idea: sites and services

Sites and services schemes were the first widespread, controlled, formal, and comprehensive planned progressive development strategy. These projects centered their attention in the provision of land and basic infrastructure. They relied on the potential of low-income group’s self-help efforts for the provision of the individual dwelling as demonstrated in informal housing such as squatter settlements and slums. The underlying concept supporting sites and services was that the kind of progressive development observed in informal housing was an effective way to meet the evolving housing needs of the poor. The assumption was that if inhabitants of squatter settlements were capable of undertaking the construction and consolidation of their dwellings under the adverse and precarious conditions of informal housing, they would do much better under a more favorable environment.

The creation of partnerships and the division of responsibilities between the housing agencies and households were among the first purposes of planned progressive development projects. Sites and services “established the principles of the division of labor and collaboration between private and public sectors” (Koenigsberger, O. 1986:30). The housing agencies retained the tasks of preparing the land, laying out the streets,

¹⁰ Caminos, H., J. Turner and J. Steffian 1969. "Urban Dwelling Environments." Cambridge, MA, The MIT Press.

blocks and plots, and providing services and facilities in several fashions. Households were responsible for the incremental construction of the dwelling and, in some cases, for participating in works related to the general improvement of the community. However, sites and services did not intend to duplicate informal settlements (Reimers, C. 1992:2). In fact the strategies stressed the need for "restoring planning control" (Peattie, L. 1982:133; Van der Linden 1986:18) by organizing the spatial arrangement of sites, streets, facilities and other physical elements (Goethert 1985:28), and securing land tenure and assistance in additional aspects (Peattie, L. 1982:133). Site and services aimed to raise housing 'efficiency', maximizing land use and 'improving' speed of construction and standards of user-produced housing. The aim was in regaining control of the 'negative aspects' of informal housing and reproducing its 'positive aspects'. Laquian describes these aspects to be the "resources, skills, and personal motivations to provide adequate shelter for themselves" (Laquian 1977:293; 1983b:16). Peattie refers to this aim as the planners' desire to "organize, regularize, and support these self-improving processes... ..but channelled and planned in a manner which will eliminate the disorder and irregularity of uncontrolled settlements." (Peattie, L 1982:133)

With reserves, planned progressive development became the main strategy of low-income sponsored housing. To funding agencies the main advantages of progressive development over other approaches were affordability (household needs were matched with household financial capabilities), and adaptability (housing responded to user's characteristics and needs). As Laquian points out:

"The main principle behind basic housing is progressive development. This is the idea that shelter and services can be initially provided in the simplest and cheapest way. The housing package can then be gradually improved upon in stages, using the combined resources of the people, community, government, and other institutions. In the process, the shelter and services that evolve are in response to the basic needs of the people and their inherent capability to achieve those needs" (Laquian A. 1983a:8).

International agencies such as the World Bank, incorporated the idea within their programs in the early 70s, ten years later experiments with progressive development were underway in several regional planning projects around the globe.¹¹ As other funding agencies, the World Bank also saw in sites and services the opportunity to incorporate its own agenda. The World Bank model of ‘affordability - cost recovery - replicability’ was introduced as part of the implementation criteria of sites and services. The public and private sector, they thought, would be attracted to sites and services demonstrating the superiority of this model over conventional housing (Pugh, C. 277:91).

Besides the introduction of self-help and incremental development, the added value of sites and services was implementing a more efficient model of developing residential land. The planning rationale responded to criteria of efficient utilization of land and a logical mechanism for infrastructure provision and servicing. Studies about the best possible utilization of land were set out in technical documents (Caminos, H and R. Goethert, 1978), and models for land utilization were developed in complex algorithms and computer programs (Bertaud, A. 1978). In broad terms, Popko describes the criteria for sites and services land planning as follows:

“Planners establish suburban layouts reserving correct amounts of land in correct locations for lots, schools, parks, commercial, and other communal uses. Individual lot sizes, proportions and locations within neighborhoods are determined from overall target densities, efficiency of infrastructure, desirable variances in lot prices, level of initial utilities, and particular advantages lots may have for combined commercial uses.” (Popko; 1979:20).

But sites and services programs went further than what has been explained thus far. Projects included financial schemes for viability and sustainability, loan and credit programs, material banks, technical assistance, training programs, and so on. Additionally, sites and services could be complemented with programs supporting community organization and development, school and medical facility management, the

¹¹ The inclusion of shelter as a major policy issue in the World Bank was announced by their publication “Urbanization” in 1972. Following publications “Sites and Services Projects” in 1974, and “Housing” in 1975

development of local economies through support to small businesses, local industries, self-employment and so on.

A typical sites and services project proposal included several components. It would start with general studies of the economy and the demographics of the context of the project, the study for financial feasibility, cost-benefit analyses, sources for funding and repayment proposal. The physical component included physical studies of the site and a general proposal indicating the land use plan, the design of the residential areas from the general layout of the settlement indicating streets, lots, and special areas, to the level of plot utilization and often designed models for the units. An infrastructure component would include a proposal for temporary and permanent water supply networks, general layouts of off-/on-site drainage system, sewage disposal, electricity lines, and details of typical roads, footpaths, drainages, etc. The social component could include proposals for development of community building and consolidation, special services and facilities such as elementary and high schools, higher education centers, dispensaries, health centers and/or hospitals, community centers, neighborhood recreational areas, open spaces and development of commercial and industrial areas. The implementation would be described in terms of a phased plan of construction, the cash flow plan, the participation of the local institutions, etc.¹²

Considering that housing went beyond the problem of shelter, sites and services probably intended to cover too much under the umbrella of a project. However, it sent a clear message that the urban habitat as a whole should be considered when approaching planned progressive development in low-income housing.

“Sites and Services schemes can be regarded as a land development process, and a means of creating property assets for low-income households” (Pugh, C. 282:91)

completed the view of the World Bank about low-income housing policy support.

¹² National Housing Authority of the Philippines 1978, “The second Feasibility Study of Dagat Dagatan and Regional Centers” Final Report by Llewelyn-Davies Kinhill Pty Ltd with SyCip Gorres Velayo & Co.

Nowadays, after more than three decades without new paradigms in low-income housing, progressive development remains the most reliable mean for sponsored housing programs. Sites and services, however, lost their appeal to international development agencies and there has been neither major support to these, nor any other strategy for creating new low-income settlements projects during the 1990s.

2.d The Critiques

“To be sure, ... site/services projects were far from a total success. In some countries, for example, the plots were appropriated by non-target groups. In others, the projects were delayed for a number of reasons, and because of consequent cost increases, the intended beneficiaries could no longer afford them. Also the rate of repayment has been generally low, and the maintenance of the project areas of poor quality. More importantly, the projects created institutional problems as specially created implementing agencies could not be incorporated in the existing institutional structure. This threatened the sustainability of these efforts” (Sanyal, B. 1986:8)

The implementation of site and services seemed, at the beginning, as a very simple and powerful idea. In a short time, however, projects were found not to meet the housing expectations of low-income groups, especially the poorest. Early revisions addressing the problems of implementation of sites and services schemes focused on the administrative processes of application, screening and selection of the beneficiaries (Siebolds, P. and F. Steinberg 1982:119). Usually the bureaucracy, complex application processes and entanglement of the administrative procedures for adjudication, burdened the delivery of housing and often resulted in the rejection of the neediest applicants, paradoxically, the intended target group of sites and services (Schmetzer, H. 1982:510, Peattie, L., 1982). Administrative burdens endangered affordability of the projects if delays were such that prices of labor, materials and construction increased. For instance, the costs of engineering projects and works in Nairobi sites and services increased by more than 3 times the price of a serviced plot within 4 years of implementation (Chana, T. et al 1979:26)

The dependence of the projects on self-help techniques became also criticized as an exploitation of the neediest. Housing was paid twice in labor, the daily journey at work and the additional time that households spent building at home (Ward, P. 1982:10). In this way, progressive development projects were criticized for becoming the expedite avenue for governments to abandon public commitment to low-income housing, and pushing the poor away from the city. Additionally, the location of the projects had also the unintended effect of “creaming-off” the poor. The economically sounder working class could easily displace the poorer groups on the projects. These groups depended on the social nets of urbanized areas, ties with better-off relatives living in the city, and the opportunities that established urban areas offered. Moreover, converting valuable housing assets into cash was too attractive when immediate survival was the problem (Peattie, L. 1982:132-3). But also for people who could afford staying in the site selling was attractive. In an evaluation of several sites and services, Laquian points out that plots could produce capital gains of 120% (Laquian, A. 1983:214).

Attention was brought also to the issue of the projects’ standards. Evaluations consistently showed that dwellers did not comply with the arbitrary high physical standards set by site and services projects. For instance, in Ciudad Guayana, Venezuela, progressive development projects were intended to raise housing ‘efficiency’, maximize land use and ‘improve’ speed of construction and standards of user-produced housing (Corrada 1966:6).¹³ On the Dandora site and services, McCarney reports that inhabitants were not able to meet the desirable levels of housing consolidation and timetables imposed by the authorities (McCarney, P. 1987:105).

Site and services had already gained a good amount of detractors when the issue of land, and its impact in the affordability and sustainability of the projects received attention. Not only the introduction of on-site infrastructure made site and services very

¹³ Corrada, Rafael, 1966. "The Housing Development Program for Ciudad Guayana" Mimeograph, Housing Policy Seminar. San Juan, Puerto Rico: University of Puerto Rico.

expensive, but also off-site infrastructure provision became unaffordable due to the usual location of sites and services in the periphery of the cities.

“... administrative simplicity and economic efficiency push sites-and-services projects toward large tracks of relatively low-priced land, which most frequently occur at the periphery of the urbanized area” (Peattie, L. 1982:134)

Peripheral location was not an intentional part of the project strategy but the only land that was affordable for low-income housing. Consequently, the problems of high costs of transportation to the city, long commuting journeys, lack of proximity to the city’s facilities and amenities, and so on were added to the already long list of arguments against site and services. Additionally, the cost of bringing up services from the nearest city to the settlements was summed up to the cost of the project. Again, even the cheapest site and services projects became unaffordable by low-income people.

... the opening up of more land does not necessarily mean that the problem [of housing for the poor], if we follow the conventional approach of planning and delivering systems, will be solved, or even that steps will be taken to a solution. In the case of the city of Karachi, for instance, we have opened up enormous chunks of land by means of a road system; yet, that land lays empty because it is not affordable. The cost of structure - infrastructure - and the cost of services make that land not affordable. (Hasan, A. 1997:58)¹⁴

The complex design of the projects required an amount of logistics and coordination for their implementation that dragged the projects away from the simplicity of the original idea. This fact has only been acknowledged more recently. The average sites and services project involved different government agencies and entities working together. Projects with numerous components such as infrastructure, housing, transportation, health, nutrition, education, business development, etc, “ultimately lacked focus and were very difficult to implement” (Zanetta, C. 2001:522). Deriving knowledge from these projects through monitoring and evaluations was not an easy task either.

¹⁴ Habitat II, 1997. “Shelter the Access to Hope” Round-table discussion, June 6, 1996, Istanbul. Geneva: The Aga Khan Award for Architecture

“ ... a large number of sites and services projects are considered to follow the theoretical viewpoint from which they, in fact, deviate to a large degree. It often seems as though the facts have taken their own course: a number of expected results have not materialized. In most cases, sites and services schemes have by no means catered to the increase in low-income housing demand. In some cases, they have even failed to be of any use to the low-income population. As a result, sites and services schemes have not stopped processes of informal housing. Neither do they seem to have done the damage expected by others.” (Van der Linden, J. viii-ix; 1986)

However, the toughest critics of sites and services became also their best supporters. The virtues of sites and services were limited though relevant. The most important was that it broke the paradigm of mass produced housing with an alternative that, if not ready yet to be able to provide alternative options for the lowest income groups, still had much room for improvement.

“The important thing to consider about ... sites-and-services is that, while they are not without problems, they have been found to be much better at providing shelter and basic services at prices that the urban poor can really afford, compared to other housing approaches.” (Laquian, A. 1983b:214-5)

“While it is true that ... sites-and-services, did not really meet the needs of the poorest of the poor, enough people living in slum and squatter conditions were able to benefit from them.” (Laquian, A. 1983b:225)

“... the sites-and-services concept represents an enormous advance over the traditional and unworkable idea of massive public production of finished units...” (Peattie, L. 1982:139)

In spite of these voices of support, almost suddenly, and partly as a result of criticism stemming from early evaluations, the international development agencies that strongly advocated site and services, stopped the funding. The housing paradigm was abandoned to be replaced by the idea of ‘enablement of the markets’ under the larger umbrella of ‘urban management’ (WB 1991), and support was limited to slum upgrading and redevelopment only under specific characteristics.

2.e The Abandonment of Site and Services

The abandonment of sites and services was the result of a major change in housing and urban policy. The change was initiated in the World Bank, and extended to the institutions on which the World Bank exerted a strong influence.¹⁵ There was not an ‘official withdrawal’ of the World Bank from the sites and service practice. The range of projects addressing shelter supported by the World Bank kept on going until the turn of the 1980s. However, the beginning of the shift away from sites and services and, in general, the support of the project-by-project methodology was flagged out in 1983 by the paper “Learning by Doing: World Bank Lending for Urban Development, 1972-82” by Michael Cohen. Marking the end of an era, this paper synthesized the learning from the project-by-project approach during more than a decade of activities. The paper also exposed the difficulties in producing the scaling up of the projects by governments in developing countries. Finally, the paper announced the reappraisal of the Bank’s policies to “urban operations on city-wide policy reform, institutional development, and high-priority investments” (Jones, G.A. and P.M. Ward 1994:36-7).

However, what seemed as a rational evolution based on experience did not actually reflect the external and internal pressures over the World Bank policies. Sanyal describes increasing attacks to poverty-oriented projects from people of the high administration of the U.S. government at the beginning of the 1980s.¹⁶ These attacks, he says, not only came from the exterior of the institution. A “latent opposition group” within the Bank staff that followed with concern the orientation of the projects addressing poverty during the 1970s, took advantage of the political moment to emphasize the need to bring back traditional economic growth approaches in the lines of previous experience of the World

¹⁵ In reference to Yunus, 1994, Zanetta, C. 2001:514 says that World Bank policies are followed by regional, bilateral and national-development banks as well as other non-financial institutions

¹⁶ Sanyal, B. “Learning Before Doing: A Critical Evaluation of the Privatization Concept in Shelter Policies of International Institutions” unpublished paper, MIT.

Bank (Sanyal, B. 1986:9-10). As its president Robert McNamara was leaving his chair, the World Bank's perspective toward urban poverty was radically changing (Ibid 10).

McCarney provides additional insights on the issue. She quotes the irritation of a developing country government official to the arguments by a World Bank official for the change in shelter policy. McCarney emphasizes the internal dynamics of an institution such as the World Bank in what she called "the life of an idea".

"We have just accepted sites and services after fifteen years of you, the Bank, promoting the idea in my country. And now you tell us to abandon it. Well, we like the idea. Now we want to do sites and services and you tell us we should do urban management." (McCarney, P. 1987:23)

In "The Life of an Idea" McCarney argued that there is a pattern of institutional behavior in which ideas "are latched onto, promoted and then abandoned at a great rate of speed as a result of organizational pressures to do so" (McCarney 1987:15). New ideas come to occupy a privileged place on the institutional agendas pushing away previous ideas and deleting any remaining signs of their existence within the institution.

In 1986, the World Bank began a 10-year project "to raise the professionalism and image of urban management in the developing world" (Jones, G.A. and P.M. Ward 1994:37). The new idea was labeled "urban management programme," and broadened the objectives of international assistance addressing the urban sector to the levels of "economic development and macroeconomic performance" (WB 1990:4). In 1990 the staff of the housing section of the World Bank was dispersed to other sections (Pugh, C. 2001:399).

The last paper of the World Bank on sites and services projects announced the impossibility of continuing implementation of sites and services without high subsidies, something that the World Bank was conceptually opposed to (Mayo, S.K. and D. Gross 1987:328). To reach the target group of sites and services projects (usually under the 35th percentile of the income distribution), it was necessary to subsidize between 80% to 90% of the cost of projects (Ibid). According to Mayo and Gross, subsidies became the

unsurmountable obstacle to replication and scaling up the projects. Governments in developing countries would not be able to provide this high level of subsidies and, without subsidies projects would become totally distorted. This is actually the reason most scholars believe caused the abandonment of sites and services projects by the World Bank and other regional development banks.¹⁷

Conclusions: what was learned?

This chapter has provided an overview of the inclusion of progressive development strategies in low-income housing. It has also described details of the sites and services experience as the most important example of planned progressive development experimented to date.

The overall experience of sites and services is one of mixed results. Time and the lack of better paradigms in housing have made the story of sites and services and its lessons more valuable. The idea that originated the model is still valid. That is, progressive development can be included within a structured planning strategy to produce cheap housing for low-income residents by self-help/management methods. No substitute has replaced it and current shelter approaches, such as upgrading, rely on progressive development.

Sites and services also generated a high density of theoretical and ideological interaction. More than a place for idealistic exchanges, sites and services projects were the battlefield where practitioners and scholars cross-fired severe critiques about their views of progressive development in low-income housing. These critiques did not remain unheard and were usually followed by adjustments and adaptations to the previous ideas, which in turn generated new critiques. In that sense, sites and services were a real learning-by-doing experience that caught the interest of many in the housing field.

¹⁷ From conversations of the author with professor Reinhard Goethert in June 2002.

Many of the actual projects lacked the flexibility that progressive development was supposed to provide. Projects were rigidly assembled in their physical, financial and social aspects. Sites and services aimed at flexibility by preparing a diversity of 'housing packages' that often did not fit the needs of many of the poor. In the physical aspect, sanitation packages, design alternatives for the units, land use, plot size, and block arrangements, settlement and street layout were too rigid to allow some of these elements to fall below arbitrary minimum standards. This was especially true for sanitation and land development, and had a big impact on project cost. In the financial aspect, economic assumptions about housing expenditure and household income were overoptimistic and affected housing consolidation and the ability of households to pay, leaving housing to higher-income groups (Chana, T. S. 1984). In the social aspect, expectations for self-help and community participation had a cost that the poorest could not always afford.

In regards to the characteristics of the projects, big and complex sites and services projects were difficult to implement, to follow-up and to scale-up. Sites and services should not be treated as conventional mass housing. Small project size, different locations and a range of housing options are probably opposed to rules of modern production, but have better chances to succeed in the context of low-income housing (Peattie, L. 1982:137).

The impact of the projects in the countries where they were implemented was important but limited. Those benefited were able to find housing that they otherwise could not have enjoyed. However, the scale of the projects in relation to the size of the housing shortage was minuscule.

“... urban lending [for sites and services], though modest in amount ..., has had a significant impact on the way urban issues are being analyzed and solutions formulated and implemented. ... Appropriate projects design has reduced the cost of providing shelter and infrastructure by as much as 75 percent in many projects, and extensive direct benefits are being generated. Some 1.9 million households, or about 11.4 million persons, have benefited from shelter projects alone.” (Cohen, M. 1983:2)

However, more important was that the wide application of sites and services programs throughout the world, which brought governments and the general public nearer to the understanding of a low-income housing alternative avenue to conventional mass housing. Even though governments that implemented sites and services did not scale up the approach, nor did they propose major changes to their housing policies, it became more difficult for them to justify conventional policies of completed housing.

“... sites and services have proved to be a step forward in the right direction; thanks to the wide spread application of the approach, there is not only proof that ‘financially feasible and user-acceptable’ solutions to the housing problem exist for many more people than could be reached under previous approaches; also, these facts are widely known and accepted. By implication, it is also known that, technically speaking, governments are able to do much more than many of them are presently doing. Thus, the conclusion can be drawn that political considerations, rather than financial, technical or managerial aspects determine whether the approach is going to be applied the right way or not.” (Van der Linden, J. 140:1986)

Unfortunately, the abandonment of the approach by development agencies was premature and sent a wrong signal to governments of developing countries. Sites and services projects went through major changes during their implementation that made them overcome many of their initial shortcomings. This previous experience suggests that implementation of new projects could have been postponed temporarily in order to allow time to find answers to the problems of affordability and subsidies. However, the real big opportunity that has been missed with the abandonment of sites and services, so far, is to learn from the 20 to 30 years of knowledge about project outcomes.

“The criticisms of sites and services must be interpreted not as unsolvable problems but rather as a set of positive lessons. ...learning from past mistakes should not mean ‘learning not to do’. The idea of sites and services is still valid, and workable.” (McCarney, P. 1987:17)

II. A Review of the 1990s

3. Following up on planned progressive development projects

Introduction

The literature about planned progressive development strategies during the 1990s is sparse, dispersed and mostly concentrated around the first half of the decade. On the one hand, this fact can be attributed to a lack of audience for these projects. Attention was at that time focused on the trial of the new ‘urban management programme’ (Jones, G.A. and P.M. Ward 1994). On the other hand, the core concept of sites and services continued in the ideas derived from them within the field of planned progressive development. Thus, new ideas came out under different labels to avoid bearing the stigma of their history. The terms ‘sites and services’ and ‘progressive development’ were rarely used to refer new initiatives.¹⁸

However, a few pieces of literature published in the 1990s do deal with further results of World Bank projects, especially late site and services implemented in the middle of the 1980s. These evaluations, mostly concerned with the implementation stage of the late projects, add no relevant information to the body of knowledge reviewed in the second chapter. Some of them will be discussed in the next section.

Another part of this newer literature, however, adds a new dimension to the picture of sites and services projects: that of time, and how the predictions and assumptions about progressive development turned out in the long run. This literature is a relevant contribution to the theories about planned progressive development strategies, and challenges some of the most widely accepted assumptions.

¹⁸ These terms were tacitly avoided in the context of the international funding agencies. The recently emerged term ‘demand-driven initiatives’ has become used to refer to this kind of projects (from a discussion about the issues with professor Reinhard Goethert in September 2001, MIT).

This chapter discusses this literature and synthesizes the basic findings of these works.

3.a Further evaluations of the World Bank sites and services

There was decreasing attention to sites and services during the last half of the 1980s. Not much was written about planned progressive development strategies after funding for sites and services dried up and the orientation of urban policies shifted from a project approach to a sector wide approach. There are a number of evaluations, however, that synthesized some of the sites and services experiences, especially the later ones (Kamulali, T.W.P. 1985, Koenigsberger, O. 1986, Materu, J.S. 1986, Bijlani, H.U. 1988, Onibokun, A. et al 1989, Kironde, J.M.L. 1991, Rakodi, C. and P. Withers 1995, Ikejiofor, U. 1999). Some of these evaluations also benefited from reviews of the early projects (Kironde, J.M.L. 1991). No new evaluations, reflections or account of memories referring to the sites and services experiences were published by the World Bank after the article by Mayo and Gross in 1987.¹⁹

This literature confirmed much of the relevant existing knowledge gained during the 1970s and the first half of the 1980s. Meanwhile, the global recession of the late 1980s impacted severely the economies of developing countries. Thus, sponsored sites and services programs were affected by the reduction of public expenditure in social investment and the effects of falling incomes and rising prices in their countries (Kironde, J.M.L. 1991). For instance, the budget for housing and urban development in India was reported to decrease continuously with each Five-Year Plan program (Bijlani, H.U. 1989:46).

¹⁹ McAuslan points out that, after becoming used to the 'sector policy papers' of the World Bank during the 1970s and the 1980s that led housing policy, ten years after the new Urban Management Programme started, no publication that gave a coherent vision of the new Bank's urban policy had been produced (McAuslan P. 1997:1722).

Two years after Mayo and Gross suggested that large subsidies on sites and services could not be avoided, the need to achieve “affordability, cost-recovery and replicability” was still being hammered-in in the late sites and services projects of the World Bank. However, the spiral of problems was about to start. Delays in the beginning of the projects strongly increased costs.

Nigeria’s sites and services program, for instance, was scheduled for 1983 but finalized 4 years later with cost increases up to 216 % (Onibokun. A. et al 1989:54) ²⁰. Still, a large number of plots remained unoccupied or with incomplete units. In Bauchi, only 400 out of the 1.947 allocated plots were occupied by 1988. A large proportion of those occupied benefited untargeted groups (Ibid 52). Only 30% of the low-income workers obtained housing even though this group represented the lower 70% of the population. Even worse, the poor who got into the project, could not afford the core units --which remained unoccupied because they were unattractive for higher income households-- nor could they afford commercial materials to build their dwellings (Ibid 55).

In three of the 1975’s sites and services of Dar-es-Salaam in Tanzania, 13 years after projects were implemented, over 50% of the buildings were in some way incomplete. People lived in many of the partial structures, but many showed no occupation, and even some plots remained vacant (Kironde, J.M.L. 1991:35). However, some of the poor managed a way into the project adding 791 “new” plots to the original provision (more than 17% of the existing number of plots) through the illegal occupation of public land (Ibid 35). A survey found that 42% of the plots changed hands, and that only 50% of the housing units were owner-occupied (Ibid 37). The most recent sponsored sites and

²⁰ Bauchi sites and services project in Nigeria, began in 1978 with the feasibility study but it was officially finished at the end of 1987 (Onibokun, A.G., T. Agbola and O. Labeodan 1989:53).

services in Zimbabwe,²¹ Budiriro II, suffered similar problems. This study discusses this case in more detail in chapter 4.

As a result, high subsidies were also necessary in the late sites and services projects because of incorrect targeting due to misleading eligibility criteria, incorrect assumptions on incomes,²² bureaucratic procedures and corruption, slow plot allocation, default in repayments, plot turnover and commercialization, slow construction and consolidation, rigid standards and timetables, etc.

However, there were some new considerations for the implementation of sites and services. Local promotion of sites and services, it was proposed, could render higher benefits by cutting-off expenditures in external assistance and foreign staff²³, and minimizing losses due to unfavorable currency exchange (Onibokun, A.G. et al 1991:60). It was also acknowledged that previous sites and services assessments “were carried out soon after implementation” and only provided information about the issues concerning this first stage. This prevented housing scholars knowing more about what were “future permanent residential areas” (Rakodi, C. and P. Withers 1995:372) and limited the knowledge about the impact of sites and services in the wider housing context.

3.b The new evaluations: a long term perspective

A group of evaluations made around the turn of the 1990s was especially interesting because it added the dimension of time to the assessment of planned progressive development projects. It is important to highlight that, at that time, very few studies gave importance to the issue of how the process of progressive development occurred under planned conditions. The previous evaluations assumed that the kind of housing process

²¹ World Bank sponsored sites and services in Zimbabwe started in 1984 in the cities of Harare, Bulawayo, Mutare and Masvingo, and continued in some of these cities with a second phase in 1990 (Rakodi, C. and P. Withers 1995:374-5)

²² The “arbitrary cut-off levels” of the applicants’ incomes included households that could not afford the programs later and excluded those who could have kept up with the level of monthly payments. Mayo had already acknowledged as misleading the assumption that people were able and willing to spend 20 to 25% of their incomes in housing and associated services (Mayo, S.K. and D. Gross 1987:328)

observed in informal housing would crystallize if the projects could stimulate the investment of individual resources in housing (Reimers, C. 1992:4).

Very few authors paid attention to reporting the process on which the idea of progressive development was founded. A study in Langa Langa, Kenya, looking at the lengthy administrative procedures of sites and services, evaluated the rate of development of the units within a two-year period (Muller, M.S. 1982). In the El Salvador Sites and Services, Bamberger et al found, that there was a logic sequence of development in which the household first added area to the original structure. In a second stage walls were built to define the plot. The dwelling was finally improved with better materials and finishings (Bamberger, M, Gonzalez-Polio and Sae-Hau 1982b). Similar results were obtained in “San Jose del Pino” sites and services project, also in El Salvador, made by the Organization of American States and the Fundación Salvadoreña de Desarrollo y Vivienda Mínima -F.S.D.V.M.-. This study identified the existence of a first stage prior to the sequence described in the Bamberger study, in which a temporary dwelling was initially built and then improved into a more permanent structure. The study added details about the use of the spaces and their location in the plot (O.A.S. – F.S.D.V.M. 1977:17-24).

The new studies were concerned with the characteristics of housing that was produced in planned progressive development projects through time. For example, in Ahmedabad sites and services, India, the stages of progressive development after 8 years of implementation were described and analyzed (Mellin, R. 1987). Another study in Zihuatanejo, Mexico, in a 4-year-old national sites and services, looked at the relevance of spatial needs against permanence in the place (Navarrete, J. 1989). Finally, a study following a 27 year-old progressive development project in Venezuela reported the

²³ Onibokun refers that foreign assistance expenditures amounted up to 32% of the total cost of Nigeria 1988's sites and services.

evolution of its housing stock analyzing the sequence of additions and changes made over time to the initial dwelling structures (Reimers, C. 1992).

Some aspects of these studies reported similar observations to those made by previous researchers. For instance, the houses were built using a variety of self-help techniques. Dwellings included one to several rooms for renting which constituted part of the fixed income of the household. More than houses, dwellings allowed many other ways of income generation such as food and vegetable stands, small convenience stores, workshops for auto-mechanics, carpentry and the delivery of services such as hair dressing, sewing or laundry (Mellin, R. 1987, Navarrete, J. 1989, Reimers, C. 1992). The inhabitants of these settlements also contributed to the tasks of infrastructure construction and consolidation, not only with their labor, but also with cash. Rigid standards generated problems with the planning authorities and ended up not being enforced. The model designs proved to be inadequate to facilitate successive extensions, etc. (Reimers, C. 1992).

However, additional remarks were enlightening. Observation of the consolidation process provided a more accurate evaluation of project achievement than did repayment rates, number of defaults, or plot turnovers.

The relationship between land tenure and consolidation was challenged by some of these studies (Navarrete, J. 1989, Reimers, C. 1992:79). In the early literature about housing, it was argued that security of tenure would result in dwelling consolidation (Turner, J.F.C. 1967). Direct ownership was favored because land could be used as collateral to obtain funding. However, these studies found that reaching certain level of economic stability and a socially acceptable environment in the settlement was more important for households than obtaining land titles (Mellin, R. 1987, Reimers, C. 1992:80). In a peripheral development of a city, it could take some time while the city developed links towards the site, and the settlement generated its own dynamics. In the meantime, even if titles were not granted or were conditioned to consolidation,

inhabitants knew that land was 'de facto' secured. Progressive integration of the settlement to the city, infrastructure improvement and the provision of services usually produced the desired response of consolidation. Some scholars in land issues had already acknowledged this finding (Doebele, W. 1985:13, Hoffman, M. and T. Marbun 1990:28, Hasan, A. 1997:38, Calderon-Cockburn, J. 2001:89)

Non-permanent structures were found sometimes as necessary steps in the process. In the literature non-permanent structures were seen as fragile steps to be surpassed as fast as possible or, if possible, avoided. In the new evaluations, temporary structures were found to serve as primary shelters while households accumulated capital and materials to build a larger permanent structure that could meet official standards (Reimers, C. 1992:70). Thus, households remained in their dwellings adding area to provide more comfort and/or privacy. Consolidation with better materials was another stage that indicated a household's serious commitment to living in the place (Navarrete, J. 1989). A few households remained as long as 16 years in the non-permanent structures and then built a larger permanent structure at once (Reimers, C. 1992:80). Connection was found between building permanent structures and the consolidation of the infrastructure and services of the settlement with infrastructure and services (Navarrete, J. 1989, Reimers, C. 1997).

The arrival of newcomers, usually an economically more secure group, was also associated with the existence of certain minimum levels of services, mostly water, electricity and sewage (Reimers, C. 1997). Consolidation and growth was not homogeneous among households, that is, at any given moment there would be a wide range of dwelling development stages that showed the delicate balance between priorities and needs made by low-income inhabitants (Mellin, R. 1987). Thus, less developed units of poorer households became target of this latter group.

Conclusions: challenging the assumptions

This chapter has examined literature about planned progressive development strategies after international support was withdrawn from sites and services at the end of the 1980s. The following conclusions reflect on the assumptions made by sites and services and the challenges by the new evaluations on planned progressive development experiences.

In the first place, assessment of late sites and services confirmed the previous evaluations on early projects and corroborated the World Bank's decision to give projects up. The projects did not meet the criteria proposed by the World Bank of affordability - cost recovery – replicability. Besides the shortcomings of the projects due to rigid implementation processes, the world economic crisis of the 1980s affected the sensible economies of developing countries where sites and services were implemented. Devaluation, fluctuations in currency, and economic instability affected the cost of external assistance and increased the amount of necessary subsidies. Sites and services could meet cost recovery only if internally promoted and without external assistance.

Additionally, new evaluations on planned progressive development strategies challenged some of the existing assumptions on sites and services. Premises about the need for land tenure, skipping the temporary dwelling, improving the speed and sequence of consolidation, priorities of households, etc. originally identified in informal settlements, turned out to be different under planned conditions of progressive development (Reimers, C. and M. Portela 1995:10). As a result, the process of progressive development observed in planned progressive developments did not resemble that of informal settlements.

Consequently, sites and services projects in developing countries failed because they did not meet the rigid implementation procedures, the imposed criteria of evaluation, and the wrong assumptions of development.

In this way the door for other experiences of planned progressive developments was still open. The next chapter presents and analyzes some experiences of planned progressive development that were experimented in developing countries after sites and services disappeared.

4. After sites and services: The Recent Experiences

Introduction

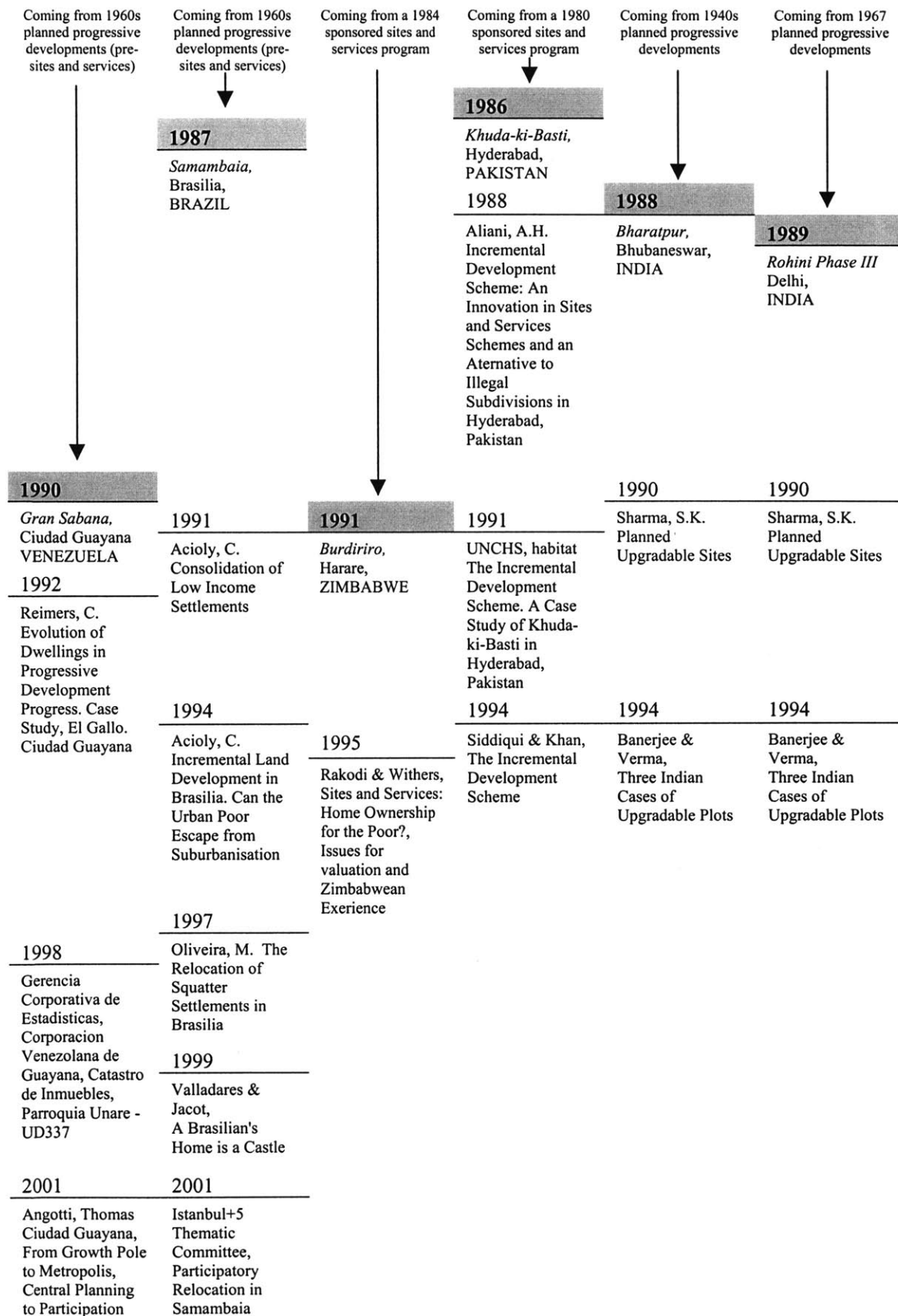
This chapter analyzes several cases of planned progressive development that were implemented after the sites and services paradigm was abandoned by multilateral donor agencies. These rather modest and localized experiences were in many ways different from the projects of the previous twenty years. In most of the cases not even their name indicated a relationship with sites and services at all. In some of the cases, such as the Venezuelan, Brazilian, or Indian experiences, the projects were actually drawn from experiences previous to sites and services and thus, their name logically reflected this connection.²⁴ But others were attempts to break up with and move on from the questioned World Bank sites and services model (for instance the incremental development schemes of Pakistan).

At least three features can be mentioned that differentiate most of these projects from the original sites and services model. First, they began after the momentum generated by the strong support given to sites and services by development institutions during the 1970s had already disappeared. The third generation of planned progressive development projects relied mainly on regional or local budgets, and some attempted self-financing. Second, they were modestly launched or had been operating with a very low profile for some time even before sites and services (the Urban Improvement Units of Venezuela). Third, the projects were simple in nature, focusing more on land and service components and their improvement, and less on financing, dwelling consolidation, etc.

This section includes an account of several of these projects with the purpose of analyzing and comparing them. Some of them started in the late 1980s. However, all of

²⁴ In fact some of these were as old as the original 1960s' experiences that gave rise to the idea of sites and services.

Fig. 1 Projects and their reports along time (shaded dates correspond to implementation of the projects)



them represent a step forward from the conventional practices at the time. The late World Bank sites and services project in Zimbabwe has also been included because it went well into the 1990s and thus, serves as point of reference in the analysis. Figure 1 places the projects selected for this study in time, indicates the literature related with them and suggest connections between the experiences.

4.a Progressive Urban Improvement: “La Gran Sabana”, Ciudad Guayana, Venezuela

Ciudad Guayana is a planned city located at the southeastern region of Venezuela founded in 1960 as part of a regional strategy of development to decentralize the country developing industrial regional poles. The expansion of the local industries of iron, aluminum and hydroelectric power during the 1960s, motivated the development of this urban center to provide for the need of services and amenities of a large working population ²⁵. The population before 1960 was 4,000, but it grew to 148,000 by 1970, 300,000 by 1980, 577,000 by 1990, and 615,000 by 1998 (Angotti, T. 2001:333). This description of the city and of planned progressive development there is based on direct observations and data collected by the author during research visits in 1991 and in January 2002.

In the planning of the city the MIT-Harvard Joint Center for Urban Studies was involved and, influenced by the work of John Turner in Peru, planned progressive development strategies were experimented in Ciudad Guayana during the first decade of the city. Under the name of ‘Progressive Urban Improvement Units’ or ‘Unidades de Mejoramiento Urbano Progresivo’, the projects were first tried to house low-income groups back in 1963, during the first years of the industrial city. These basic progressive

²⁵ There is an extensive literature about the creation and development of Ciudad Guayana in the 1960s, 1970s and 1980s, among them Appleyard, D. 1976; Daykin, D. 1978; Dinkespiel, J. 1970; Dodge, C. 1968, Friedman, J. 1966; Garcia, Maria-Pilar 1976; Lynch, E. 1973; MacDonald, J.S. 1971 and 1979; Peattie, L. 1968 and 1987; Penfold, A.

developments included the incremental construction of the dwellings as well as the infrastructure. This housing practice has been maintained for more than 40 years with varied intensities, and with certain lack of differentiation from upgrading of informal settlements (Angotti, T. 2001:334, Reimers, C. 1992:70). These pre-sites-and-services schemes have been reported as an excellent showcase of the potentialities of progressive development in planned low-income housing (Reimers, C. 1992).

Until 1986, social polarization in the city was aggravated by the spatial residential segregation between high income and poor groups, a feature stressed by the physical separation produced by a river (Peattie, L. 1987:11). Thereafter, low-income housing has been developed in the periphery of both sides of the city (visits of the author to the city in 1991 and 2002). This change in the pattern of development was connected with the empowerment of local governments in the country's decentralization process.

The city shows a long history of tolerance to squatter settlements that, in fact, have enjoyed continuity in time proving their strengths over planned housing in the 40 years of the city's life (Portela, M. 1992, Reimers, C. and M. Portela, 1995). Thirty percent of the labor force works in the main city industries and related sector of services. Another 10% works in the tertiary sector and 60% survives from informal activities with less than \$1 daily.²⁶

The planning corporation that created the city in the 1960s owns most of the available land as a result of the initial planning strategy. The municipality assumed the planning of the city after 1989, but land property has not been transferred to the local government. Public plans such as housing are usually negotiated with the corporation, which, so far, has supported the initiatives of the local government (interview of the author with the director of the municipal urban planning department, 1991).

1966; Rodwin, L. 1965 and 1969; Turner, A. 1971; Von Moltke, W. 1965, and the Guayana File available in libraries MIT's Rotch and Harvard's Francis L. with writings of Bacon, E. 1962; Lynch, K. 1964; Peattie, R. 1962. and others.

²⁶ Statistics of the city by 1998, Gerencia Corporativa de Estadísticas, Corporacion Venezolana de Guayana.

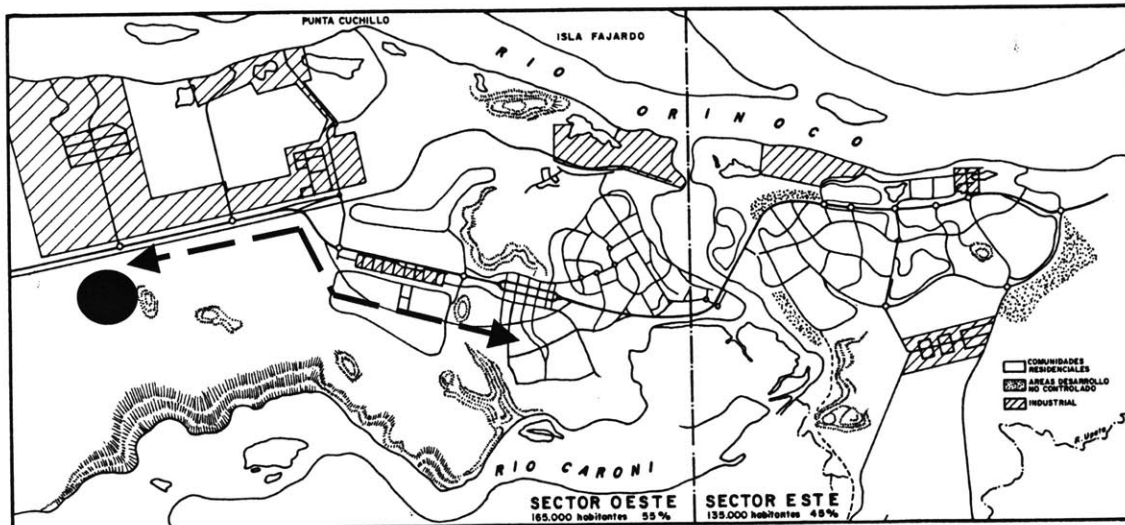
At the beginning of the 1990s, the planning corporation of Ciudad Guayana in Venezuela, re-launched the progressive urban improvement strategy. The site where this occurred was called the UD 337 (after Unit of Development), but it is better known as “Core 8” or “La Gran Sabana” in reference to the vast extension of flatted land found by the first arrivals.

La Gran Sabana was developed in public available land, 10km west from the city center and 3 km of the city’s industries (see Figure 2). Several small invasions in this side of the city were upgraded in the 1980s, but no planned project involving progressive development was there before. La Gran Sabana was the first progressive urban improvement unit project in the west side of the city. It was created to relocate squatters from two nearby settlements that were on the flooding areas of a new hydroelectric dam.

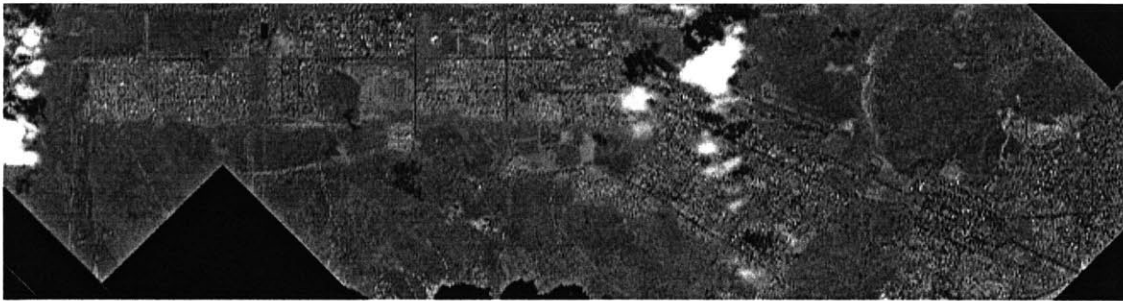
Land was sold to the relocated families who were to pay for it over 15 years. The site was cleared and leveled to demarcate 4,700 plots without services. The access road was asphalted but the street network was unpaved. There were 20 water standposts with four taps each uniformly distributed in the site. The electricity network and street lighting was also installed. About 2,500 people and their belongings were brought to the site in a two-week period. New applicants occupied the remaining plots within the next two months. Construction started immediately and all plots showed occupation within the next 6 months. Plots were 250 sqm and the settlers built individual pit latrines on them as they were a common practice in the city. Services included transportation by jitneys and buses to the industries for workers. There was also a police station and a dispensary, and areas were reserved for a public market, a school and a park.

In 1991, people started improving the water service burying water pipes that ran from the standposts to the plots in an almost permanent water network. The electricity company verified the illegal connections to the posts and installed meters. Private transportation increased and diversified. By 1998, there was an elementary school, a community center, 2 dispensaries, a public market, small manufacturing and construction

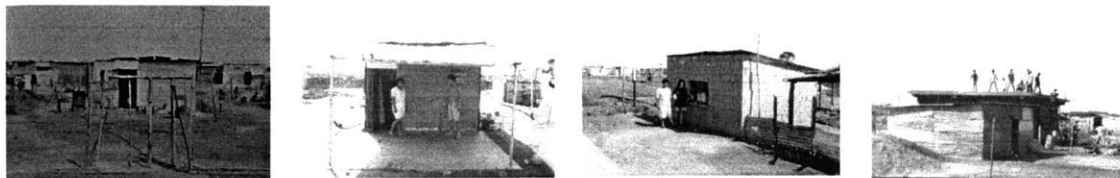
Fig. 2 General Plan of Ciudad Guayana and initial views of the settlement July 1991.
 (source: C.V.G., Informe Anual 1969, pages 18 and 19 Photographs by the author)



Fuente: Informe Anual de 1969 p IX - 18 y 19



Aerial photograph of the site in the periphery of the city



Initial views of the site: the water taps, the temporary structures, the income-generating premises, the self-help construction

material industries and shops (CVG 1998). Half of the housing units there were already permanent structures and the remaining was being continuously improved. People was organized in one neighborhood association with a board of representatives by blocks. The neighborhood association linked the community with the city authorities and coordinated community participation in the works of infrastructure. It also pressured the proper institutions to obtain services.

When I returned to the site in January 2002, the changes were striking. In informal interviews, I found that visitors and inhabitants that did not know the origin of La Gran Sabana, considered the place above informal settlement standards. Many of the current inhabitants, either original settlers or newcomers, showed a high level of satisfaction and pride for living in this settlement. All the streets were paved although some of them were cracked and had already holes indicating a poor quality of paving. There were no sidewalks but the space was reserved for them between the street lines and the front limit of the plots. Some of the neighbors had built sidewalks in front of their plots at their own expenses, especially where shops and commerces were located. Buildings such as the school, the police station and some government dependencies assumed the construction of the public sidewalks too.

Water reaches each plot individually today but the installation of sewers has been delayed by problems of natural drainage in the area. Many neighbors have built septic tanks and even some keep using the latrines. This problem requires technical ingenuity and a large external investment. Electricity, lighting, transportation and garbage collection are regular services that work with the same institutions that the rest of the city.

According to the Corporation censuses, the original provision of land had been expanded to 6.740 plots. There were 6.590 buildings from which 5.884 were housing, 600 were retail and small shops, 95 were small and medium industries, and 11 were government-managed dependencies. Still there were 21 empty plots, 127 were being built, and 2 were being used as parking lots. A total population of 22.820 was on the site

from which 22.294 were residents and 526 were people that came everyday to work in different jobs at the site from governmental office clerks, teachers, sales persons, market vendors and constructors, etc.

Many aspects of housing consolidation and general features of the settlement were comparable to previous experiences in urban improvement units that took longer time (Reimers, C. 1992). The housing stock was built with very permanent materials, usually concrete or hollowed clay blocks, plastered and painted. In 345 of the plots, additional structures occupied either front or backyards and were generally used for income generating activities such as small shops or rental housing. There were some storage rooms. About a third of these structures seemed to be the undemolished original temporary structures as some of the inhabitants confirmed later. Other were new additions to the permanent dwelling made with the specific commercial or rental purpose. Many frontyards were nicely taken as gardens and enclosed with low walls and arranged with plants and trees but others were just empty spaces before the dwellings. Most of them were enclosed with walls and bars for protection.

Overall, it was true that the settlement seemed more developed than a comparable upgraded informal settlement in the same side of the city. There was activity on the streets and in the shops, around the schools and market, and it looked like a well-built low-income urbanization. There was a market for the housing and several houses were being sold. Still, some of the older neighbors asked on the site estimate that about two thirds of the population are original settlers.

La Gran Sabana in Ciudad Guayana and older progressive urban improvement units (El Gallo, Los Robles) are acknowledged by the population of the city as a good way to provide low-income housing, the use of these schemes has not been elevated to the rank of policy in the context of city planning. Moreover, as it was said before, it is not basically differentiated from upgrading because in the long run it is believed as a similar strategy. Moreover, much of the history of progressive urban improvement units is

unclear for the young planners of the city, and reports and accounts buried in the files of the planning corporation are not of easy access to municipal planners.

4.b Incremental Land Development: “Samambaia”, Brasilia, Brazil

Brasilia’s progressive development settlements were rediscovered by scholars at the end of the 1980s and the beginning of the 1990s (Acioly, C. 1991). The city incorporated the idea of progressive development in peripheral low-income settlements during the construction years (1957-1960) and brought it back again through a housing program between 1983 and 1985 (Ibid 48). The settlements relieved the pressure caused by the high influx of low-income migrants by pushing spontaneous settlements out of the model city and preserving its aesthetics (Oliveira, M. 1997). The practice became formalized with the development of 11 Brasilia’s satellite cities. This model by which urban land was delivered to low-income residents to be developed by progressive development mechanisms was called ‘Incremental Land Development’ (Acioly 1994).

Founded in 1960, Brasilia combined decentralization, regional development and the idea of a new capital for the country. The construction of the central district known as “Plano Piloto” characterized the city, but actually it housed only 15% of the population while 85% lived in the periphery (Valladares, L. and M. Jacot 1999:29). Two thirds of the jobs were also in Plano Piloto while 20% of the poor lived with less than \$2,00 daily (Acioly C. 1994:245).

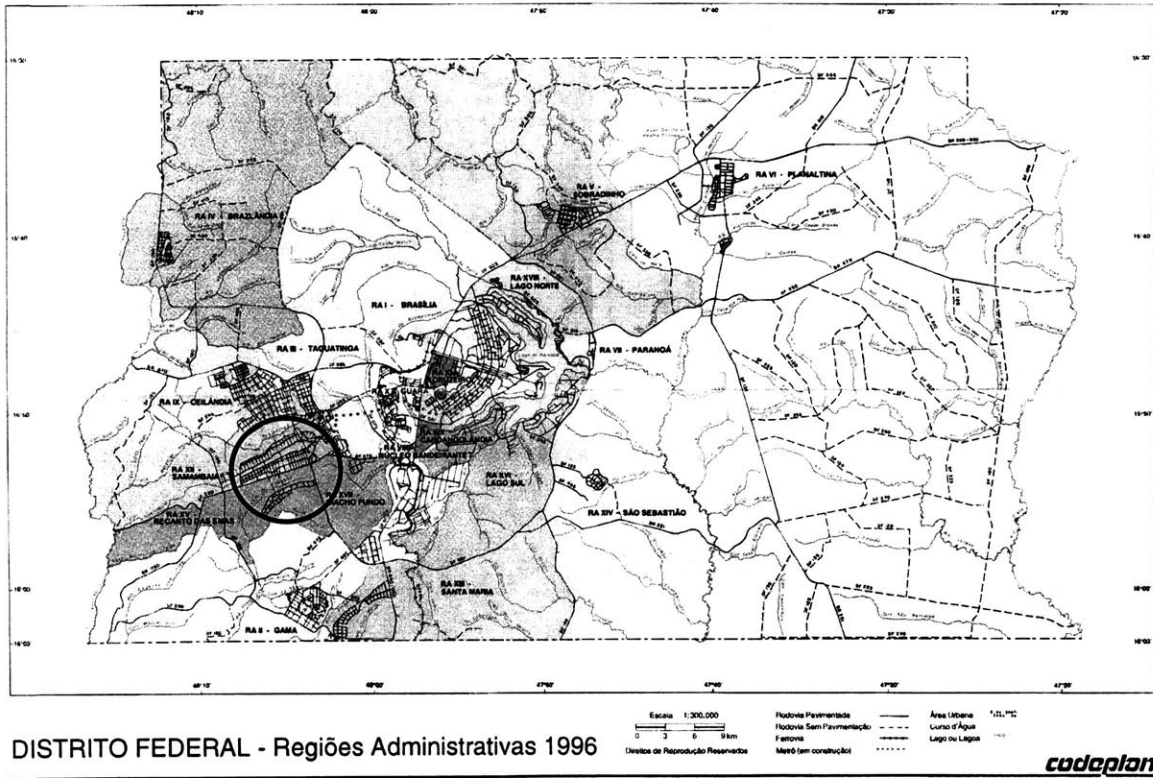
The population of Brasilia grew from 6,823 by 1957, to 546,000 in 1970, 1.18 million in 1980 and 1.82 million in 1996 (Valladares, L. and M. Jacot 1999: 31). Squatter settlements were part of the city since the construction period. Progressive development was introduced in the camps of workers and technicians who built Plano Piloto, but became also used to relocate squatters in sites with basic servicing in the periphery. As a planning strategy favored at the time, the local government managed to acquire 60% of

the land and claimed the remaining for expropriation. The government also used master planning, land use regulations, police control, and evictions to prevent unplanned low income housing in Brasilia (Acioly, C. 1994:246).

Samambaia was 25km from Plano Piloto (see Figure 3) and was the site where 5,500 inhabitants were relocated in 1987 as part of land guided occupation (Istambul+5 2001:34). In 1989 additional 22,000 plots of 120 sqm were demarcated and served with unpaved, compacted roads and electricity. Water was provided with 20,000 lt water trunks, and 200 public water standposts were installed shortly after. Initial transportation connected Samambaia to Plano Piloto twice a day and there were no facilities, but areas were reserved for schools, medical facilities and community centers. Land was given in concession, which allowed use and inheritance, but prevented selling and speculation. Plots had to be occupied within 45 days. Otherwise land was reallocated. There was no public financial support or direct involvement whatsoever in the provision of housing. This was totally self-financed and self-generated. The site was open to non-owners who had lived in Brasilia a minimum of three years. It attracted 60,000 residents of 50 slums in Plano Piloto who were to be relocated. Half of the new residents of Samambaia were actually tenants in many of the slums with monthly incomes below \$170 (Acioly, C. 1994). Only 17% worked in the formal sector and 65% were under 18 years with a high 21% between the ages of 5 and 9. In 1991 the population of Samambaia grew to 127,430 and to 163.000 in 2000 (Istambul+5 2001:34)

By 1991, the bus service frequency increased to one every 2 hours and main roads were asphalted. Water supply was improved to a network with capacity for 17,000 connections and sanitation was provided with collective septic tanks that received 3,526 connections. Other services included 17 schools, 3 health centers, police and fire stations. Still in 1992 the number of schools increased to 25, and there were a hospital, 98 religious buildings, 17 sport fields and 334 shops. People showed high participation in the progressive improvement of housing, infrastructure and services in their community

Fig. 3 General Plan of Brasilia and its satellite cities including Samambaia
 (source: Codeplan, Brazil)



(Acioly, C. 1994). The relatively good outcome stimulated government investment in later stages. The subway reaches Samambaia since the late 1990s. However exemplary these results have been, the government of Brasilia has continued its relocation policy.

4.b Planned Upgradable Sites: Bharatpur, Bhubaneswar, India

At the beginning of the 1990s, the chairman and managing director of the Housing & Urban Development Corporation -HUDCO- in New Delhi, S.K. Sharma, proposed using unserviced plots to house low-income groups under the name of 'Planned Upgradable Sites'. The idea was originally published in 1988 in a regional journal at the same time that it was being experimented in India²⁷. With methodological rigor, Sharma described the logical sequence of development of low-income housing arguing that neither conventional housing, nor sites and services followed this sequence Figure 4 contains Sharma article's sketches analyzing the sequences of development.

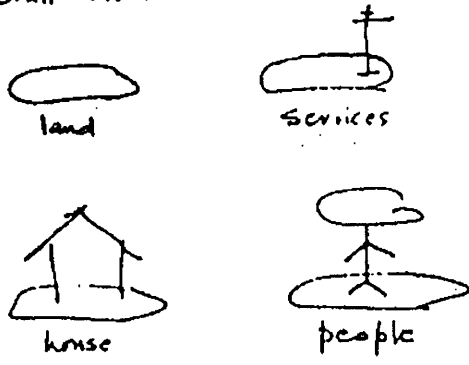
Squatter settlements were, according to Sharma, the closest approach to a logical sequence of housing, but was incompatible with city planning. The planned upgradable sites strategy proposed that basic preparation of land was followed by occupation. Housing could then be started and improved upon together with infrastructure and services. Sharma's proposal made fair reference to John Turner's paper "Future Directions in Housing Policies" presented in 1985 and later published (Turner, J. 1986). Turner made a similar analysis to conclude that the sequence land → people → housing works would be the analogous modern version of traditional housing thus, the ideal sequence for low-income housing.

The planned upgradable sites strategy proposes the use of progressive development for both dwellings and infrastructure. Land is prepared with unpaved roads, plot demarcation and the security of access to services. Plots are then allocated and services

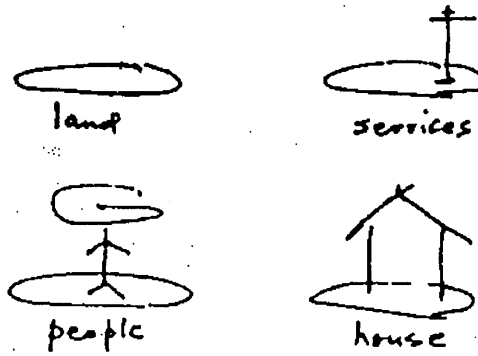
²⁷ Sharma, S.K. 1988, "Planned Upgradable Sites" *Nagarlok*, Vol XX, No. 4. The article gained international projection with its publication in Sharma S.K. 1990, *Open House International*, Vol. 15, No.4.

Fig. 4 Sequence of Development according to Sharma
 (Source: "An Alternative to Squatter Settlements" in Open House International, Vol.15, # 4, pag. 41-42 1990)

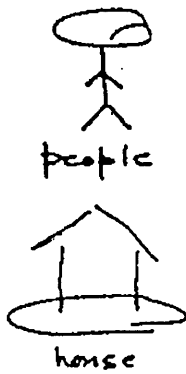
I Built House :



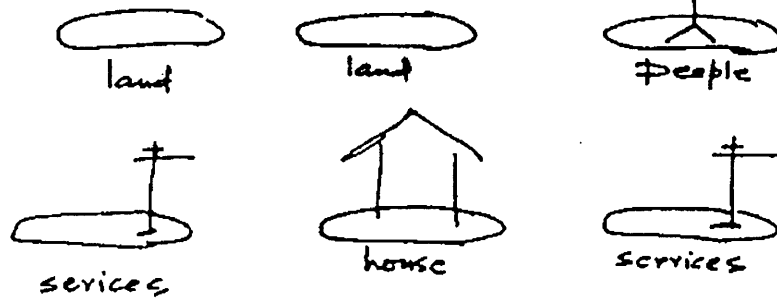
II Site + Services :



III Slums



IV Planned upgradable Sites



are progressively provided while housing is built, upgraded and consolidated. The approach could be considered a rudimentary site and services scheme and constitutes the same basic concept that originated the first sites and services in the early 1960s.

The planned upgradable sites strategy aimed to build upon the potential of India's experience with planned progressive development. Officially implemented "municipal layouts" from the 1960's, and sites and services from the 1970's, yielded upgradable plots in the 1990s as cost-effective, quick and simple (Banerjee, B and G.D.Verma 1994:273).

The Bharatpur upgradable plots in Bhubaneswar feature such an approach. The city of Bharatpur was developed as the new capital of Orissa State. The population grew from 38,200 in 1961 to 412,000 by 1991. Squatters occupied the empty areas of the city since its beginning in the 1960s. In the 1980s, squatters started occupying peripheral land. By 1993, 70 squatter settlements housed 20% of the population (approximately 13,600 families). The official policy supported relocation of squatters but, at the same time, squatters were tolerated and services and infrastructure eventually reached the areas. In 1993, legislation created the instruments to allow slum upgrading (Ibid 265).

The municipal corporation of Bharatpur provided land and a sites-and-services-like layout to relocate people from two inner city squatter settlements in 1988. These settlements were included in a nation-wide program for slum upgrading. However, delays on the implementation of the program influenced the people's decision to accept the alternative of relocation. Families were allocated in plots of 60sqm without services. Streets were unpaved but some were lit, and 6 wells were the only provision of water. The site was in the route of several bus services and a dispensary operated on the place. Areas were reserved for schools, parks and recreation, shops and some community facilities (Ibid). The level of services and infrastructure was considered satisfactory and the hardship of the inhabitants in the first years of the settlement was more related to the inherent problems of relocation (Ibid 265-6).

Within three years the infrastructure was improved with the addition of 38 tube wells and 34 municipal water standposts, and 255 individual latrines. New services included garbage collection, 8 childcare centers, 4 adult literacy centers and 11 non-formal education centers, and 2 sewing instruction centers. Between 1991 and 1992, main roads were paved and lighting was installed in the remaining streets. A participatory structure allowed the community to have its voice in the planning and infrastructure decisions. Upgrading and micro-enterprise loans were made available (Ibid 266-7).

Figures situate absenteeism at 3% in 1992, but plot turnover was not enforced. However, it was expected that as services and infrastructure progressed, plots would become attractive to higher income groups. Nevertheless, the outcome of the project vis-à-vis other low-income housing approaches was considered positive, affordable, rapid and simple. The major problems identified were at the operational level of the existing institutions and the necessity of available land (Ibid 267).

4.c Incremental Housing: “Rohini Phase III”, Delhi, India

In 1991 urban areas in Delhi concentrated a population of 8.4 million of which 1.3 million were squatters (Banerjee & Verma 1994:270). By 2001, the urban population increased to 9.8 million, and squatters were 1.9 (Census of India 2001, Ministry of Home Affairs, Government of India). While the urban population has increased 16% in ten years, slum increased by more than 40%. Relocation of squatters to the city’s periphery is a common, old practice related with the Municipal Acts of India that required from the government the provision of land for “hutting grounds” (Sharma, S.K. 1990:43). Upgrading is a less favored practice, as it was culturally understood as a temporary measure to be followed by relocation. The monopoly of land and housing by the government has also promoted the feasibility of relocation as the prevailing approach. By

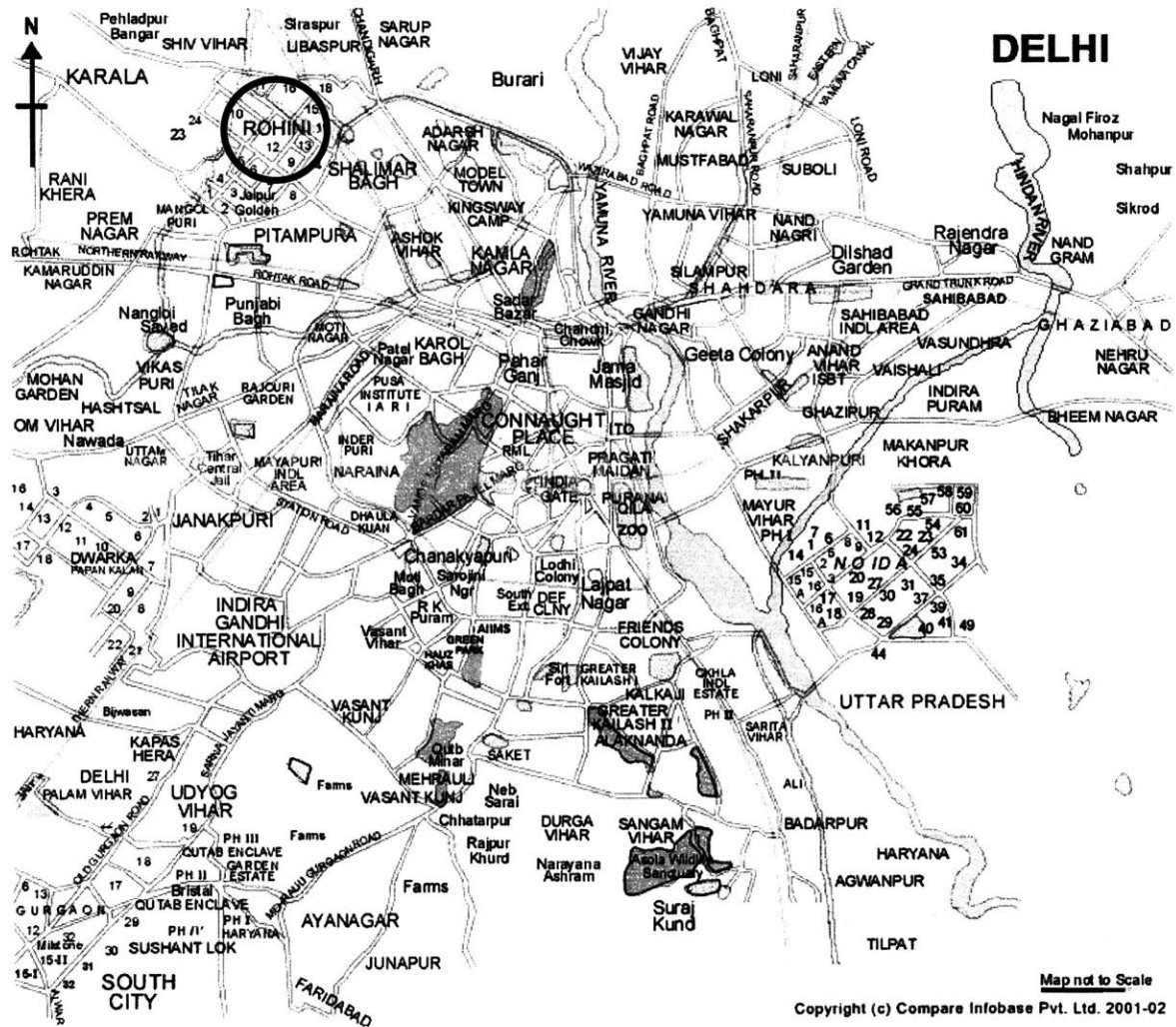
1994, 250,000 families had been relocated from the city to public projects (Banerjee & Verma 1994:270).

Sites and services in the periphery are old in Delhi but highly criticized. The continuous trend in lowering standards to increase capacity of these settlements has produced results such as plots of 12 sqm (Ibid). As in the case of Bhubaneswar, illegal subdivisions of middle-income groups are widespread and a population of 1.5 million lives in these settlements. The upgrading of illegal subdivisions is also a process that involves political patronage and intensive negotiation.

The Rohini 'Incremental Housing' project was developed to resettle 2,300 families from an invaded lot at the south of Delhi. Rohini Phase III was part of a larger project in the north-west periphery, designed to accommodate a million people in four phases. People arrived to the site in 1989 and were allocated in plots with full tenure. The site already had streets and drainage brick lined with public lighting. Macro-blocks of 115 x 115 m containing four 64-plot-blocks surrounded a central recreational area. Plots were about 40 sqm and arranged in groups of four surrounding a service area. This common area contained a common water tap and a septic tank to which individual latrines were connected. No provision for other services or facilities was provided (Ibid 271).

By 1994 electricity was still lacking and water had to be hand-pumped from taps. On the other hand, sewage systems were operating and housing was built and consolidated. Transportation to the site remained poor and it may have contributed to absenteeism, although no administrative controls about absenteeism or commercialization of plots were operating. The Downtown Delhi Authority did not follow the project outcome or considered the incremental housing approach as a potential policy alternative. The relocation was considered a solution to a problem but Rohini Phase III was seen at the time as a "low-quality sites and services" (Ibid 272-3).

Fig. 5 General Plan of Delhi showing the location of Rohini.
 (Source: Infobase Pvt. Ltd.)



4.d Incremental Development Scheme: Khuda-ki-Bhasti, Hyderabad, Pakistan

What Sharma reported in 1988 in India was similar to the on-going approach being experimented in Hyderabad, Pakistan since 1986 under the name of 'Incremental-Development Schemes' or Khuda-Ki-Basti. The incremental development schemes -IDS- were also product of the intellectual construction of Turner's 1985's ideas, complemented with Pakistan's own experience in progressive development strategies in Karachi and Hyderabad.²⁸ Observation of illegal subdivisions and occupation of unfinished sites and services implemented by the Hyderabad Development Authority -HDA- stimulated the search for alternative low-income housing strategies²⁹. Evaluations of incremental development schemes in Hyderabad inspired the research of a whole generation of scholars.³⁰ Shortly after, the Hyderabad Development Authority started producing documents assessing the experience.³¹

It is not the objective of this study to report in detail the abundant literature about incremental development schemes. A complete overall description of the approach can be found in a report of the United Nations Centre for Human Settlement about the incremental development scheme experience (UNCHS 1991). A detailed account of the experience can be found in a Master's Thesis at the Asian Institute of Technology of Bangkok (Aliani, A.H. 1988). Relevant issues of the implementation are presented hereafter.

²⁸ The Hyderabad Development Authority implemented a number of sites and services projects between 1978 and 1985 developing a total of 15.000 plots of which, for many reasons, only 35 were found to be occupied by 1985 (Siddiqui, T.A. and M.A. Khan 1994:278-9).

²⁹ The insights on illegal subdivisions by Mohammad A. Khan, director of the HAD at the time, were also key in the conceptualization of the incremental development schemes (Aliani, A. 1988:33).

³⁰ Among these, Arif Hasan in 1987 and 1990, the master's thesis of Adnan H. Aliani, the doctoral dissertation of Peter Nientied in 1987, the work of Tasneem Siddiqui in 1987 and 1988, the work of Siddiqui and Nientied in 1989, the studies of Jan Van der Linden in 1988, 1989 and 1990.

³¹ Siddiqui, T. 1988 "Shelter for the Urban Poor: An Experiment by the Hyderabad Development Authority, Hyderabad", and "Report on Socio-Economic Survey to Women's Development Programme: Base Line Survey 1988 Khuda-ki-Basti, Hyderabad" by the HAD.

Hyderabad had one million inhabitants in 1991; of those 285,000 lived in 100 squatter settlements on the periphery. People who lived with less than \$4,00 daily represented a large 70% of the population. The informal sector provided 44% of the employment. Public land was controlled by a local board, and metropolitan authorities such as the HDA, developed the land according to their programs (Van der Linden, J. 1989).

The Gulshan-e-Shahbaz unfinished sites and services project, one kilometer from Hyderabad center, was the place in which the incremental development scheme was experimented. Using the original layout, sector D6 of the project (with a total of 52 sectors – see Figure 6 of the general plan of the Gulshan-E-Shahbaz sites and services- was initially selected because it was near an illegal subdivision thus seeming as an accepted location for low-income settlers (UNCHS 1991:24). Sectors E3 and E4 were later added to the project (Siddiqui and Khan 1994:283). The name Khuda-ki-basti which means “God’s Settlement”, was given by the inhabitants in reference to the lack of provision of almost anything but the land (Van der Linden 1989:8).

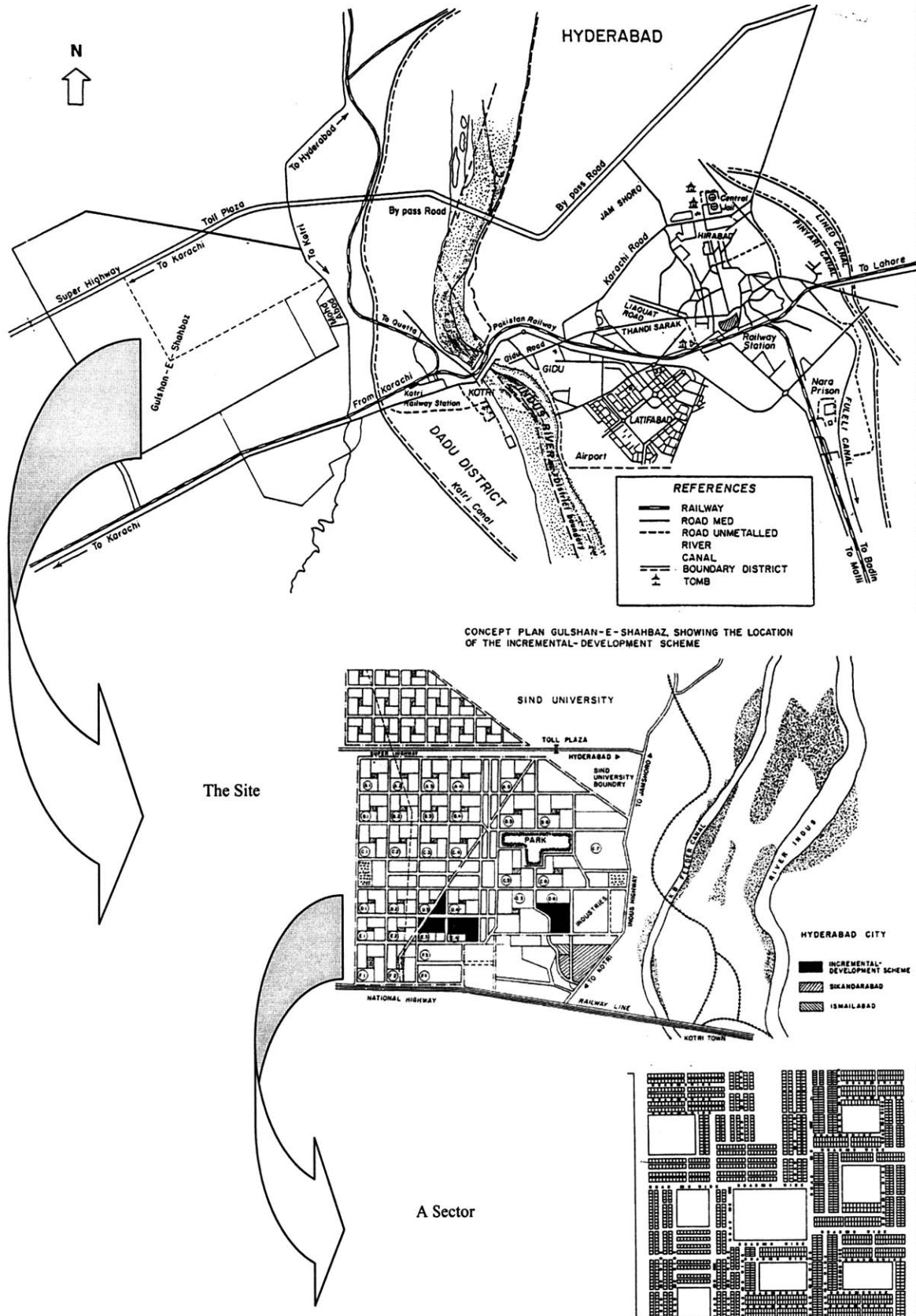
The novel features of incremental land development were that initial access costs were limited to the price of land and the cost of trunk water. Little public investment was required other than for leveling land and laying plots out (see Figure 6). Additionally a reception area was setup where applicants could live for about 15 days while they were screened. It was believed that living in the reception area would serve as of a screening method. The delivery of the plot required its immediate occupation and the building of the dwelling. For those following this sequence, the plot was allocated in a very short time. Finally, the scheme was scheduled for off-site infrastructure in a near future. Besides security of tenure, security of connection to the city’s infrastructure was the major difference from illegal subdivisions, the closest alternative to incremental land schemes (UNCHS 1991:18). Slums and illegal subdivisions in Pakistan were upgraded with individual effort as well, but they required strong political backing to obtain city

services. An article in 1994 by Siddiqui and Khan, considered that incremental development schemes in Hyderabad reached the target groups of low-income settlers.

Occupation of the site started with a group of 350 families in 1986 and reached 2,500 by 1987 and 3,000 by 1989. Plots were 80 sqm and the only infrastructure was unpaved streets. No electricity or water network existed on the site. The inhabitants obtained water from trucks until collective tanks were commonly built. Latrines substituted bucket toilets and transportation was supplied by the HDA. At least in theory, the development of infrastructure and services followed the pace decided by the inhabitants (UNCHS 1991:19). By 1991, individual water taps were in 86% of the plots and electricity in 50%. Municipal transportation was incorporated with 25 round trips per day and seven doctors visited the site. Several daycares were installed in homes and 5 schools were built. No standards were imposed for the construction of housing, only a setback in the rear of the plot was required to assure proper ventilation in the future.

The social organization responded to the tasks that were assumed by the inhabitants. People were organized in 11 blocks of 250 to 300 plots each. Blocks elected representatives to elevate proposals to the HDA. Proposals were then discussed in public meetings. Conflicts with absentees and confrontation with land-grabbers and slumlords were problems solved with more or less success by the Hyderabad Development Agency (Siddiqui & Khan 1994:288). Other mentioned problems were common issues of progressive development such as arbitrary timetables of project execution, or low-income housing such as reaching the target group. On one hand, in an attempt to speed up the process of consolidation and to overcome the lack of construction activity observed at the beginning of the project, the time to complete the permanent dwellings was reduced from the initial one year to three months (UNCHS 1991:26). On the other hand, better off inhabitants overrode the most needy group by acquiring plots as investments or future housing for their descendants (Ibid 39).

Fig. 6 General Plan of Hyderabad, the Gulshan-e-Shahbaz sites and services, and a sector of the Incremental Development Scheme or “Khuda-ki-Basti” of Pakistan (Source: United Nations Centre for Human Settlements 1991, pages 22, 23 and 25)



Nevertheless, scholars point out that however complicated these problems were on incremental development schemes, these were not the same problems of sites and services and were worked out during the execution of Khuda-Ki-Basti (Siddiqui & Khan 1994:289).

4.e Serviced Plot Programs:³² “Budiriro”, Harare, Zimbabwe

Sites and services have been the preferred approach to low income housing since the late 1970s in Zimbabwe (Rakodi & Withers 1995:372). This country offered a different setting for the implementation of these strategies because of its total opposition to squatter settlements, and its large proportion of the labor force working in the formal sector. Additionally, central and local government maintained a tradition in high standards of development in physical planning (Ibid).

The country’s sites and services were developed in the mid 1980s with the assistance of the World Bank. Budiriro was part of a national package of sites and services projects implemented in the city of Harare. Being a World Bank-supported project, evaluations concentrated on the issues of targeting, affordability, cost-recovery and replicability. The results are, in general terms, similar to other funded sites and services.

Harare had a history of rental housing and hostel accommodations. In 1980, the government of Zimbabwe proposed to concentrate 60% of its housing in low-cost cores and serviced plots. Beginning in 1980 the first sites and services were allocated in Harare.

Budiriro ‘Serviced Sites’ program aimed to provide 11,350 serviced plots in four cities. Standards were imposed to the level of construction: one room with the wet core should be ready before plot occupation. Additional four rooms had to be built within the next 18 months. Financing was made available at 25-year repayment period. The project had two major stages.

³² Serviced Plots is the name given by Rakodi and Withers (1995) to these sponsored late sites and services.

Budirio I started in 1984 and by 1989 2,550 plots had been allocated. From these, 1,200 plots were allocated to companies (employers' housing). Budirio II continued in 1990 with additional 1,586 plots. Again half of the plots were allocated to companies. Even though an important part of the plots reached the target group, there was evidence of the use of influence, bribery and forged information to get into the lists of applicants. The lowest income groups were left out of the program either because they did not meet criteria (labor continuity and minimum income), or because they were overridden by the irregularities that were mentioned.

Land freehold was to be transferred when the dwelling was finished. Construction of the dwellings was completed in an average of one year. The first stage was usually a three to four room unit with a wet core that was built using hired labor within a period from a month to 4 years. Timelines ended up being neither followed nor enforced by the authorities.

There was a small turnover of undeveloped plots. Other few of them were semi-built plots that could not be finished by its household due to financial difficulties. Transactions of the plots occurred under legal and illegal circumstances. The government did not prevent this commercialization, but tried to regulate it by observing that new purchasers met the original eligibility criteria.

4.g What is new?

This section of the chapter summarizes and compares the information presented in the previous section. It is important to note that, with the exception of the Venezuelan case for which the author has collected direct evidence, the data used here came from the available literature dealing with these experiences during the 1990s and it is limited by the information available in these sources. It is worth mentioning that the collected information suited well the particular interests of this chapter. Analogous data were

available in the literature to allow comparison between the cases. The cases presented are not the only ones,³³ but are by and large representative of the kind of research found in the literature about planned progressive developments produced during the 1990s. The data have been organized in a series of tables to facilitate the comparison of information. The inclusion of the late sites and services Budiro of Harare is interesting in itself because it reveals a shift in the perspective about the issues considered relevant in planned progressive development strategies. The World Bank's supported sites and services case stands out of the group because the concerns that are assessed are the concerns under which sites and services projects were evaluated during the 1970s and 1980s, i.e., those that concerned the World Bank. However, the case misses information about how the settlement was delivered, occupied, improved and consolidated. The questions that raise are, does this represents a shift in the issues that became relevant in planned progressive development strategies during the 1990s? or it is just a different focus caused either by the discipline of the scholars or by the nature of the consumer? (i.e, the World Bank evaluators and independent researchers). This part will be discussed in detail in the last chapter.

Characteristics of the Cities

The projects were all located in urban areas, mostly in cities with varied population sizes. The smallest were around half million (Ciudad Guayana and Bhubaneshwar), the middle were between 1 and 2 millions, and the largest urban areas were around 10 million inhabitants. All these areas were characterized by rapid urban growth.

All the cities, except the serviced lots in Harare, have a long history of squatter settlements produced by invasions of inner areas. The general policy adopted in these

³³ This research also found similar planned progressive development strategies in Cordoba, Argentina (Vanella, Ricardo 1994) and Vijayawada, India (Banerjee, B. and TG.D.Verma 1994).

cities was relocation in peripheral land, their governments have a long tradition using this policy. In this respect, only the government of Harare demonstrated political will to assume the coordinated planning of the housing. The other governments relied on reactive policies to manage and control the cities. This was evident in cases such as Delhi, Hyderabad and Brasilia, where even middle-income groups adopted the informal mechanisms to house themselves, generally in illegal subdivisions. At the same time, the fact that these settlements were eventually provided with infrastructure and served, revealed an institutional willingness and experience with upgrading processes that governments have explicitly included among their public urban policies within the last three decades.

Land used for low-income housing and, in general, the largest proportion of the vacant land in these cities was under government control. In Hyderabad and Ciudad Guayana land management and low-income housing were managed by two different entities that had to negotiate the planning process. They were also the cities with less problems of land availability. In the case of Ciudad Guayana, since growth started in the west side of the city, large amounts of land were still available for future expansion. In the case of Hyderabad as in Karachi, desert land surrounds the cities and availability has not been a problem (Hasan, A. 1997:58). In both, however, as in Brasilia and Delhi, urban sprawl represented a problem due to long commuting distances. With the exception of Harare, illegal subdivisions were pervasive in these cities, reflecting lack of land control and planning enforcement. The poor groups portrayed in these cities had similar characteristics: they lived with very low incomes and depended, in a great degree, on the informal job market.

Fig. 7 Characteristics of the Cities

	City background, size & growth	Previous history with squatters and progressive develop.	Ownership of land for low income housing groups	Characteristics and location of Poorest groups
Upgradable Sites Bharatpur, Bhubaneswar, INDIA	New city developed as new state capital. Population: - 38,200 by 1961 - 412,000 by 1991	Squatters since 1960s. By 1993, 20% of the population lived in 70 squatter areas (approx. 13,600 families) Relocation policy until upgrading was included in 1993	Land for low-income housing managed by municipal corporation Available government land used in the upgradable sites project	Initially squatters occupied empty land within the city. After the middle 80's agricultural land in the periphery was used. Middle income groups joined illegal subdivisions
Incremental housing Rohini phase III, North West Delhi, INDIA	Population urban Delhi - 8.4 mill. by 1991 - 1.4 mill. squatters - 9.8 mill. by 2001 - 1.9 mill. squatters	Squatters and illegal colonies. Relocations since 1956, preferred policy over area upgrading Sites and services in periphery since 1967	Public land taken by squatters or used for sites and services and upgrading. Illegal subdivisions can occur in private land	Low-income housing either legal or illegal occupies the periphery. Occupation of inner urban areas are usually relocated
Incremental Development Scheme Khuda-ki-Basti, Hyderabad, PAKISTAN	Pakistan's 5 th largest city Extension: 4000 ha Population: - 134,000 by 1941 - 242,000 by 1951 - 1 million by 1991 - 1.2 million by 1994	25% of housing +/- 110 squatter settlements Squatter pop.grew from 162,000 to 285,000 Sites and services and upgrading programs since the early 1970s	A board controls public land / metropolitan authorities develop it. IDS was inserted in the unfinished 1981's sites and services project of Gulshan-e-Shahbaz Illegal subdivisions are occurring.	70% of population are low-income groups w/ daily income < \$4.00. 44% of the labor force works informal sector. Squatter settlements and sites & services occupy the periphery
Serviced Plots Programmes Budiriro, Harare, ZIMBABWE	N/A	No squatter settlements Tradition in hostel accommodations and rental housing Sites and services used since late 1970s.	The government owns land for housing. Freehold given to the occupants	60% of those looking for low-cost housing could not afford S&S
Incremental Land Development Samambaia, Brasilia, BRAZIL	New city/ new capital founded in 1960. Central district (Plano Piloto) started in 1957. Population growth: - 6,823 by 1957 - 1.8 millions by 1996	Squatter settlements since city's creation. Progress. development used in workers camps. Also used in squatter relocations in periphery sites w/ basic servicing since the beginnings	Government owns 60% of the land and the remaining 40% under expropriation. Project developed in land initially occupied by smaller relocations	15% of population live in Plano Piloto (1.3 m) 85% in satellite cities of the periphery (.5 m) 2/3 of the jobs are in Plano Piloto 20% of poor live with less than \$2.00 daily
Progressive Urban Improvement Gran Sabana, Ciudad Guayana, VENEZUELA	New industrial city (Steel, Aluminum and Hydroelectric power) founded in 1960 Population: - 4000 before 1960 - 148000 by 1970 - 30000 by 1980 - 577000 by 1990 - 615000 by 1998	Tolerance to invasions & squatter settlements. Low income housing strategies since 1962; -UMUP- Progressive Improvement Units and slum upgrading	80% of land is owned by public planning corporation since 1960. Municipality assumed planning after 1989. Negotiation between these two entities is necessary in planning Project developed in public unoccupied land	Concentrated in the west. After 1989 newer areas were developed towards east periphery 30% labor in industries and related services, 10% works in tertiary sector and 60% in informal employment

* Late sponsored sites and services

Characteristics of the Sites

The projects described here all started around 1990 with the exception of Hyderabad's incremental development scheme that was created in 1986 after sites and services in Pakistan. Location of all projects in the periphery reveals that this is the public land available that governments were willing to use for low-income housing. This is especially true for the cases of Ciudad Guayana and Brasilia, where public land closer to the city was available.

All the cases except Budiriro, were product of relocation plans. People were located in land with other purposes and the projects were seen as housing for low-income groups and the way to clear the occupied land from squatters. All the inhabitants, in general, obtained substitute housing in the new projects. Additional places were opened to new applicants. Generally speaking --and again with the exception of Budirire-- the selection criteria tried to assure allocation of land to the low-income groups. Immediate occupation and beginning of construction work was frequently required. Permanence on the site was also of concern. The incremental development scheme used the reception area for this purpose. The assumption that only people in need of housing would go through the burdens of living in provisional conditions for some period seems to have worked well. Issuance of tenure documents only occurred after some steps, usually connected with permanence and/or when minimum levels of construction were met. Inhabitants received tenure in several forms --direct, freehold and concession--and all of them seem to have worked well for the purposes of housing investment.

The projects were very different in size and initial servicing. The number of plots varied between 2,300 to 22,000. Excepting Samambaia, the projects were small, with less than 4,700 plots. The level of infrastructure was similar for most of the projects. It included, unserviced plots with common water taps, electricity network and street lighting. Sewage was inexistent and individual latrines were built in later stages.

Fig. 8 Characteristics of the Sites

	Year of occupation, Location of the site	Land Security Arrangement, target population and occupation	Number of Plots and Initial Infrastructure	Initial Services and Facilities
Upgradable Sites Bharatpur, Bhubaneswar, INDIA	Started in 1988 Located in periphery of the city	Directed to relocate 2 squatter settlements Households moved to the site in November, with belongings and salvaged materials of construction	Unpaved roads and 1761 demarcated 60 sqm plots Street lighting and 6 water wells	Connected to the city by existing bus service. Provisional dispensary and land reserved for education, recreation and commercial premises
Incremental housing Rohini phase III, North West Delhi, INDIA	Started in 1989. Located in periphery of the city.	It was addressed to relocate squatters who invaded land already allocated. Inhabitants were compensated for relocation	Clusters 150 x 150m of 256 plots of 64sqm. Each 4 plots share a water tap and septic for 4 individual latrines. Total of 2,300 plots. Street and rain drains were brick lined. Public lighting.	Areas reserved for recreational parks. No other facilities were reported.
Incremental Development Scheme Khuda-ki-Basti, Hyderabad, PAKISTAN	Started in 1986. 10 km from the city center and 1km from a cluster of illegal land subdivisions.	Applicants lived in a reception area during 15 days for screening. Plots assigned but not allocated until occupation shown and dwelling built	Unpaved roads 3,500 plots of 80 sqm. Water by truck, later collective tanks built Bucket toilets used until latrines built. No electricity provided	Transportation was by bus set by development agency. No other facilities were available at the beginning.
Serviced Plots Programmes Budiriro, Harare, ZIMBABWE	In 1984 Budiro I and in 1990 Budiriro II.	Freehold of land to be transferred when the dwelling is completed Applicants selected in base of continuity in their job and minimum income.	Budiriro I: 2,550 lots of which, 1,200 were to companies' housing Budiro II: 1,586 lots 1/2 to companies.	N/A
Incremental Land Development Samambaia, Brasilia, BRAZIL	Started in 1989. 25 km from the central district of Plano Piloto. The site was originally used to resettle 4000 families (1987)	Land concession, use and inheritance allowed Directed to non-owner population of satellite cities. Elegibility: income <\$170, 3 years in City. Plots to be occupied within 45 days of allocation	Unpaved roads. 22,000 demarcated 120sqm plots. Only electricity network. connection to after a structure was built. Water provided with 20,000lt water trucks. 200 public water standposts were installed shortly after	Initial transportation twice a day morning and afternoon Reserved areas for schools, medical facilities and community centers.
Progressive Urban Improvement Gran Sabana, Ciudad Guayana, VENEZUELA	Started in 1990. 10 km from city center in peripheral land. 3km from industries 1 st planned progressive development at the west of the city	Land sold to residents with 15-year plan. Individual titularity Directed to evictions of 2 squatters settlements Taken to the site with belongings including recovered previous housing materials	Unpaved road network, and 4,700 demarcated plots of 250 sqm. Access road asphalted. Water standposts with ten taps each. Electricity network and street lighting. Individual pit latrines	Transportation by jitney. Industry buses for daily transportation of worker to work sites Police station, small medical facility. Areas reserved for a public market, a school and a park

* Late sponsored sites and services

The level of services and facilities was similar. Transportation was available but often poor and expensive. Recreation and parks, public markets, schools and health centers counted with reserved areas but only in the case of Ciudad Guayana a police post and a dispensary were already on the site.

Initial Occupation and Development

All the inhabitants were taken to the site with their belongings and salvaged construction materials as part of relocation projects. Some relocations were larger programs that came from different settlements. The projects were also opened to new occupants because in many projects there was a surplus of plots, or later, because of plot reassignments and reallocation. In two cases some of the new plots had already been invaded. Arrival of new settlers to the project was produced within one to four years.

In all the cases reported absenteeism was low and plots that remained empty were reallocated. Some plot turnover was reported in all projects even though restrictions prevented plot transfers. But often if these restrictions were enforced, selling of plots occurred whether it was legally certified or not. Only in the case of Budiriro, the government was aware of the majority of transactions going on.

Within a period of three to four years, the infrastructure and services of all the cases except Delhi, were considerably improved. Most of the projects improved the water supply with individual connections as well as sanitation with pit latrines. Electricity was also installed in all cases except Hyderabad and Delhi. Transportation was generally improved.

Facilities show different level of improvement in the cases studied. It appears that schools and dispensaries were given priority. Then adult education centers and community centers. Police and fire stations, markets and small industries came last.

Fig. 9 Initial Occupation and Development

	Arrival of Inhabitants	Last Occupation Reported Absenteeism	Provision of Services	Provision of facilities, housing consolidation
Upgradable Sites Bharatpur, Bhubaneswar, INDIA	Families of a delayed upgrading prog. were relocated to the site. Dwellings started with recycled material from previous housing. Level of initial services considered satisfactory. Hardships at beginning because of relocation	Almost no plot turnover By 1992 absenteeism was 3%	By 1991 were added 38 wells and 34 municipal stand posts. Public toilets built and latrine offered at demand. Garbage collection was activated. By 1992 15 km of roads & drainage were provided. Electricity in all streets	By 1991: 8 childcares, 4 adult schools, 11 non-formal education ctrs, 2 sewing ctrs, community hall, primary health ctr. By 1992 primary school built, 400 loans for micro-enterprises, loans for shelter upgrading to 1200 eligible families.
Incremental housing Rohini phase III, North West Delhi, INDIA	People made free occupation of plots that formalized with allotment. Some plots were already invaded.	No controls over land speculation or absenteeism, which was encouraged by poor transportation.	Planned city services did not reach the site. Hand pumps were installed to get water from dried wells	Dwellings have been built. Addition of facilities not reported. Very low site standards
Incremental Development Scheme Khuda-ki-Basti, Hyderabad, PAKISTAN	350 families arrived in 1986. Population increase to 2,500 by 1987 and 3,000 by 1989. Applicant spent two weeks in a reception area to demonstrate need and screening.	Absenteeism was reduced because the required permanence in the reception area. Turnover of plots is facilitated because land is allocated after the trial period.	Public bus service of 25 round trips per day as well as private lines. 86% of the dwellings have individual water taps and 50% have electricity.	No medical facilities but seven doctors serve the settlement. Five primary schools and several home daycares.
Serviced Plots Programmes Budiro, * Harare, ZIMBABWE	By 1984: 2,550 households By 1990: 1,586 households.	Small turnover of some undeveloped plots and a few unfinished. Selling of plots under legally and illegally. Government regulate purchasers meet the eligibility criteria	N/A	Timelines were not met or enforced. Construction of dwelling completed within one year
Incremental Land Development Samambaia, Brasilia, BRAZIL	People from 50 slums, half from Plano Piloto and half were tenants. 60,000 inhabitants arrived in 1989. It increased to 127,430 in 1991 and to 163,000 in 1994.	Last figure 200,000 inhabitants. Some plots reallocated because of absenteeism. Sell of plots is occurring in spite of restrictions (a day of oct.92 showed 69 houses to be sold)	Buses each two hours. Main roads asphalted. In 199: 17 schools, 3 health ctrs, police and fire stations. In 1992 17,000 individual connections to network. Collective septic tanks with 3,526 connections	In 1991, 17 schools, 3 health ctrs, police station and fire station. In 1992 there were 180 pay phones, 17 sport fields, 25 schools, 334 shops, 98 religious buildings, a hospital.
Progressive Urban Improvement Gran Sabana, Ciudad Guayana, VENEZUELA	People from 2 invasion Trucks moved material and belongings from former dwellings. An initial 2,500 people arrived to the site in a two-week period. New applicants occupied the remaining plots.	All plots allocated in a 2-month period. They were occupied within 6 months though some absenteeism was seen. No turnovers occurred but within a year plots with few improvements were being sold.	People buried piping from water standposts to plots building almost permanent network. Illegal connections to the electricity network checked and meters installed by company. People built latrines in short time.	Transportation (jitneys) diversified. By 1998 primary school, market, community ctr, 2 dispensaries, small manufacturing and construction material industries, and shops were added. 1/2 housing was permanent in 1998.

* Late sponsored sites and services

Impact in Housing Local Policy

The inhabitants organized community representative bodies for tasks needing participation or social organization. They mobilized political and social pressure to obtain infrastructure and services from local agencies. These bodies also organized and structured participation in infrastructure works.

All the studied cities enforced relocation of squatter settlements (already around the year 1990). All of them also supported slum upgrading, except Budiriro that did not have squatters.

The projects were seen positively in all cases except in Delhi and Budiriro, where culturally, serviced sites were considered substandard. Actually, people in Delhi do not consider that sites and services work improving standards. However, in all cities there seemed to be a lack of will to change policies against relocations. Even though the strength of the planned progressive development strategies is to allow development of new areas, thus controlling urban growth, it is likely that these projects will always be used as a response to relocation.

The understanding that government officials have about the potentialities of planned progressive development strategies is not clear. In Delhi, for instance, their previous experiences with illegal subdivisions were ignored for the implementation of Rohini III. In Ciudad Guayana, municipal planners do not make clear distinction between upgrading existing squatters and progressive urban improvement units. While on the one hand this make sense because both approaches work similarly with the same institutions, on the other it is odd that the advantage of being able to coordinate planning is not realized.

Also in terms of policy, only in Bharatpur land availability is seen as a potential obstacle for the continuity of the program.

Fig. 10 Impact in Housing Local Policy and Additional Remarks

	People and Community	Previous Housing Policies	Assessment of the Project Impact	Other
Upgradable Sites Bharatpur, Bhubaneswar, INDIA	Participation in planning was enabled through a body of representatives C.M.G-	Project started with a nation-wide program of relocation, a common practice until 1993. New legislation facilitated upgrading. Currently the focuses are slum upgrading and urban basic services	Regional government willingness to support the policy. Considered better than upgrading and conventional sites and services. Cost-effective, quick, simple. Operational problems with local institutions	Land availability is seen as major problem. New infrastructure and services will eventually attract newcomers.
Incremental housing Rohini phase III, North West Delhi, INDIA	Project proposes sharing of services and a common space. No participation is reported	Relocation exists since 1956. Upgrading was seen as temporary solution to wait for relocation until 1990. Upgrading has become common practice	The idea was seen as a last resort to relocate squatters.	Experience with illegal subdivisions ignored in the project. No action to improve quality. It is considered a "low-quality sites & services
Incremental Development Scheme Khuda-ki-Basti, Hyderabad, PAKISTAN	People in eleven blocks of 250-300 plots. Representatives are elected and proposals for improvement are elevated to the HAD for discussion in public meetings	Sites and services dominated policy scenario with very little success. Upgrading is practiced in slums and illegal subdivisions with political support.	Positive outcomes of IDL have been widely reported, especially ability of low-income groups to finance and build infrastructure. No official support has been given to IDL.	egies based on these more recent, simplified projects, and attempts to contribute to the knowledge
Serviced Plots Programmes Budiriro, * Harare, ZIMBABWE	N/A	Sites and services is the largest approach. Strong tradition in physical development control	Government authorities willing to support the strategy, though it is considered sub-standard.	Employer companies intermediated in the housing process
Incremental Land Development Samambaia, Brasilia, BRAZIL	People participated in progressive building of infrastructure and housing. Most are half literate. Only 17% works in the formal sector. 65% are under 18 years, 21% are between 5 and 9.	Master planning, land use regulations, police control, evictions and resettlement in raw plots with minimal infrastructure were all practiced. The site was in 1987 a land guided occupation	Experience of ILD considered successful. Managed to obtain the participation of people for infrastructure. But it is unlikely that housing policy will change	No housing finance, public construction or government support. Relative good outcome attracted government investments.
Progressive Urban Improvement Gran Sabana, Ciudad Guayana, VENEZUELA	A neighborhood association created to organize participation for infrastructure works and to pressure for services and facilities.	Progressive urban improvement used for long time, but more frequent in relocations. Upgrading is used for invasions to public land. Planning officers do not differentiate these approaches	The project is useful to manage large relocation. Residents consider successful the outcome, site offers services, goods and amenities for the population. Lack of will to promote policies of progressive urban improvement	Planning experience in the local government is of short data. The experience accumulated by the corporation is not easy accessible to local government planners. Relations with the corporation are difficult

* Late sponsored sites and services

Conclusions: How is it now?

This chapter collected and analyzed recent evidence of the implementation of planned progressive development projects. The following conclusions reflect over the analyses and comparisons made in the chapter.

Planned progressive development strategies were implemented with positive outcomes during the 1990s, after support for sites and services from international development agencies disappeared. They project designs required very limited initial resources to be implemented, mainly land and some form of basic services that allowed the immediate occupation of the site. They represented a good alternative for the low-income groups vis-à-vis squatter settlements. The cases of Hyderabad and Ciudad Guayana showed that squatters had no better options of land available for development but rather the same kind of peripheral unserviced land. Thus, in these cases planned progressive development strategies were in better comparative position because land was secured and the promise of future services existed (especially water and transportation).

In spite of their different origins, the locally sponsored projects shared many commonalities. They were implemented as relocation projects, located in urban peripheral land, and all had a very low level of starter services mainly laid out plots and roads, and water provision. No housing was provided, no minimum standards were enforced other than those already set by the layout of the project (i.e., plot size, width of streets, density --1 household/lot, etc.). Provisions for future facilities and amenities were mainly in the way of areas reserved for their future provision. Infrastructure was installed and improved with community participation and housing was developed incrementally, as in squatter settlements.

During the initial days of implementation they made similar misconceptions as did sites and services. For instance, in Hyderabad dwelling construction had to follow certain

timetables and when administrators realized that deadlines were not being met, timetables were accelerated to produce the consolidation response. It was not until project administrators realized that building pace was not being met because of absentee households, that the problem was tackled more effectively.

The selection of participants focused more on occupation and permanence in the assigned plot, and dwelling construction, and less on household's income, housing affordability and repayment capacity. The fact that the projects were relocations also made selection of beneficiaries easier because there were records and censuses available. However, some projects opened to newcomers added screening mechanisms. These were procedures aimed to make difficult for higher income groups with other housing alternatives to benefit from project's housing. Examples are the implementation of the 15-day permanence in the reception area, securing the land allocation after occupation, permanence and dwelling construction occurred, and the reallocation of emptied plots.

Infrastructure and services for projects were provided within the local institutional frameworks of the cities. Wherever upgrading was already institutionalized this made things easier. Public and private companies of city services in these countries have developed structures to work providing services in these settlements and, in general, all governments had previous experiences with community labor for infrastructure works. In general, all services and facilities were improved in short time, especially transportation and sanitation.

A last reflection worth mentioning is that the cases reviewed in this chapter portrayed very much the same characteristics and simplicity as those that housing researchers in the 1960s and early 1970s described as best of what planned low-income housing should be in planned progressive development strategies. This is further discussed in the final chapter.

III. A View to the Future

5. After Sites and Services

Summary of the study

This study focused on planned progressive development strategies implemented in the late 1980s and the 1990s. That is, they were built in a period, after such projects had been dropped from the international development assistance agenda, and after funding sites and services projects was cut-off, and donor support for shelter projects more generally was considerably reduced. The study started by presenting the theoretical case for the inclusion of progressive development to address low-income housing problems within the scope of formal planning activities. It described how the idea of planned progressive development strategies was introduced with sites and services projects, gained strong support and was widely implemented in developing countries during the 1970s and 1980s. We saw, however, that in practice sites and services projects as they were implemented failed to satisfy the evaluation criteria of international development agencies which had initially supported them. In particular, they could not meet the World Bank's criteria of affordability, cost-recovery, and replicability, which were necessary to avoid the need for high external subsidies. As this became apparent, support for sites and services projects deteriorated quickly. This led to the abrupt abandonment of the strategy during the second half of the 1980s.

The World Bank's formal evaluations of its later sites and services projects confirmed the conventional wisdom about the projects' weaknesses. However, subsequent researchers have agreed that this information was of limited value as it only focused on the implementation stage of the projects and used the criteria imposed by the sponsors for the implementation of the projects. As described in Chapter 3, new research based in

long-term assessment of planned progressive developments was initiated at the end of the 1980s and the beginning of the 1990s that challenged some of the assumptions about progressive development that had been taken for granted in the initial sites and services project activities.

Recent evidence of five more recent planned progressive development projects was found, presented and analyzed in Chapter 4. All of these recent projects were small, local initiatives that were implemented in several developing countries during the end of the 1980s and the 1990s without external assistance. The projects focused on the development of land with a minimal provision of services. Housing and infrastructure were improved by the residents over time and with community and government participation. The thesis argue that these projects provide new evidence of the validity of progressive development projects as an element in planned housing strategies. The implications of these findings are discussed in the next section.

Discussion and interpretation of findings

The evidence reviewed in this study supports the view (Mayo, S. and D. Gross 1987), that sponsored sites and services were abandoned because project deficiencies led to high subsidies; the abandonment of sites and services also reflected internal and external pressures on donors to give up direct shelter project policies (McCarney, P. 1987). The project deficiencies were the consequence of the complexity of the projects' design, the rigidity of the implementation procedures. It is argued that the interpretation of projects as failures reflected the narrow criteria used to assess project outcomes, criteria which increasingly reflected the emerging agenda of development agencies rather than original project goals or theories.

The rigidity of the implementation procedures and complexity of the projects, have been largely discussed in the literature and were reviewed in this study. Project decisions

such as ‘accelerating the process of consolidation’ or ‘increasing productivity of the projects’ which were common in the early sites and services projects were based on the unproven assumption that what worked in informal housing would equally work under a ‘planned environment’ in which time constraints were imposed from outside. These faulty assumptions contributed to the most undesirable consequences of the projects (i.e., pushing the poorest out of their housing).

Paradoxically, allowing flexibility was part of the essence of the earliest progressive development proposals. Rigid plans, timetables, packages of housing, services and financing, standards and regulations were, by definition, inconsistent with the concept of progressive development in which the maximum range of freedom to make individual decisions must be allowed. Low-income groups have different strategies for survival and no attempts to predetermine the characteristics of their housing will succeed in serving all low-income individuals. For some of this group, however small or large it might be, predetermined housing will fail (Peattie, L. 1982:137).

The new planned progressive development projects described in this thesis show a different kind of project characterized by the simplicity of the project design and by low initial investment. But they also show a different kind of evaluation in which criteria are suggested by the most remarkable features observed and not imposed by preconceived models and unproven assumptions. This does not imply that projects do not have to meet an ‘affordability – cost recovery – replicability’ or other criteria that can guarantee sustainability. On the contrary, because designs were simpler and time constraints much more flexible, the new planned progressive development projects appear to come closer to meeting the criteria of affordability, cost recovery and replicability than did the earlier World Bank funded projects.

One of the most important issues which this thesis set out to examine was to test if the kind of development observed in informal housing could be reproduced under planned conditions (i.e. whether flexible, incremental housing is being built in sites of planned

progressive development projects to allow the poor to match their needs and priorities). The evidence from the later projects described here is that this is possible.

The lesson from the later projects also reinforces McCarney's comment that "learning from past mistakes should not mean learning not to do" (McCarney, P. 1987:17). Giving up planned progressive development strategies such as sites and services, should not have implied giving up learning from the experience. Withdrawal of support for site and services projects implied a loss of 15 years of knowledge about sites and services. One can only wonder what could have been learnt from longitudinal evaluations of the earlier sites and services projects.

The evidence that this study has collected together, organized and analyzed about recent planned progressive development projects indicates that this housing strategy is still promising. It demonstrates that these projects can be implemented with very little initial investment and without external support. The evidence also shows that people are willing to invest in their dwellings and in the infrastructure. The five cases described in this thesis are instances where implementation followed the guidelines and led to improved initial living conditions.

The new planned progressive developments also examined in this thesis suggest that introducing a low level of initial standards in housing became easier when housing projects were associated to larger or more important projects. All the cases reviewed by this study, involved relocation of residents from elsewhere. The housing elements of the projects were seen as a solution to a major, unavoidable problem, or part of another necessary project, and not as low-income housing built as part of housing policy. All parts involved, the relocated squatter, the government, and the observer, agreed that lower initial standards were acceptable in order to avoid a potential conflict. One could easily argue that if this kind of projects were part of the housing supply policy of a government in a developing country, projects would be criticized because of poor standards. Improving the infrastructure standards of these projects was also easier

because of the previous experience of the implementing governments and service agencies in upgrading. In fact, improving infrastructure in these projects should have been easier than upgrading existing informal settlements.

Finally, the findings also suggest that initial emphasis in project design should be placed mainly on land, basic urbanization and water. These, in general, will provide a satisfactory initial level of services if improvement and addition of new services and infrastructure can be expected for the site. The experiences described in Chapter 4 also show that transportation and sanitation were next in priority for residents. The improvement of the existing services as well as the introduction of new services can be driven by demand as people has demonstrated willingness to invest resources in kind or cash to obtain them.

Implications for policy

Among the findings of this research with larger policy implications are the peripheral location of the projects, the policy of relocations that originated the projects and the need to widening the understanding that standards can be continuously improved and encourage the development of mechanisms to gradually reach desirable standards.

Peripheral land is most surely the land that low-income households can afford. In many developing countries, it is likely that substantial amounts of peripheral available land will be in the hands of public agencies (Doebele, W. 114:1987). At the same time, peripheral settlements can be less than a problem if they are developed and consolidated as new parts of the existing city. They can generate their own dynamics and reduce their dependence with the city. For instance, La Gran Sabana in Ciudad Guayana generated 526 formal jobs and many more were created in the informal sector with local construction and retail. Planned progressive development strategies could become a low cost clear policy of governments for the development of the periphery.

Relocation policy was the initial point of each of the cases studied in this research. It is contradictory that land can be easier to develop in a context of reactive policies such as forced relocation than it is with proactive planning. The new experiences reviewed by this study suggest that minimum standards such as those adopted initially in the projects were more politically acceptable because the projects originated as relocation rather than new housing projects. One model that can be derived from these experiences would suggest that a component of relocation in the initial phases of a project may make affordable standards acceptable to public authorities, making it possible to provide a low initial level of services to the first households. Newer residents might then be permitted to move in or developers to develop land adjacent to the initial settlement at similar standards. As the settlement evolves reaching better levels of services and housing standards, the idea could become attractive for replication either diminishing or without the component of relocation.

Housing policy and planning must encourage the development of methods to introduce infrastructure and services gradually in planned progressive development areas. This issue together with an initial low level of standards, are key elements to allow the poor to afford and to stay in the projects. Increasing standards or speeding the process of infrastructure improvement will favor the displacement of the poor from these settlements. The experience of many countries in upgrading projects should serve as starting point to address this issue.

Finally, if the previous aspects could be enforced in the implementation of planned progressive development strategies it should be possible to meet the criteria of 'affordability – cost recovery – replicability'. The prerequisites for making planned progressive development projects sustainable are 1) assuring a location on peripheral land that could be afforded by low-income households, 2) making acceptable a low level of initial standards in the understanding that they will be upgraded by responding to inhabitants priorities, and 3) devising and enforcing mechanisms for the gradual

improvement of infrastructure many of which should not be different to regular upgrading mechanisms.

Unanswered questions

This thesis leaves many open ends and unanswered questions; some need to be addressed by research; others require practical experience.

In the field of infrastructure and servicing, research in low-cost sanitation technologies for temporary and long-term servicing has already been explored in association with progressive development concepts (Choguill, C. 1996, 1999). What we do not yet know is how hybrid sanitation technologies could best ease the transitional process of development between temporary and permanent technologies.

In the field of land development, what mechanisms could be developed for a rational densification of the areas over time. Inhabitants of planned progressive developments benefit from lower densities at the beginning to release the demand for initially poor services. For example septic tanks and pit latrines are only feasible at low densities. Densities could be increased as the settlement and infrastructure is developed, social stability is gained, linkages to the city are consolidated, etc.

Finally, the long-term evolution of these residential areas should be tracked. Research in old planned progressive developments and existing sites and services could provide very relevant information about the processes of formation of these areas. Understanding the construction of these areas of the city would be enlightening for the discipline of the urban planner and designer.

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