

Latin American Perspectives

<http://lap.sagepub.com/>

An Appraisal of Sandinista Housing Policies

Kosta Mathey

Latin American Perspectives 1990 17: 76

DOI: 10.1177/0094582X9001700305

The online version of this article can be found at:

<http://lap.sagepub.com/content/17/3/76>

Published by:



<http://www.sagepublications.com>

On behalf of:

Latin American Perspectives, Inc.

Additional services and information for *Latin American Perspectives* can be found at:

Email Alerts: <http://lap.sagepub.com/cgi/alerts>

Subscriptions: <http://lap.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://lap.sagepub.com/content/17/3/76.refs.html>

>> [Version of Record](#) - Jul 1, 1990

[What is This?](#)

An Appraisal of Sandinista Housing Policies

by
Kosta Mathéy

The housing problem in Third World countries is alarming. The number of people who are homeless or live in makeshift settlements under miserable conditions was estimated to exceed one billion in 1987, the "International Year of Shelter." Many strategies, including sites-and-services, slum upgrading, core housing, and similar alternatives, have been tested almost everywhere, but the housing deficit continues to worsen. Most experts agree that housing is only a secondary problem which can hardly be solved without a wider and simultaneous redistribution policy on the national, if not the international, level. Therefore, when the Nicaraguan Revolution succeeded in July 1979 and the Sandinistas started to convert the capitalist economy of the previous Somoza regime into a mixed economy with a strong social bias, it was felt that one of the greatest obstacles to solving the housing problem appeared to be out of the way. Everyone was curious about which housing policy the Nicaraguans would choose, and what could be achieved when mutual support between the government and the popular classes could be assumed. If the Nicaraguan model were successful, this might give hope to the millions of homeless in other parts of the world and encourage other governments to adopt at least some elements of its policy.

THE REVOLUTION AND THE FIRST STEPS

Housing has been a problem in Nicaragua for a long time. The 1971 census recorded that 61 percent of dwellings had only dirt floors, 46 percent were without sanitary facilities, 36 percent had no access to water, and 59 percent lacked electricity. In 1972 a severe earthquake hit Managua, killing 10,000

The author is lecturing in the Department of Architecture and Town Planning at the University of Kassel, West Germany. He wishes to thank the many colleagues who commented on earlier versions of this article and thereby helped to clarify several of its ambiguities and to update information. He expresses particular thanks to Mirina Curutchet and Jill Hamberg for their extensive comments and to Auxiliadora Reyes for information about recent policy changes. A new housing law was tabled in December, 1989, but—if already passed—will certainly not be put into practice by the new conservative government elected in February, 1990.

LATIN AMERICAN PERSPECTIVES, Issue 66, Vol. 17 No. 3, Summer 1990, 76-99
© 1990 Latin American Perspectives

people and destroying 50,000 homes. In the following years little was invested in housing, and none of it benefited the poor. Further losses were suffered during the battles which preceded the liberation and as a result of flood in 1982. More recently, the war with the U.S.-backed contras caused no less than 43,000 deaths and displaced more than 150,000 people (Curutchet, 1987: 135, Vance 1987a: 170-171). In September 1988 the country was severely hit by a hurricane which erased whole settlements along the Atlantic Coast. In Managua alone, several hundred kilometers from the coast, more than 1,000 homes were completely destroyed and another 30,000 heavily damaged.

Nicaragua is a small country; it has a surface area of 129,541 square kilometers and in 1987 had a population of 3.5 million (MINVAH, 1987). When the Sandinista government gained power, it inherited a housing deficit of 250,000 units, which meant that two-thirds of the population lacked decent housing.¹ It was calculated that this deficit would increase at a rate of 40,000 units per year, of which 25,000 would result from the decay of existing stock and 15,000 would arise from natural population growth (MINVAH, 1984a).

It would have been unrealistic to expect an instant solution from the new government. Apart from the fact that housing was only one of many pressing needs, the Sandinistas needed time, peace, and expertise to develop housing policies. Hence the most urgent difficulties had to be solved on an ad hoc basis, and some early decisions would have to be revised at a later stage. Many observers and "revolutionary tourists" were disappointed when they discovered problems of scarcity, incompetence, bureaucracy, and the like—shortcomings faced by any society, because they may be rooted in psychological and sociological behavior rather than in the political system.

IS HOUSING A PRIORITY IN DEVELOPMENT?

Since by definition the financial investment capacity of developing countries is very limited, any state resources which may be spent on housing will be scrutinized on at least two levels: the benefits to the housing sector versus the benefits to other sectors; then once a decision is made in favor of housing, competition will ensue between different regions and between urban and rural areas.

SECTORAL PRIORITIES

Given the backlog in fixed industrial investment in all developing countries and the heavy burden of foreign debt, investment in the "productive"

sector is normally granted priority over housing which tends to be considered a mere consumptive item or a social service at best. Usually it is only under the threat of political uprisings that most governments are inclined to allocate more resources to the housing and consumptive sector, and then it is to maintain the stability of the political system.

In Nicaragua, which inherited an extremely high foreign debt from the prerevolutionary government, the prime development objective was the strengthening of the economic capacity of the nation, the means to achieve a positive balance of payments. This meant that "productive investment" was perceived as the most important requirement for reaching self-sufficiency in food production and for expanding exports through improved cultivation of cash crops (particularly coffee, sugar, and cotton). Social expenditure in education and health was given priority over housing, since it was thought that they would have a greater and more direct effect on stimulating the economy, and because they would reach a greater number of people with the same, or more limited, resources. It has been argued, for example, that the literacy campaign, which benefited almost 2 million Nicaraguans, was less costly than providing 2,000 families with a house (Arguello Hüper, 1985). However, the ambitious social programs in health and education had to be curbed together with most housing programs once the imposed war absorbed an ever-increasing share of the economy—eventually amounting to 60 percent of all government expenditures. Due to this critical situation, the share of the budget earmarked for housing, which had reached almost 3 percent of the GNP in 1982-1983, was cut back to about 1 percent in 1986,² relegating it to fourth or fifth priority (Reyes, 1988). More recently, the Nicaraguan state's role in assuming sole responsibility for providing direct financing for housing has been questioned altogether. Instead, foreign aid has been explicitly declared a key source of funding for shelter projects (MINVAH, 1987: 5).

However, in Nicaragua housing is not always considered a social expenditure or a consumptive item. The Ministry of Agriculture, for example, emphasizes that adequate accommodation counts as a productive factor in agriculture (MINVAH, 1981: 42), and it provides houses as an integral part of many of its own development schemes. In this sense, the now dissolved *Ministerio de la Vivienda y Asentamientos Humanos* (Ministry of Housing and Human Settlements, or MINVAH) also gave priority to those housing schemes which were linked to forestry, fishing, mining, and similar projects (Tapia, 1984: 98).

REGIONAL PRIORITIES

The economic model pursued under the prerevolutionary Somoza regime caused extreme regional imbalances in the pattern of fixed capital investment, provision of services, and the distribution of wealth. Urbanization in the cities proceeded in an absolutely uncontrolled manner following the requirements of transnational capitalism, and turned the capital, Managua, into a typical "primate city" (Linsky, 1969): Whereas only 22 percent of the nation's population lived in the city, 93 percent of all sewage installations, 85 percent of all construction investment, and 80 percent of all other investments were concentrated there (Tapia, 1984: 91, Curutchet, 1987: 95). The strategy of the Sandinistas was intended to counterbalance this inherited pattern and to decentralize productive investment and political responsibilities step by step. For example, the share of all investments made in the Managua region was reduced to 66 percent in 1981 and to 42 percent in 1983 (Curutchet, 1987: 95). The long-term spatial distribution of the population was planned in accordance with the economic development potential of the regions. Assuming an overall population of 5 million in the year 2000, a hierarchical but balanced system of towns and smaller population centers was planned, with an even distribution of services throughout the country. In detail this plan, the *Sistema Urbana Nacional* (SUN), envisaged the following: (1) Managua, with a population of 1,700,000, would remain the capital and the most important administrative center, where key services would be concentrated, i.e., the seat of government, national broadcasting, specialized hospitals, etc.; (2) Nine *centros regionales* (regional centers) would each contain a population of 20,000 to 100,000 and serve surrounding areas of an additional 50,000 to 500,000 inhabitants; (3) There would be 19 *centros secundarios* (secondary centers) each with a population of 10,000 to 20,000 and each with a surrounding area of 25,000 inhabitants; (4) Fifty-five new or existing settlements with a population of 2,000 to 10,000 inhabitants would become *centros de servicio* (service centers) and would provide centralized services for an additional 5,000 to 25,000 persons living in dispersed villages.

The plan assumed 70 percent (or 3,500,000) of the nation's population living in towns of more than 1,000 inhabitants, and 30 percent of the population (1,500,000) living in rural areas. If the rural population currently constitutes 43 percent of the total population (*Third World Guide*, 1989-1990: 422), we can see that further urbanization of the population is intended and that Managua will be permitted to grow much faster (140 percent) than the nation as a whole (66 percent). It may be disputable whether such a devel-

opment is desirable or unavoidable, but the recent influx of refugees from rural areas into the cities (as a consequence of the war) may justify such a pessimistic prognosis. However, little thought seems to have been given to how the negative social, ecological, and macroeconomic effects of such rapid urbanization can be avoided.

It is certainly true that the internal logic of the war has forced the government to devote a higher proportion of its spending than had been planned to the two most backward "special development zones" in the eastern parts of the country. These areas coincide with the areas most directly affected by war damages. So far some 250,000 peasants have lost their homes, their productive base, and need to be rehoused. In 1986 the share of government-provided housing for the rural population reached 60 percent (MINVAH, 1987: 8). New settlements have been built near the frontier, offering better protection than isolated hamlets, and minimal infrastructure (such as roads) has been constructed. In spite of additional investments pumped into the area for strategic installations and other military reasons, decentralization policies have been hindered on the whole by the war.

THE INSTITUTIONAL INSTRUMENTS

THE STATE APPARATUS

One of the first undertakings of the revolutionary government in 1979 was the creation of the Ministerio de la Vivienda y Asentamientos Humanos, a fusion of the previous Viceministerio de Planificación Urbana (Town Planning Vice Ministry), the Oficina de Inquilinato (Rent Office), and the Banco de la Vivienda de Nicaragua (Housing Bank). As the name suggests, the ministry had two main departments with distinct responsibilities: The first, the Dirección de Desarrollo Urbano (Physical Planning Office), was in charge of town and regional planning, including the preparation of master and development plans (but not implementation of its own investments). The second, the Dirección General de Vivienda (Housing Department), was responsible for planning, programming, supervising, and implementing all investments made by the ministry. In practical terms its functions included the building and management of state housing projects, the redistribution of land, and the coordination of infrastructure and most services. (However, the provision of technical services belonged to the activities of specialized enterprises, such as the Instituto Nicaragüense de Acueductos y Alcantarillas which was responsible for distribution of drinking water and the sewer

system, the Instituto Nicaragüense de Energía which was responsible for electricity, street lights, and the former Juntas Municipales (now *alcaldías*) which were responsible for garbage collection, road surfacing, etc.

Although the MINVAH had a great variety of responsibilities, and employed more staff than most other ministries, it ultimately depended on the Planning Ministry, which decided on the allocation of all monetary resources in the first place. Finance for individual housing projects has been provided by the Banco Inmobiliario de Nicaragua, S. A. (National Mortgage Bank, or BIN) and from outside agencies (MINVAH, 1987: 6). On the other hand, MINVAH had dependent subsidiaries on its own, such as the Empresa de Construcción de Viviendas Nacional (State Building Companies, or COVIN). Other state bodies, like the municipalities or the Ministerio del Desarrollo Agropecuario y de la Reforma Agraria (Ministry of Agriculture, or MIDINRA), may have their own planning boards, develop land, or build houses themselves, but they had to obtain the approval of the MINVAH before they could execute their schemes.

Over the years the MINVAH had grown into a "superministry" while at the same time its budget had declined because of the war economy. Therefore in 1988 the decision was taken to dissolve the MINVAH and to distribute its former responsibilities among a number of independent institutions. Most tasks (like all aspects of urban and regional planning) have been passed on to the regional governments, emphasizing the idea of decentralization and greater participation. Managua as a special case has maintained an independent office of urban development, infrastructure, and housing. MINVAH's former legislative responsibilities have been taken over by the Nicaraguan Institute for Territorial Structure (INITER) at the central level. The construction of houses and infrastructure will be handled independently by COVIN.

POPULAR PARTICIPATION

Without the support of large sectors of the population, the Sandinista revolution could never have succeeded in overthrowing the Somoza regime. After the victory reconstruction had to rely on intense cooperation of the local population since a functioning state apparatus had yet to be built. Therefore, popular participation was seen as an integral ingredient of the national housing policy: "Through their mass organizations the population actively participated in the elaboration and application both of the provisions laid down in the plan and in other political decisions which had a direct impact on the people's future" (MINVAH, 1983: 24; translation by the author).

Formal instruments of popular participation have been introduced in two spheres: political control and execution of policy. In many instances the organized community has successfully negotiated with the authorities cases in which the bureaucracy failed to adequately satisfy their demands. One of the first instances of such a negotiation process in the field of housing was the case of the Barrio San Judas in Managua (see Vance, 1987a and 1987b).

The main instruments of participation are the mass organizations, and among these in particular the former *Comités de Defensa Sandinista* (Sandinista Neighborhood Committees, or CDS), the *Milicias Populares Sandinistas* (Sandinista Popular Militias, or MPS), the *Asociación de la Mujeres Nicaragüenses "Luisa Amanda Espinosa"* (women's organization, or AMNLAE), the *Juventud Sandinista 19 de Julio* (Sandinista Youth Clubs), and the labor unions. At least initially most of these mass organizations constituted a formal part of the Sandinista party system (the *Frente Sandinista de Liberación Nacional*, FSLN) but since these organizations are locally based and primarily concerned with practical day-to-day problems and their solutions, many citizens join these groups without being members of the party or may even belong to a different political party.³ Reflecting this variety of political viewpoints and realizing the necessity of grassroots activities for the reconstruction of the country after the war, the formal link between the party and the neighborhood committee was first severed in 1988 after public and frank discussions, and the women's organization followed soon after. The latter changed its name to *Movimiento Luisa Amanda Espinosa* (MOLAE), whereas the reorganized neighborhood committees, now called *Community Development Committees*, are primarily concerned with issues of local self-government and administration (Light, 1988). A detailed analysis of mass organizations in Nicaragua can be found in Ruchwarger (1987).

The neighborhood committees have played a key role in popular participation. In many ways they were organized in a fashion similar to the *Comités de Defensa de la Revolución*, or CDR, in Cuba, except that in Nicaragua they existed before the revolution, when they worked underground. The CDS have operated on several levels, starting from the block and street level, at the neighborhood level, where they were named *Comité de Barrio Sandinista* (CBS), at the municipal (*zona*), the regional, and at the national levels. At the local base level special interest committees existed everywhere and took care of specific tasks, such as vaccination campaigns and preventive medicine (i.e., sanitation awareness), cooperation with solidarity groups abroad, cultivation of communal gardens to grow basic crops, improvement of infrastructure, reforestation, etc. (Mathéy, 1984: 117). Sometimes the local CDS organized or coordinated voluntary home construction and infrastruc-

ture improvement activities (Curutchet, 1987: 69; Darke, 1987: 110). These voluntary work campaigns have become known under the name *rojo y negro* (red and black), which are the colors of the Sandinista movement.

At the central level representatives of the CDS were installed in all ministries, where they became members of the CPC (Program Coordination Commissions). However, because there was no direct linkage between the local CDS representation and the decentralized executing branches of the authorities, grassroots control was often thwarted, i.e., in such matters as the allocation of vacant sites, or the repair of deficient services (Mathéy 1984: 113). With the reorganization of the neighborhood committees at the base level in 1988, their central organization was under revision as well at the time of this writing.

An illustrative and concrete example of popular participation in the field of housing has been the local committees responsible for distributing the sites and building materials for housing projects. These committees, the outcome of a cooperation agreement between the MINVAH and the CDS in September 1983 (Ruchwarger, 1987: 170), are named *Comités Regionales de Asignación de Lotes y Módulos Básicos (CRALOMBA)* and consist of one representative from the ministry (MINVAH until 1988), one representative of the regional government, of the party (FSLN), the Central Sandinista de Trabajadores (trade union, or CST), and the neighborhood committee CDS (MINVAH, 1984: 13). When any new houses have to be allocated, the selection of applicants has normally been left to the local CDS, which has the most intimate knowledge about the applicant's objective housing need and merit in terms of contributing to the solution of neighborhood problems. Any disputes or subsequent tenancy conflicts are transferred to one of the regional committees, *Comités Regionales de Asuntos Habitacionales (CRAH)*, which were established in February 1984 and are composed of one MINVAH official and two representatives of the mass organizations (MINVAH 1984a: 18). In both cases the ultimate power lies with the delegates of the mass organizations, since decisions are made by simple majority vote.

NONPHYSICAL IMPROVEMENTS IN THE HOUSING SYSTEM

LAND POLICY

In a mixed economy the questions of land ownership and privately rented housing tend to be highly conflictive since the vested interests of private capital rarely harmonize with the requirements of a socially oriented housing policy. Before the revolution, Nicaragua witnessed excessive land specula-

tion, particularly by the Somoza family, so there was a general consensus that their land should be expropriated once the Sandinistas took power. However, no attempt was made to nationalize all land, since many smaller landowners had been supporters of the Sandinistas, and real estate had been one of the few means of investment for the middle classes in an environment of steep inflation, without necessarily aiming at speculative gains. The main interest of the revolutionary government was to rectify past injustices which land speculation had brought about and to inhibit future speculation.

Only a few weeks after the Sandinistas took power, they prohibited the sale of deeds on unimproved land (*Ley de Repartos Ilegales*, 1979) and thereby stopped the previous practice of speculative land subdivisions whereby the poor had to pay exorbitant sums for small plots in neighborhoods which lacked water, sewage, paved streets, etc. By a subsequent law, the land of the existing 420 shantytowns (with 84,000 lots) was expropriated, and the ownership transferred to MINVAH. Any rents or leases which the occupants of the land continued to pay were to be reinvested by the MINVAH in urgently needed services and infrastructure.⁴ Eventually the land title would be transferred to the occupants. Of the expropriated sites 13,000 were immediately turned over to the occupants since their accumulated payments over 20 or more years were estimated equal or superior to the value of the land (*Ley de titulación de lotes*, 1982).

Private ownership rights over land not used to satisfy the housing needs of its owner were further restricted in 1981 (*Ley de expropiación*, 1981) and 1983 (*Ley de bonos de expropiación*, 1983). Any vacant urban land which had been zoned for residential use could be expropriated under the condition that it was needed for a public interest development—including housing. The previous owners were entitled to compensation. However, since 1983 such compensation has been made in the form of certificates which can only be exchanged for money after 20 years. These provisions were intended to inhibit urban land speculation and not to nationalize land in general. In the countryside, for example, some 30 percent of the 377 hectares of land expropriated under this law had been reprivatized by 1984 (MINVAH, 1984b).

As long as MINVAH existed, the transfer of ownership of land was regulated in order to keep speculation under control, and all property changes required clearance by the ministry (MINVAH up to 1988). At present, however, there is no restriction on the transfer of building sites between individuals.

To summarize land policy in Nicaragua, private ownership of land was maintained and even sanctioned if the land was to be used by the owner himself. In fact, the number of landowners increased significantly as a result

of the rural and urban land reform laws. Except for the cases of expropriations, there was no monetary value set on the land, and small farmers or residents of *Urbanizaciones Progresivas* (see below) do not have to pay for land for the time being. However, a revision of this practice has been on the agenda for a number of years but has been deferred due to the chaotic economic situation caused by the war and inflation amounting to several hundred percent a year. The idea is to let people pay for the urbanization cost of vacant land, but not to charge a commercial price ruled by supply and demand.

TENURE GROUPS AND HOUSING RIGHTS

At times different forms of housing tenure have been promoted or attacked on ideological grounds. For example, owner occupation has been understood to reinforce capitalist relations, and private renting has been perceived as an instrument for exploitation because a landlord derives income from leasing of rooms or part of a house by taking advantage of his capital and not by means of a “productive” activity.

In fact, in prerevolutionary Nicaragua more than 30 percent of the population was paying rent (Ruchwarger, 1987: 171), and of those the majority belonged to the poor which, as in most other countries, had little opportunity to defend themselves against unscrupulous landlords. So it came as a great relief to the poor when early in 1980, half a year after the victory of the revolution, all rents were reduced by 50 to 60 percent (*Ley de inquilinato*, 1980). It was claimed that this measure benefited some 72,000 families. Similar to the provisions made in relation to illegal subdivisions, it was further foreseen that in cases where the landlord did not provide for the appropriate maintenance and repairs of the property, the state could intervene on behalf of the tenant and carry out the necessary repairs directly with the rent paid by the tenant. Although this legislation for the protection of tenants and leaseholders can be viewed as very favorable in theory, it has not always been very practical. Cases have been reported, for example (Sánchez, 1984), in which the new reduced rent was lower than the mandatory payments and taxes, which obviously produces a financial problem for a landlord willing to fulfill his responsibilities in regard to repairs and maintenance of the property.

In 1982 an even more radical bill was proposed by the government to outlaw private rental housing altogether—again on the principle that a tenant would have paid off the cost of a house after 20 years of rental payments. However, this bill was extensively discussed by the public at all levels, and substantially modified before its eventual approval in 1983:

Before the government presented the law to the Council of State, CDSs in all major cities organized neighborhood assemblies to promote mass discussion and debate on its provisions. The country's newspapers published the complete text of the law. The Council of State received the final proposal only after public input substantially altered the law. Some CDS members argued that although the law would weaken the power of the big landlords, it could also indiscriminately affect poor and working-class families who rent a wing of their homes or own some extra small property to augment their modest income. Others felt that inheritance restrictions might hurt poor families. The government took these criticisms into account and added special clauses and exceptions to avoid adverse effects among the popular classes (Robinson, 1984: 313).

The same provisions which had been proposed for private renters also applied to the housing stock owned or managed by the government. Ownership of these dwellings has been automatically transferred to the tenants after a maximum period of 20 years (the exact length of the renting period has depended on the income of the tenant, since the rent paid has been calculated not to exceed 15 percent of family income and has been revalued periodically in line with inflation) (MINVAH, 1987: 5). On the other hand, severe sanctions are foreseen in the cases of rent arrears and may include the forcible removal of the family from the dwelling (Sánchez, 1984).

The principle of private home ownership has never been challenged in Nicaragua. On the contrary; owners can obtain credits for home construction,⁵ and a good number of dwellings from the state housing stock have been sold to their occupants in the last few years.

HOUSING PRODUCTION

HOUSING SECTORS AND OUTPUT

We tend to measure the success of a nation's housing policy by the number of units completed within a certain time span. However, for the majority of the population other nonmaterial elements of a housing policy, such as the introduction of rent control or land reforms, can have a much more significant impact than the construction of a limited number of houses, which are then allocated to a lucky few. We should keep this in mind when we look at the figures of new housing provided by the Nicaraguan state. These housing construction figures certainly read very favorably when they are compared with housing production performance under the Somoza regime (1,617 houses between 1966 and 1970 according to Vigil, 1982: 2), but they nevertheless fall behind the need generated by the natural population growth

alone, not to speak of a chance to alleviate the deficiencies of the housing stock inherited by the revolution.

In terms of physical housing production, Nicaraguan housing policy has operated four distinct programs: construction of mass housing complexes, building materials banks, the progressive development program, and settlement upgrading.

Housing Complexes

This mass housing program supplies *complejos habitacionales* (finished houses and apartments) of a relatively high standard. It appeared to be the favored approach of the Ministry of Housing in the first years after 1979. The houses were built by "direct labor" through the state construction company COVIN. Each development comprised 150 or more units and was frequently linked to a new production enterprise (i.e., mining or agriculture). The rent was related to the building cost, which made it too high for the average population. This may be the reason why in Managua, where 42 percent of the produced units were located, a high percentage of civil servants have been among the beneficiaries.⁶ The remaining units were built in León, the second largest city (23 percent), and in rural areas (30 percent) (MINVAH, 1984b: 30-31; MINVAH, 1987: 9). In total 9,536 dwellings were completed under this scheme between 1980 and 1986, after which it was discontinued because of the restrictions of the war economy.

Self-Help Programs and Building Materials Banks

Even before the victory of the revolution, several self-help housing projects of the "core housing" type had been launched with World Bank funding. After 1979 these projects were completed in line with initial plans, except for a change in the criteria applied to the selection of participants. For the last 700 units (spread over thirteen project areas [MINVAH, 1984]) the applicant's participations in communal activities was taken into consideration, apart from financial acceptability. However, further sites-and-services projects, which continued to be popular in other Latin American countries, were rejected in Nicaragua on the grounds that they would reinforce individualism as opposed to collectivism (Vance, 1987a: 172)

Formal *proyectos de autoconstrucción* (self-help projects) were replaced by the program of the Bancos de Materiales (building materials bank), and were targeted at those applicants who were in possession of a building site or who lived in a house in urgent need of repair (*mejoramiento habitacional*).

These people could purchase loose building materials or complete kits for a standard house at very favorable, controlled prices. In 1983, prefabricated timber houses of 36 square meters were introduced as an alternative option. The so called *módulos básicos* (basic modules) made extensive use of indigenous building materials and could be assembled by the users within a few hours. Unfortunately, the production capacity for these units was drastically reduced when the sawmill of Ocota was destroyed by the *contras* in 1984 (Curutchet, 1987: 67). Meanwhile the demand for shelter increased significantly, particularly among those who became homeless as a result of the war, and a more modest solution was introduced with a *plan techo* (roof-only plan) to cope with the difficult shortage. Altogether 12,269 *módulos básicos* and 5,655 roof-only units were distributed between 1980 and 1986, and 95 percent of these benefited the rural population (or 70 percent of the *módulos*), with a preponderance to zones most affected by the war.⁷ In addition to this figure, another 3,419 units were provided directly by the MIDINRA or by other institutions (MINVAH, 1987: 10 and cuadro 4).

Progressive Urbanization

In the main cities of Nicaragua the housing problem was too big to be dealt with through the programs of the complejos habitacionales or the *módulos básicos* alone, at least in the short and intermediate term. Therefore, as a complementary measure, an ad hoc response was introduced in 1982, which became the main instrument to rehouse the victims of the flood in Managua in the same year. Alternative sites in so-called *urbanizaciones progresivas* were provided with basic infrastructure (communal water taps, electricity, public transport) given to those people who had become homeless, and free transport was offered to move all reusable building materials from their previous shacks. In an attempt to gain control over the increasing squatter settlements since 1984, the progressive urbanization program was extended and benefited particularly those who had settled on geologically unsafe land (earthquake and flooding hazards) or on sites earmarked for uses other than residential.

At first the concept of the *urbanizaciones progresivas* appears similar to the sites-and-services projects known in other countries. However, there are several important differences. First, in Nicaragua the land was given to the settlers free of charge and with full security of tenure, which makes it possible to effectively reach that part of the population with the greatest housing need. Second, as the *urbanizaciones progresivas* are always near the main bus lines within the city and not far out in the periphery, the men and women can follow their habitual occupational pattern, often involving part-time and occasional

jobs. And third, the principle of collective organization, political neighborhood representation, and communal work is fostered among the dwellers of these settlements, mainly by delegating important responsibilities to the CDS of the neighborhood. Up to 1984, 63 percent of the distributed sites were located in Managua (MINVAH, 1984b: 34). In the following two years more emphasis was given to other cities, reducing the share of Managua to 55.7 percent (MINVAH, 1987). Altogether, some 28,800 plots had been allocated as part of the program by 1986. This has turned the scheme into the most significant contribution among the “physical elements” belonging to Nicaraguan housing policy.

Settlement Upgrading

Most urban houses, particularly in earthquake-ravaged Managua, are located in unplanned neighborhoods and have lacked some or all basic infrastructure and services. During the revolution the support for the Sandinistas had been very strong from many of these places, and the population expected fast and visible improvements of their hitherto miserable conditions as the fruit of the revolution. Therefore the upgrading of these settlements was assigned high priority within housing policy. However, since no official prospective land-use planning existed for these areas, long-term investments could only be made after the future of each particular settlement had been defined by the planning authorities. As land use plans proceeded, most of the 420 informal settlements were included in the Programa de Mejoramiento de Urbanizaciones, and approximately 50,000 families have benefited in one way or another from the program in terms of receiving better services in the neighborhood, such as gutters to carry rainwater, a paved road, a day clinic, etc. (MINVAH, 1987). Given actual economic constraints, upgrading has become the most important physical element of urban policies and implies that the government provide the necessary building materials, and the population contributes its own labor force (Reyes, 1988).

THE IMPACT OF STATE HOUSING PROGRAMS

Adding up all the housing solutions offered as part of the various housing programs (but excluding the sites distributed in the progressive developments and neighborhood upgrading, where the impact is difficult to quantify) almost 28,000 dwellings were provided by MINVAH in seven years: an average of 4,000 per year (or 1.14 units per 1,000 inhabitants). Assuming an occupancy rate of six persons per dwelling, we arrive at 6.85 houses completed for every 1,000 families which means that every house would have to

stand up for 146 years, or—taking a housing deficit of 377,000 units in 1981—that the last person in need of a house today would have to wait 94 years to receive a government dwelling. Not included in this calculation is the additional demand of some estimated 15,000 units yearly arising from the natural population growth and any extra houses needed to absorb internal migration flows. (The figures were derived from the tables supplied in MINVAH, 1984a.)

We see that housing output by the state in Nicaragua does not appear particularly impressive, either on its own or when compared with state housing programs in other countries. However, this relatively modest figure becomes meaningful when the composition of the target group is reviewed. In Nicaragua according to 1984 figures, 17.8 percent of the housing output reached the absolute poor, those earning less than one minimum wage, and another 78.1 percent went to the next income bracket of one to three minimum salaries. This meant that only 4.1 percent benefited the middle and upper income groups. In typical low-income housing programs of other Latin America states, such as those sponsored by the World Bank, the bottom 30 to 60 percent of the population tend to be excluded because they are too poor to meet the financial obligations set by the program (see Peattie, 1987: 69-76).

THE CONTRIBUTION OF “NONGOVERNMENTAL AGENCIES”

Since the beginning of the revolution, a substantial number of foreign-based nongovernmental agencies and solidarity groups supported various kinds of development projects in Nicaragua—many of them also improving the housing situation locally. For some time this kind of cooperation was a potential area of conflict between the local community and central state institutions (Curutchet, 1987: 97): The organizations abroad often had established partnerships with specific neighborhoods in Nicaragua. Personal relations evolved and helped to mobilize foreign funds to support a particular development project tailored to suit this specific community in Nicaragua. On the one hand, such a project did not necessarily conform with the priorities set by the central planning authorities, who tried to guarantee a balanced and most rational use of limited resources. Furthermore the state tried to control and coordinate the help offered by foreign nongovernmental agencies through a central office in order to guarantee that all financial transactions connected with it were handled by the National Bank and exchanged at the official “commercial” exchange rate. As the spending capacity of MINVAH dried up as a consequence of the war economy, and inflation exploded, nongovernmental agencies were given more freedom again to invest accord-

ing to their own priorities. This is particularly true for the period after 1986. Since these organizations tend to work directly with the local communities, it is difficult to obtain a clear picture about the overall impact of their support, but my impression is that in the last few years more houses have been built with financing from these agencies than from government funding.

THE PRIVATE AND THE INFORMAL SECTOR HOUSING

Although the Nicaraguan state acknowledges the right of each citizen to a decent home, this does not imply that housing has to be provided by the state or voluntary sector. After all, Nicaragua is a mixed economy, and mortgages are available to owner occupants, but until recently they have had to compete with MINVAH for the very limited funds of the Banco Inmobiliario de Nicaragua.⁸ A problem for the private sector entails the supply of building materials, which are extremely scarce and partially under state control (i.e., cement, lumber). There is a parallel market for these building materials, but the prices tend to be several times higher than at official outlets. Nonetheless, between 1983 and 1987 I noticed important private building activity in all neighborhoods, a phenomenon difficult to explain under such unfavorable economic circumstances, and which calls for further research.

However, there are no indications that private housing is being built for sale or for lease on a commercial basis, which is, first of all, a positive indication for effective legislation in favor of tenants and against property speculation. On the other hand, the sharing of one dwelling by two or more families, or subletting to friends or distant members of the family without any financial interest, known as *inquilenatos* in many Latin American countries, is on the increase in Nicaragua.

The last resort for the urban homeless are the squatter settlements, and Nicaragua has experienced distinct periods when the homeless relied on these. One of these periods was immediately after the triumph of the revolution, in 1979 and 1980, when more than 25,000 people occupied some 4,400 vacant sites in Managua, taking advantage of the disappearance of the oppressive police apparatus maintained by the Somoza regime (Curutchet, 1987: 61). A second wave of squatting could be observed shortly before the elections in 1984 when it was very unlikely that the governing Sandinistas would risk a confrontation with the squatters. A third, and rather continuous, movement in this direction has occurred since 1985 and can be attributed to the increasing number of refugees fleeing from the countryside where the war and the threat of massacres by the contras prevent a productive and peaceful life. Most recently, the damages caused by the 1988 hurricane forced many additional families into the cities and makeshift dwellings. However,

in contrast to the neighboring nations, squatters in Nicaragua do not risk forceful eviction by the police. Therefore there are no mass invasions or overnight building sites. Instead, an early process of grassroots organization and participation tends to take place, and the benefits of the established CDS structure enable negotiation with the authorities for an early provision of communal services and infrastructure.

THE CHOICE OF TECHNOLOGY

Options differ considerably regarding the best choice of technology to satisfy the housing needs of a Third World revolutionary society. Some people think that the use of so-called appropriate technologies would help to serve a maximum number of people in a short time and would save foreign exchange by relying on local building materials. Other experts argue that in the aftermath of a revolution the people expect better quality housing for everyone and that traditional building methods lack the necessary productivity to satisfy the increased demand.

In the case of Nicaragua the policy concerning the question of technology went through different phases. In the first two years after the revolution, the approach was relatively open, and the construction of uniform concrete block houses (including those belonging to the World Bank's self-help program) went on simultaneously with experiments in rammed-earth and bamboo construction, or similar appropriate technologies. Representative of these approaches were several adobe experiments in Managua, an experimental farm for bamboo at Rama, and a Center for Appropriate Technology (CITA) run by MIDINRA near Estelí. All these ventures were discontinued, albeit not for ideological reasons alone. The Rama farm was in the war zone and stopped operating about 1983. MINVAH gave up its adobe experimentation site in Managua in 1982, which may have been a direct consequence of the fluctuation of staff in that period. The CITA-MIDINRA center was closed in 1985-1986 after internal management problems (for an appraisal of CITA activities, see Curutchet, 1987: 81-87).

By 1983, the preference had shifted toward prefabrication and cement-based construction, and this tendency appears to have been reinforced by the state construction enterprise COVIN and indirectly as well by cooperation with Cuban institutions. It was hoped that the cost of the high quality complejos habitacionales could be lowered and that the durability of the houses could be increased at the same time, as expressed in a publication of the MINVAH: "As a priority the housing demand created by rural and urban

productive units will be satisfied by these housing development schemes (complejos habitacionales). In order to maximize the advantages of prefabrication and standardization in the production process, these programs are being carried out with heavy construction methods" (MINVAH, 1984b: 8; translation by the author). However, results from heavy construction and industrialized building methods in the housing sector were often disappointing, and the approach was criticized on several occasions. It was reasoned, for example, that heavy construction would create too heavy a drain on foreign exchange since 55 percent of the cost of cement had to be spent on imported energy (Tapia, 1984: 101) and that other high-quality building materials and components (electric installations, metal fittings, ceramics)—which are typical for the high-quality construction of the housing complexes—had to be imported and were difficult to obtain, which delayed the completion of the units unnecessarily (MINVAH, 1984b: 45). Also, poor architectural design and the incompatibility with Nicaragua's sociocultural context have been discussed (MINVAH, 1981: 84). Last but not least, even official publications implied that a higher productivity could not easily be achieved.⁹

Criticism of prefabrication and financial difficulties, as well as the explicit preference for less ambitious technologies expressed by international and nongovernmental agencies from abroad, helped in a consideration of a wider use of local materials and small-scale production. For example, several municipalities purchased low-cost machinery for the production of fiber cement roofing tiles, which would substitute for industrially produced corrugated iron and asbestos cement sheets. More recently (1988), the Technical University (UNI) started research into alternative building materials and methods.

CONCLUSION

In looking at the absolute number of houses built by MINVAH since 1979 or measuring the problems of increased squatter settlements in Managua over the last four years, it would appear that Nicaraguan housing policies do not suggest great achievement. However, we must bear in mind that the Nicaraguans chose to put their main emphasis on nonphysical improvements in housing provision and on social services in general, in order to benefit the largest number of people with the limited resources which were available. Within the wider field of social expenditure housing was assigned the third priority after health and education (Vance, 1987a: 171).

Since 1981 the housing deficit has grown by 17,000 units annually (Ruchwarger, 1987: 170). The declining output in government shelter projects and the overall worsening of the housing situation in Nicaragua must be attributed primarily to the escalating war, which had been imposed on the country by the Reagan administration. This has drastically curbed the disposable budget available for any housing construction. At the same time, the influx of refugees fleeing the ever-present threat of contra devastations and genocide has frustrated the decentralization policy and produced a chaotic situation in the cities where too many people have sought new homes.

It may be true that not all problems encountered in the Nicaraguan housing system can be explained by the war. Due to the poor teaching facilities prevalent in the prerevolutionary period and the brain drain in response to poor income opportunities, the level of professional and academic skills has been restricted, a condition affecting public authorities in particular when they seek to fill vacancies (because of the low wage levels they offer). There are additional problems of coordination and competition between different ministries and other state institutions, which need years to sort out. Certainly these restrictions are endemic in most parts of the developing world, but they tend to be even more severe in periods following a political overthrow. Fortunately, the popular character of the Nicaraguan Revolution set the foundations for well-organized grassroots participation, and frequently the local community was able to offset many of the limitations coming from a more central economic or administrative level. This learning experience, which might not have been necessary under more peaceful conditions, will certainly help to build a real grassroots democracy once the war has been overcome in Central America.

In spite of the many problems discussed, the housing policy implemented by the revolutionary government in Nicaragua favorably contrasts with conditions typical in other Latin American or Third World countries. It should be pointed out that *90 percent of all state housing investment directly favors low income groups* (Tapia, 1984: 101), a figure which would be difficult to encounter in any truly capitalist country, including the industrialized world.¹⁰ However, an even more remarkable and truly revolutionary achievement for the majority of the population is the *free access to land and basic services*, as provided within the *urbanizaciones progresivas* program in urban areas. In rural areas the Agrarian Reform represents a similar approach since land titles are also distributed to small farmers free of charge and housing is explicitly considered a productive (and not consumptive) investment. By adopting these two principles other Third World countries would be able to solve at least part of their housing problem, but this would also imply

sacrificing certain “freedoms” currently enjoyed by landed and finance capital and would represent a step toward a mixed economy.

APPENDIX: HOUSING LEGISLATION, 1979-1983

Ley de (intervención de) repartos ilegales (September 26, 1979)

Prohibits the sale of plots in illegal subdivisions.

Ley de inquilinato (January 2, 1980)

Reduction of all housing rents to 40-50 percent of their previous value, except for high-quality housing for which 5 percent of its assessed value is the permitted maximum rent per year. In cases where the landlord fails to carry through the necessary repairs the government may intervene on behalf of the tenants and take over the management of these dwellings.

Ley de donaciones del casco urbano (January 4, 1980, amended April 8, 1980, and May 5, 1980)

Municipalization of all unused sites in the center of Managua, for which a general development ban had been issued after the earthquake of 1972. Compensation is to be paid to the previous owners after deduction of all tax debts.

Ley de regulación de las cuotas de amortización de viviendas del sistema financiero nacional y del MINVAH (1980)

Reduction of mortgage payments to correspond with the average income situation of the population affected. All mortgage payments done within the past 20 years will be counted as down payments toward the transfer of ownership to the occupants.

Ley creadora de la corporación nicaragüense de bienes raíces (CONIBIR) (April 4, 1980)

Creation of a subsidiary of MINVAH to handle the administration of the housing stock in MINVAH's care.

Ley sobre el uso del suelo en las áreas de desarrollo de los asentamientos humanos (August 30, 1980, amended May 12, 1983)

Transfer of planning authority to MINVAH. Development plans (Planos de Desarrollo) and Zoning Plans (Planos Reguladores) are to be the binding planning documents.

Ley procesal de inquilinato (February 17, 1981, amended December 21, 1981, annuled July 6, 1983)

Procedural instructions related to the Ley de inquilinato.

Ley orgánica de la corporación constructora de viviendas (August 31, 1981)

Creation of the state-owned direct labor and planning enterprise COVIN.

Reglamento de la ley orgánica de COVIN (December 11, 1981)

Procedural instructions related to the Ley orgánica de la corporación constructora de viviendas.

Ley de expropiación de tierras urbanas baldías (December 14, 1981)

Provisions to enable the expropriation of any unused urban sites if needed for the public interest. The compensation to be paid in form of investment certificates at an annual interest rate of 2 percent over a period of 20 years after which the value is due for cash payment. (By 1985 some 377 hectares had been expropriated according to this law, and slightly more than 30 percent of this land had been reprivatized again [see MINVAH, 1984].)

Ley de expropiación de predios baldíos en el casco urbano del centro de la ciudad de Managua (December 16, 1981)

Provisions for the expropriation of sites in central Managua.

Ley de titulación de lotes en repartos intervenidos (January 2, 1982, amended April 9, 1982, and October 7, 1982)

Provision of ownership titles to the owners or occupants of private sites under government administration.

Reglamento de la ley de titulación de lotes en repartos intervenidos (October 12, 1982)

Procedure instructions related to the Ley de titulación.

Ley de bonos de expropiación de tierras urbanas baldías (June 6, 1983)

Compensation for expropriated urban sites in the form of certificates.

NOTES

1. In 1979 the population was 2,700,000, or 439,026 families. The housing stock consisted of 376,973 dwellings which left 62,053 (14 percent families without a home. Of the existing houses, 187,890 were substandard (only one room, or structurally dangerous), which adds up to a housing deficit of 249,943 (Curutchet, 1987: 19)

2. In 1981, 2,376 dwellings were produced, representing 2.01 percent of GNP; in 1982, 3,476 (2.92 percent); in 1983, 4,121 (2.74 percent); in 1984, 3,631 (2.18 percent); in 1985, 4,567 (1.19 percent); in 1986, 2,171 (no percentage indicated).

3. Nicaragua is a multiparty state. Within parliament there are parties in coalition with the FSLN and parties in the opposition such as the Liberals and the extreme left. The right-wing parties, which cooperate with the U.S.-financed contras, refused to take part in the 1984 elections.

4. This provision did not imply that all the substandard neighborhoods could expect an instant improvement of their conditions. For example, while MINVAH had collected 20 million córdobas from the residents in all substandard neighborhoods (MINVAH, 1984b: 19), or 68.5 million córdobas derived from all 35,000 dwellings and 50,000 sites under its management in 1982; only 8.85 million córdobas were invested again in the improvement of 353 dwellings (Tapia, 1984: 98).

5. Créditos Hipotecarios from the Banco Hipotecario for periods between one and 20 years, at an interest rate of 14-20 percent. If the credit is intended for purchase of a house the applicant must provide securities; for repairs there is no such requirement (MINVAH, 1987: 6)

6. The observation was made by the author in the San Antonio project in 1987. This is not to say that civil servants enjoy a particularly high income; rather the opposite is the case and explains the phenomenon of the high fluctuation of staff in the state sector. Although I lack firsthand information in this respect, I assume that civil servants have been offered these houses, which would be difficult to rent on the market at the cost price, at a discount price to compensate for the low wages.

7. Region I (Las Segovias), Region IV (Matagalpa and Jinotega along the northern border to Honduras), and Special Development Zone III (Río San Juan, on the border with Costa Rica) (Curutchet, 1987: 135).

8. In the first years the share of the private sector loans was negligible. According to more recent sources (MINVAH, 1987: 8) this share reached 55 percent in 1986, although this figure was only given in relative terms. It might be that BIN funds channeled to MINVAH have declined due to the war economy, so that similar or less funds for the private sector still represent the majority.

9. MINVAH (1984b) calculated a productivity rate of 3.3 (highest) for timber houses, 2.92 for conventional solid construction, and 2.3 (lowest) for the prefabricated small panel system known under the name SANDINO.

10. A comparison with socialist countries, such as Cuba or China, is more difficult, since there a key question might be how effectively income differentials were reduced in the first place.

REFERENCES

Arguello Hüper, Alejandro

1985 "La vivienda urbana dentro de las prioridades del desarrollo nacional." Paper presented at the International Conference Hamburg 1985: Urban Renewal and Housing for Low Income Groups in Metropolitan Areas of Latin America. Hamburg: TUHH/FSP 6: 25-34.

Curutchet, Mirina

1987 *Vivienda y participación en Nicaragua sandinista*. Córdoba, Argentina: Fac. de Arquitectura, Universidad Nacional.

Darke, Roy

1987 "Housing in Nicaragua." *International Journal of Urban and Regional Research* (London) 11 (1): 100-114.

Ley de bonos de expropiación de tierras urbanas baldías

1983 *La Gaceta* (Managua) June 6.

Ley de expropiación de tierras urbanas baldías

1981 *La Gaceta* December 14.

Ley de inquilinato

1980 *La Gaceta* January 2.

Ley de repartos ilegales

1979 "Decreto 97." *La Gaceta* 83, 18 (September): 137-139.

Ley de titulación de lotes en repartos intervenidos

1982 "Decreto 923." *La Gaceta* 86 (16): 169-171.

Light, Julie

1988 Article in *The Guardian* (London) August 31: 18.

Linsky, Arnold S.

1969 "Some generalizations concerning primate cities," pp. 285-294 in Gerald Breese (ed.), *The City in Newly Developing Countries*. Englewood Cliffs, NJ: Prentice-Hall.

MINVAH

1981 "Seminario sobre planificación de las asentamientos humanos y la vivienda rural en Nicaragua (March 23-April 10)." Managua: Siap Documento No. 31. (Mimeographed).

1983 "Urbanizaciones progresivas: alternativa para el desarrollo de asentamientos humanos." Paper presented at the Seminario Internacional en Berlin (Oeste) y Vienna (September). Managua: MINVAH. (Mimeographed).

1984a "El déficit de viviendas." Managua. (Mimeographed).

1984b "Los asentamientos humanos en Centroamérica y Panamá." Paper presented to the IX Conferencia Centroamericana Permanente de Vivienda y Desarrollo Urbano. Managua, (Mimeographed).

1987 "La vivienda en Nicaragua." Paper presented to the Simposio Internacional Sindical sobre la Vivienda. Sofia, Bulgaria: Unión Internacional de los Sindicatos de la Construcción. (Mimeographed).

Mathéy, Kosta

1984 "Basis and methodology for the design of an integrated development project in Ciudad Sandino, Nicaragua," pp. 105-132 in Bruno et al., *Development of Urban Low Income Neighbourhoods in the Developing World*. Darmstadt, West Germany: Archimed.

Peattie, Lisa

1987 "Affordability." *Habitat International* 11 (4): 69-76.

Reyes, Auxiliadora

1988 Personal interview given at the Meeting of the City Architects of Socialist Capitals in Havana in November. Taped.

Robinson, William

1984 "Zur neuen Wohngesetzgebung in Nicaragua," pp. 311-314 in C. Müller-Plantenberg and R. Rempel, *Soziale Bewegungen und Räumliche Strukturen in Lateinamerika*. Kassel, West Germany: GHK.

Ruchwarger, Gary

1987 *People in Power: Forging a Grassroots Democracy in Nicaragua*. South Hadley, MA: Bergin and Garvey.

Sánchez, Domingo

1984 Personal interview with Domingo Sánchez, member of the Nacional Council for the Partido Socialista Nicaragüense, in February. Unpublished notes.

Tapia, Octavio

1984 "Die Tendenzen der Wohnungspolitik im Nicaragua von heute," pp. 87-103 in Eugen Bruno, Kosta Mathéy, and Arnold Körte (eds.), *Umgang mit Wohnquartieren unterer Einkommensgruppen in Entwicklungsländern*. Darmstadt: Archimed.

Third World Guide

1989-1990. Montevideo.

Vance, Irene

1987a "The community as evaluators: Experience with community participation in self-build projects in Managua," pp. 169-196 in Reinhard Skinner et al., *Slum Upgrading for the Urban Poor: Evaluation of Third World Experience*. Manila, Philippines: Island Publishing House.

1987b "More than bricks and mortar: Women's participation in self-help housing in Managua, Nicaragua," pp. 139-163 in Caroline Moser and Linda Peake (eds.), *Women, Human Settlements, and Housing*. London: Tavistock.