Architect of the Community

From non-governmental to governmental approach to housing improvement

Mauro Bolado

Civil Engineer Havana City Provincial Housing Direction Cuba

Introduction

In 1959 a new era started in Cuba with the triumph of the Revolution. **One of the main** problems the young government addressed was housing as well all other pending social needs, such as education, health care, social security, and other services. In this direction the government started to develop different strategies.

Since the end of 1989 Cuba has been facing a strong economic crisis that has forced major changes in the economic and social development strategies, including the introduction of new elements into the Cuban society. On this context of changes HABITAT-CUBA¹ was created.

One of the programs that Habitat-Cuba has implemented is **The Architect of the Community.** This program was selected by the United Nations Conference for Human Settlements among the 40 Best practices worldwide.

In June 1998, the government decided to remove this program from Habitat-Cuba placing it under the direction of the National Institute of Housing. It thus became a governmental program.

This paper aims to analyse policies and strategies adopted by Cuban government to solve housing problems. It analyses Habitat-Cuba's role as an NGO and the programs that have been implemented.

The paper also aims to look at the Architect of the Community's functions. The government's reasons to promote the change and the program feasibility to improve the housing system institutional framework.

General Background

About Cuba

Cuba is an archipelago consisting of the Island of Cuba, the Island of Pines and around 4 195 smaller islands. It has a total land area of 110 922 square km, with 5 746 km long, 210 km across at its widest point and only 32 km across at its narrowest point. Due to political and administrative purposes, Cuba is divided into 14 provinces and a special municipality. Its population is around 11 million inhabitants.

The most populated cities are Havana City with 2.3 million inhabitants, Santiago de Cuba with 1.5 million inhabitants and Holguin with 1.3 millions.

Housing Policies

To meet the target of massively improving social housing, the Cuban authorities developed new designs and construction tech niques that put great emphasis on industrialised and patterned large-scale construction as well as training programs for Architects and Engineers.

For 40 years, Cuba outlined a strategy of social development with equity, which in terms of settlements, was aimed at reaching a more appropriate balance in urban development with priority towards secondary cities and enhancing living and working conditions in rural and mountain areas, providing a greater rural-urban integration.

From the first years of the Revolution steps were made to initiate a process of transformation in housing.

From 1965, projects and works were centralised within the Ministry of Construction and two main development guidelines were defined: better craftsmanship construction applied in typical four store panels, and the development of integral systems of heavy prefabrication, which tends to a top technification and industrialisation of the construction process.

In 1971, the construction and development of rural communities and workers' neigh bourhoods with houses granted free-of-charge was promoted. This had the objective of guaranteeing the labour settlements required for economic and agricultural development and new investments.

In December 1984, the National Housing Institute was created virtue of the first General Housing Law, which granted property to all Cuban families. This law drew from many previous experiences, especially to support the construction, conservation

¹ Habitat-Cuba is a Cuban NGO.

and rehabilitation of houses by workers organised in micro-brigades and by the households through the sale of construction materials and technical services establishing a more coherent housing policy. The gradual solution of the housing problems in the country was the main objective.

From 1985, the State grants land for house construction and urbanisation, as one of the priceforming components of the houses that builds and transfers as a property to their tenants. This scale of prices includes the urbanistic facilities of the place and the geographic location of the house in keeping with the delimitation of the zones approved by provincial governments. The immediate steps taken to alleviate housing problem were simultaneously addressed in two directions: in the legal and institutional aspect and directly in house construction.

In front of the obstacles found by this strategy in terms of the shortage of local work force, in the specific conditions of our country, the facilitating policy promoted by the World Housing Strategy to 2000, had been already experimented, with the creation of micro-brigades: workers collectives assisted by the State with the aim of contributing to production of houses and basic services. This experience has been widened with the formation of "social micro-brigades" formed by neighbours interested in improving their habitat conditions and supporting the construction of houses by own efforts. In the 1976-1985 period, 430 000 houses were finished through these schemes. In the five-year period from 1986 to 1990, 160 000 houses were completed by the State and Cooperative sectors and 48 000 by the households, which means an average of 41 700 houses per year.

Nevertheless, the technological model adopted by the State for the house construction based on heavy prefabrication and tipicity, created a series of problems regarding the cost, the consumption of building materials, energy, and low architectonic expression, which from the previous decade made already evident a necessary change in strategy conceptions, designs and technologies in housing.

Institutional Framework

The National Housing System is part of a top-down institutional structure divided into three levels: national, provincial and municipal. In each one of them the system is subordinated to its higher level of government who decides the housing directives according to the national housing policy. Hence the subordination among the same entities at different levels is only a methodological subordination.

The National Housing Institute (INV) is at the top of this structure as a dependency of the Ministry of Construction. At the second level are the Provincial Housing Directions (DPV) and the Provincial Housing Investment Units (UPIV) as an independent Sub-Direction of the Provincial Housing Direction. This Sub-Direction is directly subordinated methodologically to the National Housing Institute. At the lowest level is the Municipal Housing Direction (DMV), subordinated to the Provincial Housing Direction and also the Municipal Housing Investment Unit (UMIV), subordinated to the Provincial Housing Investment Unit. (See figure 1).

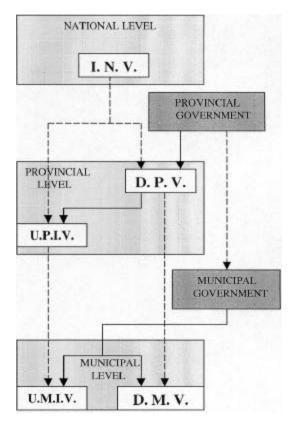


Figure 1. Housing system structure' s scheme.

Housing Situation

As a result of the government policy that promoted a high degree of prefabrication, the housing situation was quantitatively improved. From 1976 to 1990, 638 000 houses were built, which means an average of 42 500 houses per year. Nevertheless, the mass construction became a qualitative problem. Houses and apartments built following this procedure have the same repetitive design. To worsen this situation, there was general lack of quality in the construction process.

The five-year period initiated in 1991 has witnessed the worst economic crisis probably ever confronted by Cuba's nation. It meant the sudden loss of safe sources supplying raw materials, technologies, credits and dramatic contraction of export markets².

It is, therefore, indispensable that the analysis of the current situation is made within the framework of a series of specific policies and actions, which are being taken, among which the following should be highlighted:

² Habitat II Conference. Cuba's National Report.

- Granting state land, to workers in some rural areas, particularly those allotted to coffee and tobacco crops.
- Administrative decentralisation giving an ever increasing competency to municipalities.
- Development of the local industry incorporating hundreds of small towns into productive activity.
- Creation of local base for alternative material production and introduction of non-conventional technologies mainly in house building.
- Existence of the Architect of the Community for the solution of specific problems related to every household's shelter needs.
- New and more flexible conception in rendering services, including private activity in some areas which used to be exclusively state-run.
- Proliferation of every kind of study focussed on the community and the family.

At house construction, the economic and energy crisis caused a decrease in the production of building materials, and there in the pace of house construction.

To deal with this situation, it was then necessary to substantially reduce the building-material consumption of the industry, and obtain new houses of quality and durability, from the creation of the technical-material basis in each province, municipality and community to locally produce materials according to the raw material availability of each territory with small-scale processes, with a very low energy consumption and low environmental impact.

This program permitted the development of a considerable base of local production of alternative materials and gradually increased the construction of new houses and settlements.



Figure 2. Lack of maintenance and housing deterioration.

Housing maintenance became in a problem. Thousands of houses units are deteriorated³ despite the efforts made and the resources invested. We have not been able to revert this trend.

The State has further rendered small and low cost technical-constructive services to alleviate small problems in greater number of housing units.

Most of these houses were built at the beginning of the century and even before. Sanitation and other facilities are out of order. The materials used to build them doesn't work any more.

The image of the capital is not the right one. There are several thousands of braced housing units. Many of buildings are still to be demolished. The problems of facades, balconies, and beams in numerous buildings in highly populated areas and unhealthy towns, show a picture of high level of deterioration.

Therefore, Cuba has redefined the concept of investment in housing, which is no longer a social service but a widely participatory, decentralised and environmentally sustainable process.

Habitat-Cuba

With the collapse of the Socialist Block the Cuban political and social context completely changed. The large-scale construction developed in the 80s was suddenly stopped due to the lack of adequate resources. Hence the government policies and strategies had to change to face a quickly deteriorating environment.

It was in this particular context of changes within the civil society that a group of professionals in the housing sector became aware of the new possibilities of their role and Habitat-Cuba was created among other NGOs, as a means to improve the housing conditions.

Habitat-Cuba is a non-profit association, created in 1993 by a group of architects, engineers, sociologists, lawyers, economists and geographers.

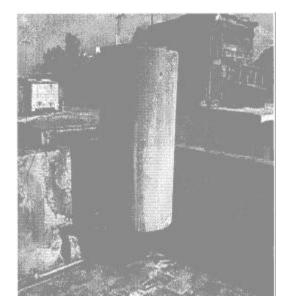


Figure 3. Lack of enough resources to revert the situation

³ See figures 2 and 3.

Since the very beginning its main objective has been to give solutions and develop, in a non governmental basis, the habitat problems, aboarding their solution through the implementation of some programs as a strategy to deal with housing development in urban zones and in rural zones. Habitat-Cuba structure has in its staff some persons who take care of the programs' control; they are the National Program Coordinators.

Habitat-Cuba's main goals are:

- To develop and promote alternative models for housing.
- To give technical, social and financial training to professionals within the housing sector.
- To promote and lobby for sustainable housing.
- To organize for the exchanging of ideas and experiences between institutions, government and non-governmental organizations for the solution of habitat problems.

Major projects in execution:

- The Architect of the Community Program.
- Sustainable Settlements Using Local Materials in the Province of Holguin.
- Capacity-building of Professionals, Technicians and Construction Workers in the use of Self help techniques.
- National and International Seminars and Workshops.

The Architect of the Community Program

Housing Strategy of the Program

The programs that Habitat-Cuba implements have the common target to promote the people's participation in the solution of the habitat problems through the stimulation of self-help housing construction and alternative techniques as a solution to the demand of material resources and environmental conservation.

The implementation of these programs allows in a perceptible way a quantitative and qualitative increase of housing construction.

It happens after a period where almost all state and private construction had stopped, things are moving again and there is need for new mechanisms that allow answering to the existent demand.

Among these programs *The Architect of the Community* was the most successful⁴, developing faster than any other and quickly spreading in the whole country.

YEAR	A*	B*	C*
1994	2	24	156
1995	38	148	5 151
1996	101	340	14 436
1997	122	448	27 211
1998	128	507	33 338
TOTAL			80 292

Fig. 4. Architect of the Community Program Development

A*: Q uantity of municipal offices.

B*: Quantity of architects.

C*: Families attended to.

This program was developed and implemented in 128 out of the 169 municipalities of Cuba, covering all 14 provinces. The sponsors are the Argentinean architect Rodolfo Livingston, who developed the method called "cirugia de casas", and the NGO CIMADE of France, that gives the financial support in hard currency for the professional work.

This program was the central axis of Habitat-Cuba, it was designed to give technical and specialised services to the people in the housing field. It also had the important responsibility to deal with the programs' management and was fundamental in economic support of the NGO.

Through this program it has been possible to extend knowledge about alternative techniques and give technical assistance to people that needed it as an answer to their problems. These solutions are affordable for the low-income families.

The Architect of the Community Program has also developed several collaboration projects, financed by external institutions, as part of the implementation stages, this has contributed in a way, to the improvement of housing stock and living conditions of low-income people.

The projects have included the gender issues and the eradication of inappropriate social conduct as a way to progressively get a developed urban environment.

At the same time, The Architect of the Community Program, has the very difficult mission to stop illegal activities in the informal self -help housing field. For the reason the architects' work takes place in the neighbourhood, close to the people, playing the role of a strong specialised force focussed to solve the people's housing necessities.

Actors and Roles

There are two principal actors involved in the self-help construction process, the architects of the community and the client who represents his family.

The architect, based on a survey of needs and wishes and the information gathered on the housing site provides the client with a construction project including the necessary information to develop the construction process.

The client and his family provide the architect with the necessary information about the house, the family and other particularities the architect may need to do his work.

⁴ See figure 4.

Other actors involved in this process are the Direction of Architecture and Urbanism (DAU), who has the responsibility to give construction permits and enforce urban regulations. This institution also deals with local planning issues and has to report to superior actors, negative incidence of new constructions and unauthorised remodelling causing damage to the urban environment.

The Municipal Housing Direction (DMV) is the entity in charge of land tenure control and housing legalisation.

Before applying for permits, the project is revised in a technical commission composed of representatives from the local entities and the Architect of the Community that represent its client's interests. At this point the project is evaluated and granted or not granted permission to continue.

Design Approach

The Architect of the Community works with a participatory design method. It is aimed to involve the family in the construction process from the very beginning, because it is the family who will live in the designed house; and each one has it s particular characteristics. Therefore, the house must be adapted to its tenants' characteristics.

The client's request is almost never the main objective. Behind the formal request often hide their main wishes and needs which the client is unable to perceive or does not want to due to regulation, violations or for other reasons.

The architect's work, first of all, must then be a psychological quest for the true need and breaking the mental barriers the client may have around the whole process.

The Architect of the Community method applies three exercises to meet these objectives. They are:

- The more or less game: In this exercises all members of the family are questioned about what type of house they would like to have, what things they like more and what they like less.
- The attorney game: In this game the family plays the role of the "attorney" that in a "trial" accuses the house.
- The ending wished house: At this point the architect asks the family to tell him about their "dream house" (type of plan, number of rooms, kitchen's size, room's uses, etc.).

With the results of the exercises, the architect elaborates a list of problems and wishes. The problems are mainly obtained from the attorney game, and to a less extent from the more or less game. The wishes are obtained from the ending wished house and partly from the more or less game. With those results and the information obtained from the inspection and actual house plans, the architect is able to start design work.

Structure

The Architect of the Community used to be structured in provincial groups with total autonomy. The National Architect of the Community Coordinator, who was a member of the Habitat -Cuba Direction Staff, methodologically supervised them.

Each of the provincial groups adopted a structure according to its province's characteristics. The head of the province group, was the Provincial Program Coordinator, who had the same responsibility as the national co-ordinator at its level, and also controlled the program administratively, supported by a small staff, who did the paper work. The provincial group had the responsibility to implement, after agreement with the whole membership, the strategies, whatever they were, focussing on the development program given by the provincial level.

Every three months, a provincial co-ordinators national meeting was held, with the participation of the national program co-ordinator and some other members of the Habitat-Cuba Direction Staff. In those meetings the successfully implemented strategies were discussed by each group with the objective, if possible, to replicate them in the rest of the province groups.

This bottom-up structure, allowed great operational opportunities in problem solution as the ones who made strategic decisions, were the ones in continuous relation with the ground problems, they only needed the top level agreement as a way to follow the general strategy of the program.

The Architect of the Community was also based on a participatory design method. It was created to offer technical services to the self-help housing construction so that they could actually implement the ideas, but participation in this part of the construction process was not developed, and the program was focussed only as a way to give appropriate house designs to each family, qualitatively improving the houses.

Work Method

The program's method consists of a short series of interviews between the architect and its client.

During the first interview, the architect tells the client about his working method, the ways to pay for the service and other details concerning the program's functioning. The client provides the architect with a general background about the family (number of members, age, occupation, future perspectives, etc.), and a brief history about the building, including its problems. Both parties (architect and client) agree on a date for the next interview.

The second interview takes place at the client's house. This time, the architect completes the information about the family and the house (all family members over 12 years old take part in this interview).

The architect asks the family about their needs, houses' problems and wishes for a new house. To complete the information, the architect measures the building and the plot area. Here again both parties agree to anot her interview in a period no less than 15 days.

With the information obtained the architect prepares a list of problems and demands to be solved and accordingly, designs 4 or 5 alternatives.

The following interview takes place at the architect's office, where the architect shows the client each and every one of the alternatives developed. The architect explains to the client why and how the problems and wishes are, or are not solved in each case. The architect gives the alternatives to the client and agrees to another interview.

In the next step the client is expected to present and discuss the designs with his family and they have the opportunity to select the best one according to their criteria.

Finally, the client brings the selected alternative to the architect. They both discuss the details and agree about a final date, where the architect gives the client the technical project ready to be built.

Outcomes and Failures

In those years the works implemented by the program made Habitat Cuba an institution of prestige. The adopted structure and its bottom-up decision making system, were fundamental pillars in the Architect of the Community's work. It brought new working relationships among architects and reduced the gap between architects and clients.

The architect's responsibility in decision-making gave a different dimension to the team's work that worked for the same common objective in spite of the very different individual interests. At the same time this strategy developed a greater diversity in the problem solutions, because the architect in contact with the problems was responsible for making the decisions together with the inhabitants.

The Architect-client a new established relation provided popular knowledge where both parties learned from one another and dealt better with the local environment.

On the other hand, the fact of being an NGO, represented a disadvantage. The support obtained from the local government was minimum and the relationships with governmental entities involved in self help housing were extra-official. The program, and even the NGO, had no say in decision making of the local strategies or at any other level, even if those decisions could affect the program's strategies.

From another point of view, the program got a bigger dimension that Habitat-Cuba was not able to manage. The economic structure was out of the control of Habitat-Cuba.

The material infrastructure was not developed enough to improve the work quality.

The program had no recognised legal authority to deal with technical services concerning the self-help housing offered by governmental institutions involved in other issues in the construction sector.

The Changes

The Government's Vision

As the housing mechanisms were answer the problems of this sector, the government's housing policy was aimed to find appropriate ways to solve the problem looking more to maintenance and rehabilitation than to new construction.

At the same time, The Architect of the Community kept growing and made itself a successful program. It became a powerful and capable professional force, working to improve the housing sector, with well-acquired prestige among the people it served.

However, the program was working below its real capacity. There were many services the program should offer to the people that it did not offer. Those services were offered by other governmental institutions without enough qualified force, but with the legal authority to develop them.

Keeping in mind the necessity to improve the housing sector, the government last year decided transfer the Architect of the Community to the National Housing Institute. It thus became a governmental program, with as minimum of changes in its structure and functioning as was possible.

- This decision need three major aims. They are: Complement the National Housing System with a qualified and prestigious force as the Architect of the Community.
- Invest the Architect of the Community Program with enough legal authority to confront the whole self-help housing construction sector.
- Involve the Architect of the Community Program in the decision making process as a way to improve the National Housing System strategies.

There was just one way to make these tasks possible: to keep the Architect of the Community functioning and its goals untouched.

The New Structure and Functioning

As a way of adapting the program to the government structure a series of changes were introduced. It was recommended that the changes do not affect the customary program's functioning in any way, including the architect's incomes and other standards.

The housing system has a double subordination with a top-down established structure and the programme was inserted in one of them as a precondition to reorganise its structure.

The changes once approved, the National Housing Institute assum ed the national program co-ordinator with the same functions it previously had. The Provincial Housing Directions assumed the provincial programs, and put them in its structure as an independent sub-direction. At the same level is the Provincial Investment Housing Unit, with a similar structure to control the municipal groups.

Until now the program operates with the same characteristics that it had before. A large number of dwellers receive everyday the technical services that the program offers them.

It also covers self-help housing projects developed by governmental institutions, applying its participatory method.

The program has found its own place among the governmental institutions. Relations with other entities within the housing system have not stabilised yet. There are many gaps that should be filled through cooperation and comprehension.

Relations between Habitat-Cuba and the Architect of the Community Program, after the change, are excellent. Habitat-Cuba's responsibilities are capacity building and methodological assistance to the architects of the community, among other tasks.

New Actors and New Roles

With the transformations, the actors and roles in the self-help housing process were also modified. The NGO no longer participates in this process as an important actor. The process is now entirely conducted by the government.

The Architect of the Community keeps the responsibilities it had and has acquired new ones. The government has extended the program's boundaries out of the self-help construction process. It has increased its activity to offering technical services related to housing legal aspects.

There are possibilities to offer project services to other entities involved in the construction process within the Housing System.

The future envisages many opportunities for this system. Other things should change, but participation as the program's main concept will not change. Many entities involved have just begun to understand that participation is the key to develop an efficient housing process.

Results Expected from the Changes

Based on the Architect of the Community's work results and program's strengthening, the government expected results to efficiently approach the housing problem.

The program was moved to the National Institute of Housing to improve the institutional framework with a specialised professional force able to answer the housing shortage problem.

To meet the housing legal problems with quality and efficiently through faster technical services approached with a specialised structure.

The change also improves the Architect of the Community's work as a way to get a massive answer close to the families' necessities.

The change has internal disadvantages that can stop the program successful results. The extension of the program's boundaries to legal services represents a decrease of the program's capacity to deal with technical projects in time. With the loss of the program's bottom -up structure, architects have been left out of the decision-making process. Hence, the program's results are affected and the relations between the program's different levels and even at the same level are affected.

Conclusions

The change aims to achieve better ways to approach housing aspects in general and self-help housing problem in particular. Nevertheless this movement represented a radical change in the program's conception. Today the program's characteristics are not the same. The strengths and weakness are different from what they were before. They can be listed as follows:

Strengths

- Governmental support to meet the objectives of the program.
- Comprehensive approach to the housing problem by architects involved in the process.
- Capable labour force to approach the issue.
- Participatory method to meet the problem.
- Self-financed and non-bureaucratic internal structure.

Weakness

- Top-down institutional framework structure.
- Lack of adequate resources to develop the work.
- Architects out of the decision-making process.
- Weak relations among governmental entities.

Accessibility to the program's objectives depends on architects work Then the main task of the people involved in the Architect of the Community work must be focussed to facilitate and improve the architects' work.

The program is still engaging in the government system, hence is soon to generalise changes results. Weakness and strengths related before should be changed.

Recommendations

It is recommended with special emphasis to reinforce the program's structure and relations as fundamental aspects. The structure should be organised as a way to get a participatory internal process. Architects must be involved in the decision making process if the expected result is the program's development.

Another aspect to carefully keep in mind are internal and external relations. The change has had a negative impact on the internal relations. Hence it is necessary to find way to allow their performance.

Relations with other entities have been improved with the change. However until now they have not

yet given the expected results. It is important to improve them and get large co-operation to allow better work's results reverted in housing matters. Continuation of the architect's capacity building is recommended to allow the necessary knowledge to approach a developed and sustainable housing environment.