

Improving the approach to Low-income Housing projects process in Quito

Learning from Multiple Cooperatives Association “Solidaridad”
(minga-empowering community work)



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Shelter Situation in Ecuador

Ecuador is an independent and democratic state, located in western South-America crossed by the equator line. The country lies within an extension of 272.032 sq. kilometres, from the low plains of the Pacific Coast, gradually rising up to the highlands of the Andes, going down again towards the East to the Amazon jungle,.

The Galapagos Archipelago is part of Ecuador located within its 200.000 miles of territorial sea. Ecuador territory is divided into 24 provinces, and these into 219 cantons. Just one of them, Galapagos, is an insular province.

Quito the Capital, is located at 2800 meters of altitude, and together with Guayaquil are the most populated cities and the main centres of development.

Demography and Health

Ecuador's population was estimated at 13.3 million in 2007. The average annual rate of natural increase has been 2.8 percent over the last decade, the highest of any country in South America. About 61% live in urban areas and almost 39% in rural. In the past 25 years, Ecuador has experienced two major waves of emigration, sending 10 to 15 percent of Ecuadorians overseas.

Native Americans are believed to make up 40-60 per cent of the total population; mestizos, 40-50; blacks and mulattos, 5-10 percent; and unmixed Europeans, 5-10 percent. The official national language is Spanish, but nearly 30 percent of the people speak aboriginal languages. Christians are 80% and other 20%.

Table 1: Ecuador Population Census, 2001

Region	Males	Females	Total	Households
highlands	2,640,020	2,820,718	5,460,738	5,968871
lowlands	3,044,045	3,012,038	6,056,223	5,203028
Amazon	286,296	262,123	548,419	53,489
Galapagos	10,204	8,436	18,640	2,431
No limited zones	37,788	34,800	72,588	729

Projections indicate that by the end of 2010, 80% of the population will be living in urban areas. Mortality rate according to the same source is of about 0.04% of the population.

Economy

The economy of Ecuador is based mainly on exports of bananas, oil, shrimp, other primary agricultural products and money transfers from nearly a million Ecuadorian immigrants employed abroad. Ecuador is Latin America's sixth biggest oil producer and the fourth biggest exporter.

According to legitimate sources the GDP has raised in 2.3% economy over the last year, due mainly to increase of oil costs. The minimum salary of an Ecuadorian is USD 200 per month. The basic basket, and economic indicator, the minimum cost for food per family (4 members) in a month is USD 252, nevertheless the last months of the year prices have drastically changed due to the floods in the cost and other natural disasters during winter season in the current year.

Poverty and extreme poverty can be determined by examining the degree in which basic living conditions are satisfied or not. Sixty-one percent of the national population lives below the poverty line, and thirty-two percent of it in extreme poverty, according to the Ministry of Housing Annual Report.

Housing Policy

In 1983 a project, carried out by the Banco Ecuatoriano de la Vivienda - the Ecuadorian Housing Bank defined the role of state and private actors and suggested ways of improving availability of urban land for the poor.

The study was meant to help Quito design appropriate housing solutions and evaluate the effectiveness of government efforts to provide low-cost housing; IDRC's urban policy program completed a study on the relationship between the urban land market and housing in low-income sectors of the Quito metropolitan area at that time.

The project found that 60 percent of the total market demand for housing in Quito was for housing stock for investment and speculation. The year before, half of all land converted for housing in the city was held by speculators. Conventional housing solutions had largely failed because they were too expensive, tied to a market control by speculators. The high cost of construction materials, exigent technology and construction standards involving expensive procedures, and the lack of urban planning, were some of the reasons for projects to fail. In addition, poor people could not qualify as "credit subjects" since they frequently lack permanent jobs and have no title to property.

Ecuador's "housing gap" was estimated at 1.3 million housing units in 1991, defined as units needed to cover both homelessness (317,000 households) and units which are insufficient (900,000 households) (World Bank).

The government of Ecuador has established two main public institutions to deal with housing, the Ecuadorian Housing Bank (Banco Ecuatoriana de Vivienda – BEV) and the National Housing Board (Junta Nacional de la Vivienda – JNV). In addition to these organizations, Ecuador also provides a housing voucher subsidy directly, called the Housing Incentive System (Sistema de Incentivos para la Vivienda – SIV). These groups and programs ultimately fall under the purview of the government level Ministry of Urban Development and Housing (Ministerio de Desarrollo Urbano y Vivienda – MIDUVI).

Housing loans **to improve urban and rural housing** as well as loans to access **a new house** have recently been doubled, according to executive decree on February 13th 2007, by Correa's government. In addition the ABC scheme (Saving+Subsidie+Credit), which is well known and practiced in many countries of

South America mostly aimed at the middle income classes is a formula that has been adopted by most governments in the last years. Regardless of consequences like those occurred in other neighbour countries like Chile where this system has been implemented to increment the housing stock but has created a major problem, due to lack of public spaces, rigid and monotonous design, among others in the massive adopted solutions (*los sin techo y los con techo* is one of the cases where lessons are to be learned).

Quito's latest Municipal Policy

Quito is located over 2 800 meters above sea level laying along 45 kilometres from north to south and an average of 15 kilometres from east to west, with a surface of 12,000 square kilometres, surrounded by the Andes mountains in a zone of enormous seismic risk. Its average temperature varies from 15 to 25 Celsius degrees during the year, with a high level of precipitation during the rainy season. The Quito Metropolitan District including the North zone, the Centre zone, the South zone and the tow Valleys (Cumbaya and Tumbaco) are divided into 65 metropolitan parishes.

Traditionally the North of the city has been the side of progress, development and investment, whereas the South has remained neglected area where there is still a lack of basic services in many of its neighbourhoods.

About 700,000 people, live in risky areas, considering the security of construction towards seismic events and landslides. Within the next two decades the city's population will increase in about one million inhabitants. Challenges for municipality are not just the creation of new housing but the integration of the existing neighbourhoods to the development of the city (Jorge Carvajal, Quito Vivienda, General Director). In the last five years irregular neighbourhoods have had access to basic services through programs such as "improve your neighbourhood" supported by the municipality.

The present administration has created the Housing Direction Unit (Unidad de la Dirección de Vivienda) and the Land and Housing Unit (Unidad de Suelo y Vivienda) to come out with the process of legalization of neighbourhoods.

The Metropolitan Land and Housing Company (Quito Vivivenda) and the Company of Urban Development (Empresa de Desarrollo Urbano) have also been created in the current administration, in order to face the development and growing

of the city in a suitable manner when providing the city with public spaces and infrastructure.

Quito Vivienda is a Company in charge of the rehabilitation and urbanization of Quito. Pon a Punto Tu Casa (Update your house) is a program held by Quito Vivienda attempted to reinforce the residence conditions of the colonial centre and the housing patrimony by means of low interest credits and technical assistance allowed to households in order to create low rental housing (Ximena Ron, Program Coordinator, Quito Vivienda).

In the urbanization process public and private land are both used in reducing the housing deficit. About 12,000 housing units are being built in the south of the city, in urban zones in full serviced site plots according to the municipality. The efforts of municipality now focus more on the creation of housing for the low income, considering specially those that traditionally didn't have access to it.

Actors in Shelter Delivery and their Roles

The Shelter Unit a division of BIEN-ESTAR Foundation carries out ABC policy through the SISTEM OF HOUSING INCENTIVES (by its initial in Spanish SIV). The loans addressed the low income who after been qualified can buy a house of 36 sq. meters paying USD 8,000 in any of the projects constructed by SIV.

Qualification for credit is coordinated by the MIDUVI (Housing Ministry in Ecuador). Credit is given by financial institution such as Banks and Private Credit Institutions (Mutualistas), previously qualified by the state, which at the same time offer a large variety of projects designed, constructed, promoted and sold by them.

Quito's municipality is the planner and designer of the city and its role is to provide land, technical and practical knowledge and services related to the urban planning and development.

International agencies like the United Nations (UN-HABITAT program), CARE International and USAID have been working in Ecuador and the region for more than 40 years. They combat poverty by creating awareness, empowering communities and developing social programs.

Housing in Quito

Quito has a population of 1.5 million. 70 percent of urban families live in poverty and 26 percent of these families live in extreme poverty. About 91 percent of the

rural population of Ecuador is poor and this phenomenon has set off a vast exodus towards the urban areas. The principal housing problems are: lack of new housing stock and a serious deterioration of the existing stock, which has also brought on serious health problems, lack of basic services and insecure tenure, and lack of employment opportunities.

According to 2001 national census, 75.5% of the total dwellings have quality deficit. Other figures show that just 52.1% of dwelling units have access to water by a proper canalization inside the house, 48% of them count on a formal sewing system for waste water elimination, 89.7% have access to electricity, 32.2% have a normal telephone line, and 62.7% eliminate waste through the municipality services in an adequate manner.

Many, perhaps the majority, of rural migrants move to Quito in search of higher paying jobs between the sowing and harvest periods, leaving behind their wives and children to tend the fields in their absence. They often work in the informal construction sector where pay is usually far below the designated minimum wage. Those lucky enough to find more permanent employment stay in the city.

Profiteering and land speculation have pushed house prices beyond the means of most Quiteños. Even when the government constructs subsidized housing, rent costs often become so high that such housing is only affordable to the middle class or, at least, to those persons with steady incomes.

My Organisation

Roberto Moscoso and Architects is a private firm, like many in the city of Quito, headed by Roberto an architect with more than 35 years experience. The firm has focused on the architectural design and urban planning in general. Many private firms and professional involved in the housing and development processes are integrated to the program carried out by the State and Municipalities, our firm is not the exception. Since 1999 different projects and studies have been developed together with the municipality of Quito, regarding housing solution for more than 9000 low income families. Just in the last two years we have developed more than 80% of this housing solutions in projects located in the south part of the city, in land that not too long ago was not within the urban limits, so that these projects have to create the necessary conditions for urbanization and development, so that urban

substructure was one of the most important previous steps to be carried out, that is why our efforts have been addressing this in first place, so that our efforts were focused in connecting the projects to the city before starting the real planning and design of the houses and furthermore, the building process.

We are also concerned with technical solutions of the different projects and our efforts focus very much on the design problems which are specially tackled by specialists in the different fields and phases of the design process, with whom we work together as a team.

Improving the Approach and Designs of Housing for the Low income in Quito

Quito's population is growing rapidly. The planning of the city has not match that rapid growth. The lack of urban policies in general, and housing policies in particular, have lead to very serious problems, such as lack of infrastructure, traffic congestion, low and very bad environmental conditions, lack of public spaces, lack of housing stock, among others.

During the last months the municipality has finally determined that its planning department will be the only entity capable to dictate the new housing policies for the city, the department will be allowed to implement action plans for the city in the immediate future, guaranteeing a more sustained development and planning. As for these new conditions, the necessity for more specialized professionals teams and consultancy firms is evident. The look for most innovative, economic, fair, democratic, social, environmentally friendly and sustainable solutions is absolutely urgent.

This paper will not attempt to come to special or particular solutions to face these problems, but it will formulate some guidelines and recommendations to be considered by other professionals based on the expertise of the author's consultancy firm. In a second part it will take a look at the invaluable experience of "Solidaridad", a multiple cooperatives association working in the South of Quito in the provision of housing for the low income, this paper will analyse the implemented concepts of: community participation, building capacity and awareness creation, that have made this project a successful one.

Why improving the approach of the consultancy private firms regarding the low income housing necessities are so important?

Planning the housing for the low income has never been an attraction for any private firm in Quito. The majority of them have focused in the rentable market of the middle and high classes of the society. Planning for the low income has always required a good deal of social conscience and solidarity sense.

Housing promotion firms and investors hardly see a good opportunity business in planning for these groups, and even if sometimes these groups were originally targeted by the promoters, most of the times the high costs of urbanization and the lack of appropriate planning lead to increment in the costs of construction, making these units unaffordable for low income families

A housing unit for a low income family in Quito is around USD 12,000 and its floor area is between 48 to 54 sq. Meters. A housing unit for the middle income is around 15,000 and 24,000 thousand dollars and its floor area varies from 55 to 70 sq. Meters. Variation of the price depends on the quality of the finishes and materials, as well as the cost of land that has increased considerably in the last two years.

The level of compromise of the professional groups in the city is very low, this reflects in the poor quality of the projects themselves. Creating somewhat awareness among professional is very important, so that the solutions may be convenient for the development of the city.

Guidelines for a better approach in the planning and designing for the low income. The experience of the firm

The advantages of a good planning and designing process from the beginning lead us to an optimization of all resources and improve the quality and results of every project. The following are our guidelines:

- The professional team must be very balanced, **the team head** must be an architect by profession with enough knowledge, experience, organization and capacity. His skills will include enough leadership so that the rest of the team members maybe assigned with a specific task for the whole processed through a methodology established by him. The team has to agree in the determination of a defined wage, very much under the normal

cost as for the interest of the community which may see the benefit in the final cost of the project.

- He has to be able to discuss, argue and revolve the established norms as to be even capable to established specific new ones for a defined project, according to the community necessities, which is in most of the times the case when considering a project assisted and coordinated by the municipal teams.
- His capacity for negotiation with the promoters, who are generally profit oriented, should ensure that they understand what the low income people are and what their necessities are.
- The team leader should be in a position to at preliminary phase makes sure that the preliminary studies such as topography of the terrain, and soil composition can drastically change the cost in foundation and structure, as well as other aspects as provision of infrastructure for new.
- **The coordinator** is someone who knowing the spirit of the project may be able to transmit the most relevant ideas produced by the head, and the detailed concepts for those who are going to produce the drawings, to do a field survey, a research, etc. With a clear methodology that allows to follow the progress of the project in each one of its phases, until the submission of the final layout.
- Periodical meetings for discussion with the engineers groups, and other professional teams is also a responsibility of coordinator, who will be delivering information to all teams achieving a continuous follow up and taking care of all changes in the project so that all the teams can have updated information at the end.
- The information compilation must be achieved through conversation between the professional team members and the community representatives, where by means of different approaches and methodologies, such as interviews, field surveys, so on and so forth, surveyors and investigators will list necessities and requirements of the community to be considered in the project to be developed.

- The participation of the community will be considered the participation of all family members, without distinction of age or gender, this is a process of awareness creation where we guarantee the sustainability of project, although the community as such has to be organised already and have its own representatives.
- Finally an architectural program should be developed in which all the results and outputs of the discussions between the parts will be displayed and will constitute the most important document for the project to be achieved.

The experience of Solidaridad, Multi Cooperative Association

Solidaridad is the result of a network of cooperatives working together, where the creation of new work opportunities on a well organized structure in a sustainable basis, takes place. Having in mind not just the physical conditions where houses are going to be built, but a context where a real sense of integral development can take place and lives can be improved (Diego Carrion, Planning Department Direction).

Success is also due to a good understanding among the roles of municipality at all levels and community participation. The cooperatives network consists of:

1. Housing Cooperative
2. Saving and Credit Cooperative
3. Education Cooperative
4. Constructions Cooperative
5. Food service Cooperative
6. Hospital Cleaning Cooperative
7. Communitary Service Cooperative

Each one of these units achieves a defined and significant role in the development of the community, where democracy, equity of gender has also been considered as relevant elements in this model.

So far 2,500 dwellings have been built and delivered, 250 new jobs have been generated on a permanent basis (see Annex 1, picture 1). The network counts with a primary school, pave factory, tile factory, Carpenters and Metal Workshops, Food Service Centre, a Community Service Centre and more.

Solidaridad, the beginning

In 1999 during the Administration of Roque Sevilla as the City Mayor, a project for housing of 3000 housing units was planned for the South of Quito.

The assigned plot was in a rural area, therefore no services were available, and accessibility was to be created by the promoters and the municipality, although the success of the project was such that for the first time specific regulations for low income housing in rural areas were established, and ten years was the time allowed for the project to be developed. The contribution from the Municipality was 50% of the cost of the basic services.

Later on, more than 30 hectares in Quitumbe (South of Quito) were purchased by Solidaridad. Planning was developed according to the new regulations. A case was open in EMAP (Water Supply Company in Quito) and another in EEQ (Electric Supply Company in Quito) both to help with the big demand the project generated. In this case the municipality will not contribute at all. This second project is considered to be a breakthrough in the image of Plan Ciudad Quitumbe that allows a further development in this area in the south of Quito.

The Approach

A concept of flexibility has been the general practice when developing Solidaridad, adapting the necessities of a society in search of common sense proposals.

Migration in Ecuador is an important fact to be considered when planning for the low income, the poor will not always remain poor (Juan Carlos Clavijo, Solidaridad Manager, June 2008). As a matter of fact most of the emigrants, in most cases, have to sell their lives in order to reach the precious dream; nevertheless it is also true that in most cases their lives have changed and their income have improved. In any case it is Solidaridad policy that if someone is in need of housing and does not have the means to purchase a housing unit, this person will not be rejected but will have an opportunity to work within the network of cooperatives.

This mentality is also applied when projecting the units. These have been conceived in a progressive construction basis. The basic unit is 45 square meters, and unlike in most cases where it is 36 square meters. The second step is a G + 1 unit of 78 square meters consisting of: 2 bedrooms, living dining area, kitchen, full bathroom and the stairs. The third step is a G + 2 units with one more bedroom, studio and another bathroom.

The proportion of light for the facades allows having a good natural lightning solution and an excellent sense of space (see Annex 1, picture 2). The conditions to be qualified as a member of the cooperative are:

- 70 weekends of community work, twice per month
- Adults formation process 120 hours
- Saving and financing 16 months

After 16 months the member can be qualified as such and will be able to purchase the house, because they can afford to pay the 30% of the total cost USD 5,600.

This amount allows the member to get access to credit to pay the remaining 70% by mortgaging the property itself.

Site Research in Solidarity Cooperative

After a survey of three questions in a sample of 50 people, applying to be members of multycooperative Solidaridad, the survey was meant to show the will of people to follow the model of cooperatives’, here are the results:

Question			
Do you believe in cooperativism as a good formula to obtain benefits?, why?	76% Cooperativism is the best way to get things by working together	20% Cooperativism is a good way, but not enough	4% Confusing answer
Do you believe in the concept of communitarian work, have you ever participate of a “Minga”	84% Believe in the results and participate of communitarian work or mingas at least once in their lives	14% They have never participate but they will be open to	2% They will not participate at all
Are you prepared to work on a regular basis during 70 weekends twice per month, and go under 120 hours capacity building program?	96% They will	4% They could not, but they will do something else in stead	

As we can see, people who have already approached the program are already aware of the effectiveness of the methodology for determining the means by which they will have access to purchase a house. They also believe in the model of cooperativism, as well as that they trust in communitarian work.

Outputs to be considered in “Solidaridad” experience

- The concept of integral development is definitely a key for success, this means that gender issues, capacity building, communitarian work and so on, are integrated in a unique effort understood and achieved by the community, by means of the cooperative organization.
- The cooperative model is a flexible one, that when interacting in different ways, in different fields allows to create a solid structure and work opportunities in a sustainable basis.(see Annex 2, picture 3)
- Is a flexible model that has been creating and adding concepts according to the necessities of the community and going along with it, creating a real sense of development and awareness at the same time.(see picture 4, annex 2)
- The system of multiple cooperatives associated creates many opportunities to the community giving them chance to work in many fields. (
- The concept of minga (1), a communitarian work traditionally practiced by the people in Latin-American countries, constitutes a key in the construction of a community capable to create their own solutions. (see Annex 3, picture 5 and 6)

The Action plan

The final objective of this paper is to encourage other colleagues to try to create the most favourable conditions and to be interested in working for housing of the low income, and at the same time make some considerations when working with this specific kind of projects, considering experiences like Solidaridad Multi-Cooperatives System and the proposed guidelines.

Personal Action Plan

- Sharing expertise knowledge and the guidelines to improve the approach of the design process for low income projects, by mean of lectures in seminars and other events.
- Awareness creation among students talking about the low income, their needs, possible solutions, and experiences.
- Publishing a video of the experience of Solidaridad, the results of this paper and the possibility to extend the experience to other colleagues or anyone who can be interested.

(1) Minga: communitarian work and social development in Latin America. Coming from the quechua word (mink'a) it defines a way of communitarian working practice before the Spaniard conquest, by the aboriginal communities in South-America. Today is a common social practice in many countries in the continent, showing a rationality inspired by the benefits that the community makes. ..

...The mingueros (communitarian workers) work in many fields, agriculture, construction, mining, etc.

The minga is a system of free work, collective and communitarian work in a voluntary basis, practice by the Andean people as to achieve enormous work, with big social benefits. ..

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Annex 1

Picture 1

Work teams at Vecindario 4 Site



Picture 2

Housing units at Vecindario 4 site



Annex 2

Picture 3

Cement Blocks and paves factory, one of the cooperatives ruled by the community



Picture 4

Kindergarten, school and high school, another cooperative at Solidaridad



Annex 3

Picture 5

A green area inside the project plot near a river, upgraded by communitarian work (minga).



Picture 6

Community members and families working in the gardens within the housing Project, Site 4

