Improving the Popular Housing Quality in El Salvador
The Housing Production by means of Suitable Quality Standards

Ernesto Tobar
Construction Manager
Habitat For Humanity El Salvador
El Salvador, Central America.

1 Shelter Situation Analysis

1.1 Basic General Data

El Salvador is located in Central America and shares borders with Guatemala and Honduras. The land is mostly mountainous has a coast on the Pacific Ocean and a central plateau, its capital is San Salvador, it has a tropical climatic zone and maintains similar climatic conditions during all year.

El Salvador is a democratic republic whose three representative organs are: the executive organ represented by the President of the Republic, the Legislative organ denominated Legislative Assembly of El Salvador and The Judicial organ expressed in the Supreme Court of Justice.

El Salvador is divided in 14 provinces, 39 districts and these are divided in 262 municipalities.

Demography
El Salvador it’s a country from the Central America, with a territorial extension around of 21,000.00 square kilometers, a population of 7 million of inhabitants living within the Salvadoran territory and almost tree million people living in the exterior mainly in the Unite States, the population density is around 330 habitants per squares kilometers.
The population growth rate is 2.4 % per year.
Economy

Actually the country economy is oriented to sectors of services, agricultural (Coffee and sugar cane production), manufacture and handcrafts.

Since 2001, El Salvador adopted the American dollar as currency of legal course, all the national economy and national accounting were transformed to dollars and this decision has restricted the adoption of strategies in monetary politics from the government to influence the economy of the country.

Another aspect sensitive in the Salvadoran economy are the remittances coming from Salvadoran living in the interior, mainly from the United States, these represents an important source of incomes into the Salvadoran economy and it is an important part of the commercial balance. During 2006 were received around $3,3 thousand million dollars from Salvadoran in the exterior, that represents 17.1% of the Gross Internal Product.

1.2 Shelter Related Fact and Figures

Housing stock

The housing stock in El Salvador is approximately 1,600,000.00 and the total housing deficit is 545,000 houses. 512,312 represent the qualitative deficit and 32,688 represent the quantitative deficit.

Around 70% of the housing deficit corresponds to the low incomes people.

Quantitative housing deficit per year

<table>
<thead>
<tr>
<th>Income Level (1=US$175)</th>
<th>Percentage of Population</th>
<th>Distribution</th>
<th>Informal Economy Sector</th>
<th>Formal Economy Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 0 to 1</td>
<td>47.60%</td>
<td>19,291</td>
<td>13,417</td>
<td>5,874</td>
</tr>
<tr>
<td>From 1 to 2</td>
<td>30.60%</td>
<td>12,427</td>
<td>5,587</td>
<td>6,840</td>
</tr>
<tr>
<td>From 2 to 3</td>
<td>11.80%</td>
<td>4,792</td>
<td>1,733</td>
<td>3,059</td>
</tr>
<tr>
<td>From 3 to 4</td>
<td>4.90%</td>
<td>1,990</td>
<td>330</td>
<td>1,660</td>
</tr>
<tr>
<td>From 4 and n</td>
<td>5.20%</td>
<td>2,112</td>
<td>711</td>
<td>1,401</td>
</tr>
<tr>
<td>Total</td>
<td>100.00%</td>
<td>40,612</td>
<td>20,962</td>
<td>19,650</td>
</tr>
</tbody>
</table>
Housing Qualitative Deficit

The housing qualitative deficit is referred to lack of one or more of the next aspects:
Elements made with permanents materials and suitable conditions of safety
1. Roof
2. Walls
3. Floor

Basic Services Provided
4. Electricity
5. Drink water
6. Sewerage

1.3 Housing Policy

The government of El Salvador formulated a housing national policy, however this policy is oriented to define special norms and procedures for regulate the obtaining of housing project permissions and it does not define structural mechanisms for financing.

The municipalities do not have housing policies and their actions in this subject depends the capacity of the central government.

1.4 Actors in Shelter Delivery and their Roles

<table>
<thead>
<tr>
<th>Actors in Shelter Delivery</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Social Housing Fund</td>
<td>Provide housing credits for formal sector employees.</td>
</tr>
<tr>
<td>National Fund of Popular Housing</td>
<td>Provide housing credits for formal and informal sector employees.</td>
</tr>
<tr>
<td>Popular Housing Support Federation (FIDAVIP)</td>
<td>Represents a network of NGO’s working in the popular housing Issue.</td>
</tr>
<tr>
<td>Vice Minister of Housing and Urban Development</td>
<td>Government office in charge of urban development at the country</td>
</tr>
<tr>
<td>Developers and constructers Privates</td>
<td>Privates developers of housing projects, they provide different solutions housing according to the financial system</td>
</tr>
<tr>
<td>National Financial System</td>
<td>Provide credits for housing</td>
</tr>
</tbody>
</table>
2 Organization

Habitat for Humanity El Salvador is a non-governmental organization (NGO) working in housing programs with low incomes families, most of them does not have access to housing loan in the private banking system.

The Habitat for Humanity objective is to provide affordable housing for poor people through self help and auto constructions process involving to the communities, municipalities and other sectors.

The target group are families with housing needs and their incomes are between one and five minimum wages (since U.S. $ 175.00 to U.S. $875.00)

The families who access to the housing program gets a loan with soft conditions a long term (around 10 years), the payments are deposited in the revolving funds, which represents the most important source for financing the housing programs of the organization.

The Housing Products are the followings:
Housing construction
Lot and house plus basic infrastructure
Housing Improvement

Options for Financing
Complete Credit
Subside and Credit
Complete Subside (under restricted conditions)

Habitat for Humanity El Salvador built an average 600 houses per year around the country.
3 Shelter Problem

The lack of sustainable policies for financing housing from the government, become to NGO’s as an important actors for resolve the housing needs.

Every year El Salvador require 40,000 new houses as result of population growing, around 30,000 houses correspond to families with incomes levels around of four minimum wages of less, this demand also represents requirements of land, basic infrastructure, housing construction, education, sanitation, and others social and economics aspects for satisfy the needs of the poor people.

Nevertheless the production of houses by the government and privates sectors result insufficient for satisfy the housing national demand, therefore the NGO,s and others social organizations which works in this subject have an important role for reduce the breach between the supply and demand.

The housing sector not attended is destined to living under unsuitable conditions making more critical the poverty cycle.
Target Population
The past year around 3,000 families from five municipalities in the west of the country were affected by seismic movements, the must of the affected people are living in poor economics conditions, at this time the reconstruction process by the government and other organizations are not enough for provide the number of required units.

Habitat for Humanity has been working in the reconstruction process and recently finished the reconstruction of 100 houses for affected families, the projection is provide 300 houses more for the next three years.

The Shelter Quality.
The must of houses damaged were built with construction systems and unsuitable materials and lack of a quality control.

In El Salvador the popular housing quality is an aspect that isn’t have the importance that is required, the production of popular housing is associated to low costs and low construction standards, however the production with low standards represented a high risk for the population.

The housing vulnerability is directly associated to the housing quality.

4 Proposal for Change and Improvement
 Improve the popular housing quality for 50 houses as pilot project, trough four processes:
1. Formulate standards for popular housing
2. Implementation of the standards
3. Implement a quality control system
4. Monitoring and evaluation of the results

The next table represents the results expected in each stage of the proposal.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Short Terms (Pilot Project)</th>
<th>Long Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Standards (HS)</td>
<td>Formulation of Housing Standards : structural and not structural elements,</td>
<td>Application of HS for all the housing projects, Diffusion of HS a community and settlement level</td>
</tr>
<tr>
<td>Implementation of HS</td>
<td>Technical staff training, certified technically masons, reduction of risk, housing quality increased</td>
<td>Application of HS for the housing projects an organization, community and settlement level (housing social production)</td>
</tr>
<tr>
<td>Quality Control System</td>
<td>Standardization of supervision process, quality management tool</td>
<td>Increase the Efficiency and Productivity and the management of construction resources</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>Monitoring of key indicators, evaluation of results and adjustment</td>
<td>Quality Continuous Improvement</td>
</tr>
</tbody>
</table>
## Action Plan

<table>
<thead>
<tr>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulate the complete project</td>
<td>Nov-30</td>
<td>Jan 30</td>
<td>Feb 29. Definition of quality control process and create &quot;The guide for construction quality control&quot;</td>
<td>March 30.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification Of Masons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement Standards and Quality Control Systems for 50 houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of Project Results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>