

# EL SALVADOR

## SELF-HELP AND INCREMENTAL HOUSING: LIKELY DIRECTIONS FOR FUTURE POLICY

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*RESEARCH CONTEXT: This longitudinal case study examined and documented incrementally owner-built housing and their policy environments: 1) to assess self-built housing and recommend strategic options for governments (national and local) in developing countries experiencing large urban housing deficits; and: 2) to help enable and promote incremental housing processes as a model for national low-income housing policy. The fieldwork took place in two cities of El Salvador during the period January – March 2011. This is a research project of IDB managed by its RES Department with the support of the FMM Department.*

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### AN ONGOING RESEARCH REPORT

These findings are based on an initial round of analysis. Further in-depth analysis and verification of data is continuing from the extensive data collected.

# SUMMARY AND KEY CONCLUSIONS

## INTRODUCTION

*The incremental building process will continue to be how future generations build. It will be how most of future housing stock increases.*

This is a forty-year longitudinal case study of incremental housing in El Salvador. The purpose is to follow and understand how low-income households have built their houses over time. A survey of 210 households documented the strategies and processes from occupation to the present – most of the cases spanning three decades. Seven settlements were surveyed, representing three predominant types of low-income housing in El Salvador – illegal settlements, ‘sites-and-services’ projects, and ‘turnkey’ housing projects by government and the private sector. The goal is to understand household strategies, decisions and costs from the perspective of building houses incrementally over time and compare those with households in conventional housing projects. To further capture possible investment influences on households, a timeline of external factors – national policies, economic fluctuations, inflationary effects of construction costs, etc. – were analyzed. The intent is to identify and recommend policy options for governments and international assistance agencies seeking to support more effective models of national low-income housing policy. El Salvador is an important case - some of the earliest (in the 1970s) projects designed to support incrementally built housing became prototypes for *sites-and-services* programs sponsored by development institutions worldwide. Unfortunately these pioneering efforts were evaluated too soon after occupancy, before the pace of expanding and improvement took off, resulting in misguided criticisms of incremental housing. This study has the advantage and importance of examining household trajectories from the perspective of three decades.

Table 1: TYPOLOGY of settlements and description of incremental STAGES of houses <i>TIPOLOGÍA de asentamientos y descripción de las ETAPAS de sus casas</i>						
	Sites and services (legal) Lotes con servicios (legales)	Illegal settlements Asentamientos ilegales			Projects Proyectos	
Types Compared Tipos que se comparan	Serviced Plots and Core units Lotes Servidos y Unidades Básicas	Upgraded slums Mejoramiento barrial (Tugurios)	Un-upgraded Slums Tugurios sin Mejoras	Illegal subdivisions Loteificaciones sin servicios	Public turnkey housing Casas completas publicas	Private developer Turnkey housing Casas completas privadas
Settlements Surveyed Asentamientos encuestados	(FUNDASAL) El Pepeto Sensunapan	(FUNDASAL) Las Palmas	Jardines del Boulevard	(ARGOZ) Nueva Trinidad	(FSV) Nuevo Horizonte	(Grupo Robes) Altavista
<b>STARTING POINT / INICIO</b> • Plot/unit at occupancy and/or shelter at the time settlement was constructed and before improvements. • <i>Una casa o unidad al momento de posesión, o cuando el asentamiento se estableció y antes del dueño que llevaba a cabo mejoras</i>		Champa 				
<b>FUNCTIONAL / FUNCIONAL</b> • House with improvements to enclose and made habitable; minimum investments to accommodate the household. Few extensions or improvements; low investment level. • <i>Casa con mejoras para en cerrar y hacer habitable la casa: inversión mínima, suficiente para establecerse la familia. Pocas extensiones o mejoras; nivel inversión baja.</i>						
<b>COMPLETE / CONSOLIDADA</b> • House with room additions, improvements, and finishes that meet the needs and expectations of the household. The investment cost is medium. • <i>Casa con cuartos agregados, mejoras y acabados cumpliendo las necesidades / expectativas de la familia. El costo de inversión medio.</i>						
<b>EXPANDED / AMPLIADA</b> House considerably expanded in size, number of floors, amenities and with quality finishes. A considerable amount of investment. <i>Casa considerablemente ampliada en tamaño, pisos adicionales, funcionalidad, y en acabados. Representa una considerable inversión.</i>						

## KEY FINDINGS AND RESULTS

■ **Incremental strategies prevail.** Across all settlement types (illegal, legal and those designed to support incremental housing) residents expand and improve houses to some extent over time. All types – illegal settlements, projects supporting incremental process, as well as public / private turnkey projects, have a considerable number of owners that, over time reach a high level of household investment and development.

■ **Settlement types affect pace.** Illegal settlements (slums, and nonconforming subdivisions) generally take longer to receive utilities, tenure security, and residents have little, if any access to credit. Incomes tend to be slightly lower and not as consistent; startup and pace of improvements are slower. Even government and private sector housing projects have a considerable numbers of residents expanding, modifying and upgrading houses beyond the turnkey unit. These tend to start earlier and are larger investments, and have more improvements.

■ **Household strategies vary.** All incrementally developed settlements have a range of build-outs/improvements. Within this group some households make few investments even years on, so houses remain with minor improvements (characterized in this study as *Fundamental*). Others expand rooms and amenities in a matter of several years to meet household space needs, functional priorities, and esthetic preferences to a satisfactory point of completion (*Consolidada*). These households stop expanding at this point. A third group invests more (often sooner) to add rooms, second and third stories, and often upgrades services, kitchen and baths for a fully expanded house (*Ampleadas*). Although these differences do not always correspond to correlations of income and household size, availability of discretionary income uniformly drives the process.

■ **Starting point influences the process.** Comparisons among illegal vs. official, with no help vs. having some support – shows that some upfront help makes the process more efficient. The starting point for slums and illegal subdivisions is a plot of land without utilities. These tend to be very slow to start and take longer to improve. *They often have fewer dwellings go beyond Fundamental.* Projects supporting incremental housing (sites-and-services) have faster start-up because they offer starting point options: plots with only utilities, plots with a sanitary core (bathroom and laundry) or a core unit (starter house) intended to facilitate expansion. All these options have construction credits, technical assistance and mutual help programs to jump-start the process.

■ **Low-income households are pragmatic.** In general, these owner-builders are careful investors with ability to manage and optimize resources. The vast majority of households of all settlement types have the ability to manage the start-stop process when income is unsteady, balancing household expenditures, accumulating savings, and working on construction over time. A slow pace of house improvement, even with long delays, is not considered a major problem, rather it is accepted as a given necessity, paired with the expectation that they will reach their goal at some future point. As a group these households are markedly enterprising in handling the process, relying on their own efforts but also on non-monetary arrangements to the process.

■ **A home is an investment for the family.** The majority do not seek to sell their houses. Most state their objective is to leave their houses to their children (and many have now inherited – particularly in sites-and-services projects). This, in part, may account for accepting a long process for “completing” the house. Given scarcity and limited options they see the property as a coveted “opportunity” to pass on the family rather than market gains.

■ **Security is important; tenure less so.** Only about a third of owners purchasing land in illegal *lotificaciones* or sites-and-services (FUNDASAL) projects complete the titling process. There are interesting reasons:

- the transaction costs of processing the title are too high relative to the importance for owners
- the sales document represents sufficient security of tenure (protection from eviction)
- there is little interest or need for securing loans with the property as collateral
- many see no need for title as they plan to leave the property to their heirs

The sites-and-services projects anticipated title deeds necessary for mortgages from lending institutions, however these never opened lending windows for this income group; FUNDASAL managed the loans component instead.

## INVESTMENT TRIGGERS – CAUSE AND EFFECT OVER TIME

Household shelter choices and investments are triggered, restrained or postponed by a few key factors. Externalities – for example, national housing policies, access to land, availability of housing and credit, economic fluctuations, etc. - as well as household circumstances, influence where and how to settle, investment decisions and, importantly, the pace and extent of house improvements. The main indirect influences affecting household strategies are:

■ **Access to housing markets.** *Housing deficits 1970 to 2010.* Official national housing deficits statistics, for quantity (i.e., number of formal sector units produced) and quality (i.e., lacking 'basic' services -- infrastructure, sanitation, connections and houses of "acceptable quality") have, on average, remained constant at on average about 500,000 each year for the past four decades. However, the cumulative demand for affordable land, services and credit continues to escalate. This implies that: a) national housing policies/programs have not keep pace with demand; b) the informal sector, by default, has kept up with urban population growth and; c) the standards for low-income housing and services are unrealistic and unaffordable to government and the poor. ***This has lead to continuous demand and impetus for the majority of low-income households to build illegally and incrementally, implying that the extra-illegal sector is providing affordable options.***

■ **Limited production of affordable housing** *Public housing projects 1970 to 1990.* National housing policy early in the period promoted walk-up apartments and completed houses as a response to the deficit. For the most part these highly subsidized public programs never produced more than 1,000 units per year. Neither did other public or private programs produce affordable housing. The exception is FUNDASAL's sites-and-services program aimed at low-income households living in *mesones* and *tugurios*, which from 1970 to 1985 produced on average, about 2500 units per year. ***However, overall housing production in those 20 years did relatively little to lower the demand for houses, and had no effect on the deficit for lower-income groups. Growing numbers of households turned to illegal alternatives and started building incrementally.***

■ **Increased urban migration.** *The civil war of 1976 – 1988* resulted in massive rural-to-urban migration and increased demand for low-income housing, but it also slowed the production of formal housing. This created more squatting and illegal subdivisions. Construction costs escalated, housing production declined, land and rent markets escalated, unemployment increased. ***All these factors affected household spending and investments for expansion.***

■ **Remittances – 1980s – 2011.** The armed conflict also produced a steady migration to the US and Canada that continues. The effect has been a large influx of remittances that have been the major impact on low-income housing production. The largest impact is that recipient families invest in expanding and improving existing homes. For others needing shelter, remittances help enter the informal housing market (illegal subdivisions - *lotificaciones*). While reliable reporting data is unavailable, this may account for most of the low-cost housing production over the past twenty years. ***Remittances are the most prominent trigger for expansion/ improvements to existing houses.***

■ **Earthquake reconstruction.** Both the 2000 and 2001 earthquakes substantively affected low-income, housing production, and, for some, generated a short-term infusion of income. Reconstruction investments were mostly for new housing and repair programs that generated some employment. Some increase in income as seen in some areas surveyed (*El Pepeto*) triggered improvements. In others, there was post-quake stagnation due to high costs of materials, combined with scarcity of labor. ***However it may have created a spike in construction costs, thereby postponing incremental improvements for some, as well as job losses for others.***

■ **Cost of construction.** With some fluctuations, materials, labor and overall construction costs kept pace with inflation (with spikes related to the earthquakes). ***Costs of materials (always higher when purchased in small quantities) are another key factor in decisions of when to build out. Respondents also complained of scarcity of credit for materials and the high cost of specialized labor, such as plumbers and electricians.***

■ **Comparing incremental and turnkey.** NOTE: Table three is a starting point for comparing across settlement types. The table contains perceived market values. Analyses to compare incremental (i.e. sites and services) with turnkey, taking in to account the investment costs, subsidies, etc. is underway and will be included the final report.

<b>Table 2: COMPARISON of INCREMENTAL STRATEGIES by settlement type</b> <i>COMPARACIÓN de ESTRATEGIAS INCREMENTALES por tipo de asentamiento</i>						
	<b>Sites and services (legal)</b> <i>Lotes con servicios (legales)</i>	<b>Illegal settlements</b> <i>Asentamientos ilegales</i>			<b>Projects</b> <i>Proyectos</i>	
<b>Types Compared</b> <i>Tipos que se comparan</i>	<b>Serviced Plots and Core units</b> <i>Lotes Servidos y Unidades Básicas</i>	<b>Upgraded slums</b> <i>Mejoramiento barrial (Tugurios)</i>	<b>Un-upgrade d Slums</b> <i>Tugurios sin Mejoras</i>	<b>Illegal subdivisions</b> <i>Lotificaciones sin servicios</i>	<b>Public turnkey housing</b> <i>Casas completas publicas</i>	<b>Private developer Turnkey housing</b> <i>Casas completas privadas</i>
<b>Settlements Surveyed</b> <i>Asentamientos encuestados</i>	(FUNDASAL) <i>El Pepeto Sensunapan</i>	(FUNDASAL) <i>Las Palmas</i>	<i>Jardines del Boulevard</i>	(ARGOZ type) <i>Nueva Trinidad</i>	(FSV) <i>Nuevo Horizonte</i>	(Grupo Robes) <i>Altavista</i>
<b>SURVEY INQUIRY:</b> <i>INTERROGANTES DE LA ENCUESTA:</i>						
<b>1. What went well and what difficulties did the households have in building their houses incrementally?</b>  <i>1. Que les fue bien y qué dificultades tuvieron las familias en la construcción incrementalmente de sus casas?</i>	<p><b>Went well:</b></p> <p>Households had financing by NGO to buy plot, starter core and utilities. NGO-organized community for <i>ayuda mutua</i> –group construction of cores – and sweat equity was down payment. NGO also made construction credits for enclosing core house at occupancy. This jump-started the incremental process. Respondents also stated the benefits of working together as a community. Typically most households went on to an expanded <i>consolidado</i> stage within about a decade. A small percentage stayed as <i>funcional</i>, and about 25% reached <i>ampliado</i>.</p>	<p><b>Went well:</b></p> <p>Although most <i>Las Palmas</i> residents had been evicted and squatted here, the monetary cost was very little. They set up their <i>chamapas</i> quickly using discarded materials.</p> <p><b>Difficulties:</b></p> <p>These are households without access to credit. Their shelter and living environment is precarious, unsanitary and in risk of eviction. Their incremental strategies are postponed for decades. Very few improvements are affordable or made. The shelter priorities are protection from the elements and mudslides and flooding. Construction is impermanent, although after decades, some</p>		<p><b>Went well:</b></p> <p>Residents in these subdivisions have some security of tenure (sales agreements) and therefore start the incremental process. However the starting point is unassisted and improvements are slower and take longer.</p> <p><b>Difficulties:</b></p> <p>Lack of credit. Because the subdivision is nonconforming utilities take longer to be</p>	<p><b>Went well:</b></p> <p>These subdivisions are fully equipped and with turnkey houses built by contractor.</p> <p>Homeowners have access to credit and FSV program subsidies. Because the house is <i>Consolidada</i> typically households do not do major additions at the start, However there are many that do, adding second and third floors. For these families it seems easy, and a priority to expand to <i>Ampliado</i>.</p> <p><b>Difficulties:</b></p> <p>Some homeowners have plans to expand (the Altavista has been built in the last three years).</p>	

	<p><b>Difficulties:</b></p> <p>Most reported economic problems (lack of income) as hampering the process, and found construction materials expensive and labor costs high. Most stated that there was not enough credit made available.</p>	<p>permanent materials are added. Moreover, the lack of steady income precludes accumulating savings. They have poor water service and no sanitary services. Las Palmas has now been upgraded.</p>	<p>available</p>	<p>Those that do expand state that they want/need more room (most investment is to add bedrooms).</p>		
<p><b>2. What is the typical owner-built incremental process?</b></p> <p><i>2. ¿Cuál es el proceso incremental típico del propietario?</i></p>	<p>Participates in mutual-help (household groups working together to build starter core houses) as part of down payment and Financing plan. At occupancy, brings materials from dismantled 'champa' to build temporary house on plot while core is enclosed (with construction credit).</p> <p>Starts by adding a room and often a bathroom. May take a few years until next trigger to add other rooms.</p> <p><i>Fundamental</i> longer; <i>Consolidada</i> added rooms within a decade; <i>Ampleada</i> is faster, but can take decades to complete.</p>	<p>The incremental strategy is on hold, or very minimal, until upgrading and regularization occurs. Only a few households move into improving their houses despite the risks and insecurities involved. However, those that do follow a fairly typical, incremental process. Of these only a few go to <i>Consolidada</i>.</p>		<p>Varies: some postpone, others start the incremental improvements quickly and do larger investments.</p>		
<p><b>3. What are the comparisons of the different starting points (legal, illegal, with support, or not), in terms of:</b></p> <ul style="list-style-type: none"> <li>• Presumed market price?</li> <li>• Time to <i>Consolidada</i>?</li> <li>• Size of end product?</li> </ul> <p><i>3. ¿Cuáles son las comparaciones de los diferentes puntos de partida (legal, ilegal, con o sin el apoyo), en términos de:</i></p> <ul style="list-style-type: none"> <li>• Precio de mercado presunto?</li> <li>• Tiempo?</li> <li>• Tamaño del producto final?</li> </ul>	<p>*Presumed market price: - start: \$ - now: \$ 29,667 (average both) Time: 10 years Size: 90m2</p> <p><i>Note: * = breakdown of subsidies and other cost being defined. ** = age of development.</i></p>	<p>* Presumed market price: - start: \$ - now: \$25,000 Time: 20+ years Size: 43m2</p>	<p>*Presumed market price: - start: \$ - now: \$13,600 Time: 20+ years Size: 71m2</p>	<p>* Presumed market price: - start: \$ - now: \$ 7,688 Time: 15 years Size: 46m2</p>	<p>*Presumed market price: - start: \$ - now: \$24,250 Time: 6** years Size: 76m2</p>	<p>*Presumed market price: - start: \$ - now: \$17,030 Time: 3** years Size: 52m2</p>

**Table 3: ACTORS, INPUTS AND STAGES – Comparing Three Settlement Types**

Types	Illegal Settlements / Upgrading	Sites and Services Projects	Official Public & Private Projects
Actors			
<b>Household</b>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>only shelter option</li> <li>confined to basic and/or precarious shelter</li> <li>illegality/insecurity constraints actions</li> <li>needs technical advice on what to do, how to build safely</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>see as transitional strategy / limit / postpone investments for years</li> <li>exposed to health and safety problems</li> <li>limit savings for housing investments over time</li> </ul> <p><b>AFTER COMPLETION</b></p> <ul style="list-style-type: none"> <li>a few (20%) eventually improved / expanded house after decades</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>security / long-term goals = investments in family's future</li> <li>gets starter core + infrastructure</li> <li>gets technical advice / training about building</li> <li>contributes 'sweat equity' down payment with <i>ayuda mutua</i></li> <li>Gets loan/credit</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>built in stages, pragmatic, affordable</li> <li>has individual choices, preferences, decisions</li> <li>allows payments in-kind, and as savings become available</li> <li>mobilizes savings</li> </ul> <p><b>AFTER COMPLETION</b></p> <ul style="list-style-type: none"> <li>build equity</li> <li>get support to start, continue process</li> <li>build more floor area, on average that other types</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>have security</li> <li>pay for investments up-front</li> <li>have a completed house</li> <li>full infrastructure at the start</li> <li>finished unit to move into</li> <li>accumulated savings /worker contributions over time</li> <li>no support programs</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>accumulated savings /worker contributions over time</li> <li>no support programs</li> </ul> <p><b>AFTER COMPLETION</b></p> <ul style="list-style-type: none"> <li>about a third, on average, expand houses, and many (2/3) make improvements</li> </ul>
<b>Community, ADESCOs (local CBOs)</b>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>informally organized at onset</li> <li>in <i>tugurios</i> - squatter settlements have no status, recognition</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>in <i>lotificaciones</i> have no access to municipal services until recognized and represented</li> <li>little or no infrastructure, facilities</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>well organized, recognized and effective</li> <li>given training in community development</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>has ability to lobby for municipal services and facilities</li> <li>builds own sports and recreation programs</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>turnkey, supply white line, furnish</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>create own community association</li> </ul>

<p><b>Municipalities,</b> (Local Authorities, Local GOES Agencies)</p>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• seen as having a high social and political cost</li> <li>• potential city-wide health and environmental dangers</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• originally had little control or ability to intervene</li> <li>• recent municipal &amp; government upgrading programs to transform and regularize</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• requested international funding for programs</li> <li>• entered into agreement with NGO implementing agency</li> <li>• obtained subdivision approvals</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• CBOs entered into agreements with for municipalities to take over maintenance of infrastructure and provide services</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• national government sponsored and supported housing program</li> <li>• national worker/employee housing savings fund</li> <li>• national subsidies applied to programs</li> <li>• policies supporting private developer produced low-cost housing; incentives.</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• Municipalities responsible enter into agreements for maintenance and services to project areas</li> </ul>
<p><b>NGOs,</b> <b>Bilateral Agents,</b> <b>Multilateral Banks</b></p>	<p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• some national welfare programs and social funds</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• NGO planned developed and implemented program</li> <li>• NGO acquired land</li> <li>• International loans co-financed; GoES guaranteed loan</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• utility companies provided trunk lines</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• FSV for housing financing + subsidies</li> <li>• Municipalities</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• utility companies provided trunk lines</li> </ul>
<p><b>Government Agencies,</b> <b>Private Developers</b></p>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• Need to address inequality concerns</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• National informal settlement upgrading programs</li> </ul> <p><b>AFTER COMPLETION (Options at Present)</b></p> <ul style="list-style-type: none"> <li>• Need legislation for <i>lotificaciones</i></li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• Address land needs for low-income housing</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• Needed appropriate subdivision standards</li> </ul> <p><b>AFTER COMPLETION (Options at Present)</b></p> <ul style="list-style-type: none"> <li>• Incremental housing policy to support sites and services concept at large scale</li> </ul>	<p><b>AT START UP</b></p> <ul style="list-style-type: none"> <li>• Turnkey, no follow-up</li> </ul> <p><b>DURING CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• Extend incremental components into existing FSV policy</li> </ul> <p><b>AFTER COMPLETION ( Options at present)</b></p> <ul style="list-style-type: none"> <li>• Incentives to private land and housing developers to include incremental options in their projects (an official version of the <i>lotificaciones</i> model)</li> </ul>

# 1. OVERVIEW

## Study origins, concept, objectives

### 1.1 INTRODUCTION

*The incremental building process will continue to be how future generations build. It will be how most of all housing stock increases.*

The Inter American Development Bank (IDB) - as well as several other international development agencies - for decades supported its member countries' efforts to mitigate the impact of urban poverty. The lack of adequate affordable shelter in cities has been a decades-long problem of weak or misguided urban policies. A half century ago, at the onset of the massive wave of migration and city growth, overwhelmed governments unsuccessfully either attempted to discourage or stop the influx of the poor. Some governments tested/used industrialized housing models that proved too costly and not at the scale needed. Consequently, over six decades billions of low-income urban dwellers worldwide confronted with the lack of affordable housing, carry on building their own homes - the only way they could - over time, paying as they could afford, on whatever land they could, legal or not. This *incremental building process* will continue to be how future generations build. It will be how most of all national housing stock will increase. Remarkably, for the most part this process continues to be unofficial and extra-legal.

### A PROBLEM WITH TWO PARTS

*Upgrading and 'Sites-and-services' projects are both based on incrementally built housing.*

Housing policy in Latin America (annex 4) has gone through a number of redirections in the past fifty years - mostly influenced by international development agencies. Over the years IDB and others have helped governments introduce programs to improve living conditions in existing slums and illegal settlements. These settlement-upgrading programs are now universally considered good urban housing practice, with most developing countries committed to, and carrying out large-scale programs. Fundamentally **slum/settlement-upgrading supports the incremental process**, for both improving neighborhood infrastructure and services as well as supporting the residents' process of improving and expanding their houses. For many governments, settlement upgrading is now a core business and a centerpiece of national housing policies. Upgrading programs are helping to legalize residents and integrate their communities into the city. They have successfully transformed living conditions and lives of hundreds of millions. However these much needed and effective initiatives only address **half of the problem**: unless there is also a way to overcome the fundamental issues of access by the poor to land, credit and subsidies, then squatting, slums and illegal settlements will continue to proliferate. Relatively few instances exist where national housing policy supports and encourages this type of incremental effort and mobilizes resources for **the production of new land and houses for low-income owner-builders**. This has not always been the case. In the early 1970s (prior to launching illegal settlement upgrading) IDB and others supported sites-and-services programs as policy alternatives to expensive and inefficient public housing projects. Sites-and-services programs provide low-income households access to a plot of urbanized land on which to incrementally build a house. In effect, the concept mimics what illegal subdivisions accomplish. These projects were carried out in many countries worldwide starting in the 1970s.

*The study tests the following hypothesis:*

■ *The incremental process can be improved, benefiting both families and cities ; and*

■ *Programs for incrementally built housing are an effective proactive approach - to help increase housing productions and meet population growth.*

### 1.3 STUDY OBJECTIVE

This case study examines and documents over time incrementally owner-built housing in order to recommend strategic options for governments (national and local) that seek to include incremental housing as a major tool of national low-income housing policy.

This study tests the following hypothesis: a) The incremental process - formal and informal - can be substantially improved in terms of speed of consolidation and quality of construction, benefiting both families and city; and b) Supporting housing programs for incrementally built housing is an effective proactive approach - in terms of costs, administrative inputs, and technical assistance - to help increase affordable housing units and meet the anticipated population growth.

The recurring debate: “is incremental owner-built-house construction as effective and lower cost than contractor-produced ‘turn-key’ houses?” is important. Some believe that the cheaper labor (considered ‘free’ if not valued) of incrementally built houses makes the total cash outlay less. If included, it is more difficult to compare incremental to turnkey. A contractor who builds all at once clearly is faster. Standards are probably higher, assuming some oversight. A key issue is how to define ‘effective’. Comparison is also an issue of perspective. For a family, a complete house with affordable payments considering its irregular income, lack of surplus funds, building incrementally would be advantageous. If the act of construction adds to house ownership benefits then the incremental process has advantages (note for example: FUNDASAL’s mutual help construction process – see Annex A-5); if the ability to design according to their own choices is important, incremental is again better. If initial cash outlay from the government is considered, incremental also is better (lower upfront investment), but implies accepting an initial lower standard for families. Acceptance/choice by families is clearly a key consideration.

#### 1.4 FOCUS

The outcomes and the factors that influence the incremental housing process for the specific case of existing sites-and-services developments in El Salvador are compared to other types of housing production, for example, informal housing settlements. The full range of low-income housing options in El Salvador is compared, each starting from the late 1970s to the present.

#### 1.5 PROCESS

This survey was carried out in association with local partner institutions in El Salvador. FUNDASAL, the *Fundación Salvadoreña de Desarrollo y Vivienda Mínima*, an NGO with 40 years experience in low-income housing, was contracted to carry out the field survey and preliminary data analysis, as well as to provide data retrieval, logistical arrangements, and liaison with communities and households interviewed, as well as contextual and historical reference to the work. The Universidad Centroamericana José Simeón Cañas and the Universidad de El Salvador organized and provided student survey teams. A ‘*Survey Results Workshop*’ – a hands-on learning event – in El Salvador with the survey team and associated institutions, and IDB staff, is planned in November 2011 as part of this study. The objective is to review this study’s findings and review incremental housing policy options.

## 2. EL SALVADOR AS CASE STUDY - PROTOTYPES FOR FUTURE INCREMENTAL HOUSING?

### 2.1 WHY THIS STUDY? WHY EL SALVADOR?

*The magnitude and impact of incremental housing on the production of housing*

The vast majority of El Salvador's urban poor and low-income population housing over the past six decades has been self-built and incremental. Urbanization, unprecedented in the 1950s, was met with two responses: first, fledgling pilot attempts of government public housing, and second, a large wave of unsanctioned – extra-legal – individuals building shelter on their own. A relatively small private tenement rental market also emerged – the *mesones* – old center-city houses converted into room rentals affordable to a relatively small share of working poor. The vast majority of city migrants went to squatter settlements – *tugurios* - on invaded land. The relatively small number of publicly produced heavily subsidized houses and apartments failed to be a replicable model for the poor or reduce the housing deficit. This created a decades-long situation where informal, incrementally built housing accounts for the bulk of shelter provision, which is the largest share of housing demand in El Salvador. However, early on there were groundbreaking explorations of how to help the poor help themselves to build their houses. A local NGO, FUNDASAL developed an innovative and participatory process to develop affordable land with infrastructure where low-income families could build their houses at a pace they could afford. Over fifty countries have carried out sites-and-services projects, but few used the approach of resident participation and mutual-help in building core units as was done in El Salvador.

These early successes produced tens of thousands of plots and proved the concept valid. However, a decade of armed conflict hampered the institutional framework needed to continue. Housing policy in El Salvador has evolved over the past two decades and is increasingly attending to the low-income housing deficit – for example, with national programs for informal settlement upgrading<sup>1</sup> – which supports the incremental housing processes. Government turnkey housing for low-income workers (*Fondo Social para Vivienda* –FSV- payroll and employers plans) and recently projects for this income group by private developers, are producing small, but completed houses. Government is also presently considering draft legislation for regularizing the pervasive, but illegal privately developed *lotificaciones* – illegal subdivisions – an informal land market that is the main access for low-income households to incrementally build homes. The FUNDASAL sites-and-services projects of the 1970s are a living laboratory for understanding the household dynamics and strategies of the incremental process – experiences that can best inform how to shape future housing policy – not only for El Salvador, but worldwide. These wide-ranging experiences and endeavors make El Salvador an exceptional case for understanding the incremental process as a potential housing policy model.

### 2.2 CAN INCREMENTAL HOUSING BE NATIONAL HOUSING POLICY?

That question can be best be answered by understanding the strategies and process households have used in building, improving and expanding their houses gradually at a pace that allows investment of accumulating savings. This survey tracks 210 households in six settlement types, over forty-years of building incrementally. In order to better understand households' decisions over time, as they build, improve, and expand their houses, a parallel forty-year analysis – a timeline - of low-income housing production, national housing policies, economic shifts, construction costs, etc. focuses on external impacts that affected the low-income incremental housing process, both formal and informal.

The study's findings help understand investment decisions, what triggers investment, and the costs of producing houses incrementally. This information can inform recommendations for supporting households build more effectively. In this way the results can help government shape national policy to benefit from the incremental process.

<sup>1</sup> For example, two recent settlement upgrading programs of El Salvador supported by IDB provided drinking water, storm and wastewater drainage, road improvement, lighting and indoor toilets in the homes.

## 2.3 KEY QUESTIONS

The survey asks:

What do we want to know about the incremental process?

- I. How low-income urban households (the majority of the urban population) built their houses incrementally over time?
- II. What are the strategies, costs, and results?
- III. What triggered decisions over time to make improvements and invest in expansions?
- IV. Do different starting points – illegal vs. official, with no help vs. having some support – make the process more efficient?

What the survey seeks to answer.

- V. Is the incremental process affordable to low-income households and to governments?
- VI. Is incremental self-built housing efficient and economically viable?
- VII. How does it compare to contractor-built completed houses?
- VIII. Can incrementally built low-income housing programs be designed to support the owner-builder, reduce costs, increase efficiency and be good national housing policy?
- IX. Given that the incremental process is fundamental to housing production of El Salvador – and in a majority of countries worldwide – can it become officially supported housing policy?

Answers to these questions leads to the decades old concept of sites-and-services, which tested the policy of building on and supporting the incrementally built process by designing projects from their inception to plan for the eventuality of homeowners improving and expanding their houses over time, as they accumulated savings to do so.

## 2.4 THE SITES-AND-SERVICES HOUSING CONCEPT

In the early 1970s sites-and-services housing programs were piloted<sup>2</sup> and subsequently funded by international development agencies<sup>3</sup>. These projects had the objective of demonstrating the viability of the incremental process as well as shifting conventional public housing policy to include the informal or extra-legal sector: squatters, households living in slums, tenements, and illegal subdivisions. The programs introduced affordable cost-lowering standards and codes (appropriate to incrementally developed infrastructure and services) and provided basic services and plots for sale to incremental homebuilders. Some programs included basic “starter” core units and/or “sanitary cores” options to facilitate the owner-built process. The concept was to remove constraints of the formal land and housing markets, the lack of credit and subsidies, the scarcity of low-cost, affordable land, the lack of municipal services, and high official permitting and transaction costs. The projects even allowed residents to bring their shacks from their former squatter settlements, and live in them temporarily while building – an extraordinary unusual concept for its time. The approach takes advantage of households’ ability to use their own labor to build a house over time, as savings are accumulated. These programs generated and combined credit, subsidies, household savings and, in some cases labor as contributions in-kind. They have been built in dozens of countries with many successful examples. However by the late 1980s, international development agencies and governments shifted funding priorities from sites-and-services to supporting municipal development and later, with the Millennium Development Goals, to slum upgrading, as the main challenge to address. Still, upgrading slums is only effective if a proactive response is also given to what creates slums: access by the poor to land, utilities, secure tenure and credit. Providing these needs is the objective of sites-and-services programs. That is the objective of sites and services programs.

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<sup>2</sup> In Africa, Asia and Guatemala, Peru, Nicaragua, Chile, Bolivia, Brasil, etc. One of the earliest examples (1970) was carried out by FUNDASAL, a Salvadorian NGO.

<sup>3</sup> World Bank (FUNDASAL project 1974) and IDB (*note: need to cite earliest IDB projects*)

## **Sites-and-Services Pros and Cons**

### Advantages of Sites-and-Services:

- Helps government prioritize and make available land for low-income housing as part of city growth plans.
- Can help rationalize land markets
- Gives households legal status
- Organizes, facilitates and speeds up the incremental process
- Helps mobilize savings for shelter
- Can promote community cohesion and shared responsibilities
- Provides conduits for complementary social assistance programs
- Organizes/ improves coordination among infrastructure, utilities and service agencies
- Can be a conduit for private sector partnerships
- Lowers the cost of housing production for government and for homeowners

### Difficulties of Sites-and-Services:

- Requires political commitment over time
- Needs political will to address land assembly and acquisition
- Must change attitudes, and resistance, conventional complete house production concept

# 3. A SURVEY IN TIME

## Capturing the incremental expansion process

### 3.1 THE SURVEY APPROACH

*The magnitude and impact of incremental building in the production of housing*

As in most Latin American countries, incremental home construction predominates in both illegal settlements (squatters, unauthorized subdivisions, etc.) and in officially sanctioned developments (i.e., sites and services). Moreover expanding and improving houses is pervasive throughout the low-income housing sector. Most residents of government turnkey house projects also modify or expand their houses (see Tables 1-3). Homeowners want more space, different living arrangements, upgraded utilities – and as a whole, seek to customize and personalize how the house looks. Therefore the survey looked at resident strategies of three types of settlements - illegal, sites and services and turnkey housing projects. Seven settlements representing the types were sampled, and a total of 210 households were interviewed. The survey collected data at four levels: household, community, city, and country, with their respective objectives and implications/ effects as shown below.

LEVEL	DATA OBJECTIVE	POLICY CONSIDERATIONS
1. HOUSEHOLDS	<i>Interviews, house survey:</i> <ul style="list-style-type: none"> <li>household income /size</li> <li>family strategies, improvements, build-outs</li> <li>costs (at start, improvements)</li> <li>investment triggers</li> <li>quality</li> </ul>	<ul style="list-style-type: none"> <li>Influence of existing policies: Immediate, direct impact</li> <li>Active / effective enabling environment and,</li> <li>Legislation and enforcement: Individual scale of impact</li> </ul>
2. COMMUNITIES	<i>Settlement site survey:</i> <ul style="list-style-type: none"> <li>Legal status</li> <li>location factors related to levels of incremental expansion</li> <li>land values</li> <li>influence of timing of provision of services/utilities</li> <li>increased commercial facilities</li> </ul>	Passive delayed impact; autonomous decision making  Large-scale effect  <i>( Can data be captured to show causality?)</i>
3. CITY	<i>City externalities:</i> <ul style="list-style-type: none"> <li>growth adjacent to settlement</li> <li>influences on land value</li> <li>availability/cost of public transport</li> <li>availability of trunk infrastructure</li> <li>cost of construction materials and labor</li> </ul>	Passive indirect, delayed impact; autonomous  City scale affect  <i>(May be difficult to show causality)</i>
4. COUNTRY	<i>Country externalities:</i> <ul style="list-style-type: none"> <li>housing policies</li> <li>public housing production</li> <li>access to credit / subsidiesinflation / dollarization</li> <li>private sector housing production</li> </ul>	Generally passive, indirect, delayed impact; autonomous  City, country scale affect  <i>(May be difficult to show causality)</i>

### 3.2 METHODOLOGY

This longitudinal survey aims to capture the dynamics of incremental house expansion. A diagram (shown in section \_\_\_) links house expansion, household income, and family size, typically over a 30-year period to quickly indicate pivotal growth points. Additional external data is collected separately, and combined with the diagram timeline. Inflation rate, cost of materials index, economic situation of the city and country, relative location of the surveyed area within the city, provision of infrastructure, and title are correlated for their effect on expansion decisions made by homeowners.

The focus at this stage is a broad overview for determining key variables, which are catalysts to expansion. This survey sets the stage for more detailed family surveys that go deeper into understanding the incremental construction of the houses.

### 3.3 AREAS SURVEYED

The full range of low-income housing options were surveyed and compared. Most of the survey areas were settled in the late 1970s. They ranged from officially planned projects which included finished, complete houses, and sites-and-services starter building cores where home-owners complete and expand their homes (FUNDASAL projects), to illegal squatter developments, to upgrading and legalized former squatter settlements, and to semi-legal private developments (i.e., known as ARGOZ<sup>1</sup>-type developments).

Table 4: SETTLEMENT TYPES SURVEYED						
Settlement	Date	# plots /families	Type of Units	Community organization	Tenure	Comments
<b>Nuevos asentamientos urbanos – Baseline reference sites-and-services settlements with core houses - FUNDASAL</b>						
1. “El Pepeto” Soyapango (AMSS)	1975	530	LS US UB	Directiva y sectores	legalizada	Típico “lotes con servicios (L/S)” Fundasal Ayuda mutua y crédito en materiales
2. “Sensunapan” Sonsonate	1977	563	LS US UB	Directiva y sectores	legalizada	L/S Fundasal en ciudad secundaria; lotificación con “clusters”
<b>Mejoramiento de barrios – An upgraded settlement, with innovative 2-story core housing</b>						
3. “Las Palmas” San Salvador	1997 a 2001	1200	UB	Directiva y sectores	legalizada	Mejoramiento de infraestructura con unidades básicas
<b>Barrios sin intervenciones – An informal/illegal “Tugurio” - not upgraded</b>						
4. “Jardines del Boulevard” San Salvador	1965	140	“Champas”	Organización autónoma	No legal	Autogestión en mejorar infraestructura

<sup>1</sup> AGOZ is a private development company (no longer in operation) that produced an estimated 200,000 plots (with unpaved streets, but no infrastructure) in subdivisions throughout the country – a ‘sites without services’ alternative. Plots were rented with the option to buy. Lands were outside urban municipalities, so not eligible for services.

Lotificaciones privadas – A private sector land subdivision without services ( Argoz type - provisional selection.						
5. “Nueva Trinidad” Soyapango AMSS	1973 - move in 1992	144 familias			Legal venta, ilegal develop	
Urbanizaciones legales – Formal public and private sector low-income housing projects						
6. “Nuevo Horizonte” Soyapango AMSS	1985		Vivienda completa			Tipo Fondo Social para la Vivienda (FSV)
7. “Altavista” Soyapango AMSS	2007		Vivienda completa			Tipo desarrollo privado: Grupo Roble

Note: LS – lots with services; US – sanitary core; UB – basic unit.

### 3.4 AN INNOVATIVE SURVEY AND CELEBRATION

The household survey was specifically designed to both a) capture the family history as central to the home construction process and, b) the evolutionary (i.e., service improvements over time) influences on the settlement and its community. For this to be possible a key element of the analysis was a combination of household interviews with a celebration of community success: one community-wide weekend festival event for each community surveyed. The “*Festival de la Vivienda y Comunidad*” pays tribute to the efforts of expanding houses and provides the basis for a survey of the neighborhood’s development – two processes that are interlinked. In this way, it was not ‘just a survey’, but a way toward re-energizing the sense of community along with a serious reflection in understanding the process. The survey teams were not just surveyors, but guides who helped the families understand and reflect. The survey forms provided the structure for reflection with the families and produced the information for policy considerations. For example, in discussions with community members in the former mutual-help core house/site and services projects, most lamented and deplored the loss of the original communal spirit generated by working together during the mutual-help construction stage. The *Festival* is a way to help rekindle their solidarity, and, possibly to pass on to their children – now grown – the community bonds of the past.



### 3.5 SUMMARY OF SURVEY STAGES

There are seven stages to the surveys in each community.

SET-UP

#### 1 – INITIAL CONTACT WITH COMMUNITY

- Brief leaders and full community on the study.
- Reach agreement with community for the 'Celebration of Our Community.' – a weekend of surveys and celebration.

#### 2 – DETERMINATION OF THREE STAGES OF HOUSING SUCCESSES BY THE COMMUNITY: BASIC, CONSOLIDATED, EXPANSION

- After the initial meeting, a brief explanation of the task and the description of the 3 stages was made to the community.
- A large-scale base map was given to the community on which to locate the various house stages.
- The three types were identified with community leaders to guide the selection throughout the project.
- The community selected the members to carry out the survey
- The completed community map with the three stages of expansion was made available before the planned weekend 'Celebration of Our Community'
- The plan guided the Survey Teams in selecting projects to survey.

The Celebration of Our Community

#### 3 – THE WEEKEND 'Festival de la Vivienda y Comunidad – THE START

- The 'Coordinador' and the student survey teams met with the leaders and the community to introduce themselves and begin the surveys
- A community member accompanied each of the student survey teams throughout the survey.
- The 'Coordinador' assigned families to be interviewed by each of the student survey teams. 10 houses of each type (basic, consolidated, expanded) were selected. If there were not 10 in a category, the extra was shifted to the next type. A total of 30 interviews were conducted in each project.
- Each student team had individual distinguishing vests, a clipboard of the survey questionnaire, a digital camera, and a sketchpad. A tape recorder was optional, but ideal.

#### 4 – THE WEEKEND Festival – THE SURVEYS

- One hour was allocated for each survey. At the minimum, three on Saturday, two on Sunday. All five were done Saturday, time permitting
- Each student survey team carried out five surveys.
- Each family survey included:
  - (Photograph of front of house with house number as means of information control)
  - Introduction to family, explanation of purpose
  - Discussion of family situation: 2.1 El Comino, 2.2 Tamaño de los Hogares
  - Walk-through of the house with the family – Photos of the house interior
  - Discussion of the house – 2.4 Diagram: Ingreso de los Hogares
  - Discussion of the household income – 2.4 Diagram: Ingreso de los Hogares
  - Discussion of the current stage of the house – 2.5 Cuestionario: Estado Actual
  - Parallel to discussions is the measurement of the house and additional photos as needed. 3.1 Plan de Casa, 4.1g Foto Documentacion
  - Closing: photograph of family and survey team in front of house

#### 5 – THE WEEKEND CELEBRATION - END OF EACH DAY OF SURVEYS

- The survey teams would review their responses; complete the house expansion sketches if necessary, prepare the 'thumbnail expansion sketch', and prepare the brief 1-paragraph narrative of the family trajectory. 3.2 Proceso de Narrativa
- The Coordinador would review the survey forms and data to check the data responses, determine if adjustments to the format are required, or if necessary to return and complete missing or incomplete information.

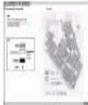
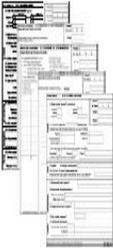
#### 6 - THE WEEKEND CELEBRATION– THE CLOSING FESTIVAL

- Opening - welcome to the community-by-community leaders
- Congratulations by government officials
- Brief overview of the surveys, and thank-you by FUNDASAL
- Reflections by original community members
- Music! Food! Dancing!

## 7 – COLLECTION AND DIGITIZING OF DATA AFTER Festival SURVEYS

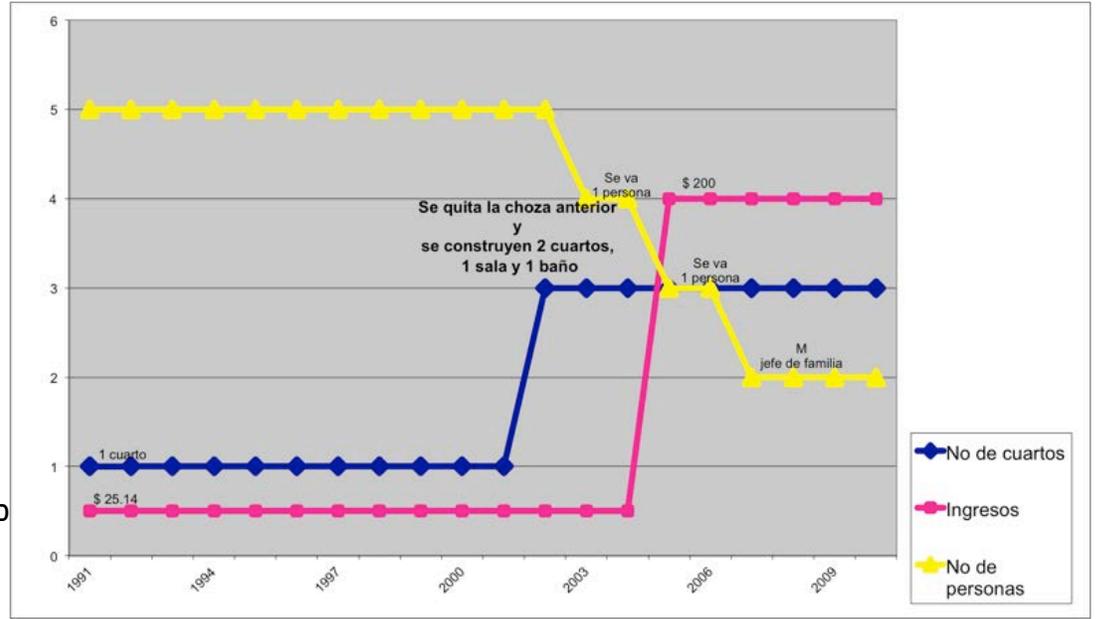
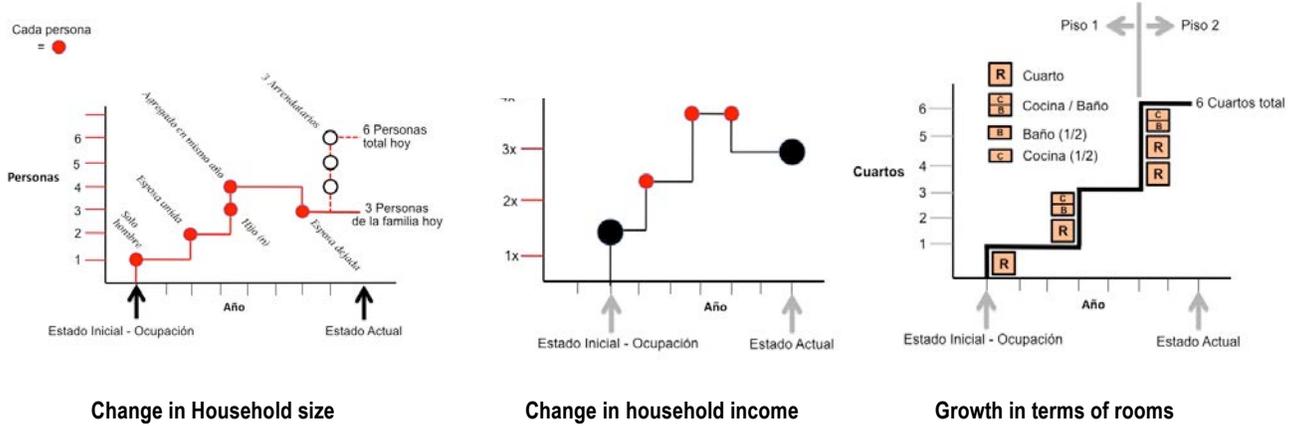
- The data forms, photographs, and measured drawings of the house, the growth ‘thumbnails’ were collected by the ‘Digitador’ at the end of the Ferias, or shortly thereafter.

### 3.6 SUMMARY OF SURVEY QUESTIONNAIRES AND DATA

	Survey Forms	Who collects	Issues Addressed
<b>1.0 HOUSING TYPES AND LOCATION</b> 	Survey Form: 1.1 Localización de los tipos	<i>Prepared by community before survey weekend</i>	<ul style="list-style-type: none"> <li>• Number and location of types in project (high value areas, interior streets, etc.)</li> <li>• Number and location of small stores in houses as income improvement</li> </ul>
<b>2.0 FAMILY DATA</b> 	Survey Forms: 2.1 Cuestionario: Estado Actual 2.2 Diagram: Tamaño de los Hogares 2.3 Diagram: Hogar de Expansión 2.4 Diagram: Ingreso de los Hogares 2.5 Cuestionario: El Comienzo	<i>Prepared by Survey Team during field survey weekend; 4 person survey-term includes community member; estimated time for each survey 1 hour</i>	<ul style="list-style-type: none"> <li>• Reasons for participation in project</li> <li>• House description at move-in and current</li> <li>• Payments at move-in and current, tenure</li> <li>• Trajectory of house expansion</li> <li>• ‘Trigger’/ motivation for house expansion</li> <li>• Constraints and expansion support: funds, labor, etc.</li> <li>• Change of family size and income related to house expansion</li> <li>• Relation to externalities (title, loans, remittances, rental income; disasters, etc.)</li> <li>• Services available in area</li> <li>• Increase in value (calculated)</li> <li>• Govt inputs compared to outcome</li> <li>• Problems/suggestions during expansion</li> <li>• Future expansion</li> <li>• Level of perceived security in community</li> </ul>
<b>3.0 HOUSE DATA</b> 	Survey Forms: 3.1 Plan de Casa 3.2 Proceso de Narrativa	<i>Plan prepared by Documentor during field survey</i> <i>Narrativa by Documentor and ‘Talker’</i>	<ul style="list-style-type: none"> <li>• Location and area of additions</li> <li>• Sequence of expansion</li> <li>• Use of spaces</li> <li>• Summary of process</li> </ul> <p><i>Speculation: is there an impact from engaging in survey in encouraging expansion?</i></p>
<b>4.0 PHOTO DOCUMENTATION</b> 	Survey Form: 4.1 Foto Documentación	<i>Prepared by Documentor during field survey</i>	<ul style="list-style-type: none"> <li>• Qualitative information</li> <li>• Construction details, level of maintenance, room uses.</li> <li>• Materials in building</li> </ul>
<b>5.0 EXTERNALITIES</b> 	<i>No specific form.</i> <i>Prepared in data table and ‘timeline’ format</i>	<i>Prepared by Investigator from published references</i>	<ul style="list-style-type: none"> <li>• External factors to determine impact on expansion of house; for example, wars, inflation rates, economic situation of city/country</li> <li>• Timeline of relative location of survey area</li> <li>• Timeline of service provisions in areas</li> <li>• Initial cost to govt, beginning project description</li> </ul>

### 3.7 SURVEY DIAGRAM: INCOME, HOUSEHOLD SIZE, HOUSE SIZE OVER TIME

Three key data attributes at the family level were graphed to facilitate understanding of shifts in household changes over time: household size, income (in terms of multiples of basic minimum income), and house expansion (in terms of room additions). Comparison of the diagrams offers ready identification of the inter-relation among the three. They show the intervals between expansions as related to the other factors, persons/room may be determined, and triggers dates.



### 3.8 SELECTION OF HOUSEHOLDS TO SURVEY

Housing is considered to fall into three categories: basic (*fundamental*), consolidated (*consolidada*), and expanded (*ampliada*). All three types were surveyed with equal distribution – i.e., 10 of basic, 10 of consolidated, and 10 of expanded in each settlement type. The community identified the house categories in their community following guidelines from example images of each type in their community.

*The 'basic' or 'fundamental' is the first step for families when they move in. Some families do not progress further. The 'Consolidated' shows considerable investment by a family, and by all measures is a standard, good quality house. The Expanded example is even more elaborate, and opens the possibility of adding to the housing stock of a city and potentially rental income as well.*



## 4. SURVEY FINDINGS

### 4.1 WHAT DOES THE SURVEY TELL US?

[Note: taken from field reports - some data subject to verification]

#### EL PEPETO

Sites-and-services  
with core starter  
house



#### 1. Settlement pattern

##### History

The *El Pepeto* subdivision is located in the municipality of Soyapango near the town of Ilopango – within the metropolitan area of San Salvador. It has an approximate area of 6km<sup>2</sup>, and is home to 1,500 families (about 7,500 people) on the same number of lots. It has 14 small neighborhood parks, a community center, a school and a mini sports complex built by the community with funding by the Ministry of Education.

The subdivision was built in 1972, as a project of FUNDASAL. It is the third of many sites-and-services projects built by the NGO, and the first one with a population of over 1,000 plots. The residents applied from different parts of the country (although the majority were from metro San Salvador) and resettled to the site. The land, near the airport, was purchased by FUNDASAL from the Air Force. Upon completion of civil works and occupancy by residents, the subdivision was officially transferred to the Municipality of Soyapango that is responsible for providing municipal services and maintenance. The site is within 15 minutes to social and productive land uses: commercial centers Unicentro, World Plaza, Plaza Soyapango and Hiper Paiz Soyapango, Psychiatric Hospital, DIANA industries, Indian and Seed Chicken Cristiani Burkard, S. A. (which distributes seed and fertilizer for planting).

In keeping with FUNDASAL's methodology, households purchasing plots went through a program of community organization and participation groups of mutual-help construction of community infrastructure works, specifically in building the sanitary cores and 'basic' one room starter or core house. The community organization leaders elected by residents provided social and organizational activities for the entire settlements. Their representatives interfaced with municipal officials on a number of issues and needs.

##### Physical conditions of the settlement

The site has good topography. Access into the community has been upgraded and paved (at the insistence and lobbying of the community representatives) by the municipality a few years after occupancy, and as a result has bus service to the center of San Salvador.

The average plot has a dimension of 6 m by 10 m, and most houses cover the entire area (as a result of small plot size). Houses are built with different materials, now predominantly a mixed system, with a concrete or tile floor and corrugated roofing. Several families have built second floors; some have even added a third story.

The supply of drinking water is per household, piped and connected to each house. Families pay on average \$56 for monthly service, including sewer and drainage. The storm water is carried by a system of surface channels leading to a sewer main. All homes have electricity supplied, the average payment for which is \$ 10 per month per household. There is poor street lighting, no public phones in the subdivision. Most households have house landline telephone service (pre-cell phone service).

##### Socioeconomic

The community's board of directors in office was elected in August 2008 and has legal status to represent the community. The municipal government has been working well with the community in the last decade. The average family income is estimated at \$ 150 per month. The men work as laborers and farmers, women serve as factory workers, laundresses, domestic workers and street merchants.

The main problems for the community are teenage pregnancy, unemployment and lack of childcare. The youth is at-risk due to the lack of opportunities for job training and structured recreational activities. Teenagers not in school

are unemployed and some have trouble with gangs (*Maras*), but fewer than elsewhere because the community has a very strong, cohesive influence.

#### *Prioritized needs*

Small businesses in *El Pepeto* consist of such activities as fruit vendors and making tamales. On average there are a variety of small stores in houses that offer convenience goods to the neighborhood.

*Improvements needed, as identified by community leaders are:*

- a) Improve the infrastructure of the community house
- b) The care and maintenance of green areas
- c) Improve street lighting
- d) The maintenance of the sports facility

*So far the community has managed the following projects:*

- a) Construction of a Sports Complex with the National Public Security Council.
- b) Improvement of the Community House and refuse collection service with the municipality of Soyapango

## **2. Observed incremental development**

### a) Description of development found in houses and their immediate surroundings

To date, 27% of the households surveyed have title to their homes; 13% to not, mainly because they lack sufficient funds to process the title through the legal registry. 57% have another type (pre-title) of document securing their ownership.

It is important to note that over time, the overall quality of housing and access to basic services has improved considerably. Now 100% of households have clean piped water in their house, as opposed to 33% in the subdivision when first occupied. Today 93% have direct connections to water mains, as opposed to 30% in the beginning. The electrical service is also widespread - 93% of households have connections, while at first only 30% had access. Also 97% of households have access to sewer lines is provided by the municipality. Initially only 17% of households were served.

### Incremental development of the household characteristics: growth household size, changes in income. Triggers.

For *El Pepeto* 93% of households surveyed, increases in family income were one of the main triggers for improving the house. This has two aspects: upgrading the quality/permanence of construction (i.e., replacing a scrap wood wall with concrete block, etc.) or to increase the number of rooms; over 90% of the improvements was the construction of bedrooms and bathrooms.

The household earnings increased in the range of U.S. \$ 150 initially to \$ 600 in most cases, with some salaries over U.S. \$ 900. The role of remittances is unclear.<sup>1</sup>

Impact on incremental development with respect to the city growth and the location of the settlement, which originally was surrounded by cane fields and the airport. The city of Soyapango from the time the *El Pepeto* settlement was occupied has expanded around the site. It originally had only one unpaved access road; now it is incorporated to the city's street grid.

According to census data, Soyapango's population has grown from 2,730 1980 to 241,403 inhabitants in 2007. Comparison of the 1992 census years Soyapango of 261,122 inhabitants with the 2007 census of 241,403 inhabitants indicates that Soyapango lost 7.6% of population. This suggests that instead of immigration into metro San Salvador and neighboring municipalities as was the case before 1992, the phenomenon of migration to the United States and the growth of other municipalities that offer advantages in housing, especially the municipalities of Valle San Andrés to the west of the capital, was noted.

*El Pepeto* was one of the first settlements to be built east of the hospital (north-east of downtown). In effect, the subdivision spurred the subsequent development of other residential 'colonias'. The city of Soyapango has grown toward the east and north of the center over the past three decades, resulting in the consolidation of these areas,

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<sup>1</sup> The remittance issue: respondents were, in general, hesitant to discuss this, perhaps because their relatives are "illegal" in the countries to which they have immigrated. This is a difficult source to quantify.

improving services and increasing density of the population, services, amenities, transport and, therefore increased land values.

Value of incremental development to support programs and funding strategies

The settlement was conceived as a new approach to housing families of limited income, planned by FUNDASAL with the concept that the poor do have the ability to build houses, but they lack key support: affordable land, credit to pay over time, and a way to have their land and house not be at risk of being taken from them. In addition, what these families needed was a way to make the land and the house affordable. They could make small investments as they earned income. In fact, many of El Pepeto's households moved from rented rooms in center-city *mesones*, where they could save enough for the monthly rent. FUNDASAL made the project cost roughly equivalent to the rent. But it depended on lowering the cost of house construction by doing the building gradually. The other objective was to have some costs – mostly the down payments - as sweat equity, in the form of mutual help (*ayuda mutua*) where groups of residents worked together to build the core units. The other element was a method of financing that combined credit, subsidies and a line of credit for construction materials to use in “finishing” the core unit, making it habitable. Many participants dismantled their temporary shacks, moved them and temporarily lived in them on their new plot during construction.

In addition to the focus on supporting residents with the incremental process, FUNDASAL helped establish the community organization and development. A specialized workforce of social workers and building technicians helped jump-start the community and the individual house building efforts. The result was that the community, as well as individuals, were prepared for building on their own, as well as to make the community lobby for services from the utilities and the municipality. Having legal status was key in these efforts, which had the effect of speeding up the incremental process.

**EL PEPETO – Sites and Services, Core House  
TYPICAL HOUSES**

**FUNDAMENTAL**



**CONSOLIDATED**

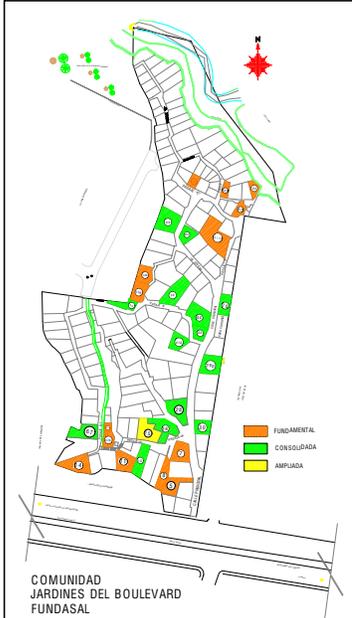


**EXPANDED**



## JARDINES DEL BOULEVARD

*Illegal settlement,  
not upgraded*



### 1. Characteristics of the settlement

#### *History*

*Jardines del Boulevard* is an illegal squatter settlement located adjacent to the Pan American highway, near the World Square shopping center and Hiper Paiz, in the municipality of Soyapango. The settlement is under the jurisdiction of the Municipality of Soyapango, part of metropolitan San Salvador. The settlement is about 40 years old, and only recently has a process of regularization of tenure started in anticipation of the settlement being upgraded by the municipality. Families settled the site from different areas of San Salvador – most by those unable to pay rents in the central city. The settlement has an area of about 1.7km<sup>2</sup>, housing about 135 families (about 675 persons) on the same number of lots. They are in the process of legalizing the possession of the house as residents have been living, on average, 40 years in the area. Most housing has occupied the entire area of land to housing. Most of the houses are laminated tin or cardboard, some homes are mixed materials, with a tile floor and corrugated tin roof.

#### *Physical condition of the settlement*

The site has topography with moderate slopes and adjoins a creek. Access to the community is from unpaved vehicular and pedestrian paths. There is no sewer system, only surface drain off. There is no adequate storm drainage. Households charged by monthly consumption, the average being U.S. \$ 2.29, purchase the supply of potable water. The supply is irregular. All homes have electricity supply with an average payment of \$ 8 per month per household. There is poor public street lighting in the community. There are no public phones, however 50% of households have telephone service, and cellular phone use is common.

The settlement is located in an area that has undergone considerable development over the past three decades, and it is adjacent to shopping malls Plaza Mundo, Hiper Paiz, Café de Don Pedro, and very close (approximately 5 minutes) of the Social Security Hospital Amatepec, Banks and industrial zone with Mills El Salvador (MOLSA), the Unilever plant, industries DIANA, SV Poultry and the seed industry Cristian Burkard, SA (which distributes seed and fertilizer for planting), all on the Panamerican Highway. The Eastern Bus Terminal, is also located near the community.

#### *Socioeconomic*

There are small businesses within the community, mostly convenience stores and small bakeries making traditional breads. At the main entrance of the community is a small deposit for recycling plastic, aluminum and metal. The average family income is estimated at \$ 150 per month. The men work as laborers and as recyclers, women in factories (maquiladoras), laundresses, domestic workers and street merchants.

The main problems for residents are lack of steady employment, youth at risk of joining gangs, crime and violence. Unemployment for young males is extremely high. As a result, there is the presence of gangs in the community. Challenges facing children are poverty, family disintegration, and lack of motivation to improve academic success. Support for health care and sanitation comes from the Social Security Hospital and FOSALUD Amatepec.

#### *Prioritized needs for improvement*

The settlement has been recently recognized and legally registered by the municipality. The community board of directors now in office was elected in August 2010, for a two-year term.

Priority needs for the leaders to improve the neighborhood are:

- a) Completing the process of regularization (tenure security)
- b) Introduction of sanitation and wastewater drainage
- c) Improving road access into the community
- d) Realignment of footpaths and street storm drainage channels

### 2. Incremental development in the settlements

#### a) Description of development found in houses and their immediate surroundings

This community is not legal because its original settlers were squatters. The conditions and quality of housing and

some access to basic services has improved in the past forty years. Now 73% of households have clean water, while 13% had access when the squatting began. Presently 23% have access to piped water mains, as opposed to none at the beginning. The electrical service is now also widespread, with 80% of households connected, while at first only 23% had access to power. Also, only 23% of households have access to toilets and sewers.

b) Incremental development of the household characteristics: growth in membership, changes in income. Triggers.

Presently 77% of households surveyed stated that an increase in family income has been one of the main triggers for improving the house. Other triggers are the need to upgrade parts of the house with better materials (i.e., new tin roof,) and adding a room. Over 90% of improvements were building a bedroom and a septic tank.

Wages increased six-fold, from \$100 per month initially to \$ 600, in most cases. Remittances are an important factor that residents were un-willing to divulge. In four cases, even though there was a decline in wage income, households managed to increase the number of rooms of their homes because of remittances.

c) Value of incremental development: growth of the city

In the period 1961 to 1971, when population growth accelerated, corresponding to the time when people were drawn to the metropolitan San Salvador, Soyapango, the town at the eastern outskirts of San Salvador was prime for accommodating the city's growth. It was during this decade that the Panamerican highway attracted a booming industrial zone, although without any planning. This attracted the development of many middle income housing developments as well as land invasions. Within this dynamic, coupled with the problem of civil war during the 1980s, the location of Jardines del Boulevard was ideal, both for the safety it provided and the proximity to services and potential jobs.

This situation helped the residents by providing sources of jobs – if temporary – and solidified resolve to stay in the settlement, despite the poor conditions and lack of services or tenure security. Yet over the years most households made small improvements to their houses.

d) Value of incremental development to support programs and funding strategies

*Jardines del Boulevard* settlement has not counted on support or funding programs that have facilitated the incremental development of their homes.

**JARDINES DEL BOULEVARD - Illegal, not upgraded**

**TYPICAL HOUSES**

(Pasaje C. No. 104 – Fundamental)



(Pasaje C, 97 – Fundamental)



(Pasaje C, No. 94 – Fundamental)



(Calle Principal y Pasaje A, No. 7 – Fundamental)



(Pasaje A, No. 10 – Consolidated\_



## LAS PALMAS

### Upgraded settlement



### 1. Characteristics of the settlement

#### History

Las Palmas is a slum settlement invaded by squatters and it is located on the embankment of a major river, La Lechuza. It is located at the edge of a middle-high income residential neighborhood, Colonia Escalon, in the southwestern part of San Salvador. The invasions began six decades ago, primarily because residents found the adjoining neighborhood a source of employment as domestic workers, gardeners, laundresses, shoe repairmen, ambulatory vegetable vendors, etc. In its 60-year history, the population has reached more than 1,300 families. In the past two decades residents of the high-income subdivision began complaining and speculating that increasing crime and burglaries were originating from the squatter settlement. Tensions between the two groups grew and escalated in requests to municipal authorities to evict and bulldoze Las Palmas. Negotiations ended in an agreement to work together against crime and to lobby for its upgrading. FUNDASAL, an intermediary, took on the task, with substantial funding from residents of Colonia Escalon.

The community is divided into 18 neighborhoods. The community site has a rugged topography in which the neighborhoods 1, 5, 16 and 17 are at risk from landslides in the area. The community is well organized into a central executive secretariat supported by representatives from each neighborhood. There are a number of other social groups: Alcoholics Anonymous, religious committees, sports clubs and others.

FUNDASAL implemented between the years 1997-2001 a comprehensive slum upgrading project with the support of the German Development Bank (KfW). During that project, the community legalized their land, which originally belonged to the state, and basic services, community development programs and social workers were provided. The community participated in the process. The project improved access, sanitized rubbish dumps, installed dry pit latrines and built community and sporting facilities. Landslide protection works were carried out to stabilize the topography and protect it from occasional flooding by the La Lechuza River. On the social side, the project improved the quality of community organization, their relationship and management skills to local institutions and educated families about environmental preservation.

#### Physical condition of the settlement.

Access to the community is now possible both in the form of vehicular and pedestrian, and post-upgrading several bus routes leading to the settlement are now operational.

The supply of drinking water is by household connections and metered, the amount each month for a family ranges from \$ 5 to \$ 8 dollars. The service is efficient, but about 85% of households have not activated the connections and service because of the connection charges, fees to register and various time-consuming steps to get the connections from the utility company. This is a recent upgrade, and individual final connections, including the meters are still pending. Drainage is upgraded and connects to a collector with direct discharge to the river. All homes have an electricity supply. The average payment is between \$ 8 and \$ 10 per month for home consumption. There is street lighting in the community. There are public phones in the environment and 50% of households have telephone service. The average lot size is 10 m x 12 m, but not all lots are equal. Most families have occupied the entire area of land with the house construction. Dwellings are of a mixed system, with tile floor and corrugated roof.

#### Socioeconomic

The community is hampered by the presence of gangs, which creates insecurity among the population. The neighborhood number 17 is known as the "Lost City" because of the high presence of gangs and drug trade. This is one of the reasons why the community requested a police sub-station. The community organization has had trouble operating due to the high crime rate present in the community.

The average family income is estimated at \$ 150 per month. The men work as laborers and women as factory workers, laundresses, domestic workers and street merchants. The main problem faced by families affecting areas 1, 5, 16 and 17 is the youth sector at risk by the presence of gangs. Yet, there are also young people who have

created capacities for resilience, incorporated community leadership, who say that the physical improvement of the community has awakened their motivation and influenced personal development.

Nombre	Cobertura
Centro Educativo	De parvularia a 9º grado
Clínica comunal	Sector comunal
Iglesia evangelica Apostoles y profetas	En la parcela 5 bis
Puesto policial	Toda la comunidad
Casa comunal	Toda la comunidad

The community is part of the Municipality of San Salvador (MOP), District 3. It provides repairs of the main street. The Community Development Association (ADESCO) helps manage relationships with the municipality, and the MOP in supporting crime and gang mitigation.

Proyecto	Entidad cooperante.
1-Legalización de la tenencia	Instituto Libertad y Progreso (ILP)
2-Mejoramiento de servicios básicos	FUNDASAL
3-Casa cultural	Alcaldía Municipal

### 1. Incremental development in the settlements observed

#### a) Description of development found in houses and their immediate surroundings.

Although at the time of settlement *Las Palmas* was an illegal land occupation, the entire community is now regularized and legal.

Over the sixty-year period, there was a small, gradual amount of improvement to some houses and some group efforts to improve drainage, etc. With the upgrading program 100% of households have access to potable water, even if they have not legally made their connection (only 47% had prior to the project). Now 93% have access to water mains, as opposed to only 53% prior. The electrical service is also widespread, 90% of households connected, at first only 33% had access. Also, 97% of households have access to toilets and connect to a sewer main; 70% had pit latrines at the onset. The sewerage service is provided by the municipality.

#### b) Value of incremental development of the household characteristics: growth in membership, changes in income. Triggers.

Presently, 70% of households surveyed did not have title to their homes. 23% have another type of document.<sup>2</sup>

#### c) Value of incremental development with the environment: growth of the city.

With the opening of the grand boulevard, Alameda Roosevelt, in the 1930s, the new San Salvador began developing, leading to the construction of the Colonia Flor Blanca and other developments that reach Plaza Las Americas, known as El Salvador del Mundo. From the 1950s, the road to Santa Tecla, known as Alameda Enrique Araujo also began to position itself as one of the streets of the capital where major offices, their staff, banks, restaurants began to locate. This was an important point for both areas also for the wealthy, as well as for invasions of the poor and landless to began to build. Within this dynamic began the building of the community of Las Palmas, one of the oldest settlements in the Salvadoran capital.

Between 1945 and 1965 the most dynamic growth to San Salvador occurred, tripling its size in urban area. The largest area of employment in the country was the center of the city, with 50% of total employment, 33% in the rest of the Metropolitan Area of San Salvador (AMSS) and 17% in neighboring municipalities. This economic dynamic influenced the squatter settlement of Las Palmas in its current location because of access to nearby employment in

<sup>2</sup> Note: Need to determine status of other 7%.

the capital or in Santa Tecla. In 1986, AMSS played a lead role as cultural, commercial and industrial of the country, consolidating major regional influence and dominance as the central pole and services in the region.

d) Value of incremental development to support programs and funding strategies

FUNDASAL provided support to *Las Palmas* after the 1986 earthquake, and subsequently developed interventions to improve the community, including: introduction of basic services, re-blocking of the settlement, creation of public spaces, mitigating landslides and regularization of tenure. The upgrading project consisted of re-blocking the original shacks to reorganized walkways and paving vehicular streets. The process included rebuilding new almost completed concrete block houses designed to immediately accommodate families, but that could easily be expanded to a second story. Therefore the residents have gone through two stages: squatting for decades in precarious conditions of house and settlement with little incremental improvements and, suddenly transformed into a fully developed subdivision with good standard housed by the upgrading project. The costs of upgrading are unusually high (and therefore subsidized) because of the higher standards used. Some households have already expanded the new houses.

**LAS PALMAS – Upgraded settlement, 2-story  
TYPICAL HOUSES**

**FUNDAMENTAL**



**CONSOLIDATED / EXPANDED**



## SENSUNAPAN

### Site and Services with core house



### 1. Characteristics of the settlement

*Sensunapan* is a sites-and-services project developed by FUNDASAL with World Bank co-funding 35 years ago. It is located in Sonsonate, the fourth largest city of El Salvador. The project followed the *El Pepeto* project of San Salvador, and applied the same concept and methodologies, with certain adjustments in planning layout and core house designs. It sought to lower unit costs and improve affordability, and most importantly, to facilitate the long-term process of making improvements to core units. The resident population was somewhat lower income than the (low-income) families of *El Pepeto*. They had been living in tenements (*mesones*) in center city Sonsonate, which, at the time had a lower cost-of-living than the capital. FUNDASAL organized a participatory design and selection process, with many consultative meetings with potential project applicants. In 1977, the families were selected, organized and trained, and begin the process of building their homes through the mutual help (*ayuda mutua*), each household donating labor on weekends as contributions to their down-payments. The mutual help groups, mostly lead by women, formed a strong community bond that helped build and take on a share of responsibility for post-occupancy improvement processes.

Today Sensunapan is fully developed as a subdivision, with houses showing a wide range of expansion and consolidation – and visible evidence of the wide range of strategies, preferences and abilities to invest in their homes. Many added second and third floors, although some only were able to make (or needed) minimum improvements to the original core units. The subdivision has very good social infrastructure: schools provide elementary through high school, a police post, all utilities, and street improvements. Some have added small shops or service businesses to their houses, including a Cyber Internet Café, and there are home businesses as cafes, shops, and small restaurants. The incidence of gang and criminal violence is minimal within the community.

The community's board of directors manages the following projects: Sensunapan Education Center (school), a community hall, and a small market where in the future it will operate a community health clinic.

### 2. Incremental development in the settlement

#### a) Description of development found in houses and their immediate surroundings

To date, 33% of households surveyed have title to their home. 64% have other types of tenure documents. The reason most still have not managed registering titles is due to the time and costs involved. Another reason is that there is no perceived need: there is no intention of selling the property (many have now been inherited) and residents do not use the house as loan collateral.

It is important to note that with the passage of time, the quality of housing has risen, and access to basic services improvements is complete. All households have potable city-supplied water, (compared to only 47% at occupancy). Electrical service is also widespread, 93% of households have meters, at first only 43% had. Also, 97% of households have access to the sewer system, versus only 33% stake this service in the early settlement. The sewer system is provided by the municipality.

#### b) Value of incremental development of the household characteristics: growth in membership, changes in income. Triggers.

Investment triggers: 83% of households surveyed stated that an increase in family income has been one of main triggers for improving the house. The main improvements have been: upgrading construction material from wood to block, increase in the number of rooms and improvements to the roof. It is important to note that 10% of homes have had no increase in income, which means they have not added rooms. 7% of households reported their income is so low that the household cannot afford to make changes (improvements or new spaces.)

The wage increases occurred among ranges from U.S. \$ 100 initially to U.S. \$ 650 monthly in most cases, and there is one case of a salary of \$ 2000. We must take into account that remittances are important in improving the economy of residents, but it is difficult to quantify. Sonsonate is one of the cities with highest percentage of remittances in the country. This may account for the largest expansion areas of the seven surveyed settlements.

c) Value of incremental development with the environment: growth of the city

Sonsonate is a growing city, expanding in area and population. It had 110,501 inhabitants according to the 2006 census. Sonsonate is in the main arterial highway connecting the country's major cities, Santa Ana, the Metropolitan Area of San Salvador and the city and the Port of Acajutla, site of the most recently built international airport. It is an economically dynamic city that is reflected in its population growth and commercial activity.

When analyzing the evolution of its population, Sonsonate has been the most populous urban area of the region through the years. In 1950, Sonsonate had a total population of 23,509 inhabitants; by 1992 the population had increased to 77,773. The population dynamics reflects the process of densification and urban growth experienced by the city of Sonsonate.

Sonsonate has grown to the south, which generated a significant amount of remodeling or replacement of older housing, within the city, either by changing the land use of housing to commercial premises, small businesses, as well as small *maquiladora* (assembly plant) industries. The trade and services sector is replacing the building in the center of the city and it is moving to filling the few gaps that remain in the city with quality housing, causing densification.

The *Sensunapan* subdivision was one of the first to be built south of the center of the city of Sonsonate. The city's growth into those areas resulted in more and a better range of services. Over time, new streets were built around the development, providing better transport opportunities and relationships with the city of Sonsonate. For Sonsonate's residents, this surrounding development began to improve their economic activities, consequently resulting in the improvement of their homes. Currently, the *Sensunapan* serves as a meeting point for many Sonsonate's inhabitants, with a lot of commercial activity. It has become a landmark for the city since it is located near major arteries.

d) Value of incremental development to support programs and funding strategies

The initial FUDASAL funding strategy for this project consisted of a combination of subsidized credit to acquire the basic unit. Immediately, supplementary credit with low interest rates facilitated the initial housing construction in the case of sites-and-services, as well as increases in the minimum required for basic housing unit.

**SENSUNAPAN  
TYPICAL HOUSES**

**FUNDAMENTAL**



**CONSOLIDATED**

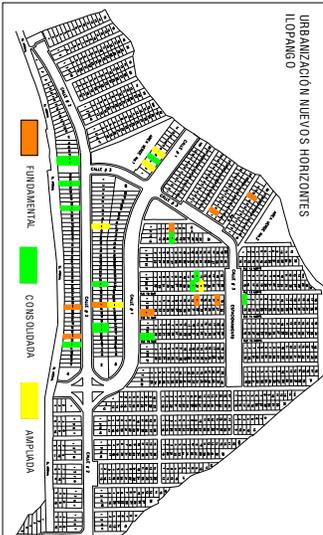


**EXPANDED**



## NUEVOS HORIZONTES

Public project  
complete house



### 1. Characteristics of the settlement

Type: Public housing project, turnkey houses.

The settlement is a “formal” (a government sponsored) housing project, with infrastructure and services, and small one or two bedroom houses built by private construction companies for sale to households eligible for loans and subsidies from FSV - the Social Fund for Housing . It is a national housing finance system for workers and employers, combined with some subsidies. Households have the option to apply for loans from private banks with a form of loan guarantee from FSV.

History

This subdivision is typical of FSV programs, where individual families buy homes with municipal and utilities services. Like all private developments, there are no community organizations or programs to assist residents.

### 2. Incremental development in the settlement

a) Description of development found in houses and their immediate surroundings

To date, 30% of the households surveyed have title to their homes; 17% do not and 50% have another type of documentation.

This is a development for families with incomes of 4 minimum wage units<sup>3</sup>. From the start 100% of households have municipal water supply although about 20% indicated they did not apply for meters and service immediately upon occupying their houses. Electrical service is also 100%, with households having meters and power; 27% connected later. Also, 97% of households have access to the municipal sewer system.

b) Value of incremental development of the household characteristics: growth in membership, changes in income  
Data <sup>4</sup>

c) Value of incremental development with the environment: growth of the city.

The subdivision is in the municipality of Ilopango, which, in the period 1961 to 1971, had a growth spurt that corresponds to the time when this geographical area was integrated into the metropolitan San Salvador. Ilopango is close to the old airport and its use now as a military base ended much of its economic development. On the other hand, tourism centered around Lake Ilopango has had an effect on development. It is now a suburb of San Salvador, many residents commute to the city center. In 1992, Ilopango had 90,634 inhabitants, and in 2007, 103,862 inhabitants, an increase of 14.6%. This reflects an increase in housing developments in the area, including major private sector housing for all income groups, for example Altavista, and other developments.

This population growth will continue with the construction of more housing developments and, recently the emergence of land invasions the north of town, where land is more suitable for development because it is to the south is Lake Ilopango. Adding to this is the completion of the main ring road (northern peripheral part of metropolitan San Salvador). The growth dynamics of Ilopango is strong and more developments will be built for income groups of four minimum wage units and more.

d) Value of incremental development to support programs and funding strategies.

Nuevos Horizontes has no support programs related to housing development, this has been characterized more by efforts of families and their own resources.

<sup>3</sup> The minimum wage “unit” prevailing at the time, subject to frequent fluctuations based on inflation or deflation.

<sup>4</sup> Data is being verified.

**NUEVO HORIZENTE – Public, Complete House  
TYPICAL HOUSES**

**FUNDAMENTAL**



**CONSOLIDATED**

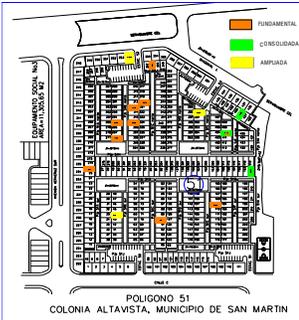


**EXPANDED**



## ALTAVISTA

Public project,  
complete house



### Characteristics of the settlement

The Altavista subdivision was built in 1995 and is located off the major ring road of metro San Salvador. It is located in three municipalities of the Metropolitan Area of San Salvador: Ilopango, Tonacatepeque, and San Martín. The overall population of Altavista is about 22,000 families, or approximately 75,000 inhabitants. This is a project of one of the largest housing developments in Latin America. Altavista has a wide range of house types for a number of income groups – from those earning four minimum wage units to middle income. The area is divided into neighborhoods corresponding to the different house types and income groups. The development site has a wide range of facilities and amenities. It has good services: a bus and minibus terminal, a municipal district, 2 public schools, 24 private schools, a shopping center, a sports area that has a soccer field, a basketball court and games. It is divided into sections each of which contains between 300 and 400 families. It has a police station, a Catholic church and those of various Protestant denominations.

*Altavista* is interesting because it is a large-scale venture by a private developer that includes low-income housing. The idea was to include FSV eligible families. Because of the scale of the overall development, land, infrastructure and supporting amenities (the developer also build one of the largest shopping centers of the city to “anchor” the housing produced, and reduce the sales price of the lowest cost houses. The area surveyed within Altavista were of the lower-cost house types.

Most sites have a board of directors. There is a community organization representing the entire development. In Altavista are commonly found small shops, beauty salons, stores, tailors, pupusas and tortillas sales, etc.

### 2. Incremental development in the settlement

#### a) Description of development found in houses and their immediate surroundings.

To date, 27% of the households surveyed have title to their homes; 33% do not, and 33% have another type of document. Because Altavista is a fully serviced development for families with income of 4 minimum wage units, access to basic services has been constant, with municipal maintenance over time. The survey shows 97% households with municipal water, electrical service and municipal sewer service.

#### b) Value of incremental development of the household characteristics: growth in membership, changes in income.

As in most of the settlements studied, the majority of households surveyed have improved their wages (73%). Of this 73%, 33% do not have extensions to their houses, the other 66% have made extension and improvements. Families with incomes that remained constant (17%) have also made expansions. Those with declining income (10%) have not expanded. The average wage in Altavista is between U.S. \$ 175. and \$ 650.

#### c) Value of incremental development with the environment: growth of the city

This development is of particular interest because of its magnitude, as covers three municipalities: Ilopango, Tonacatepeque and San Martín. It is interesting to note that both the total population and the population density of the three municipalities have increased due to its construction. Comparing the 1992 population census when Ilopango had 90,634 inhabitants to the 2007 census of 103,862 with inhabitants, there is a rise of 14.6%, i.e., it gained population, which indicates that there has been an increase in its occupation of land with the construction of urbanization of Altavista.

#### d) Value of incremental development to support programs and funding strategies

No support programs related to housing development, this has been characterized more by efforts of families and their own resources.

**ALTA VISTA – Private, Complete Houses**  
**TYPICAL HOUSES**

**FUNDAMENTAL**



**CONSOLIDATED**



**EXPANDED**



## NUEVA TRINIDAD

Private project, no services



### 1. Characteristics

#### History

Nueva Trinidad is an illegal subdivision by a private land developer for sale, with developer credit, to low income groups. It does not adhere to municipal codes and subdivision standards, and is therefore considered extra-legal. It is located in San Bartolo, in the municipality of Ilopango, a suburb of metro San Salvador. It is part of a group of similar communities - Rivas San Jorge, El Arenal, Jerusalem, San Felipe, New San Felipe and Trinidad.

The settlement is a community that was formed due to two main reasons: 1) following the relocation of families displaced from a slum in Soyapango by eviction from private land in 1992; and 2) most residents had fled to there from parts of the country affected by the armed conflict in the era of the 1980s. Currently, the prices of the lots were traded at U.S. \$ 8,000, according to the type and extent of housing built. It is under the jurisdiction of the Municipality of Ilopango. It is in the process of filing an application for construction of a communal center.

#### Physical condition of the settlement.

The land has topography with moderate slopes. There are approximately 10 plots at risk from landslides in the area. This area has slopes ranging from 1.60 m to 2.50 m above the level of passages. Access to the community is possible for vehicular and pedestrian traffic.

The site is an approximately 8173 m<sup>2</sup>, and is home to 144 families (approximately 572 people) on the same number of plots. Approximately 19 homes are uninhabited and 2 plots are vacant. The average plot size is 50 square meters, with house construction covering most of the plot area. All homes are of mixed materials and construction systems, predominantly with tile or concrete floor and corrugated roof.

The supply of drinking water is by connection to the water system of the municipality. Each household pays a flat fee of \$ 2.29 per month for service. The supply is poor, one or two times a week. About 20 families have not paid for the service because they cannot cover the connection fee and connection procedures. There are 10 lots with septic tanks with 8 years of operation.

The storm drainage is via surface channels to a collector into a canal with direct discharge into the Arenal River. All homes have electrical supply. The average payment is \$12 per month per household. There is poor street lighting in the community (9 active and 4 lamps not working). There are no public phones in the area, and 50 % of households have telephone service.

The site is well located – within 15 minutes walk to stores in San Bartolo, Altavista and SuperSelectos on the Panamerican Highway. It is an industrial environment: Cotton Marey (producing cotton for use in hospitals), Industrias Playcenter (producing fibro-cement sheet roofing and galvanized pipe) and the seed industry Cristiani Burkard S. A. (which distributes seed and fertilizer for planting).

There is a small field and the projection of building a community house.

#### c) Socioeconomic

The settlement does not have legal status. It has a board of directors in office elected on October 22, 2005. The municipal government has been helping the community since 2005.

The average family income is estimated at \$ 150 per month. The men work as laborers and women serve as operatives, laundresses, domestic workers and street merchants. In the community there are three small shops. Schools for child and adolescent populations are the Schools San Bartolo, Veracruz, San Felipe and Fabio Castillo, also the National Institute of San Bartolo. Support in health care and sanitation is delivered from the National Hospital of San Bartolo, San Martín Hospital-clinical and clinical FOSALUD community of San Cristobal ISSS.

#### Prioritized needs for improvement.

The neighborhood improvement needs were prioritized by their leaders as follows:

- a) Household sewers
- b) Stabilization of topography
- c) Communal green area and facilities
- d) Supply of drinking water for about 20 families.

To date, the board has managed the following projects:

Proyecto	Entidad cooperante.	Año o período de ejecución	Costo aproximado
Construcción inicial de champas	Alcaldía de Ilopango	1996	\$5000.00
Introducción de energía eléctrica	Alcaldía de Ilopango	1997	\$7,500.00
Introducción del agua potable por cantareras	Alcaldía ANDA	1990	
Introducción de agua potable domiciliar	ANDAS	2007	\$6,450.00
Pavimentos y fraguado de pasajes	Alcaldía de Ilopango	1992	

## 2. Incremental development in the settlement

### a) Description of development found in houses and their immediate surroundings

To date, 33% of households surveyed have applied to title to their homes, 43% do not have and 14% have another type of tenure document.

About 80% of household have clean water, compared with 17% when people started arriving in the field; 27% have access to water mains, as opposed to 3% in the beginning. The electrical service is also widespread, 77% of households have it, at first only 3% had access to it. Also, only 27% of households have access to sewer systems provided by the municipality. When residents began building homes only 3% of households were served by a sanitary system.

### b) Value of incremental development of the household characteristics: growth in membership, changes in income. Triggers.

The survey found that 77% of households have seen an increase in their income. Of this 77%, 65% have made extensions to their houses. 13% of households surveyed say wages have remained constant. Although only 10% of people said that their wages have declined, this has meant that they no longer are making extensions and improvements to their homes. For many Salvadoran households, receiving remittances is an important factor for the development of housing, but this was not widely or precisely reported by residents.

### c) Value of incremental development with the environment: growth of the city.

The municipality of Ilopango has been growing rapidly primarily because of the large number of illegal *lotificaciones* sold to low-income households. Demand is high, despite the illegal status, so land values are escalating in the settlements.

**NUEVA TRINIDAD**

**TYPICAL HOUSES**

Fundamental



Consolidated



#### 4.3 SELECTED SUMMARY TABLES

##### a. Tipo de desarrollo

Asentamiento	de casa			Total	
	Fundamental	Consolidado	Ampliada		
	Recuento	Recuento	Recuento		
S&S Core Houses	El Pepeto	11	10	9	<b>30</b>
S&S Core Houses	Sensunapan	12	9	9	<b>30</b>
Upgraded settlement	Las Palmas	11	11	8	<b>30</b>
Illegal, not upgraded	Jardines del Boulevard	15	15	0	<b>30</b>
Private, land, no services	Nueva Trinidad	14	16	0	<b>30</b>
Public, complete house	Nuevo Horizonte	12	13	5	<b>30</b>
Private, complete house	Altavsta	11	14	5	<b>30</b>
	<b>Total</b>	<b>86</b>	<b>88</b>	<b>36</b>	<b>210</b>

Settlement and build outs: The ‘not upgraded’ and the ‘private development without services’ do not have ‘expanded’ houses. Resources are considered to be absorbed by the improvement of the house. The public and private complete housing projects understandably do not have many expanded units.

##### b. Situación legal

Asentamiento	Cual era su situación legal			Total	
	Con titulo	Sin titulo	Otros		
	Recuento	Recuento	Recuento		
S&S Core Houses	El Pepeto	8	4	17	<b>29</b>
S&S Core Houses	Sensunapan	10	1	19	<b>30</b>
Upgraded settlement	Las Palmas	0	21	7	<b>28</b>
Illegal, not upgraded	Jardines del Boulevard	4	25	1	<b>30</b>
Private, land, no services	Nueva Trinidad	10	13	4	<b>27</b>
Public, complete house	Nuevo Horizonte	9	5	15	<b>29</b>
Private, complete house	Altavsta	8	10	10	<b>28</b>
	<b>Total</b>	<b>49</b>	<b>79</b>	<b>73</b>	<b>201</b>

Legal Situation; ‘Otros’ is generally a lesser form of secure tenure until house payments have been fulfilled. ‘Sin titulo’ is a transitional form of tenure, generally until payments or improvements are made.

## Cost of Improvements

Asentamiento	Rango de costo de vivienda	A quien pagaron												Junda Directiva		
		FUNDASAL	Propietario anterior de la vivienda	Albañil	INPEP	ITFA	CALPIA	Banco	FSV	FONAVIPO	FUNDASAL/FONAVIPO	Distribuidora de materiales de construcción	CALPIA/FUNDASAL			
El Popeto: S&S core housing	Rango de costo de vivienda	De \$0 a \$1000	21	3	0	1	0	0	0	0	0	0	0	0	0	25
		De \$1001 a \$5000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$5001 a \$10000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$10001 a \$15000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$15000 a más	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sensunapan: S&S core housing	Rango de costo de vivienda	De \$0 a \$1000	20	0	0	0	0	0	1	0	0	0	0	0	0	21
		De \$1001 a \$5000	1	0	1	0	0	0	0	0	0	0	0	0	0	2
		De \$5001 a \$10000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$10001 a \$15000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$15000 a más	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Las Palmas: Upgraded settlement	Rango de costo de vivienda	De \$0 a \$1000	9	0	1	0	1	3	2	1	0	0	0	3	0	20
		De \$1001 a \$5000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$5001 a \$10000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$10001 a \$15000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$15000 a más	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jardines del Boulevard: Illegal, not upgraded	Rango de costo de vivienda	De \$0 a \$1000	0	13	1	0	0	0	0	0	0	0	1	0	1	16
		De \$1001 a \$5000	0	1	0	0	0	0	0	0	0	0	0	0	0	1
		De \$5001 a \$10000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$10001 a \$15000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$15000 a más	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nueva Trinidad: Private land, no services	Rango de costo de vivienda	De \$0 a \$1000	1	1	0	0	3	0	2	0	8	2	0	0	0	17
		De \$1001 a \$5000	0	0	0	0	0	0	0	0	1	1	0	0	0	2
		De \$5001 a \$10000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$10001 a \$15000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		De \$15000 a más	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuevo Horizon: Public, complete house	Rango de costo de vivienda	De \$0 a \$1000	0	0	0	0	0	0	2	7	0	0	0	0	0	9
		De \$1001 a \$5000	0	0	0	0	0	0	1	0	0	0	0	0	0	1
		De \$5001 a \$10000	0	1	0	0	0	0	0	3	0	0	0	0	0	4
		De \$10001 a \$15000	0	1	0	0	0	0	2	5	0	0	0	0	0	8
		De \$15000 a más	0	0	0	0	0	0	2	3	0	0	0	0	0	5
Atlavsta: Private, complete house	Rango de costo de vivienda	De \$0 a \$1000	0	0	0	0	1	2	0	7	0	4	0	0	0	14
		De \$1001 a \$5000	0	1	0	0	0	0	0	2	0	0	0	0	0	3
		De \$5001 a \$10000	0	0	0	0	0	2	0	6	0	0	0	0	0	8
		De \$10001 a \$15000	0	0	0	0	0	0	0	3	0	0	0	0	0	3
		De \$15000 a más	0	1	0	0	0	0	0	0	0	0	0	0	0	1

h. Costo de unidad habitacional por tipo

Tipo de vivienda	Rango de costo de vivienda	A quien pagaron												Junda Directiva		
		FUNDASAL	Propietario anterior de la vivienda	Albañil	INPEP	ITFA	CALPIA	Banco	FSV	FONAVIPO	FUNDASAL/FONAVIPO	Distribuidora de materiales de construcción	CALPIA/FUNDASAL			
Fundamental	Rango de costo de vivienda	De \$0 a \$1000	19	6	1	0	2	1	5	6	4	4	0	1	1	50
		De \$1001 a \$5000	0	0	0	0	0	0	1	1	0	0	0	0	0	2
		De \$5001 a \$10000	0	0	0	0	0	1	0	4	0	0	0	0	0	5
		De \$10001 a \$15000	0	1	0	0	0	0	0	1	0	0	0	0	0	2
		De \$15000 a más	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Consolidado	Rango de costo de vivienda	De \$0 a \$1000	17	10	1	0	2	3	1	6	4	2	1	1	0	48
		De \$1001 a \$5000	1	1	1	0	0	0	0	1	1	1	0	0	0	6
		De \$5001 a \$10000	0	0	0	0	0	0	0	4	0	0	0	0	0	4
		De \$10001 a \$15000	0	0	0	0	0	0	2	5	0	0	0	0	0	7
		De \$15000 a más	0	2	0	0	0	0	2	1	0	0	0	0	0	5
Ampliada	Rango de costo de vivienda	De \$0 a \$1000	15	1	0	1	1	1	1	3	0	0	0	1	0	24
		De \$1001 a \$5000	0	1	0	0	0	0	0	0	0	0	0	0	0	1
		De \$5001 a \$10000	0	1	0	0	0	1	0	1	0	0	0	0	0	3
		De \$10001 a \$15000	0	0	0	0	0	0	0	2	0	0	0	0	0	2
		De \$15000 a más	0	0	0	0	0	0	0	1	0	0	0	0	0	1

Note that most of the improvements fall into the lowest range, 0-\$1000, in all areas. The site-and-services projects showed almost all improvements as very small, as well as the second floor areas. The areas with complete houses showed a wider range of inputs, 50-67% greater than the minimum.

### TOTAL AREA (Averages)

		AREAS m2			Average	
		Asentamiento	Fundamental	Consolidado		Ampliada
		o	Recuento	Recuento	Recuento	
CORE HOUSE	S&S Core Houses	El Pepeto	70	70	112	84
	S&S Core Houses	Sensunapan	72	97	166	112
NO HOUSE	Upgraded settlement	Las Palmas	33	46	50	43
	Illegal, not upgraded	Jardines del Boulevard	58*	71*	NA	65*
	Private, land, no services	Nueva Trinidad	44	48	NA	46
COMPLETE HOUSE	Public, complete house	Nuevo Horizonte	62	74	91	76
	Private, complete house	Altavista	43	47	67	52
	<b>Total</b>		<b>55</b>	<b>55</b>	<b>97</b>	

\*Covered patios excluded. If included, average is 87 m2

The largest average areas are the two 'sites and services' projects. Note the relatively large area of the Illegal settlement, Jardines del Boulevard. The terraces and patio areas have been excluded, and may result in an under counting of the area. Several of the Jardines houses had shops, partially accounting for the larger areas. Also – since essentially 'free' land - this may account for the larger size and the flexibility that the area offers.

### Q7: WHAT IS THE PRICE NOW?

		Tipo de casa			Av.	Av. Type
		Asentamiento	Fundamental	Consolidado		
			Recuento	Recuento	Recuento	
Site and services, core house	El Pepeto	14,778	30,556	34,125	<b>26,486</b>	
Site and services, core house	Sensunapan	16,750	28,778	50,375	<b>31,968</b>	\$29,227
Upgrade settlement	Las Palmas	15,700	25,000	26,143	<b>22,281</b>	
Illegal, not upgraded	Jardines del Boulevard	9,091	13,000	NA	<b>11,045</b>	
Private, land only, no services	Nueva Trinidad	6,250	7,688	NA	<b>6,969</b>	\$13,432
Public, complete house	Nuevo Horizonte	16,308	24,250	35,000	<b>25,186</b>	
Private, complete house	Altavista	13,500	17,036	24,800	<b>18,445</b>	\$21,816
	<b>Av.</b>	<b>13,197</b>	<b>20,901</b>	<b>34,089</b>		

Note the essentially equal and higher value of the houses in the sites-and-services projects as in the public, complete house project. Not unsurprising is the appreciably lower value of the land only, no service, development and the un-upgraded area – both also do not have expanded houses.

The current value of the public and private complete houses is also almost equal or lower than the incrementally expanded site and services houses.

**Q12: DO YOU FEEL SAFE?**

	Asentamiento	Do you feel safe? (Only NO)			Total
		Fundamental	Consolidado	Ampliada	
		Recuento	Recuento	Recuento	
Site and services, core house	El Pepeto	1	1	1	3
Site and services, core house	Sensunapan	4	1	0	5
Upgrade settlement	Las Palmas	0	0	0	0
Illegal, not upgraded	Jardines del Boulevard	1	6	–	7
Private, land only, no services	Nueva Trinidad	2	3	–	5
Public, complete house	Nuevo Horizonte	3	3	2	8
Private, complete house	Altavista	1	3	0	4
	<b>Total</b>	<b>12</b>	<b>17</b>	<b>3</b>	<b>32</b>

In the sites- and-services projects, 3% indicated that they did not feel secure, while in the other two tiers each indicated 6% of insecurity.

- 6% of all the Fundamental households indicated that they did not feel secure.
- 8% of all the consolidated households indicated that they did not feel secure.
- 1% of all the expanded households indicated that they did not feel secure.
- 15% of all the households surveyed indicated that they did not feel secure.

Almost 100% of the respondents indicated that delinquency was the main concern.

**4.4 FINDINGS BASED ON SURVEY OF SEVEN SETTLEMENTS**

The seven settlements surveyed were grouped into three main types for comparison:

1. **ILLEGAL: SQUATTERS AND LOTIFICACIONES.** These are the lowest cost options for households. Residents of the squatter site, *Jardines del Boulevard*, tend to be poorer, less able to accumulate savings to invest in expansion. These families have lived there for forty years, without secure tenure (though with some understanding from the landowner that the situation is static) and, although the community is established, life there remains precarious. There are only minimal services to the community, and none legal. Water service cannot be provided by the utility because residents are not ‘officially residing there.’ However, over time, as the perceived risk of eviction lessens, improvements are gradually made. As a result a number of houses are clandestinely connected, and most are able to get power service. Even so, most residents make some improvements and expansions to their houses, called *champas*, originally built of discarded materials – cardboard, scrap metal, etc. – for enclosure and protection from the elements. Over time more permanent materials are incorporated. Interestingly the lack of infrastructure at the start does not deter families from making home improvements. However the improvement process tends to start later, progress slower and the end product still impermanent. *Nueva Trinidad*, a *lotificación* (illegal subdivision built by private developer) has more tenure security – usually a rental with option to buy agreement with the developer in the form of a sales document. This gives residents more incentive to expand and make more improvements. Over time community infrastructure and services are made available. Residents tend to make considerably more improvements than those in squatter areas. Remittances also seem to have been the key triggers for *Nueva Trinidad*, as they have more difficulty accumulating savings than residents in legal sites. By contrast *Las Palmas* is a recently upgraded settlement, with regularized tenure, that has made a dramatic transformation. The layout was re-blocked to provide streets and walkways, new houses were built and municipal services, infrastructure and community facilities built. This upgrading project has been costly and highly subsidized

– possibly excessively so. It is noted that Las Palmas is not typical of squatter upgrading projects in El Salvador for several reasons – the approach is to provide comprehensive and full service standards and, simultaneously help residents completely rebuild their houses to a complete, expanded two-story house. It is included in the survey a comparison of upfront costs that are highly subsidized and contractor built.

2. LEGAL: TURNKEY PROJECTS – PUBLIC AND PRIVATE. These are examples of conventional contractor/developer built housing projects. *Nuevos Horizontes* is a developer built subdivision financed under a government housing program of the Fondo Social para la Vivienda (FSV) and *Altavista* is a private housing developer project linked to a large-scale mixed-income development. They comply with standards, codes and regulations, the houses are small, one or two bedrooms, built of concrete block and fully serviced. They are affordable to the low-income group because: house size is reduced to a minimum; there are economies of scale in construction, there are subsidies built into the financing mechanisms and national subsidies are available for constructions developers. Residents of these projects have slightly more regular income (savings) on average than the other settlements. Because they bought either a one or two bedroom finished house, they tend not to expand as much as the others, however there are a number of households that added second and even third stories. These two groups have the advantage of having access to credit and subsidies (from worker/employee savings scheme programs like FSV and loans from the private developer in *Altavista*) to help pay for the completed house. These options are only available to those that qualify as having participated in a savings program with government subsidies built in, and to the large scale of the *Altavista* development (22,000 units).

3. SITES-AND-SERVICES. Two sites-and-services project settlements – *El Pepeto* in metro San Salvador and *Sensunapan* in Soyapango, a secondary city – projects built in the 1970s by FUNDASAL, a local NGO. These projects provided a combination of credits and subsidies plus ‘sweat equity’ in the form of mutual help contributions (down payments) by families building their starter core units. The organization instituted an extensive community development plan, based on a highly participatory process to support households’ efforts in having access to plot and services, and to prepare them to build the houses incrementally. This included a construction materials credit program, technical assistance, and other outreach assistance. This effort had a high administrative and social work cost which was also subsidized. The important difference comparing these projects with the other settlements is that the incremental process was more widespread, somewhat faster on average, and had the advantage of a strong community capable of lobbying municipalities for improved services and infrastructure for their neighborhood.

■ **INCREMENTAL IMPROVEMENTS OCCUR IN ALL TYPES.** Formal turnkey projects such as *Altavista* and *Nuevos Horizontes* do not do major expansions despite having more salary increases over time and somewhat higher salaries overall. Nevertheless there are many that do so, often adding one or two stories. These are typical households of four, earning four minimum wage units (an eligibility requirement to purchase a home).

■ **INCOME DYNAMICS AFFECTS IMPROVEMENT AND EXPANSION.** Discretionary income is the major trigger for improvements. In all settlements, there is a direct correlation between household income, discretionary income and amount of expansion/improvements. In types without access to credit support, the lower the household income and the larger the number of family members, the fewer investments are often seen.

■ **INCOME SETS PACE AND TIME.** Availability of discretionary income also affects the rate of investment, although some other triggers (below) have considerable influence.

■ **OTHER TRIGGERS**

▪ **ACCESS TO CREDIT.** The two sites-and-services projects provided a way for families to save and contribute sweat equity for the down payment: credit that is difficult to obtain for this income group. In addition, FUNDASAL made available a line of credit in construction materials so families could quickly make the core houses habitable, and to jump-start the incremental process. It is worth noting that FUNDASAL projects have very high loan repayment histories and very low default rates. Other settlements (FSV and *Altavista*) had few credit options other than financing for purchasing the plot and house.

- **REMITTANCES** By far the most prevalent trigger for expansion are remittances. This is evident in all of the settlement types, and helped most houses go from Fundamental to Consolidated, and beyond. This points to the need for ways to provide a construction/improvement loans programs (i.e., see above, for example the FUNDASAL credit plan) to support the incremental process of these households. However quantifying the amount of remittances is difficult as many respondents are reluctant to discuss them. The population of Sonsonate (and other secondary cities) receives the highest rate of remittances. San Salvador is lower because of its larger employment base and lower percentage of immigrants. Sensunapan expansions are likely due to the high level of remittances.
- **CONSTRUCTION COSTS.** The availability and cost fluctuations of construction materials can influence when and to what extent to invest. Externalities such as building booms (i.e., post earthquakes) create materials and labor shortages and high wages for skilled labor. Owner-builders will do much of the unskilled work of expansion, but plumbers and electricians are called upon for more specialized tasks when the skills are not available through friends or relatives.
- **INCREASED HOUSEHOLD SIZE.** As families expand space needs become more important. Decisions to add a bedroom were the most frequent type of expansion, but these are triggered only when by resources to invest are available.
- **MATERIAL PREFERENCES.** A number of respondents from several types stated a preference for, and a goal to upgrade the house by changing to concrete block walls. A preference quite widespread in Latin America is the desire for concrete block over other materials that might be more appropriate for certain physical conditions, more economical and environmentally preferable. However, in many cases, the use of concrete block is associated with modernity, social mobility and the legitimate security concerns as it is faced with potential natural disasters.
- **SAFETY AND SECURITY** An overriding concern in all settlements (and all cities) is victimization, crime and gang activity. Delinquency is the main concern. A priority investment decision for a majority of residents is to secure the house, so window bars, stronger doors and locks, etc. are widespread.

■ **STARTING POINTS ARE IMPORTANT.** The household circumstances at occupancy influences the incremental process. For example, squatters make few modifications over the years – as a group they have little security and investing is a risk, moreover they tend to be poorer for a longer time. When they are upgraded (and have some form of tenure security) these groups begin the process. *Lotificación* dwellers have less risk and a faster start, and even without utilities or services begin improving houses – mostly by converting the temporary shack into a house with permanent materials – but then tend to have a slower pace of expansion. Sites-and-services residents have a faster start (a starter core and bathroom) that is designed to be quickly and inexpensively enclosed, and readied for occupancy. A construction materials credit helps their incremental process to get started quicker than the other types. Turnkey house projects have a slower pace of improvement/expansion because they start with a small, but finished house. Nevertheless about a third of households in these projects start expanding (adding second and third floors) within a few years.

■ **SECURE TENURE IS NEEDED.** Tenure security enables the incremental process, but the form and need varies. Freehold title is not a priority for most residents in all the settlements surveyed. On average only about 30% had finished the process for a title deed. Most that were eligible did not follow up, often for decades. Others had none and some held other types of documentation giving them rights to the plot. This indicates that once a homeowner has a reasonable expectation that he or she will not be removed, they proceed with investments. Also it shows the little interest in obtaining a mortgage or the need for collateral for other reasons. This is because once a family obtains a plot of land and a house, the vast majority will not sell, rather the strategy is to keep the house in the family. For example, a large share of the residents of the sites-and-services is a second-generation family member.

■ **LOWER INCOMES NEED INCREMENTAL MORE.** Comparing across the six types of settlements, the trend is that lower income households without steady jobs or wage increases take on many, but smaller, incremental

improvements over a longer time. Within this – and other groups – there are some that do not continue the process. It appears that these are households with extenuated circumstances (caring for chronically ill or incapacitated members of the household, etc.). Others that do not move beyond a fundamental stage seem to find little need for additional investment: they are satisfied with the house to that point.

■ **INCREMENTAL NEEDS A JUMP START.** Projects where access to credit and technical assistance are available at the onset (for example as seen in the FUNDASAL projects) residents tend to make upfront plans and decisions that help start the process. Where technical assistance is available – for example in the mutual-help construction of core houses – participants gain important building skills and understanding of construction methods and cost lowering options, that positively influence future expansions.

■ **COMMUNITY ORGANIZATIONS HELP.** Despite the lower levels of income, some settlements like *Nueva Trinidad* (earning between \$ 50 and U.S. \$ 300 monthly), have a strong community organization with the help from the Association of Community Development (ADESCO), which promotes and encourages both individual and community advancements to improve the quality of life of settlements. Hence, the inclusion of boards, Community Development Associations and the community themselves have helped find assistance from NGOs and government programs.

■ **SUBDIVISION LAYOUTS CAN SUPPORT INCREMENTAL.** Appropriate design of subdivisions can reduce development costs and land use efficiency. Designs can help guide and stimulates the incremental process. For example, the spatially grouping of plots/families – around open spaces or cul-de sacs - encourages and mutually reinforces house expansion of the group. The use of 'clusters' in the two sites-and-services projects was noted by the families as very supportive to their efforts. Appropriate subdivision regulations and standards that also allows for infrastructure and amenities to be added or enhanced over time as the settlement evolves, and new needs emerge, are important to lower initial costs of developments and lessen the investments for services at the start of occupancy when the communities needs are lower – and can be expanded to match growing needs over time.

■ **SITES-AND-SERVICES PROGRAMS ARE EFFECTIVE.** The sites-and-services projects in this study demonstrate that there are effective way to build upon the incremental abilities and efforts of low-income households. For example: start-up options – a serviced plot only, a plot with sanitary core or a plot with a starter core - allows households preferences to match incomes and capacities. Packaging down payments in-kind with savings and subsidies plus access to construction materials credits has been seen to jump-start and speed up the incremental process. Overall subdivision development costs are reduced and land use made more efficient.

■ **PAST LESSONS CAN GUIDE NEW INCREMENTAL PROGRAMS.** The survey shows that the incremental process is important, in fact the only affordable and viable option available to low-income households and their communities. The experience and lessons of the settlements examined by the study can be used to help shape a new generation of incremental housing programs. The two sites-and-services projects (and many others worldwide) are a good starting point for revisiting the concept as a new housing policy option. Across all settlement types surveyed, there is evidence that households can build for themselves. The survey also shows there are tools and approaches to help make the incremental process more effective and affordable, and past projects show that supporting households can be done at a large scale. There is enough knowledge, expertise and will to design and implement programs that support and encourage incremental housing.

## 4.5 THE COUNTRY CONTEXT

### ■ NATIONAL POLICY CAN MOBILIZE SUPPORT FOR INCREMENTAL HOUSING

- **INCREMENTAL HOUSING FILLS A NEED.** Incremental housing is the option of necessity for the vast majority of low-income households in El Salvador. Incrementally built housing has been filling the large housing production gap (i.e., most of the 500,000 unit deficit) of the country. Illegal subdivisions (*lotificaciones*) are the main supply of land for this income group. Other formal sector housing – i.e., FSV supported and, recently private developments offering houses for low-income families, are helping meet the growing demand. However, the incremental housing process can be tapped and guided to greatly expand the production of low-income housing for the country. It can lower costs to government, and can be made more efficient, accessible and cost effective. Early government supported sites-and-services programs proved to effectively produce large numbers of housing units – with positive results as seen by the analyses of the study. Lessons from those experiences can be built upon to new, state-of-the-art and more cost-effective sites-and-services programs.
- **A PROBLEM OF SCALE.** The size, scope and characteristics of the national housing deficit, even with recent public and private efforts to increase the production of housing for the lower income population, continues to pose a huge challenge for governments – and particularly for families seeking affordable housing. The scale of the deficit is such that multiple instruments will be needed to address the full spectrum of needs.
- **INCREMENTAL IS ALREADY NATIONAL POLICY.** Over the past decade the Government of El Salvador has embraced the incremental housing policy as a fundamental objective of its support for slum or settlement upgrading (*mejoramiento barrial*) throughout the country. This is effectively addressing the quality and illegality aspects of the deficit. It is done by providing secure tenure, essential, basic infrastructure, services and other support to existing lowest income settlements and their residents – addressing a pro-incremental housing policy. There are efforts to extend attention (and legislation) to the related issue of illegal subdivisions – *lotificaciones* – another positive step in expanding support for incremental housing. A third component would be to provide programs in direct support of **land development for incremental housing**: by revisiting the sites-and-services approach.
- **INCREMENTAL IS SUPPLYING LAND FOR NEW HOUSING.** Low-income families seeking a home now turn to illegal subdivisions as the only way to access land. Illegal land developers have a market because families can and are willing to build their houses incrementally, even if it means not having proper infrastructure or municipal services. However, the bigger issue of city growth and land for low-income housing still needs attention and planning under policies that support all housing types, including incremental.
- **DEVELOPMENT STANDARDS CAUSE ILLEGALITY.** Illegal subdivisions offer plots affordable to low-income families because they circumvent the official process, standards, codes and regulations that are inappropriate and unaffordable to lower-income families. These standards are encouraging illegality. There are examples of well-suited standards that can be effective and that facilitate the incremental process for both subdivisions and housing.
- **SITES-AND-SERVICES AS A MODEL.** Sites-and-services was pioneered, piloted, tested and proven to be effective and affordable in El Salvador as far back as 1970. Those experiences, lessons and approaches can be updated as policy and practiced today.

## 5. NEW DIRECTIONS FOR INCREMENTALLY BUILT HOUSING

What the results tells us about future interventions to meet growing housing demand

### 5.1 BUILDING ON EL SALVADOR'S HOUSING POLICY

Survey findings highlight existing issues, past policy failures, and also suggest models for future intervention to keep pace with growing demands for housing. Survey results show that incrementally built housing a viable, and often the only option for the low-income population of El Salvador's cities. The incremental process is affordable, flexible and pragmatic. The process is used by households in a wide range of settlement products – from illegal to official, from clandestine to market-driven. The study examined seven of these examples, each with successes and drawbacks. Some are affordable to owners or to governments, others more costly or wasteful. However the most important feature is that all these combined are meeting the needs of most of the urban low-income the population of El Salvador. It is likely continue to be how most future shelter will be produced. The key element – willingness and capacity of lower-income households to build for themselves - has the potential for addressing the national housing deficit. The incremental concept is already a central component of national housing policy, for example, informal settlement upgrading programs, which will likely continue until more pro-active measures are found to overcome the need for the poor to operate illegally and clandestinely. It is possible to envision other future initiatives built on this concept. The survey findings suggests a possible comprehensive incremental housing policy with four components:

1. **Mejoramiento barrial, or** existing slum upgrading programs by expanding and scaling-up the pace and coverage for these programs to continue addressing the backlog and growth of settlements nationally. Given the size of the housing deficit, land squatting will continue until the poor have access to better alternatives. *La Palma* is a recent example.
2. **Lotificaciones,** or illegal subdivisions like *Nueva Trinidad*: is by far the largest and only mechanism providing land to low-income prospective homeowners. Private operators are circumventing constraints – for example subdivision development standards, codes regulations, etc. to create an effective, if illegal, market. By structuring a legal and development framework to harness and make these products available at a national scale. Thus the market constraints on land will allow the now extra-legal property owners to build by accessing credits, infrastructure and municipal services – and speeding up the process of building their homes.
3. **Proyectos públicos,** or publically sponsored programs (FSV) like *Nuevo Horizonte* that are producing large quantities of land and houses with full municipal services supported government credit programs. These are effective, but could be made more efficient and lower cost (and thereby more widespread) if, instead of a small turnkey house, it would offer - at a lower cost - a more appropriate, expandable core house offered to owners wanting to modify to their needs.
4. **Lotes con servicios,** or sites-and-services, like *Sensunapan*, which shows that the incremental process can produce an end product comparable to, and or more accommodating to owners than the public or private turnkey examples. The potential for a new sites-and-services approach, updated and carried out at a national scale, with up-to-date, appropriate design standards would have the objective of supplying land and infrastructure strategically in cities and towns to: a) deter and substitute the growth of illegal settlements as part of city growth plans, and b) stimulate the supply of land for low-income housing. New guidelines and institutional arrangements for *lotes con servicios* would need to be developed. The core house model can be improved updated, special financing and construction credit programs introduced, etc. to improve on earlier examples, based on decades of experience.

For all the above, a comprehensive set of guidelines, strategies, policies and enabling environments legislation) would need to be produced. The institutional arrangements to support these programs would also need to be reconfigured.

## FOR POLICY DISCUSSIONS:

Selected topics to be discussed:

- Proactive responses for mitigating new illegal settlements (*tugurios* and *lotificaciones*)
- Expanding illegal settlement upgrading (*mejoramiento barrial*)
- Scaling up overall responses to the overcome housing deficit – incremental housing as a key component
- Addressing land and housing market constrains – how to eliminate barriers to entry
- Availability of land – increasing supply, *lotificaciones*, and new instruments
- Stimulating low-income housing production – tapping and extending owner-builder capacity
- Rationalizing housing finance and subsidies for low-income housing
- Removing constraints on incremental processes – revising development standards, regulations
- Municipal capacity to plan, manage and support new housing – city strategies for growth
- Financing incremental housing

## 5.2 IN SUMMARY

There is 40 years plus experience of providing housing for the poor, and many more of their findings and building their own. The results of this survey can help to formulate national housing policies going forward, to address the demand for housing that constantly outpaces the supply. These merit further study and discussion.

# **ANNEX**

A-1: FIELD SURVEY TEAM

A-2: SAMPLE FIELD SURVEY

A-3: EXTERNALITIES

A-4: PROGRESSIVE PROCESS OF SELF: POLICY INDICATORS FOR INCOME HOUSING – FUNDASAL FINAL REPORT (SP) 29 April 2011 (*PROCESOS DE AUTOCONSTRUCCIÓN PROGRESIVA: INDICADORES PARA POLÍTICAS DE VIVIENDA DE INTERÉS SOCIAL*)

A-5: FUNDASAL SITES AND SERVICES INCREMENTAL HOUSING MODEL

A-6: INCREMENTAL HOUSING IN LATIN AMERICA – THE POOR ON THEIR OWN

A-7: BIBLIOGRAPHY AND KEY REFERENCES

*Note: COMPLETE SURVEY DATA, FIELD MANUAL, and RECONNAISSANCE MISSION REPORT are on file.*

## ANNEX –1

### SURVEY TEAM

Listado de estudiantes las universidades UCA y UES en San Salvador que participaron en la Investigación BID – Fundación Salvadoreña de Desarrollo y Vivienda Mínima (FUNDASAL)

1. Jorge Alberto Hernández
2. Maria Guadalupe Lopez López
3. Yanery Rocío López Juárez
4. David Hemánd Berdugo Salinas
5. Joaquín Alfredo Flores Antonio
6. María Ubalda López Martínez
7. Ulises José Menjívar Rodríguez
8. Danis Ernesto Zelaya Villalta
9. Cristina Maricela Comejo Mejía
10. Mabel Georgina Alfaro Flores
11. Katherine Judith Delgado Benavides
12. Luis Alberto Alfaro Amaya
13. Jency Estefanie Cuellar Barahona
14. Kevin Alexander Cruz Vásquez
15. German Eduardo González Canjura
16. Carla Rene Calles Alfaro
17. Edgar Orlando Linares Moran
18. Cristian Omar Martínez Figueros
19. Nathalia Beatriz Pacheco Murguía
20. Karen Liana Aguilar Guevara

Bajo la dirección de FUNDASAL, San Salvador

- Lie. Castro Ismael Castro Velásquez, Director Ejecutivo de FUNDASAL
- Arq. Claudia Blanco, Subdirector
- Alma Daysi Rivera, Coordinador de la Investigación
  
- Jorge Manuel Henríquez
- Guillermo Villata
- David Hernandez
- Mario Flores

# ANNEX -2

## SAMPLE FIELD SURVEY

INVESTIGACIÓN BID - FUNDASAL  
**LA VIVIENDA TIENE HISTORIA.  
 Y ES LA HISTORIA NUESTRA**

### INSTRUMENTOS DE LA ENCUESTA

Este paquete contiene los instrumentos para examinar el desarrollo incremental de la casa. Los cinco formularios y las imágenes fotográficas de referencia deben ser completados para cada caso encuestado. Un documento, el Manual del Encuestador, acompaña a este instrumento para proporcionar el contexto, las instrucciones y el procedimiento recomendado para las entrevistas.

#### FORMULARIOS

- 1.0 INFORMACIÓN BÁSICA
- 2.0 CUESTIONARIO: COND. INICIAL Y ACTUAL
- 3.0 DIAGRAMA: TAMAÑO DE FAMILIA
- 4.0 DIAGRAMA: INGRESOS DE FAMILIA
- 5.0 DIAGRAMA: AMPLIACIÓN DE VIVIENDA
- 6.0 PLANO DE LA CASA
- 7.0 PROCESO DE NARRATIVA
- 8.0 GUÍA: DOCUMENTACIÓN FOTOGRÁFICA

**1.0 INFORMACION BÁSICA** Para el Dibujante/Fotógrafo y el Equipo de Encuesta  
**DOCUMENTACION FOTOGRAFICA** Formulario para la primer fotografía de cada encuesta

**ASENTAMIENTO / URBANIZACIÓN** Colonia al Papato

**TIPO DE CASA** Ampliada

**NOMBRE DE LA FAMILIA** Avilés Campos

**DIRECCIÓN** Pje 6 Poligono 9 Casa 24

**EQUIPO** 06

**FECHA** 12/03/2011

Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador  
 "Recuperando la historia de la comunidad"

#### Explicación

##### Tipo de casa

F= Fundamental  
 C= Consolidada  
 A= Ampliada

##### Niveles de calidad de servicios e infraestructura

	A	B	C
<b>Agua potable</b>	Acceso domiciliario. Servicio de agua de manera regular o irregular. Calidad del agua buena o mala.	Existencia de cantonera. Servicio de agua comunitario regular o irregular. Calidad del agua buena o mala.	Sin acceso a agua potable. La comunidad recorre la zona de manera regular o irregular para conseguir el vital líquido.
<b>Red hidráulica (aguas negras y lluvias)</b>	Acceso a red de aguas negras y lluvias. Con buena calidad, redes hidráulicas en buenas condiciones. Conexiones domiciliarias.	Ausencia de una red, redes hidráulicas en condiciones regulares con algunas fallas. Conexiones colectivas.	Ausencia de redes hidráulicas, o las existentes en muy malas condiciones en conexiones desde vecinos o de otras urbanizaciones.
<b>Tren de aseó</b>	Servicio de tren de aseó todas las semanas (3 días), atendiendo toda la comunidad.	Servicio de tren de aseó eventual, una o dos veces por semana los días correspondientes en la comunidad.	Sin servicio de tren de aseó, formación de promontorios en la comunidad, los vecinos tienen que quemar basura o llevarla a quimbales.
<b>Electricidad</b>	Con conexión directa a la vivienda, y servicio durante todo el día, apagones eventuales.	Con conexión colectiva, servicio en algunos hogares.	Con conexión a vecinos, ausencia en parte de la comunidad de energía eléctrica, apagones regulares o casi todos los días.
<b>Centros Educativos</b>	En buenas condiciones de mantenimiento, áreas verdes incluidas, localizada en la comunidad o a menos de 1 KM de la comunidad o a más de 1 KM de la comunidad, hasta 6° o 9° grado.	Infraestructura con cierto grado de deterioro, áreas verdes incluidas, localizada en la comunidad o a más de 1 KM de la comunidad, hasta 6° o 9° grado.	Infraestructura precaria, deficiente equipamiento, a más de 3 KM de la comunidad. Cuidar nivel de educación: primaria, secundaria y bachillerato.
<b>Centros de Salud</b>	Atención directa y constante a la comunidad, localizada en ella o a menos de 1 KM. Con buenas condiciones para evitar deslizamientos, inundaciones, etc.	Atención eventual a la comunidad, localizada a un máximo de 3 KM de la comunidad.	Atención casi nula, localizada a más de 3 KM, infraestructura deficiente.
<b>Obras de Protección</b>	Obras en buenas condiciones para evitar deslizamientos, inundaciones, etc. dentro de la comunidad o en radios próximos.	Obras dentro de la comunidad o en radios próximos.	Ausencia de dichas obras dentro de la comunidad o en radios próximos.
<b>Accesos</b>	Acceso directo a la comunidad y en buenas condiciones (calles o pasajes pavimentados y/o señalados, con iluminación, etc), sin necesidad de intermediarios.	Acceso a la comunidad, no necesariamente en forma directa, ni en buenas condiciones (calles o pasajes de empalizadas, etc), no necesariamente iluminados, con peligro para la comunidad.	Acceso a la comunidad indirecto, en malas condiciones (calles o pasajes de empalizadas, etc), sin iluminación, con peligro para la comunidad.

##### Información básica en el comienzo

JF= Jefe de familia

- H1= Hijo 1  
 H2= Hijo 2  
 H7= Hijo 7
- Cony= Cónyuge

- O1= Otros familiares 1  
 O2= Otros familiares 2  
 O7= Otros familiares 7

### 2.0 A - CUESTIONARIO: INICIAL - EL COMIENZO

**1 ¿Qué fue proporcionado?**

Sala?	Cuartos?	Otros?	Pisos?
	2	1	1

¿Tamaño en m<sup>2</sup>?  
 Cuartos: 30.00  
 Otros: 15.00

Asentamiento: Col. al Papato  
 Tipo Casa: [ ] [ ] [ ]  
 Familia: Avilés Campos  
 Equipo: 06  
 Fecha: 12/03/2011

**2 ¿Quién lo construyó?**  
 ¿Contratista? Si  
 ¿Ayuda mutua? [ ]  
 ¿Esfuerzo propio? [ ]  
 ¿Otros? [ ]

**3 ¿Qué materiales utilizaron?**  
 Pared: Ladrillo, Arena, Cemento  
 Techo: Ladrillo  
 Piso: Ladrillo, Rejo

**4 ¿Hubo algun costo?** Si \$ 800  
 ¿A quien pagaron? Ex Propietario  
 ¿Fue subsidiado? [ ]

**5 ¿Cual era su situación legal?**  
 Sin título? [ ] Otro? Coti Fivido

**6 ¿Porque se trasladó a este lugar?**  
 ¿Acceso a empleo? [ ]  
 ¿Bajo costo? [ ]  
 ¿Amigos? [ ]  
 ¿Otros? Se mudaron a casa a esta colonia por seguridad.

**7 ¿Que servicios les ofrecieron? (en la zona)**

¿Agua Potable?	¿Electricidad?
[ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ]
¿Red hidráulica?	¿Otros?
[ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ]
¿Tren de aseó?	
[ ] [ ] [ ] [ ]	

**8 ¿Que infraestructura les ofrecieron? (en el barrio)**

¿Centros Educativos?	¿Accesos?
[ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ]
¿Centros de salud?	¿Otros?
[ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ]
¿Ob. de protección?	
[ ] [ ] [ ] [ ]	

**9 ¿Había org. sociales?** SI NO CUAL? Junta Directiva

**10 ¿Qué problemas tuvieron inicialmente?** No tuvieron problema alguno

**11 ¿Qué sugerencias para apoyo a la comunidad tuvo ud. al inicio del proyecto?** Ninguna Sugerencia

**12 ¿Se sentía usted seguro?** SI NO CUAL? Existían Muchos Pandilleros

**13 Información básica en el comienzo**

¿Tamaño de la familia?	¿Edades?
4	JF 54 Cony 49 Hijo 1 27
¿Número de dependientes?	
3	H2 22 H3 H4
¿Empleo formal o informal?	
Formal	H5 H6 H7
¿Ingresos de la familia? (No más)	
\$ 800	O1 O2 O3

Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador

**Explicación**

Tipo de casa  
 F= Fundamental  
 C= Consolidada  
 A= Ampliada

**Niveles de calidad de servicios e infraestructura**

	A	B	C
Agua potable	Acceso domiciliario. Servicio de agua de manera regular e irregular. Calidad del agua buena o mala.	Existencia de cisternas. Servicio de agua de manera regular o irregular. Calidad del agua buena o mala.	Sin acceso a agua potable. La comunidad necesita ir a otros comedores para conseguir el vital líquido.
Red hidráulica	Acceso a red de agua regular y buena. Con buena calidad, condiciones. Conexiones domiciliarias.	Asistencia de una red, redes hidráulicas en condiciones regulares con algunas fallas. Conexiones colectivas.	Asistencia de redes hidráulicas, o las existentes en muy malas condiciones con conexiones desde vecinos o de otras urbanizaciones.
Tren de asno	Servicio de tren de asno todos los días (1 día) atendiendo a toda la comunidad.	Servicio de tren de asno eventual (un par de veces las semanas) atendiendo a toda la comunidad.	Sin servicio de tren de asno, formación de promotorios en la comunidad, los vecinos tienen que quemar huera o traerla a cuadradas.
Electricidad	Con conexión directa a la vivienda, y servicio durante todo el día, apagones eventuales.	Con conexión colectiva, servicios con apagones regulares.	Con conexión a vecinos, asistencia en parte de la comunidad de energía eléctrica, apagones regulares o casi todos los días.
Teléfono	Con conexión de teléfono en cada vivienda, de buena calidad.	Hay uno de teléfonos públicos o de los vecinos.	Asistencia de teléfonos públicos y de línea fija en la comunidad.

**Información básica en el comienzo**  
 JF= Jefe de familia

H1= Hijo 1  
 H2= Hijo 2  
 H7= Hijo 7

O1= Otros familiares 1  
 O2= Otros familiares 2  
 O7= Otros familiares 7

Coryu= Cónyuge

**Pregunta 11:**  
 ¿Tiene previsto ampliar su casa?  
 Ampliaciones: Escribir qué espacios tiene planeado construir  
 ¿Por qué? Explicar el motivo de las ampliaciones  
 ¿Cuánto? Cuánto costará la(s) ampliación (s)

**2.0 B - CUESTIONARIO: ESTADO ACTUAL**

Asentamiento: Col. el Pepero  
 Tipo Casa: [ ]  
 Familia: Aviles Campos  
 Equipo: 06  
 Fecha: 12/03/2004

**1 ¿Qué existe ahora? (número)**  
 Sala: 1 Baño: 1 Otros: [ ]  
 Comedor: 1 Cuartos: 3 Pisos: 2  
 Cocina: 1 Patio: 1

**2 Tamaño (área total m<sup>2</sup>)** 114 m<sup>2</sup>

**3 ¿Qué tipo de servicios tiene en su casa? (Nivel)**

¿Agua Potable? [X] A [ ] B [ ] C [ ] (Electricidad) [X] A [ ] B [ ] C [ ]  
 ¿Red Hidráulica? [X] A [ ] B [ ] C [ ] (Teléfono) [X] A [ ] B [ ] C [ ]  
 ¿Tren de Asno? [X] A [ ] B [ ] C [ ] (Otros) [ ] A [ ] B [ ] C [ ]

**4 ¿A que tipo de infraestructura pueden acceder?**  
 ¿Escuelas? [X] [ ] ¿Clínicas? [X] [ ] ¿Otros? [ ]

**5 ¿Hay organizaciones sociales?** [X] Si [ ] No (¿Cuáles?) *Junta Directiva*

**6 Pagos** Si paga, ¿cuánto paga? *No pagan*  
 ¿Para qué? *pagar, impuestos, etc*  
 ¿A quién? *para, agua, etc*

**7 ¿Cual cree que es el precio de su casa ahora?** \$ 20,000  
 ¿Por qué? *Es a raíz de lo la construcción de la primera y segunda planta*

**8 ¿Recuerda el mayor apoyo?** *No tuvieron apoyo*  
 ¿Cuál fue?

**9 ¿Recuerda los obstáculos?** *No tuvieron obstáculos.*  
 ¿El mayor? [ ]  
 ¿El más caro? [ ]  
 Si los superó, explique cómo [ ]

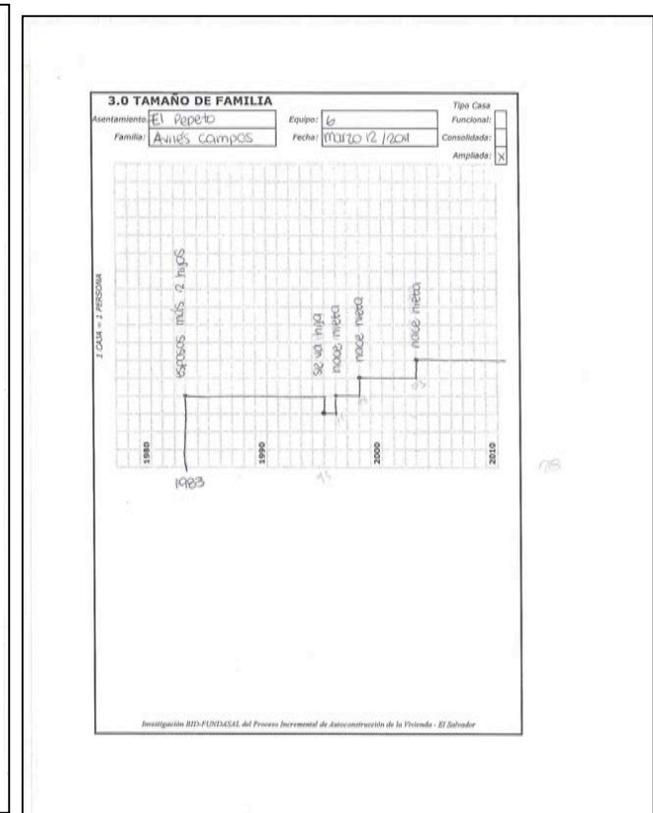
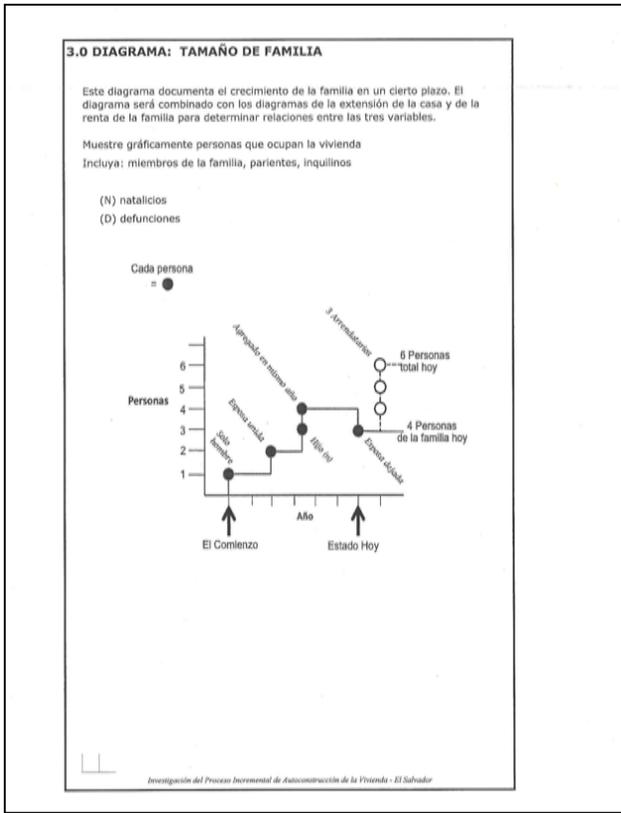
**10 ¿Supercenas para apoyo en la actualidad?** *que brindan financiamiento a personas de escasos recursos.*

**11 ¿Tiene previsto ampliar su casa?** Ampliaciones? *No*  
 ¿Por qué? *El terreno es pequeño y no hay dinero*  
 ¿Cuánto? [ ]

**12 ¿Es seguro?** [X] Sí [ ] No (¿Por qué?) *Ya existe menor delincuencia gracias a los autoridades*

**13 Información básica**  
 ¿Tamaño de la familia? 6  
 ¿Empleo: Formal? 1 Informal? [ ] Ninguna? [ ]  
 ¿Ingresos familia? *\$ 200*

*Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador*



#### 4.0 INGRESOS DE FAMILIA

Este diagrama documenta los ingresos domésticos totales en un dado plazo. El diagrama será combinado con los diagramas de la extensión de la casa y del crecimiento de la familia para determinar relaciones entre las tres variables.

Determine el ingreso mensual total de la familia:

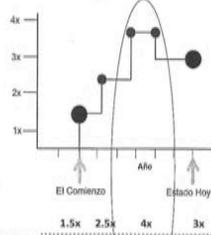
- 1 - Ocupación de la vivienda
- 2 - Actual - 2011
- 3 - En momentos de expansiones mayores de la vivienda

Muestre ingresos ocasionales importantes: remesas, etc.

Muestre abajo el ingreso por tipo de trabajo, hecho por quien y otros

Convierta ingresos de la familia a múltiplos de salarios mínimos.

- Indique ingresos con puntos grandes el comienzo y presente.
- Indique ingresos con puntos más pequeños en fechas intermedias, combinando todas fuentes de ingresos de la familia.
- Conecte los puntos.
- Registre el tipo de empleo y otras fuentes de ingresos en espacios abajo de cada cambio importante en ingresos.



Trabajo Formal: \_\_\_\_\_

Trabajo Informal: \_\_\_\_\_

Apoyo de Gobierno: \_\_\_\_\_

Otros: préstamos, alquiler, remesas, etc.: \_\_\_\_\_

Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador

#### 4.0 INGRESOS DE FAMILIA

Asentamiento: El Pepero Equipo: 6 Tipo Casa:  Funcional  
 Familia: Aviles Campos Fecha: marzo 12 / 2011 Consolidada:   
 Ampliada:



Trabajo Formal: Señor Itataya en empresa

Trabajo Informal: \_\_\_\_\_

Apoyo de Gobierno: ninguno

Otros: préstamos, alquiler, etc.: ninguno

Investigación BID-FUNDASAL del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador

#### 5.0 DIAGRAMA: AMPLIACIÓN DE VIVIENDA

Este diagrama documenta la extensión de la casa en un plazo de tiempo. El diagrama será combinado con el crecimiento de la familia y los diagramas de la renta de la familia para determinar relaciones entre las tres variables.

##### 1.0 INDICAR AMPLIACIONES

Especificar

- R = Cuarto: recámara, sala
- C = Cocina (1/2 espacio)
- B = Baño (1/2 espacio)
- O = Otros
- I = Inicio de la const.
- S = Suspensión de la const.
- R = Reanudación de la const.
- F = Finalización de la const.

Anotación a lo indicado en el gráfico:

El cuarto se cuenta cuando esta completo, listo para habitarse.

##### Indicaciones Gráficas:

Poco a poco

De una vez

Por qué construyeron en ese momento?

Como construir?

Fondos?

Problemas?

Explique cuales fueron las fechas dominantes de la extensión

Fecha que se comenzó el cuarto

Fecha que se terminó el cuarto

Fecha que se finalizó el cuarto

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

Fecha que se finaliza la construcción

Fecha que se inicia la construcción

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

Fecha que se finaliza la construcción

Fecha que se inicia la construcción

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

Fecha que se finaliza la construcción

Fecha que se inicia la construcción

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

Fecha que se finaliza la construcción

Fecha que se inicia la construcción

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

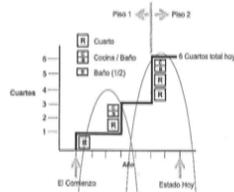
Fecha que se finaliza la construcción

Fecha que se inicia la construcción

Fecha que se reanuda la construcción

Fecha que se suspende la construcción

Fecha que se finaliza la construcción



Necesito más espacio  
 Poco a poco, con amigos  
 Ahorros  
 Con ahorros

El hijo + con su familia vinieron a vivir aquí  
 De una vez, contratista  
 Con ahorros

Problemas? Demasiado lento  
 Mala calidad

##### 2.0 AGREGAR EVENTOS MOTIVADORES

Detonadores Potenciales, Considere:

2.1 ¿Título de propiedad?

2.2 ¿Remesas?

2.3 ¿Alquiler de un cuarto?

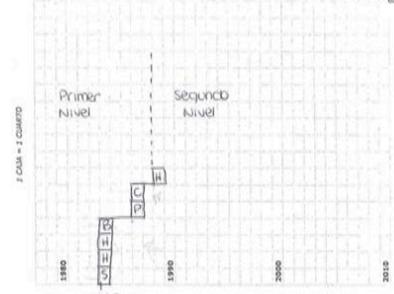
2.4 Otros, especifique

(Las respuestas deben anotarse en el diagrama de la ampliación de la vivienda)

Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador

#### 5.0 DIAGRAMA: AMPLIACIÓN DE VIVIENDA

Asentamiento: El Pepero Equipo: 6 Tipo Casa:  Funcional  
 Familia: Aviles Campos Fecha: marzo 12 / 2011 Consolidada:   
 Ampliada:



Por qué construyeron en ese momento? Necesitaban más espacio y tenían dinero ahorro que podían invertir.

Como construir? con ahorros que tenían

Fondos? ninguna

Problemas? ninguna

Investigación BID-FUNDASAL del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador

**6.0 PLANO DE LA CASA**

Asentamiento: El Papeto Equipo: 6 Tipo de Casa:  Funcional:   
 Familia: Avilés Campos Fecha: Marzo 12/2011 Consolidada:   
 Ampliada:

Se preparará un croquis de la casa existente a la escala de la página contigua que incluye muebles y muestra puertas y ventanas. También debe mostrar el proceso de ampliación de la casa. Use una página por piso.

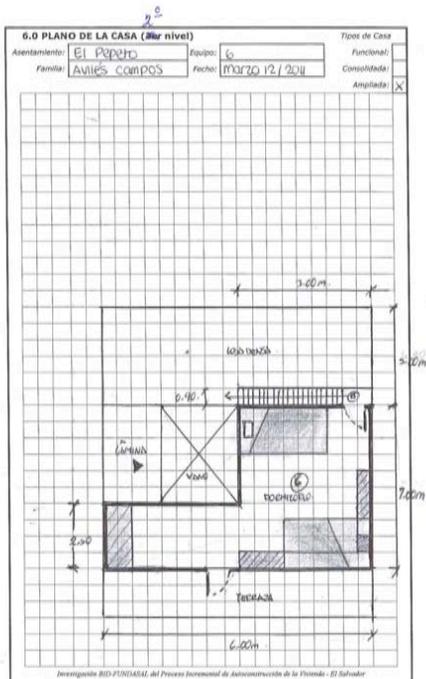
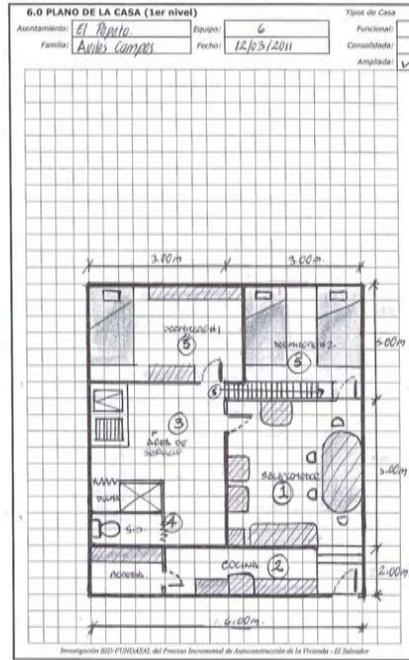
**Nota:** Recuerde! Use pluma de tinta negra únicamente - no use lápiz

**Indicar en el Plano:**  
 Paredes  
 Material del piso  
 Puertas y ventanas  
 Solamente los muebles indican uso del cuarto  
 Dimensiones aproximadas  
 Secuencia de ampliación  
 Poco a poco o contratado (cada cuarto)

**ÁREA DE CUARTOS (m2)**  
 Nombre de cuarto y secuencia en expansión

Sala-comedor	15.00 m <sup>2</sup>		
Cocina	3.00 m <sup>2</sup>		
Patio-lavadero	22.50 m <sup>2</sup>		
Baño	1.50 m <sup>2</sup>		
Habitación 1	15.00 m <sup>2</sup>		
Habitación 2	15.00 m <sup>2</sup>		
Habitación 3-terracea	42.00 m <sup>2</sup>		
	m <sup>2</sup>		
	m <sup>2</sup>		
	m <sup>2</sup>		
	m <sup>2</sup>		
	m <sup>2</sup>		
	m <sup>2</sup>		
NÚMERO TOTAL DE CUARTOS	<u>7</u>	TOTAL Área	<u>114.00</u>

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**7.0 PROCESO DE NARRATIVA**

Asentamiento: El Papeto Equipo: 6 Tipo de Casa:  Funcional:   
 Familia: Avilés Campos Fecha: Marzo 12/2011 Consolidada:   
 Ampliada:

La Narrativa se basa en conversaciones con la familia.  
 Contiene la siguiente información:

- ¿Quién vive en la casa ahora?
- ¿Qué le gusta más de su casa ahora?  
 (¿De qué están más orgullosos?)
- ¿Por qué participaron en el proyecto?
- ¿Qué fue lo primero que hicieron?
- ¿Qué razones los llevaron a ampliar su casa?
- ¿Qué tipo de problemas tuvieron? ¿Qué apoyo recibieron?
- ¿Dónde o cómo obtuvieron fondos para la ampliación?
- ¿Qué sugerencias tienen si lo hicieran todo de nuevo?

En esta ocasión fue los esposos de la casa con sus hijos y nietos el cual hace unos años me fue que vendieron un terreno para comprar la casa y solo estaba de un lado del patio una pared y los cuartos del fondo y con suficiente para la vivienda construyeron la primera planta y luego la segunda y después a la hora de tomar fotos y hacer un que con acordar a algunas fotos de la cual después los conversamos y se pasó.

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**B.0 DOCUMENTACIÓN FOTOGRÁFICA (Guía)**

*Esta lista puede ser utilizada como una guía para decidir sobre las fotografías que deben tomarse. En la mínima, tome una fotografía de cada uno de estos grupos, para un total de 7 (siete) que el número 5 incluye aspectos positivos o negativos).*

**Notas Generales**

- La primera y última actividad de la encuesta de campo es una fotografía
- Asegúrese de pedir permiso para tomar las fotografías
- Al final de cada día descargue las fotografías en una memoria

**1 - IDENTIFIQUE LA FUENTE DE INFORMACIÓN**

- Esta es la primera de la serie de fotografías para cada familia
- Escriba en una hoja de papel la siguiente información en letra de imprenta grande negra y fotografíela
- Dirección y número de teléfono de la familia*
- Nombre de la familia*
- Tipo de desarrollo de la vivienda: básica, consolidada, ampliada*
- Nombre del equipo de encuestadores*
- Fecha de la encuesta*

**2 - FOTOGRAFÍE EL EXTERIOR DE LA VIVIENDA Y SU CONTEXTO**

- Frente de la vivienda, con algún traslape de las casa vecinas
- Oblicua, de 3/4 del frente
- Contexto: alejase lo más posible y fotografíe el frente de la vivienda
- Contexto de la calle. Imagen de la calle con la vivienda a un lado

**3 - FOTOGRAFÍE LOS ESPACIOS INTERIORES**

- Sala
- Cocina
- Baño
- Recámaras
- Patio abierto

**4 - FOTOGRAFÍE LOS DETALLES DE LA VIVIENDA**

- Detalles de Construcción: Muros, pisos, acabados, otros

**5 - FOTOGRAFÍE ASPECTOS POSITIVOS O NEGATIVOS**

- Construcción
- Arreglos del espacio, dimensiones
- Otros

**6 - FOTOGRAFÍE LA DESPEDIDA DE LA FAMILIA**

- Familia frente a la vivienda
- Familia frente a la vivienda con el equipo de encuesta

*Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador*

**1.2 INFORMACIÓN BÁSICA**

DOCUMENTACIÓN FOTOGRÁFICA

*Para el Encuestador, Investigador y el Equipo de Encuesta*

*Formulario para la gestión fotográfica de cada vivienda*

ASENTAMIENTO / URBANIZACIÓN: *Colonia el Pajaro*

TIPO DE CASA: *Ampliada*

NOMBRE DE LA FAMILIA: *Aviles Campos*

DIRECCIÓN: *Pje 6 Polipono 6 Casa 24*

EQUIPO: *06*

FECHA: *12/03/2011*

*Investigación del Proceso Incremental de Autoconstrucción de la Vivienda - El Salvador*



**EXTERNALITIES**

Several types of background/context data are collected in support of the survey information. This data relates to more passive, autonomous policy interventions. The 'externalities' data is divided in two general areas: 1) Information related to the specific project being surveyed, which captures input from the government or developer, and the situation of the surrounding context. 2) Information related primarily to the economic situation of the city and the country, to capture possible impacts from external situations. The goal is to organize the information in a 'timeline' format as well as in data tables.

**PROJECT CONTEXT**

To be collected for each project surveyed

**1.0 COSTS TO GOVERNMENT (or developer)**

- 1.1 Initial starter house

*What provided, cost, and tenure arrangement*

- 1.2 Initial land costs

*Total project cost, and cost per plot*

- 1.3 Initial services provided

*What provided and cost*

*Water, sanitation, roads, electricity, other*

- 1.5 Initial assistance programs

*What offered and amounts; financial and technical support, small business support, other*

**2.0 RELATIVE LOCATION IN CITY (key plan)**

- 2.1 City growth relative to project

*Show at start, mid-point, current, and change in general land prices*

- 2.2 Infrastructure network change (Include infrastructure networks on plan)

*Water, sanitation, roads, electricity, other; scheduled bus routes*

- 2.3 General pay scale over time

*General pay scales for typical occupations expected to be found in projects. Information used to check household income responses.*

*Construction laborer, construction foreman, factory worker, casual street vendor, restaurant work, house cleaning, other.*

**CITY, COUNTRY CONTEXT – CHANGES OVER TIME**

*General background for data. Starting date 1975, ending date 2010 - current. Tentatively 5-year intervals.*

**3.0 ECONOMY**

- Economic situation of city (GNP?)

- Economic situation of country (GNP?)

- Average costs in city, trends:

*Housing (low, middle, high income)*

*Materials (cement particularly; materials index)*

*Labor (labor index)*

*Land*

- Inflation rates %

- Credit rates % (mortgages and loans)

- Shifts in government housing and economic policies

- Important other influences

*Natural disasters, wars, other*

## PROCESOS DE AUTOCONSTRUCCIÓN PROGRESIVA: INDICADORES PARA POLÍTICAS DE VIVIENDA DE INTERÉS SOCIAL - RESULTADOS INVESTIGACIÓN BID / FUNDASAL

### La vivienda incremental en El Salvador

#### 1. La situación de la vivienda. Déficit habitacional cuantitativo y cualitativo. Factores que han influido.

Luego de los terremotos de enero y febrero de 2001, el parque habitacional se transformó sustancialmente, siendo entonces necesario establecer la condición actual de las viviendas en El Salvador. De aquí que el déficit habitacional salvadoreño se vio disparado drásticamente.

Para enfrentar este problema, resulta necesario diseñar mecanismos apropiados para resolverlo, identificando en el proceso cuáles son las oportunidades de inversión disponibles en el sector habitacional, tanto privadas como públicas, siendo conveniente articular todo esfuerzo gubernamental en un plan integrado que permita reducir el referido déficit, tanto en dimensión cuantitativa como cualitativa. Se debe tener presente que las condiciones de vida de la población se ven influenciadas por su distribución espacial, por los niveles de ingresos que percibe y por la provisión de servicios básicos por parte del Estado.

El rasgo característico del problema es la insuficiente oferta de unidades disponibles para satisfacer las necesidades de habitación de una parte importante de la población. Este problema se agravó, entre otras causas: por la migración de campo a la ciudad, por el conflicto armado desarrollado por 12 años, en un principio, y la crisis del agro y falta de oportunidades de empleo en el área rural, después; por la ausencia de una política integral para responder a las necesidades particulares de la población de medios ingresos; por el deterioro económico experimentado por algunos sectores marginados; y por los estragos de los terremotos del 2001, que además de afectar el parque habitacional, afectó la provisión de servicios básicos. Esto último constituyó un fuerte golpe para la infraestructura social, especialmente, la del área rural del país.

Por déficit habitacional entenderemos los estados de carencia enfrentados por las personas al satisfacer sus necesidades de alojamiento en hogares. En cuanto a la satisfacción de esas necesidades, debemos considerar dos aspectos: la autonomía residencial y la calidad del lugar de habitación y acceso a los servicios básicos requeridos, a la familia, una adecuada protección frente al medio ambiente, físico y social.

La autonomía residencial supone la existencia de una vivienda independiente por hogar. Aquellos que no disponen de ella enfrentan un déficit cuantitativo y su estimación abarca al número de hogares sin casa existentes en una coyuntura determinada. Por otro lado, los hogares con vivienda independiente pueden enfrentar, no obstante, carencias en la satisfacción de sus necesidades de alojamiento. Ello se relaciona con la calidad material del local donde viven, que puede tener estándares inferiores a los considerados como condiciones mínimas para la protección de la vida familiar, o pueden carecer de servicios básicos complementarios a la vivienda (instalaciones domiciliarias de agua potable, eliminación de excreta y energía eléctrica). Dichas carencias representan el déficit cualitativo. Para medirlo se deben tomar en cuenta los hogares que residen en viviendas que deben ser reemplazadas por unidades nuevas, o que requieren ser rehabilitadas, ya sea en sus condiciones materiales o en cuanto a su conexión a redes de servicios básicos.

Parte del déficit cuantitativo se expresa como la convivencia de dos o más hogares en una misma vivienda o la coexistencia de dos o más viviendas en un mismo predio residencial. Paralelamente, existen familias que no han logrado aún su autonomía económica y comparten el presupuesto de alimentación y vivienda con otras familias. Estas conforman un hogar compuesto de más de un núcleo familiar, distinguiéndose así un "núcleo principal", que corresponde al núcleo del jefe o jefa de hogar, y el "núcleo o núcleos secundarios"; esto puede darse también ante problemas de vulnerabilidad de ciertas personas, que no pueden residir en manera autónoma (por razones de seguridad, enfermedad, edad, entre otras). Esto significa que el problema del déficit cuantitativo puede responder a una estrategia de sobrevivencia o derivarse de problemas de ingresos.

El déficit cualitativo está integrado por los hogares que residen en viviendas que deben ser reemplazadas o rehabilitadas, por no cumplir con los estándares materiales mínimos o por no disponer de servicios básicos. Su medición requiere precisar los estándares mínimos aceptables para que la vivienda cumpla sus funciones en relación con la vivienda familiar. En la cuantificación de este déficit se deben considerar los siguientes componentes: las condiciones materiales de las viviendas (materiales de paredes, techos y pisos, así como el estado de conservación) y el saneamiento con que cuenta esa vivienda (acceso a las redes de servicios o sistemas de saneamiento que proveen agua potable, eliminación de excretas, energía) que asegure un mínimo de salubridad y comodidad a los hogares.

Se presenta a continuación el cuadro resumen del déficit de vivienda en El Salvador a partir de la década de los 70:

Período de tiempo	Año	Déficit Cualitativo	Déficit Cuantitativo	Déficit de vivienda	(Fuente)
2000-2011	2011	-	-	-	(VMVDU) PNUD Vice-ministerio de Vivienda (VMVDU) Oficina de Planeación Estratégica (OPES) del VMVDU.
	2010	-	-	-	
	2009	-	-	-	
	2008	-	-	-	
	2007	44,383	315,118	360,301	
	2006	528,407	25,762	554,169	
	2005	532,073	36,799	568,872	
	2004	-	-	545,000	
	2003	-	-	472,131	
	2002	563,296	119,127	682,423	
	2001	531,439	130,303	661,742	
2000	489,010	36,511	525,521		
1990-1999	1999	507,227	44,377	551,604	Oficina de Planeación Estratégica (OPES) del VMVDU.  Cálculos hechos sobre la base de la EHPM
	1998	514,637	45,067	559,704	
	1997	534,511	20,716	555,227	
	1996	542,727	34,651	577,378	
	1995	534,948	44,573	579,521	
	1994	537,682	52,610	590,292	
	1993	531,819	61,670	593,489	
	1992	533,819	61,280	595,099	
	1991	-	-	-	
	1990	-	-	-	
1980-1989	1989	-	-	426,759	MIPLAN, Plan Tri-anual 1981-1983, febrero 1982.  Diagnostico Sectorial de Vivienda. FUSADES. 1988.
	1988	-	-	-	
	1987	-	-	-	
	1986	-	-	-	
	1985	-	593,635	-	
	1984	-	590,841	-	
	1983	-	587,112	-	
	1982	-	586,460	-	
	1981	-	-	-	

	1980	-	-	-	
1970-1979	1976	-	-	505,750	MIPLAN, Plan Tri-anual 1981-1983, febrero 1982.
	1970	-	-	561,465	Diagnostico de la situación habitacional de la Republica de El Salvador en 1970.

Fuente: FUNDASAL, 2011.

## 2. Características de la vivienda incremental y características de la población.

Ante la imposibilidad del acceso de las familias de los sectores sociales de menores ingresos a una vivienda terminada, sea porque no pueden pagar cuotas mínimas, sea por la imposibilidad del Estado de subsidiarlas completamente, y viendo cómo ellas han resuelto a lo largo de los años y con mucho esfuerzo este problema, se ha concebido desde hace varias décadas la idea de impulsar programas de desarrollo progresivo de la vivienda popular, tanto a nivel gubernamental como de instituciones privadas.

### Modelos tecnológicos

Los programas que se han desarrollado en El Salvador desde esta modalidad parten que las familias que habitarán dichas viviendas mejorarán sus condiciones económicas, es decir, sus ingresos tenderán al aumento de tal forma que podrán invertir en la construcción paulatina de las partes de sus viviendas inicialmente no ejecutadas, y en muchos casos, en la construcción de infraestructura e instalaciones de uso común.

En el caso de El Salvador, no obstante, que en la gran mayoría de los casos, dicha situación no ha ocurrido o lo ha sido muy parcialmente, se observará paradójicamente innumerables ejemplos de progresividad en la edificación de la vivienda popular progresiva, desarrollándose en muchos casos al margen de los programas establecidos. Lo anterior revela que alrededor de este tipo de vivienda se teje una red de relaciones y determinaciones de múltiples dimensiones y de extrema complejidad, lo que es poco útil a los programas que no la consideran en toda su utilidad.

La primera cuestión que resalta a la vista, aparte de las condiciones económicas mencionadas, es la incidencia de los modelos tecnológicos sobre los proyectos de vivienda progresiva: tipo de materiales, procesos constructivos, capacidades técnicas utilizadas en los proyectos. Estos modelos configuran verdaderos "paquetes" tecnológicos asociados a la formación de los profesionales que trabajan en esta área y a la economía de la construcción dominante, así como a determinantes concepciones de lo que se considera una vivienda "buena" y "moderna". En general, los modelos tecnológicos predominantes están concebidos para la construcción de obras finalizadas, por lo que muchos de ellos presentan componentes y procesos que dificultan el diseño y la ejecución de proyectos de vivienda progresiva.

Estrechamente asociado a las cuestiones tecnológicas anteriores, está el problema del diseño. Aquí nuevamente se encontrará una cultura del "bien final", que dificulta la elaboración de diseños, donde el concepto de progresividad sea realmente una parte del proceso.

### Políticas estatales

Al ser la intervención estatal, a través políticas (urbana, de vivienda, de infraestructura y equipamiento, crediticia, comercial, etc), decisiva en la producción de la vivienda popular, puede estimular u obstaculizar la realización de proyectos de carácter popular.

Una rápida revisión de su orientación muestra, para muchos países de América Latina, el paso de los programas de vivienda terminada durante los años 50 y 60, a los programas de lotes y servicios que prevalecieron a partir de los años 70, desarrollándose también a partir esa época, numerosos proyectos de rehabilitación de conjuntos de vivienda deterioradas y programas de provisión de materiales entre otros, hasta llega al momento actual, donde se han orientado los programas de financiamiento y se ha priorizado la regularización de la tenencia y la propiedad de la tierra urbana y suburbana.

El impacto de las sucesivas reorientaciones de las políticas de vivienda, en concordancia con las estrategias de desarrollo que las enmarcan sobre la progresividad de la vivienda popular. Así por ejemplo, los programas de lotes y servicios descansaban en la premisa que las familias que irían a residir tendrían la posibilidad económica para desarrollar vivienda progresiva, basándose esto en una fuerte participación estatal para crear las condiciones de su cumplimiento (1940-1990), mientras que la desregulación que caracteriza a las políticas actuales está estrechamente asociada al papel del mercado (1990-2011). Estamos, entonces, ante un cambio radical del papel

al Estado en torno al problema de la vivienda popular, lo que obviamente exige repensar el carácter, las formas y las bases en que deben apoyarse los programas de desarrollo progresivo de vivienda. Adicionalmente este giro en las políticas estatales, especialmente a partir de 1989, cuando el partido Alianza Republicana Nacionalista (ARENA) llegó al poder, tiende a favorecer aquellos modelos tecnológicos que están más estrechamente asociados a las tendencias dominantes en el mercado y en el sector de la construcción.

Es importante tomar en cuenta que a partir de 2009, el Gobierno de El Salvador ha empezado a desarrollar diversos proyectos de vivienda, entre ellos vivienda progresiva, a través de diversos planes y programas como el Anticrisis, Casa para Todos, etc.

### **Vivienda progresiva y modelos simbólicos sociales**

Se considera necesario incorporar en estas reflexiones generales una cuestión que se aborda poco o se deja de lado en muchos casos. Se trata de la relación entre la vivienda progresiva y los modelos simbólicos sociales sobre la vivienda deseada, que predominan en la concepción de los diferentes sectores populares.

Aspecto íntimamente vinculado a los patrones culturales subalternos dominantes y a su evolución. Su influencia en la problemática actual es generalmente poco tomada en consideración en los diseños de programas y proyectos, tanto en viviendas terminadas como progresivas. Es así como diferentes grupos sociales, que experimentan una transformación socio-cultural acelerada como es el caso de El Salvador, están expuestas a fuertes influencias externas y están ideológicamente influenciados por patrones de uso de materiales, disposición del espacio interno de la vivienda y utilización de los espacios públicos o comunes.

Un ejemplo bastante extendido en El Salvador y América Latina es la preferencia del bloque de concreto sobre otros materiales que podrían ser más adecuados para determinadas condiciones físicas, más económicas y ecológicamente preferibles. Sin embargo, en muchos casos, el uso del bloque de concreto está asociado a la modernidad, al ascenso social y a la legítima preocupación por la seguridad como lo es frente a potenciales catástrofes como terremotos u otros.

### **Vivienda progresiva e ingresos económicos**

Se llega así de nuevo al problema que está en la base de la imposibilidad de acceder a una vivienda terminada y que constituye el núcleo de la problemática generalizada en América Latina: la precariedad de los ingresos económicos de la mayoría de las familias populares de nuestras ciudades. El mejoramiento de las condiciones económicas no se ha cumplido en la mayoría de los casos, y El Salvador no es la excepción, por lo que es necesario explorar reformas económicas y sociales para que las familias incrementen sus ingresos económicos.

El Salvador, al inscribirse dentro de una opción de mercado, los materiales de construcción que se produzcan o los servicios de construcción que se ofrezcan, deben responder a la demanda, la cual generalmente sigue los patrones tecnológicos dominantes, que no son necesariamente ni los más adecuados ni los de más bajo costo para proyectos de vivienda progresiva para los sectores populares.

Las estadísticas oficiales muestran un crecimiento de la pobreza muestran un crecimiento de la pobreza urbana en El Salvador. Esto, evidentemente es un obstáculo para el desarrollo progresivo de la vivienda. En el país, sin embargo, ha ocurrido desde inicios de los años 80 del siglo XX un fenómeno que puede haber contribuido a superar la disminución de los ingresos de las familias de los sectores populares: las remesas monetarias enviadas por los migrantes, principalmente los que están en Estados Unidos y Canadá, y que ha ayudado en gran manera a dedicar parte de ello a la ampliación y mejora de las viviendas.

Respecto al papel de las políticas de vivienda, la orientación dominante por parte del Estado durante los últimos 22 años ha sido centrar su acción en la modificación de la estructura financiera, casi exclusivamente y más recientemente en impulsar procesos de regularización de la tierra urbana. En esta opción, la progresividad y la tecnología se dejan a la acción individual y del mercado.

El problema de la vivienda remite fundamentalmente a la dimensión económica: la gente no tiene casa, porque no tiene la llave que le abra la puerta para entrar al mercado de esos bienes; más aún, no tiene casa, porque sus condiciones económicas no le dan acceso a la tecnología.

### **3. Políticas de gobierno en torno a la vivienda de interés social.**

#### **4.**

#### **Entidades gubernamentales de vivienda y banca privada**

En 1941, el general Maximiliano Hernández Martínez, creó el programa “MEJORAMIENTO SOCIAL”, que tenía como alcance la construcción de viviendas de Interés Social viviendas sobre la calle Concepción al norte del último cuartel de la policía de Hacienda, parcelación rural y vivienda rural. Esta institución fue disuelta en 1950 y se crearon el Instituto de Vivienda Urbana (IVU) y el Instituto de Colonización Rural (ICR), esta última se dedicó a la parcelación rural y recreativa, en playas tales como: El Tamarindo, Metalío, El Monzón, Bola de Monte, etc. EL ICR también se dedicó a programas de vivienda rural, tales como las que están entre la carretera Litoral y la playa Metalío.

El Instituto de Vivienda Urbana (IVU) fue creado el 29 de diciembre de 1950 y de 1951 a 1981, (30 años) construyó 28,222 viviendas (unifamiliares y en altura), por un valor de ¢ 218.8 millones; y adquirió terrenos de una extensión de 1,304 manzanas por ¢ 27.55 millones de colones, en todo el país. De las 28,222 unidades habitacionales 8,616 (al año 1981) fueron apartamentos en edificios multifamiliares de 4 y 5 niveles. El IVU fue desmantelado entre 1990 y 1991 y en 1992 fue suplantado por el Fondo Nacional de Vivienda Popular (FONAVIPO).

El 13 de marzo de 1963 se creó la Financiera Nacional de la Vivienda (FNV), ente estatal de control desempeñando la función de un Banco Central de Crédito para la Vivienda. Fue un banco de segundo piso que nació con un capital del estado de ¢ 2 millones, que regulaba y supervisaba a bancos especializados en viviendas o Asociaciones de Ahorro y Préstamo. Estas últimas nacieron con un capital semilla proporcionado por la cooperación norteamericana AID y eran “Bancos de Vivienda Mutuales”, o sea ventas de acciones libres a cualquier ciudadano. Con el tiempo se convirtieron en Sociedades Anónimas en manos de ferreteros y otros productores de materiales de construcción.

En 1964 nace Atlacatl, la primera Asociación de Ahorro y Préstamo y en 1965: CREDISA, CASA y Ahorromet. Entre 1965 y 1969 financian la construcción de 2,333 viviendas, unas 833 casas por año. El tope de costos era de ¢25,000.00, al 8% interés anual a 25 años máximo, en poco tiempo bajó a 15 años plazo. En 1970 se funda el ente semi estatal “Fondo Social para la Vivienda” (FSV) especializado, como banco de 2° piso en financiamiento a largo plazo de viviendas de Interés Social para familias de ingresos de clase media baja y baja: de 1 a 4 salario mínimos.

De 1970 a 1980 el FSV se dedica a comprar proyectos habitacionales completos a Empresas que les financiaron la construcción (corto plazo) las Asociaciones de Ahorro y Préstamo; y vender a largo plazo a cotizantes de esa entidad. De 1980 hasta la fecha el FSV ya no compra proyectos individuales, sino que financia al cotizante que escoge la vivienda nueva o usada donde él la quiera. A la fecha han desaparecido las Asociaciones que muchas, antes se convirtieron en Bancos.

## **POLÍTICAS Y PROGRAMAS DE VIVIENDA IMPLEMENTADAS POR LOS DIFERENTES GOBIERNOS SALVADOREÑOS.**

Nombre: **Programa de Vivienda en Altura**

Período: décadas del 50 al 80 del siglo XX

Descripción:

Este programa fue implementado por el Instituto de Vivienda Urbana (IVU) en 1969. Tomándole importancia a la escasez de territorio, costos reciente del suelo urbanizado, y el rápido crecimiento de la mancha urbana, se hace necesario optimizar el uso del suelo urbanizado.

Este programa propone hacer un uso racional de los recursos naturales del país, aumentando el grado de concentración de la población, en armonía con el medio ambiente, haciendo lo siguiente:

- Densificar las zonas urbanas con adecuada capacidad de soporte, aprovechando al máximo las redes de servicio ya instalada, contribuyendo al control del excesivo transporte urbano.
- El costo de la vivienda en altura debe estar al alcance de la mayoría de habitantes, incluyendo los estratos de bajos ingresos del área urbana.

- Las medidas a ejecutarse deben conducir a un verdadero ordenamiento y control urbano, optimizando el uso de los recursos naturales.

Nombre: **Política Reformista Nacional**

Período: década del 70 del siglo XX (1973-1975)

Descripción:

La Política Reformista Nacional del régimen del presidente Arturo Armando Molina fue creada ante la imposibilidad y la exclusión del sistema financiero de la vivienda para los sectores de trabajadores afiliados al sistema de seguridad social, para lo cual se creó el Fondo Social para la Vivienda (FSV, 1973) y el Instituto Nacional de Pensiones de los Empleados Públicos (INPEP, 1975), los recursos con los cuales operaron, provenían de los mismos trabajadores y patronos por medio de un sistema de cotizaciones.

¿Qué produjo? Los créditos de ambas instituciones se destinaban a la adquisición de viviendas y lotes, construcción, reparación, ampliación, mejoras y pagos pasivos de vivienda.

Nombre:

**Programas Sociales Compensatorios de plazo inmediato, y programas sectoriales a mediano plazo: a) programa especial de emergencia urbana (para zonas marginales); b) municipalidades en acción; c) programas especiales de desarrollo social; d) programa especial para la reconstrucción post-terremoto de 1986; e) la creación del Fondo de Inversión Social (FIS).**

Período: 1989-1990

Descripción:

El proceso de implementación de estos programas y medidas, se inició básicamente con el saneamiento de las carteras de las instituciones financieras, con la aprobación de la Ley de Privatización de la Banca y las reformas a la política de financiamiento para la vivienda: liberación de tasas de interés, creación de la banca múltiple, participación de las Asociaciones de Ahorro y Préstamo (AAP) en operaciones crediticias distintas del financiamiento de viviendas, etc. Para que los bancos comerciales pudieran entrar al mercado financiero de la vivienda en forma competitiva con las AAP, se creó el Certificado de Depósito para la Vivienda (CEDEVIV), que es un instrumento a mediano plazo (tres años) que ofrecía rendimiento de hasta dos puntos porcentuales de los depósitos a 180 días, es negociable a tasas de interés que se ajustan semestralmente. Estos certificados fueron ofrecidos a partir de julio de 1991, sustituyendo a los bonos de vivienda que manejaba la Financiera Nacional de Vivienda (FNV).

Se realizó acciones básicamente de financiamiento, para atender las necesidades más urgentes generadas por las medidas económicas de ajuste estructural entre la población de más bajos ingresos, a través de organizaciones no gubernamentales y satisfacer necesidades de infraestructura básica, capacitación, promoción vía educación y gestión de proyectos productivos. También, este proceso de implementación buscó facilitar el acceso a la propiedad para aquellos pobladores que gozaban del derecho de posesión de un terreno y arrendatarios del ex IVU, ya que se pretendió hacer propietarios a todos los salvadoreños, lo que no fue un hecho novedoso, ya que se ha venido regularizando la propiedad desde la década de los 70's, acompañado de programas de mejoramiento y renovación de tugurios de corto alcance. Para facilitar este proceso de regulación de la propiedad, se organiza el Instituto Libertad y Progreso (ILP) en 1991, como entidad política responsable, a nivel presidencial, para cumplir con el objetivo de la legalización de las tierras de invasión del Estado y municipales.

Nombre: **Programa de Asentamientos Humanos**

Período: 1989

Descripción:

Conocido como "Programa de Comunidad de Progreso", porque promueve la transformación de las comunidades vulnerables y de más bajos ingresos, al tomar la decisión de mejorar las condiciones habitacionales, con la contribución del Gobierno. Este Programa contempló la alternativa de viviendas rurales. En algunos casos, el Programa supuso la reubicación de personas hacia lugares que no presenten problemas de ilegalidad, seguridad física y estén incluidos en un proceso de ordenamiento territorial que favorezca la ejecución de proyectos habitacionales de desarrollo progresivo.

El Programa es una alternativa para que las familias de bajos ingresos solucionen su problema habitacional, al tiempo que se implementan medidas preventivas, reubicando familias localizadas en zonas de alto riesgo. El programa favorecerá a los estratos de hasta dos salarios mínimos, identificados dentro de la categoría de déficit crítico, propiciándoles acceso a tierra y a una solución habitacional. Se contempla financiar estos procesos de desarrollo habitacional con subsidios otorgados por FONAVIPO, con montos que oscilan entre cuatro y doce salarios mínimos; los recursos para la prevención, la reubicación y legalización provendrá del VMVDU, que se entregaran a las municipalidades, por montos equivalentes a dos salarios mínimos. Las soluciones contempladas en este programa, incluirán aportes en esfuerzo, ahorro o pago de crédito, bajo la responsabilidad de la ONG u organización que desarrolle la demanda; en el caso de créditos, las familias podrán acceder también programas diseñados por el Gobierno.

Nombre: **Programa de Legalización de Tierras**

Período: 1992.

Descripción:

El objetivo del Programa de Legalización de Tierras es brindar seguridad jurídica individual a cada poseedor de lotes que participen del programa, disminuyendo el índice de ilegalidad en la tenencia de la tierra a nivel nacional, a todas aquellas familias potenciales beneficiarias del programa, que perciben bajos ingresos, o sea que no superan los dos salarios mínimos mensuales (US\$ 316,80). Para participar deben ser identificados por el Gobierno Municipal ante el Viceministerio de Vivienda, el cual solicita evaluación de legalización del inmueble de cada familia a beneficiar ante el ILP, quien otorgará visto bueno y se iniciará el proceso. Se hace necesario los siguientes requisitos:

- Las potenciales familias deben habitar en asentamientos marginales urbanos;
- Familias que hayan perdido sus viviendas en los terremotos del año 2001;
- Familias que carecen de título de propiedad de la tierra que habitan.

El programa otorga la propiedad de un inmueble, mediante la extensión de un título de propiedad debidamente inscrito, a cada familia beneficiaria.

Nombre: **Programa de Mejoramiento de Barrios**

Período: 1997

Descripción:

Conocido como "Programa de Solidaridad Urbana". Su objetivo es promover el mejoramiento de Barrios Urbanos de las principales ciudades del país, como para mejorar razonablemente de la calidad de vida de los hogares de bajos ingresos.

Este programa está destinado a atender familias con ingresos inferiores a tres salarios mínimos, provenientes de barrios deprimidos, ya que forman parte del déficit habitacional cualitativo, siendo por tanto, necesario invertir en infraestructura y servicios comunitarios, así como en los componentes físicos de la vivienda, para que, de manera eficiente se generen cambios cualitativos en las áreas urbanas. Esto implica estructurar un proceso en el que participen el VMVDU, definiendo políticas, FONAVIPO manejando la asignación de recursos; las ONG generando una demanda de soluciones habitacionales organizada, y las comunidades aportando la ejecución, ya sea con trabajo o con parte del financiamiento requerido por los proyectos.

Nombre: **Programa de vivienda "Sueño Posible"**

Período: 2003

Descripción:

Este programa fue implementado en el año de 2003 por el gobierno de Francisco Flores. Su objetivo fue el de otorgar subsidios a familias que perdieron sus viviendas en los terremotos de enero y febrero del año 2001; así mismo, pretendía ayudar a disminuir el déficit habitacional y legalizar las propiedades. El monto máximo del subsidio no debía sobrepasar los US\$ 2,500 por familia. Este subsidio se canalizaría por medio del Viceministerio de Vivienda y Desarrollo Urbano y el Fondo Nacional de Vivienda Popular.

¿Qué se produjo? Dicho proyecto exigía los siguientes requisitos: el asentamiento al cual se le otorgaría el subsidio no debía de estar en zonas de alto riesgo, sino solamente en zonas urbanas; debían de contar con el servicio de recolección de basura; no debían estar en zonas propensas a inundaciones, con disposición de servicios básicos y las propiedades debían contar con posibilidad de legalización, entre otros.

Nombre: **Política Nacional de Vivienda**

Período: 2005

Descripción:

La Política Nacional de Vivienda, responde a los postulados humanistas de nuestra Constitución y resume el compromiso gubernamental de trabajar en la ruta de un desarrollo integral de la persona, de la familia, de la comunidad y del conglomerado nacional. La política esta guiada por siete principios: Equidad, Solidaridad, Interés Social, Libertad Económica, Sostenibilidad, Coordinación Interinstitucional e Integración.

La Política Nacional de Vivienda se basa en tres ejes, para cada uno de los cuales, se identifican problemas, se plantean objetivos y se proponen líneas de acción. Los ejes son: a) la vivienda como eje de desarrollo, b) el acceso a la vivienda y c) modernización del marco técnico.

La Política Nacional de Vivienda es una de las principales herramientas diseñadas por el Gobierno de El Salvador en 2005 para dar cumplimiento a algunas de sus obligaciones expresadas en la Constitución de la República y acuerdos derivados de conferencias internacionales. Esta política tiene también una importancia particular debido a que está diseñada para hacer una enorme contribución en el mejoramiento de los niveles de desarrollo humano, la reducción de la pobreza, el cumplimiento de los Objetivos de Desarrollo del Milenio (ODM) y la activación de mecanismos capaces de colocar al país en un sendero de crecimiento robusto y sostenido en el tiempo.

Si bien esta Política presenta la problemática de la vivienda e intenciones para abordarla, **no define los mecanismos para concretizar las intenciones. En ese sentido no ha derivado en acciones concretas que abonen a atender los problemas de la vivienda en el país.**

Nombre: **Programa de Vivienda Solidaria**

Período: 2005-2009

Descripción:

Este programa consiste en otorgar a 2,000 familias afectadas por la tormenta Stan, subsidios focalizados para facilitarles el acceso a la vivienda. El gobierno plantea que además este subsidio "...generará facilidades para que cada familia tenga acceso a un crédito hipotecario en condiciones favorables y asequibles a sus ingresos.

¿Qué se produjo? Las comunidades que pretende beneficiar este programa son: El Rosario en el departamento de La Paz, Tonacatepeque, San Martín, Soyapango, Ilopango, Mejicanos, Santo Tomás, Santa Ana, Armenia, Nahulingo, Ciudad Delgado, Juayúa, Santiago Texacuangos y La Libertad.

Nombre: **Programa Casa para Todos**

Período: 2009 hasta la fecha

Descripción:

Este Programa ha sido diseñado desde el Vice Ministerio de Vivienda y Desarrollo Urbano y su ejecución está a cargo del Fondo Nacional de Vivienda Popular (FONAVIPO), que dirigirá la construcción de al menos seis proyectos habitacionales en terrenos estatales ubicados en distintos puntos del país, donde existe una mayor demanda de vivienda de interés social, pero la meta del gobierno es construir al final del quinquenio unas 25, 0000 estructuras.

Estos proyectos están dirigidos a familias cuyos ingresos salariales no sobrepasen los \$830.00. FONAVIPO subsidiará el valor del terreno y el Fondo Social para la Vivienda brindará el crédito de largo plazo para la adquisición de las viviendas.

Las proyecciones de este Programa son las siguientes:

ANNEX

Programa, Instancias, roles	Cifra de viviendas	Área	Costo unitario o \$USD	Inversión total \$USD	Ubicación	Condicionantes y Requisitos
<b>Programa casa para todos: en 5 años, 25,000 viviendas con beneficios para 27,947 familias</b>	<b>1ª fase 9,561 casas generando 86,049 empleos</b>	<b>35 a 45 m2</b>	<b>5,000 a 28,500</b>	<b>201.7 millones: 36.4 públicos y 165,3 privados</b>	<b>focalizada</b>	<b>Familias de bajos ingresos en las zonas urbanas y rurales del país. La demanda se procesa en la base de datos del SAFH (Sistema de ahorro y financiamiento habitacional)</b>
<p><b>1.1. Casa para Todos. Proyectos de vivienda social construidos por la empresa privada ABANSA Se espera que la Banca privada otorgue créditos de corto plazo para su construcción. CASALCO Empresas constructoras formularán proyectos, licitarán y construirán Banco Multisectorial de inversiones</b> creará el Fideicomiso de Respaldo para créditos de desarrollo habitacional, para dar seguridad financiera a la banca privada, que ha restringido el otorgamiento de fondos para la construcción, dada la crisis económica que hundió a este sector. <b>FSV</b> financiará el largo plazo para compra de viviendas y administrará fideicomiso. Evaluará y aprobará solicitudes y proyectos para que la banca proceda a financiar.</p>	5,800 viviendas en la 1ª Etapa de 18 meses. Se proyecta generar 52,200 empleos; 17,400 directos y 34,800 indirectos	45 m2	Hasta 28,500	165,3 millones Fideicomiso de garantía: 10 millones. Ente fiduciario es el BMI y el fideicomisario será el FSV.	No se han dado a conocer los sitios para evitar incremento del precio de la tierra.	Beneficiarios: familias con Ingresos de 2 a 4 SMM (no más de \$830.72). Los materiales, hasta donde sea posible serán de origen local. Todas las empresas serán nacionales y ninguna podrá concursar en licitaciones para la construcción de más de 2 módulos de 50 casas cada uno. El fideicomiso respalda hasta un máximo del 70% de la deuda a adquirir, y percibe una comisión anual más IVA (sobre el monto respaldado) que es acorde a la calificación crediticia: categorías A1 y A2: pagan 2%; B, 2.25% y C1 Y C2, 2.5%. El préstamo a garantizar no debe superar el 75% de los costos del proyecto de construcción a financiar y el fideicomiso no garantizará el costo del terreno y utilidades. El monto tope a garantizar es de USD \$950,000. Una vez construidas las viviendas, de no ser utilizado el fondo de garantía, éste se devuelve para ser puesto a disposición de otra constructora.

<b>Programa casa para todos: en 5 años, 25,000 viviendas con beneficios para 27,947 familias</b>	<b>1ª fase 9,561 casas generando 86,049 empleos</b>	<b>35 a 45 m2</b>	<b>5,000 a 28,500</b>	<b>201.7 millones: 36.4 públicos y 165,3 privados</b>	<b>focalizada</b>	<b>Familias de bajos ingresos en zonas urbanas y rurales. La demanda se procesa en la base de datos del SAFH (Sistema de ahorro y financiamiento habitacional)</b>
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<p><b>1.2. Casa para Todos. Proyectos de vivienda social en terrenos estatales con subsidio del costo del terreno</b></p> <p><b>FSV</b> otorgará créditos por \$10,000 a 25 años plazo para la compra de vivienda en terrenos estatales.</p> <p><b>ILP</b> dará las escrituras</p> <p><b>FONAVIPO</b> financiará la construcción y subsidiará el costo del terreno.</p>	<p>2,200 viviendas en la 1ª Etapa de 18 meses.</p> <p>Se generarán 19,800 empleos; 6,600 directos y 13,200 indirectos</p> <p>Un 20% de la mano de obra no calificada para Nuevo Belén, sería residente del municipio.</p>	<p>35 m2</p>	<p>Hasta 13,000</p>	<p>28,6 millones</p> <p>Se otorgará subsidio de \$3,000 (terreno), como prima de la casa.</p> <p>El ILP aporta 95% del costo de legalización (\$150 a \$200).</p>	<p>Proyecto La Naval 350 en Ciudad Delgado,</p> <p>Proyecto Nuevo Belén 500 en San Miguel, y</p> <p>Proyecto Bretaña 1,350 en San Martín</p>	<p>Beneficiarios: familias con Ingresos no mayores a 2 salarios mínimos (\$415.36). La selección pasará por un análisis de carencia de bienes proporcionada por el Centro Nacional de Registros (CNR), así como la verificación de fichas realizada por la Gerencia de Inclusión Social de FONAVIPO. Cada familia pone el 5% del costo del trámite de legalización, unos USD \$8.</p>
<p><b>1.3. Casa para Todos. Proyectos de vivienda social “in situ”</b></p> <p><b>VMVDU</b> licitará la construcción de viviendas in situ,</p> <p><b>FSV</b> otorgará el subsidio</p>	<p>1,561 viviendas en 1ª Etapa de 18 meses.</p> <p>Se generarán 14,049 empleos; 4,683 directos y 9,366 indirectos</p>	<p>36 m2</p>	<p>5,000</p>	<p>7,8 millones</p>	<p><i>6 municipios: Cuscatlán; Usulután; Sonsonate; San Vicente; La Paz y Ahuachapán.</i></p>	<p>Familias con ingresos que no superen los 2 SMM; que no tengan capacidad de pagar una cuota fija de vivienda, que sean propietarias de un terreno donde construir las, que no esté calificado como de alto riesgo y que no cuenten con otro inmueble. Se pedirán escrituras.</p>

### El mercado de la vivienda en El Salvador

La demanda de vivienda proviene principalmente de la población más pobre de El Salvador, que percibe ingresos inferiores a 4 salarios mínimos (US\$ 830.00) y representa un 88% del total. Un 60% de la demanda es cubierta por el mercado informal, en lotes de bajo costo provistos por un mercado que no cumple regulaciones (lotificaciones de desarrollo progresivo), y el restante 40% por el mercado formal. Estas condiciones definen como principales desafíos del sector: a) mejorar las condiciones habitacionales de familias de bajos ingresos, especialmente inferiores a 1 salario mínimo y que residen en viviendas precarias, b) proveer infraestructura básica a asentamientos urbanos precarios donde residen familias con ingresos inferiores a 2 salarios mínimos; c) regularizar el mercado de lotificaciones de desarrollo progresivo y otorgar títulos de propiedad a familias residentes en viviendas y asentamientos informales; d) ampliar el acceso a financiamiento para familias con ingresos menores a los 4 salarios mínimos; y e) desarrollar mecanismos financieros para canalizar recursos de largo plazo para el sector vivienda.

El mercado de la vivienda se suple a través de las siguientes instituciones:

Vice-Ministerio de Vivienda y Desarrollo Urbano (VMVDU)

El VMVDU atiende a las familias de 1 a 2 salarios mínimos, el Fondo Nacional para la Vivienda Popular (FONAVIPO) al sector informal con ingresos de 2 a 4 salarios mínimos, y el Fondo Social para la Vivienda (FSV) en conjunto con el sector privado a las familias con ingresos iguales y superiores a 4 salarios mínimos. El VMVDU está planteando la ampliación de cobertura de un programa piloto de mejoramiento de vivienda para familias con ingresos inferiores a 1 salario mínimo.

FONAVIPO atiende a su demanda a través de instituciones microfinancieras no bancarias autorizadas (IA). Sus recursos provienen de préstamos de la banca comercial y certificados de inversión y son invertidos en créditos y contribuciones, especialmente para mejoramiento de vivienda. Tiene un adecuado sistema de control interno y de gestión de riesgos, y un buen manejo de la intermediación financiera.

El FSV es el principal proveedor de financiamiento hipotecario para la vivienda social. Sus operaciones se financian con depósitos de afiliados y títulos valores. Como resultado de un exitoso plan implementado en el marco del préstamo 1379/OC-ES, el FSV está actualmente modernizado y fortalecido financieramente. Sin embargo, la ampliación de las coberturas de financiamiento y sostenibilidad futura de ambas instituciones requiere de la introducción de un sistema de subsidios directos a la demanda.

El sector privado de la construcción y la banca comercial, son activos y desarrollados. Los constructores tienen capacidad para producir viviendas tanto para segmentos de bajos ingresos como de medios y altos ingresos. La banca privada tiene una alta concentración de su cartera de préstamos hipotecarios, habiendo seguido la misma tendencia que provocó la crisis financiera mundial en 2008. El mercado secundario es todavía incipiente. Con recursos del préstamo 1379 / OC-ES, el Banco Multisectorial de Inversiones (BMI) ejecutó un plan de desarrollo de este mercado, diseñando instrumentos financieros que sirvieron de base para poner en funcionamiento un fideicomiso que está respaldando un programa anticíclico de vivienda. El Programa, de máxima prioridad para el GOES, pretende dar respuesta a la necesidad de generar empleo en el corto plazo. Los esfuerzos para desarrollar el mercado secundario de hipotecas siguen siendo importantes para generar los recursos de largo plazo requeridos para el financiamiento del sector vivienda.

## FUNDASAL SITES AND SERVICES INCREMENTAL HOUSING MODEL

FUNDASAL is one of the first institutions<sup>1</sup> to develop the incremental sites and services concept. In 1969, at the time the NGO was created, the country had 10,000 new urban households forming annually, yet the public and private sectors combined were only producing a total of 2,600 houses yearly - practically none of these for the lower income groups. The formal sector models were the typical suburban house and apartment buildings with fully serviced subdivisions that were only affordable to middle- and upper-income homebuyers. Public 'social housing' (smaller versions of middle-class houses and walk-up housing blocks) were highly subsidized, and were not allocated to lower income households. These types could never be produced at a scale to meet demand nor were they affordable to government in those quantities. Land was expensive, scarce and controlled by landowners. Government had no land policy, nor land planning to guide development. Government's only response to squatters was to bulldoze several *tugurios*; and virtually ignore *colonias ilegales*.

FUNDASAL's mission was (and still is) to help individuals and communities develop their potential and to overcome the impacts of poverty. The broad objective was social change and its housing program the means to that end. The focus was offering slum and *meson* dwellers viable, and legal alternatives. Their approach was to build an empowering community base from which residents could build their houses and communities. A large part of the institution's goal was to remove access barriers to land, credit and houses for the working poor (a substitute for formal sector private developers not interested in that income group as clients). In effect, FUNDASAL became an intermediary between the informal sectors and the formal - supporting the poor by legalizing their status able to house themselves. Therefore the key concept for FUNDASAL was '*desarrollo progresivo*' - or progressive development - having a double, or combined meaning: an incremental process of building + development of the individual, family and community. This called for, on the 'development' part, helping organize the future project site residents into self-sustaining community organizations, programs for household and group participation, mutual-help (sweat-equity), and for the 'incremental' process, introducing efficient design standards appropriate for development over time, core houses to be expanded, etc.

Institutionally FUNDASAL has also had an important national impact in the production of affordable housing in El Salvador, and a significant input on housing practice and national housing policy. In only a few years, FUNDASAL built a vibrant and efficient capacity, and good reputation by demonstrating it was contributing a viable response the housing needs of the country. By the mid-1970s the Government's National Plan called on FUNDASAL to be charged with 29% of the programmed national production of housing. FUNDASAL produced, on average, about 2,500 serviced plots per year in the period 1970 - 1980<sup>2</sup>, all affordable to, and bought by residents of slums and tenements. The program's innovations proved to be more cost-effective and viable than other national housing efforts - including the "social" public housing program of walk up apartments. Its technical and community participation innovations, and its alternative standards resulted in unit costs four times lower than any produced by the formal sector, and were affordable to the lowest 17<sup>th</sup> percentile of the urban population. However, FUNDASAL's most important accomplishment was developing a model that is technically sound **and** affordable for the poor. By keeping production cost per unit low (i.e. reductions through higher land density, smaller plot sizes, high cost recovery<sup>3</sup> and applying the incremental process), the model demonstrated that it was possible to produce housing and subdivisions affordable to government and to private developers. This allowed a larger share of national resources available for urban houses at the time to be redirected to lower-income households.

Two sequenced World Bank loans financed the program, and helped shift government's housing policies to include the poorest of the urban poor<sup>4</sup>. In its appraisal document of FUNDASAL's projects, the World Bank describes the goals as: "It [The El Salvador Sites and Services Project] would also be the first example of a private organization executing and substantially financing a major public sector project, thereby conserving public resources. To date, serviced site projects have embraced private participation through individual or small group efforts. The proposed project would be a significant step in the gradual evolution of Government's role from that of housing producer, possible only in small-scale, to one in which it coordinates low-income shelter activities which now take place in an uncontrolled manner".<sup>5</sup>

<sup>1</sup> Chile, and others were early to adopt the approach (with World Bank support) Senegal, Cameroon, etc.

<sup>2</sup> The armed civil conflict of the 1980s FUNDASAL's severely affected its productivity and output.

<sup>3</sup> There were no subsidies from government, however FUNDASAL did subsidize administrative costs, i.e., social work to organize communities and train residents for mutual help components. It also subsidized some costs.

<sup>4</sup> 1974 and 1977.

<sup>5</sup> El Salvador Appraisal of a Sites and Services Project, World Bank, Project id 7151 September 20, 1974

However the FUNDASAL model encountered setbacks and sustainability issues. Land scarcity, the lack of adequate urban land policy and increasing land market values led to projects being located beyond the reach of existing trunk infrastructure, and the government-run utility companies could not keep pace. By the end of the 1970s the civil war constrained FUNDASAL's productivity.

Government adopted much of the FUNDASAL approach (and lower standards) directing its *Fondo Social para la Vivienda* (the National Social Housing Fund) that conventionally produced mid-income housing, and private developers to produce FUNDASAL type housing standard for lower-income homebuyers. Eventually private developers adopted the sites-and-services model to produce hundreds of thousands of plots for the lower income buyers – although these are illegal because they do not comply with codes or development standards. Over fifty countries have carried out sites-and-services projects, but few used the approach of resident participation and mutual-help in building core units as was done in El Salvador.

## INCREMENTAL HOUSING IN LATIN AMERICA – THE POOR ON THEIR OWN

George Gattoni

**A fifty-year timeline of incremental housing** As migration to cities gained momentum in the developing world, the poor found very few places to live. Some rented rooms in tenements, but most found all they could do is occupy vacant land or right-of-ways, and build makeshift shelters. Unprepared governments at best ignored them or, often, confronted the ‘problem’ by evicting and bulldozing slums to stop squatting - but offered no housing alternatives to those displaced. A few governments turned to prevailing industrialized models for housing the poor – i.e. the public high-rise housing projects of the U.S. In the long run all these ‘solutions’ failed: they were unaffordable to government and disliked by residents. The housing deficit continued to escalate. With no way to enter the housing market, by default the poor continued to build their own cities of slums and illegal settlements – where now over a billion persons live. Interestingly, over the past forty-years private developers also bypass official regulations and created an extra-legal land market, supplying affordable, but un-serviced land to low-income buyers – a vast, clandestine market serving low-income owner-builders. The underlying issue for these households – and for future generations - continues to be legal (i.e. formal) access to land, credit and security of tenure. In the vast majority of countries the formal markets for land, housing finance and regulations continue to preclude the poor.

**A worldwide problem of land** The urban poor have shown an ability and willingness to build their homes. Given a place to build, security from eviction and time to build, houses and communities can flourish. With tenure security the poor invest<sup>6</sup> in houses. Over a billion urban dwellers live in squatter or illegal settlements. The next two generations will more than double their number, and significantly, the cities will need to develop three times the land area of to accommodate them (Angel & Goethert). How land is made available, used and allocated is a key policy issue for all developing countries. When the poor buy (or lease) land, they opt for smaller (less costly) plots, and are willing to delay buying some utilities and services. Land in these illegal (informal) developments tends to be higher density (developers maximize the amount of saleable land, minimizing public spaces and areas for streets, etc. Land use efficiency tends to be better than in conventional middle-income developments.

**Changing Responses** In the 1950s and 1960s a few Latin American governments (*Mexico, Peru, and Chile*) quickly recognized that the early land invasions were irreversible and introduced strategies to accommodate vast numbers of poor at a low cost: they legalized the process and adopted standards affordable to the poor. All made land and subsidies available. The concept was to ‘develop’ the settlements and houses incrementally: minimum, basic infrastructure and services at the onset that would be added to over time, leaving the houses to be built by owners. The strategy allowed to quickly settle and managed the rapid influx of settlers while establishing the foundation for the communities’ long-term development. By laying out future street easements, bus service could arrive. At the onset very basic services (i.e. truck-supplied water) was quickly introduced. Over time infrastructure developed at a more manageable and affordable pace for government. These early experiments became the conceptual foundations for recognizing that the poor have an active role in contribution to the housing process. For example, as early as the late-1940s Mexico City’s municipal authorities, reacting to growing pressure to accommodate newly arriving rural migrants, encouraged and authorized private developers to lay out vast residential subdivisions on peri-urban state lands. Existing development codes and regulations were not applied nor were municipal services provided, in order to make plots affordable to very low- income buyers.. One of these, *Ciudad Netzahualcoyotl*, on 45 square kilometers of what was then the far outskirts of the Mexico City, was privately developed for government in 1958. By 1970 it had a population of 570,000 and was the fourth largest municipality in the country at the time; today it has 2 million residents and is fully developed.

In the 1960s, Peru’s government unsuccessfully attempted to stop the influx of hundreds of thousands poor rural migrants and was unable to accommodate them by conventional means. The squatters organized and devised skilled strategies, including organized overnight land invasions of government lands at the outskirts of cities like Lima. However, land laws at the time protected individuals claiming use of land from eviction—if they demarcated the plot and began building a house. The homesteading squatters immediately built shelters of discarded materials. Government accepted their claims, and, working with community leaders, installed an orderly, simply controlled development process. By negotiating the proposal to give land rights on which residents would build their houses, government would introduce infrastructure and services over time. Initially government provided trucked-in water, medical care, and other basic support services. The policy was to incrementally introduce more and permanent infrastructure and services at a feasible, gradual pace. This became a simple, affordable incremental process for both government and homeowners. These “*pueblos jóvenes*,” (“young towns”) became major part of the national housing strategy. In a four year period 188 *Pueblos Jóvenes* were laid out and approximately 1.4 million inhabitants settled and began building their homes. By 1980, some 500,000 of Lima’s dwellings were in *Pueblos Jóvenes*. Over

<sup>6</sup> Kalbermatten, Banes, et. all. World Bank Working Paper, 1993. Included calculations that globally, slum upgrading residents given security of tenure, invested, on average about US\$7 (from savings) for every US\$1 of infrastructure investments.

time government, in collaboration with the communities' organizations, introduced infrastructure, services and transport. Forty years later these settlements are fully urbanized and serviced municipal districts of metropolitan Lima. Simultaneously, secure in knowing they would not be evicted, settlers began consolidating their homes and neighborhoods. Many are now accepted political districts of their cities.

At about the same time Chile had developed a similar approach, called '*chalked*' neighborhoods, where government laid out streets and blocks of house plots with chalk stripes to guide the allocation of plots to settlers. For over 60 continuous years Chile has carried out a national policy of low-income housing that has evolved from the basic concept of incremental development.

In 1972, John F. C. Turner and Robert Fichter<sup>7</sup>, after researching the examples above, cautioned about applying conventional industrialized countries' housing policies and methods to rapidly urbanizing cities of developing countries. Public housing projects and city master plans did not work in context of a rapidly growing population of the poor, and, in fact were in the way of the poor helping themselves. They pointed to needs and strategies of the poor that, if recognized and supported, offered more effective results, and pointed to the models described above as a more effective way of responding to cities and to the poor.

In the 1970s a few governments adopted policies supporting the incremental concept. They recognized that the poor could not access conventional land markets and housing finance institutions, nor did these seek low-income clients. From a developer's perspective conventional codes and regulations precluded urbanizing land at a low cost. Demand for land and infrastructure was high demand for more profitable middle and high-income housing. Therefore low-income housing needed a model that would overcome existing barriers to access land, credit and affordability – one that also drew on the owner-builder strategies of low-income households - the incremental process. That model was to be called 'sites and services' or serviced land programs.

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<sup>7</sup> Freedom to Build: Dweller Control of the Housing Process. Turner, John F. C. and R. Fichter. 1972. New York: The Macmillan Company.  
ANNEX

## ANNEX 7:

### BIBLIOGRAPHY AND KEY REFERENCES

1. Fundación Salvadoreña de Desarrollo y Vivienda Mínima. Memoria 1977. (Spanish)
2. Site and Services Projects: Survey and Analysis of Urbanization Standards and On-Site Infrastructure. The World Bank, Transportation and Urban Projects Department, August 1974.
3. El Salvador Appraisal of a Sites and Services Project. The World Bank, Project 7151, September 20, 1974.
4. World Bank Working Paper. Kalbermatten, Banes, et all. 1993.
5. Critical Issues in Community Participation in Self-Help Housing Programes. Alfredo Stein.
6. Freedom to Build: Dweller Control of the Housing Process. Turner, John F. C. and R. Fichter. 1972. New York: The Macmillan Company.
7. Incremental Housing. <http://web.mit.edu/incrementalhousing/>