

# A Tool for Policy Evaluation

## Applied to Informal Settlements in Venezuela

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### Introduction

Venezuela has applied countless shelter programs in the last 50 years, with very limited results. This is evident looking at general facts:

- Venezuela's centralised governmental system contributed to critical overgrowth of the main city centres, specially the capital city.
- In 1990 the census indicated a total population of 19.6 million, the housing deficit was estimated in 1 million units. The growth rate was 2.5%, among the worlds highest, demographic patterns indicated population would more than double, in the period 1990-2010.
- By 1970 less than 30% of the population of Caracas had been born there. The population was spilling over into smaller towns in adjacent administrative units. In spite of various attempts to manage migration patterns, Caracas continued to overshadow all other cities.

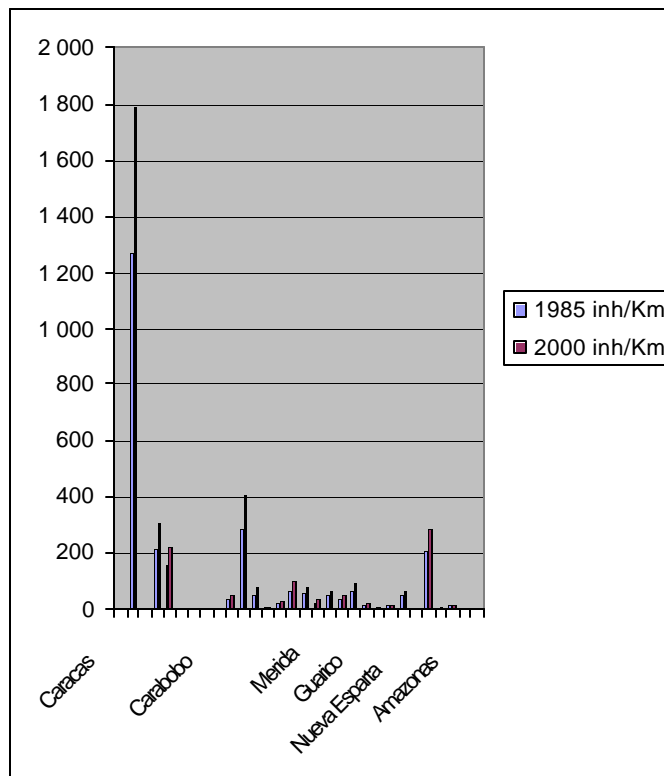


Figure 1: Density chart

The capital holds today, almost 1/3 of the country's population. The demand for services and jobs attracted a huge marginal population composed of large immigrant groups from neighbour countries and rural origin locals. Bureocratic jobs multiplied with changes of power, official sector is still the largest employer.

“In fact there were years when the capital grew at the incredible rate of 7% annually. Such growth caused tremendous economic and social problems, triggering crises in delivery of public services, especially as oil revenues dwindled”

The unplanned city sector holds 40% of its citizens. They have occupied hillsides and mountain areas conforming a poverty belt, which surrounds the city in conditions of risk, no accessibility, infrastructure or services. This has pressed the govern ability of the city to critical limits arising criminality and death rates to levels compared to war zones.

Since the decade of the fifties while the country was under a dictatorship, wide eviction strategies were applied to cope with informal settlements around the capital city. Later policies might have been successful to some extent but were dropped for a variety of reasons: sometimes political or leader’s interest in fostering his particular policy and sometimes for no reason at all. In spite of the variety of policies Venezuela has the highest relative increase of families under de poverty level. It raised from 1984’s 13% to 1997’s 47% for a net growth of 34% increase in 14 years.

In any case the country has not seen any improvements in shelter situation and seldom the promises of “housing for the poor” are fulfilled.

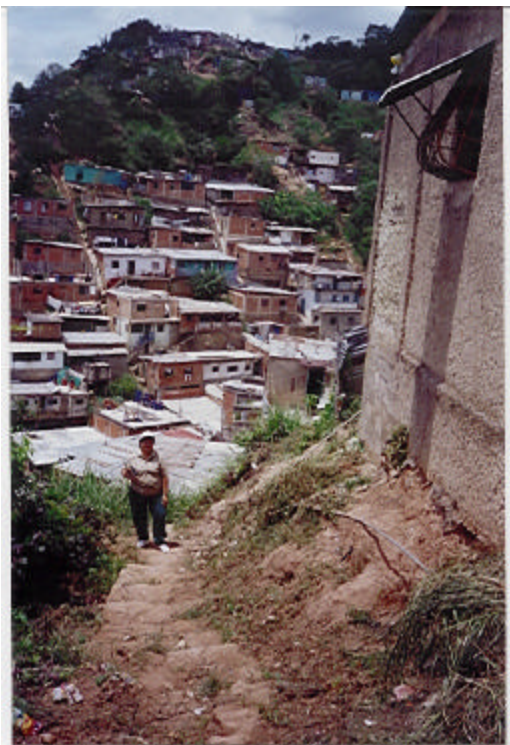


Figure 2: Community member on site helping on preliminary study stage.

## Problem Definition

Discontinuity of policies not only prevails in Venezuela but I would say is a main characteristic of developing countries. Unstable, but powerful governments backed by the military sector will follow their leaders whim too often. A new policy can be imposed only to harvest credit for the initiative and recourses will be applied to publicity rather than houses.

To ensure continuity of shelter policies I propose to strengthen it with a built-in tool for assessment, follow -up and feedback. I will illustrate the need of such a tool with the latest policy being applied which is upgrading of informal settlement in the outskirts of most important cities of the country, to attain conditions similar to formal areas, hoping to blend both into one city structure.

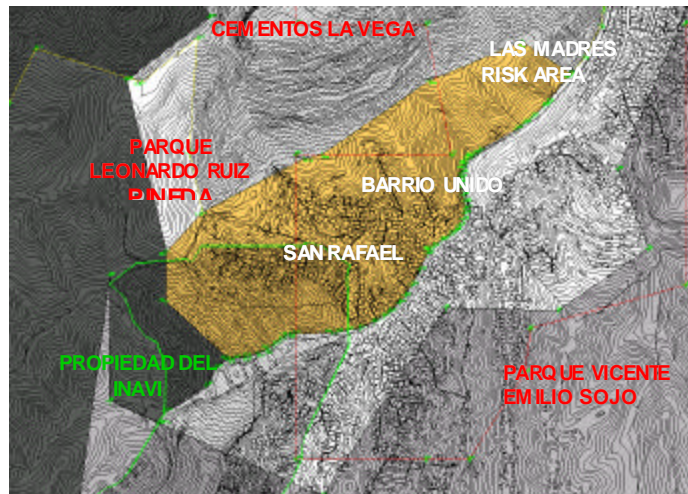


Figure 3: Sector 10.5 of upgrading policy. Area: 28 hec. Containing two Barrios, and surrounding areas

### Motivation for the Choice of Study

I am member of a team presently working on several upgrading projects. As winners of competitions opened to private consultants, our team was entitled to develop two sectors in the metropolitan area, and probably some others in smaller cities working as subcontractors for other teams.

Each project has a particular approach. The first one in La Vega, has two communities in conflict and a landslide risk area, which has to be kept free of invasion. While the “Ojo de Agua “ project has flooding risk condition as it is built on the creek’s bed. Both sectors are in the capital city but the first is included in the agreement with the World Bank while the second is not. I want to point out that projects can be quite different, the client communities can be very different but it is important to compare them, to verify if the outcome is an adequate answer to the community’s need.

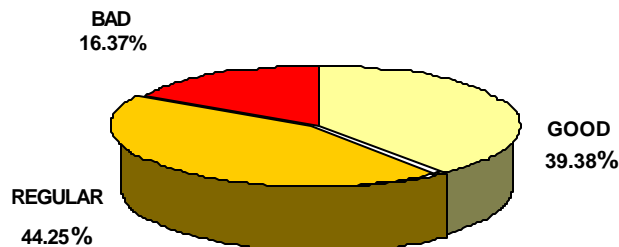
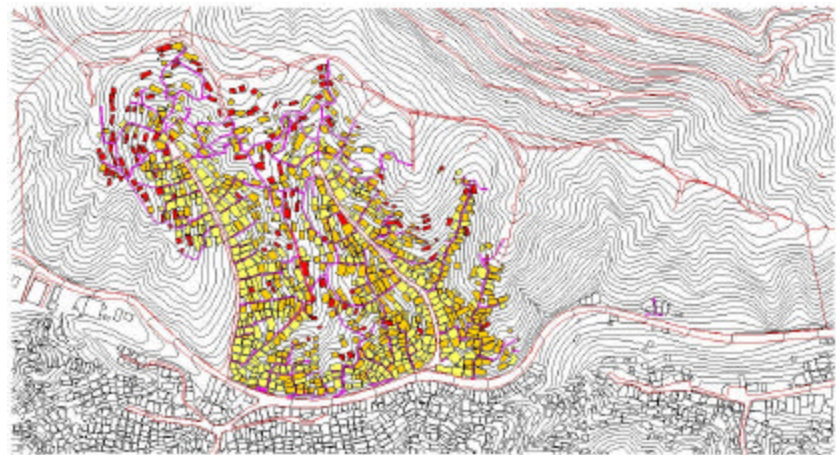


Figure 4: Example of the resulting data from preliminary site study. The houses are in better condition in lower parts, which are nearer to roads.

Once our team started to hand in advances of our work we detected the first problems: The compatibility of individual projects, in a holistic view of the zone, is not guaranteed. Teams work individually, not in collaboration with other neighbour teams in the process. The data from particular projects, part of a larger unit, are not available until next stage instead of being processed and shared. Information is difficult; coordinators are not focused on this role. No follow-up strategy had been traced.

A short example: our sector produced more units than needed to replace the houses being moved. We know other teams cannot produce units before moving some houses. There has been no way to communicate our surplus so other team's programs consider it.

If this policy is to survive long enough to obtain results it needs a highly efficient tool or it would end up in the long list of failed policies.

## Background – Upgrading Policy

I will describe the present upgrade policy with some detail in order to locate the reader in the context to understand the elements of my proposal.

The goals submitted to the UNCHS Latin American Seminar in 1990, defined a general policy divided into 4 categories of housing, related to household income.

### General Aspects

The country expected delivery of 200.000 units per year over a period of 15 years. Official sector would be in charge of 73.5% of the population requiring dwelling units, priced under 65 minimum salaries (a minimum salary equals aprox. 220\$ or 2640\$ per house hold a year). A joint public-private venture would undertake the second level, under 188 minimum salaries. Those categories would be subsidised with a wage tax imposed for this purpose, both on construction and buyers loans.

The remaining two higher income levels would be privately undertaken with subsidies only if there were surplus funds left from priority levels one and two. We will only refer to the official sector or lowest income group, the frame of the actual upgrading programme. The first stage of the programme consists of 12 sectors in two areas of Caracas, with joint funding from official sector and World Bank.

### Phased Approach

- A three-segment project will be handed-in within the first year along with the community training process.
- Construction of first front containing substitute houses or urgent preliminary works on second year.
- Bids and contracts for urban infrastructure on the third year.
- Completion of urban infrastructure fourth and fifth years.

Funds for community facilities construction or loans for improving houses are *not included* in the programme but left to the community to undertake privately or by other official channels *only after site evaluation and urban project are completed*. This avoids dedicating resources on areas, which will have to be modified in the upgrading process.

### Goals of Policy

Until now slum areas have received help in electoral seasons resulting in a patchwork of stairs and channels deficiently built, which turn out to be great risk and a great loss of resources, also on account of tragic situations and only to be displaced. That is why community often distrust work teams.

This upgrade policy seeks to put an end to this situation. It is meant to integrate in equal conditions to the rest of the city segregated poverty zones. The upgrade is needed in order to assign resources credit to houses and facilities remaining because they are sustainable in time.

The community's faith has to be restored while at the same time explaining the need of a project before things they consider most important like local schools or repairs. Also that the community as a whole must work along with the planners and assume with them the responsibility of hard decisions like who will have to move to give room for roads and so on. After this stage community will be able to receive

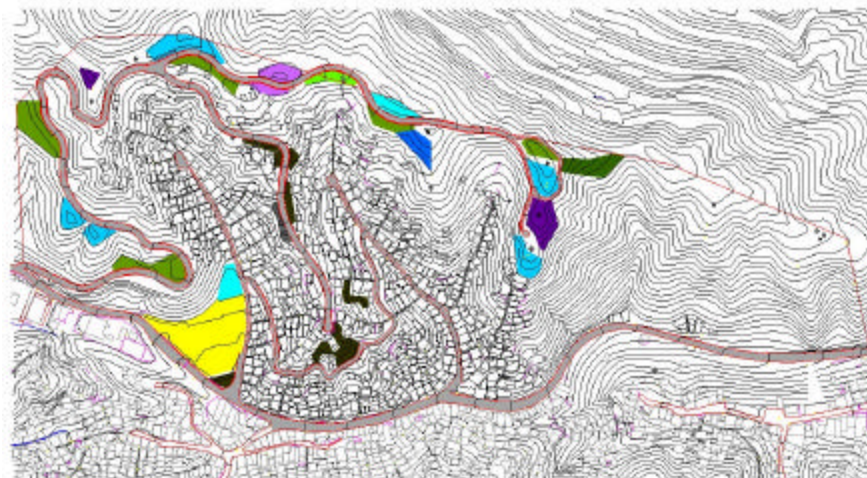


Figure 5: Urban upgrade proposal, main roads and lots for urban facilities equipment

credits, develop service facilities and maintain them. The dependence on official sector should begin to diminish as community develops.

As we see the policy is only a first step in a chain. That is why it must be maintained until community feels the results and five years is a long time for their situation.

If the policy remains effective until second stage, community will be strong enough to fight for themselves using the information acquired. They will have learned to start second-generation projects hopefully with the community in the promoter's role.



Figure 6: Communicating the project and process to the community

### **Project Selection**

The selection of the first sectors to be developed under this policy was based on urgency (National Objectives) and availability of land (Municipal Property). The criteria were based on a ten-year-old National Inventory of slum areas.

### **Project Managing Capacity**

Fundacomun, the Agency coordinating the projects in Caracas, had evolved to be a fairly well prepared institution, which had made agreements with the World Bank to participate in a 50-50 venture with the official sector. Unfortunately with the change of government most of the staff was lost and efficiency was hurt

### **Consultant Selection Process**

This part of the process was very innovative in the country. Fundacomun opened a public competition for private sector consultants, which were given a one-week introductory course with on policy issues and information on target sectors. Eighty participants were briefed on general aspects of the policy and could sign up for any one of 12 given sectors located in extreme ends of the city.

The submission did not require experience in urban development, which was one of the weak points of the scheme, but it was compatible with government's desire to hand projects to new teams avoiding "status companies" whenever possible.

**Evaluation Procedures**

Although WB is behind this process, there is no defined strategy for: Evaluating projects, using data for negotiation of construction or application of experience accumulated by planning or social teams.

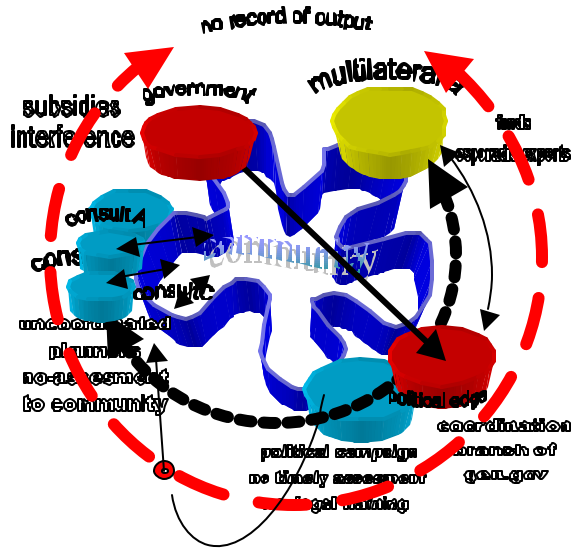


Figure 7: Actual lack of Assessment, no coordination or recording of data, absence of some participants.

**Implementation Framework**

**Country's Legal Framework**

The laws are extremely lenient with squatters. Judiciary system will not support the owner's claim if an invasion process develops in his land. The squatters or invaders will attain property rights after using De Land for 10 years.

This legal framework attracts not only poor people, but also those interested in making easy money, which will build shanties overnight for rental purpose, with no fear of legal action. Rental conditions will be costly, and impossible to regulate, but the tenants have no other possibility to rent and will abide to unfair conditions. Families (local and foreign) will consciously move to areas of risk and wait for their house to be replaced because there is general knowledge of institutional weakness to enforce eviction, even in situation of high risk.

**Negotiation**

There were some loose ends in the negotiation process with each of the winning teams, different functionaries negotiated with the teams without common criteria or reference costs. The usual criteria were to cut out the high cost items from the budget to fit it into their estimates. The result amounted to incomparable budgets. Some final budgets would include roads without geotechnical feasibility, while others lacked the infrastructure related to it, according to the consultant's previous experience or lack of it.

Contracts delayed for nine months while draft proposals came and went, removing any item based on free criteria of consultants, not on technical reasons. The resulting contracts lacked of important sectors. This might lead to serious deficiencies and also important gaps in urban projects will delay construction.

**Information Input & Output**

Terms of reference did not include economical guidelines for total project costs or templates for economical data, which would aid in the uniformity of negotiation and compatibilization processes.

LGA did not supply timely information from WB of maximum costs assigned to sectors or the format for data required from them. LGA did not facilitate contact with World Bank, always announcing their visit on last minute notice, providing contact only in large meetings with the community. Consultants ignored special conditions in the agreement signed with WB. The fact was that co-ordinators and implementers were not working as a team, but rather as opponents.

#### **Co-ordination**

Local administration of consultants has had poor co-ordination from LGAs. It particularly blocks multilateral funding agency contacts to consultants. Fundacomun's assigned official is responsible for 6 sets of consultant and social teams and World Bank contacts, but he also undertakes isolated construction projects in several sectors. His contradictory responsibilities does not allow for effective co-ordination.

## **Need of an Evaluation Tool**

An evaluation tool will create the adequate environment for the settlement policies to evolve and mature. This tool should be an important aid for all participants. The costs of initial recollection are imbedded in the basic costs of planning teams. We will call it Evaluation Tool (ET) from now on. The ET should be independent of government's support.

## **General Government or Legal Frame**

#### **Shortcomings**

Central government disregards continuity issues, granting technical public posts as political favours. This results in periodical loses of training and capacity building processes in a wide range of LGAs. Weak law enforcement allows and impulses squatting.

It is difficult for official power to detect speculation with municipal land, when the news about upgrading are spread, thus to distinguish speculators from the real needy folk.

#### **Impact of Evaluation Tool**

Promote continuity in Local agencies. It will provide demonstration that staff training and stability of some LGAs are achieving better results (time and quality) for upgrading projects. National budgets could include precise data on shelter investments

Social data registers will make it difficult for speculators from showing up in every sector to claim a piece of land. If community allows further squatting in their land it will draw back on the goal quality of their project.

## **Local Government (Coordinating) Agency**

#### **Shortcomings**

Insufficient capacity for managing consultants and contractors. The Local. Agencies are frequently dismantled and substituted by inexperienced employees. This will affect the general goal level for the policy.

There is a lack of transparency in the process. General information: is hard to find. Publications of multilateral agreements, resulting contracts, Schedules for different projects under their responsibility should be available.

#### **Impact of Evaluation Tool**

They must work along with consultants and municipalities to achieve municipal acceptance of special ordinances for upgradeable areas in time for the construction stage, on third year of the process. Their role in conveying information to Municipality and other governmental agencies will be easier, while requiring improvements on their capacity level.

Strong ties amongst participants will result because each party is dependent of the other's participants results to be linked in data bases, nobody can asses results if one fails to hand in. The participants will be interested in timely entry register so it won't weight negatively on the team's record.

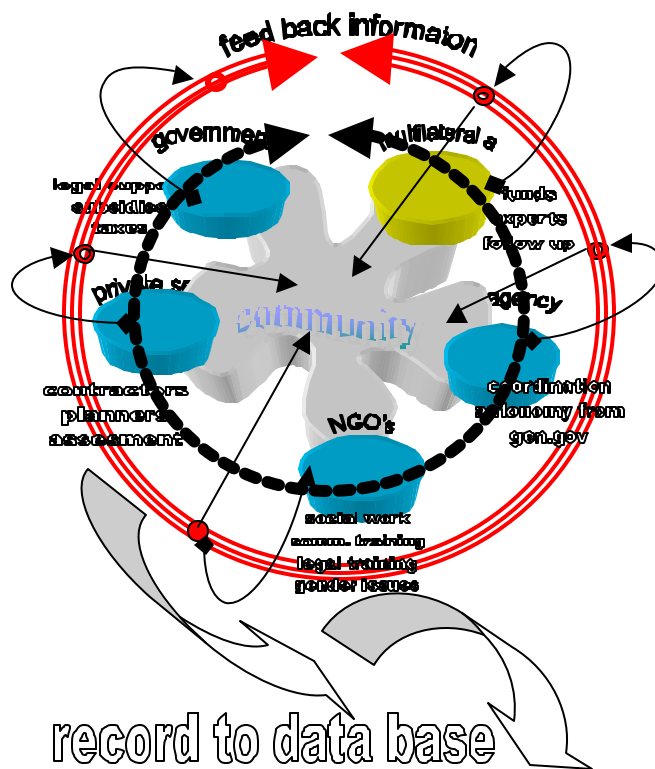


Figure 8: Process feed back with Evaluation Tool. All participants actively participating with the aid of Evaluation Tool.

## Multilateral Agency

### Shortcomings

In many cases this participant is not present as the State is also the sole provider of funds, which adds to the risk on proper assessment.

The isolation of planners from strategy in regard to its various levels is a serious handicap for the process and is overlooked by Agency.

Lack of compatibilization, general roads, and infrastructure networks reaching beyond the limits of the study area; border problems not properly approached are difficult to asses for an external expert without reliable figures. Compatibilization is basic to ensure sectorization will not hinder the large scale of infrastructure and that multiple teams responsible are working on common problems not evading them.

Although Habitat resolutions mention shelter indicators, no particular requirements are made about the progress in this issue, through the process.

### Impact of Evaluation Tool

Evidently an evaluation tool would have full support by MFAs as stated in Habitat Agenda.

Compatibilization is basic to ensure neighbour teams work on common problems not avoiding them. The data collected will underline actions taken on common networks or infrastructure requirements for external experts periodical evaluation.

MFAs would ensure its information guidelines have reached all participants with or without the participation of a given LGA.

## Consulting Team

### Shortcomings

Professional evaluation is missing, but the outcomes should measure their capacity and effectiveness. Teams need adequate attention from LGAs and MA .The flow of information should not cascade to them as the last level of execution, the untimely information hinders their performance.



Usually LGAs will meet consultants only in community forums, which are not adequate to bring out technical issues. The technical meetings with individual teams are separate; the common experiences are of no profit for other teams.

### **Impact of Evaluation Tool**

Planners should be aware of their ongoing evaluation and excel in their performance.

The project team, because of capacity and motivation, should be in a position to avoid dead ends when LGA will not take the next step. They should co-ordinate meetings with conflicting government agents: municipal, legal, property owners etc. serving as bridge and information agent. It will open enough spaces and opportunities to exchange experiences and problems of different nature where all participants will be supplied with relevant information. Transparency will be a positive change brought by because data input will require consistent criteria and a methodology for producing final figures as input to database. It will be difficult for a particular agency to make up excuses for 10 or more projects under their coordination with equal deadlines.

## **NGO Community Work (Expert) Team**

### **Shortcomings**

The place of NGOs is often taken by LGAs, which lack experience and precise objectives and goals in relation with the community; they are prone to confuse community support with political campaigns.

### **Impact of Evaluation Tool**

Independent NGOs rather than government representatives should accomplish capacity building in the community and creating a positive approach to the upcoming project and their new status as full range citizens.

We suppose the cross-information system will demonstrate the undesirability of LGA's playing both their role and the social expert's. For example measuring inferior results in participation, and responsibility building, when confronted with a governmental agency, but this is yet to be determined.

An evaluation tool will help NGO to point out the new responsibilities for the community: development of common facilities in new service lots, from fund raising to construction. Aid in training their leaders, in their role as representatives of the community; fulfil tasks and obligations related community objectives.

## **Community**

### **Shortcomings**

When a community is faced by LGAs, in the role of social promoter expert, community tends to respond only to their particular needs, short-term jobs. Occasional or urgent repairs are on their mind and they are incapable to focus on community long-term goals. This is because they are being addressed by the government figure, whose traditional obligation is to fulfil their needs. LGAs should refrain from taking part in social assessment for the community. Legal training is needed to convey a comprehension of their new role in society.

When community contacts Educational Agencies for a, lets say school, they are disappointed because the lack of response. Nobody bothers to explain that even if they have a free lot, formal sector will not take the risk because it might just not comply with regulations (accessibility, water, proved quality of soil structure, and many more)

### **Impact of Evaluation Tool**

Social Upgrading will be considered as important as Physical Upgrading. Social ties consciousness, legal organisation and issues of participation should be strengthened, as a new issue to many members of target communities. Responsibility and social commitment are measured in order to give them real control of the conversion-to-formal process and not be driven by it. The process should train them to solve their problems independently in the future and manage their uplifted environment.

A detailed list of the new serviced lots for community facilities including the pertinent documents available, will allow them to propose particular projects to other NGOs or finance system with precise areas and blue prints.

The community representatives should work not only on their layouts and figures, handed separately to them, but also help update those figures periodically in

collaboration with LGAs or the consultants with whom they have worked for 5 years. New Condominium structure for management tasks, infrastructure networks for repairs. Risk factors to improve on them.

They should measure for example, number of credits attained, repairs on houses, social projects undertaken.

## What is to be done next?

I am aware it sounds almost like a “first-worldly” condition in an environment far away from first world conditions. But if this huge effort were going to impact almost half of the countries population, wouldn't it be time to begin by changing our attitude towards information.

## Handling Information

Maybe, ironically, Caracas will more easily prepare digital records of infrastructure in upgraded areas than in those formally planned which might be lost or inaccessible to translate to digital means. And if there is a city in need of digital information is *the unmanageable Caracas Metropolitan Area*.

This because the information is being handed out in digital format for large areas. Can we afford to miss such an opportunity to reach 21 century? Would we honestly be talking about integrating informal to formal areas if we don't have a way to manage urban relevant information?

We have talked about activities improved on application of such a tool. But how is it going to work? How can it be developed? And most important how can we guarantee its permanence in our political system? How to control its size and complexity to keep it as a practical or manageable tool?

## Database as a Tool for Evaluation

Almost any policy can be successful if there is perseverance and will to achieve its goal. That is why this present work's stress is on evaluation, not on new policies. A binome *information-evaluation* will be the driving force for *all* elements in a particular society to support a given process and make it successful.

In some countries the possibilities of a database tool may be limited because of material resources, in our case the most important factor of failure of shelter policies it is lack of organization to keep and process data.

The experience gained should help other policies start where the previous one finished not from the very beginning each time. The state or government tend to consider themselves as owners of the policy implemented when it should be a struggle to empower society to become self-sufficient and able to take their responsibility. This can only come about with information and capacity to deal with it. It is up to society to support policies because they are happy and understand them and achieve their goals through them.

The processing stage will require expensive expertise. The integration of records into databases might be a matter of some years and require international consultants.

There are similar experiences in the country, for oil perforation data required by foreign investors and economic risk factor evaluation of the country producing information for local investors who would have the know-how. The first step should be a bidding process to obtain offers.

Information has to be managed independently from the official sector if it is to have an objective, long-term basis. The task is not easy but the potential benefits are significant.

The positive aspects of this policy should be exploited not only on the main goal line of action which is improving city/people conditions on the physical level; but even further, as a live data laboratory, to initiate the formal keeping of records of all projects. These records constitute the raw materials to build the appropriate tool needed to assess the implementation and revision of upgrading policy.

Factors characterising implementation will allow a comparative study of simultaneous projects run by the same terms of reference, but carried out by multiple local consulting teams in urban settings widely spread throughout the country. Favourable conditions for data collection:

- Common terms of reference for multiple projects.
- Multiple local teams of experts working simultaneously.

- Variety of city cases: megacity, medium, small.

The fixed parameters constitute a favourable setting to dissect the country's upgrading approach at all stages and provide an excellent opportunity for methodical data accumulation. If output analysis were properly managed, the resulting database would be an important tool for the evaluation of future policies and partial stages.

## Strategies for Developing a Data Base

The policy is on its initial stage. People working on the policy are still enthusiastic, especially planners with new work. It is producing results now and the shortcomings are yet to be seen. Thus accumulated problems have not begun to slow it down. There is still time to specify follow-up conditions, which begin with strict methods of data collection and recording.

The data collection is being done in projects receiving funds from World Bank because of their international normative. But most projects in the upgrade area are financed by official resources channelled by different agencies and are prone to drift away from the discipline of data keeping if some strategy is not enforced right away.

### Data Sources

There will be 5 *main levels*: Social, Financial, Project, Entities and Follow-Up. We find many interlocked spheres where there is work going on and thus there is general data being produced. To start with, they would be separate bases, for the purpose of orienting towards data collection, even if not yet useful for full digital search.

#### 1 Social level

Participants codes plus:  
 Population (by age, sex, education and others)  
 Houses graded through their physical conditions.  
 Families graded by number of members  
 Existing community organizations  
 New community organizations  
 Projects running/stopped

#### 2 Physical start conditions /proposed on project

Project code, location  
 Length of streets graded by width.  
 Parking area  
 Length pedestrian streets  
 Accessibility: horizontal and vertical distance  
 Water service (quantity and quality)  
 Other services (quantity and quality)

#### 3 Project data

Project code number  
 Location, area, layout  
 Houses (demolished, substitute, repaired)  
 Cost (m<sup>2</sup>, unit type)  
 Streets length (new, repaired)  
 Infrastructure networks (new, repaired)

#### 4 Financial

Project code, Participants codes  
 Cash flow  
 Investment, recovery (expected, real)  
 Discount rate, currency  
 Loans and agreements

#### 5 Entities or Participants

Participant's code  
 Planner's data (legal status, size, experience)  
 Consultants  
 Financial Institutions  
 NGOs  
 Charitable Organizations  
 Local Government Agencies, municipality, central government agency.

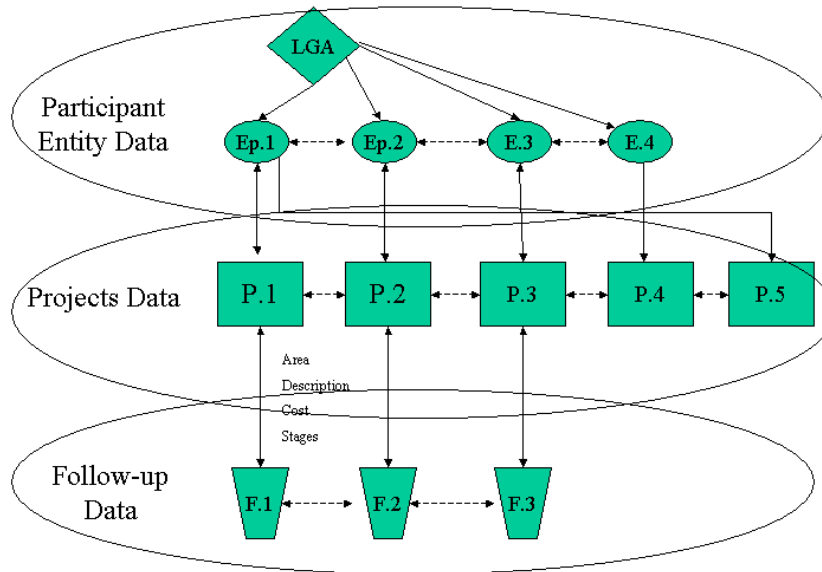


Figure 9: Main sources of information included in Database

### Practical steps

An evaluation tool will create the adequate environment for the settlement policies to evolve and mature. This tool should be an important aid for all participants. The costs of initial recollection are imbedded in the basic costs of planning teams. Simplifying we basically foresee 4 steps in this process:

#### Step 1

Promote adequate NGO or academic society as head of the project. Its first task will be implementing a bid process to select local system experts. There are strong NGOs on the construction sector whose main concern is low-income education facilities and housing which are close to the area and have qualified staff.

#### Step 2

Establish a unique way to hand numeric results for all teams. Incorporate that information to the Terms of Reference. On these premises, the first effort will be to prepare a proposal addressing UNCHS on this issue, to insure its adequacy to their standards. It is an effort in which all participants will have to be as co-operative and flexible as possible, because its an *on-the-way* developing tool

#### Step 3

Initiate individual databases for each one of field sources but abiding to the same structure, so as to link them later. Existing commercial data systems can be used for the initial stage of the evaluation process, later as needs increase there are possibilities of customising the system or have a new one prepared.

#### Step 4

Link in integrated bases these 5 modules. Producing reports for the private sector will finance part of the operation. Establish periodic actualisation for follow up.

Promote the tool for financial support to a scope of private clients.

### Local possibilities

The processing stage will require expensive expertise. The integration of records into databases might be a matter of some years and require international consultants even though there are quite a few local consultants on this area.

There have been similar experiences in the country in the environment of oil industry. Foreign investors in old wells required perforation data. Financial risk data was needed by local corporations to support their decisions. The first process has taken 7 years. The task is not easy but it has been done in highly technified areas with abundant resources, this of course, is not our case. But the potential benefits are too important to ignore.

UNCHS recommends the construction of a National Data Base System and is also willing to recommend and assess countries to achieve this objective, which is in fact a first step to an integration of a Global Data Base.

If we were only handling at one particular upgrading project there would be many ways to structure that information, as is actually happening. As we will study an increasing group of similar projects (almost 50) we face a real challenge. To implement a method, which will allow comparison and search by any of the parameter, either by financial results, size, range or whatever investigation is on the researchers mind.

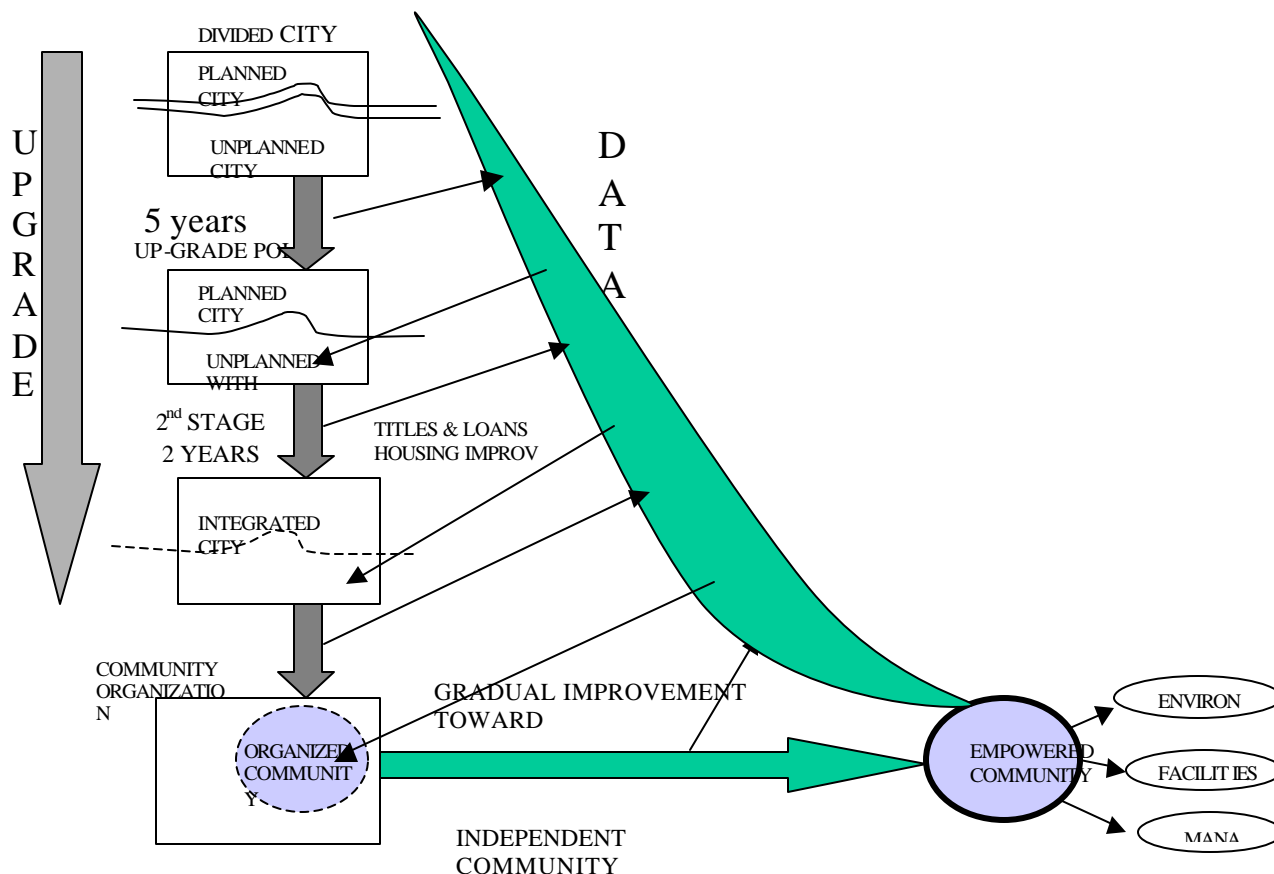


Figure 10: Evaluation tool as driving force in the process.

This database should improve feasibility studies, analysis of proposals, preliminary tabulation of consultants according to efficiency charts. This data system should render comparisons

- By finance source: results of multilateral policy and evaluation against results of locally financed projects or privately financed ones.
- By Consultant: rates of time, cost, project efficiency.
- By location: deviation of prices in certain areas, tagging specifications or correction factors for certain areas.
- By Density: cost-benefit for small, medium, large settlements.
- By Slope gradient: cost levels by range (low, med., high)
- By community size: results for 4 ranges of population
- By Technical area: innovative techniques vs. traditional, concentrated vs. disperse construction.

It would also quicken everyday tasks like:

- Tabulation of projects by categories.
- Consultation tool for work teams to pre-check their results through the project phase.
- Constant and objective evaluation of consultants.
- Availability of a referential system of indicators for each category of project.
- Help tool for purposes of proposal evaluation for LGAs.

- Measurement of effectiveness trend for investment. Improving, declining, on what factors?
- Budget resumes useful for investment prediction, for envisaging stages with deficit/surplus of funds.
- LGA's and NGAs would easily produce an agenda on general advance. It should include critical paths for different stages in process, adequate lobbying time with multilateral and/or private agencies.
- Investment policies would be mounted on more realistic figures.

## Evaluation Tool Promotes Participation

Participation is the word used more frequently in any publication related to shelter, but rarely do they clarify how it is to be achieved.

We are sure transparency related to database will bring participation of private sector and healthy competence among professionals in the social interest field.

Public information will surely attract holding funds for house improvement because their market is better defined. Official sector can also follow the chain from collection of the taxes until its final loan application to community, aiding the follow up so tax contributions are readily applied where they should, and not delayed in the institution.

Official sector will also be relieved of tedious tasks related to reports and hopefully this situation will give them more time to focus on their main task, that is, coordination of participants.

You could think community will be far from benefiting on this tool because they don't have contact with advanced digital technology as natural, but they have been working in close contact with their planners and social workers who represent their interest in the construction field and can also provide the know how on this area. In these slum communities it's not uncommon to find professionals, as state universities are free.

On the academic sector this policy has already created much interest. Universities and technical schools will deepen contacts with this system to create courses more closely related to the country's real needs, generating professional expertise related to shelter. These programs will provide student forces and abilities to aid the investigation and actualisation of data.

I hope to see this project come through.

## References

UNCHS United Nations for Human Settlements  
1991 Global Strategy for Shelter to the year 2000

Jose Barcia Arufe  
1998 Dinamica de la Pobreza en Venezuela.

UNCHS United Nations for Human Settlements Nairobi  
1991 Housing Finance Manual for Developing Countries

Ahmad A. Kayama  
1995 Can Urban Housing Be Solved Through Physical Planning? Analysis Based on Experience from Dodoma, Tanzania.