Organized Small-scale Self-help Housing

Mario Rodríguez and Johnny Åstrand



Mario Rodríguez was born in Costa Rica in 1951. He was awarded a degree in civil engineering in 1974 and a Masters degree in Business Administration in 1984. He worked for several years as a consultant engineer in highway construction.

He has been the Director of Projects for the Fundación Promotora de Vivienda FUPROVI since 1989, and is responsible for the interdisciplinary project implementation teams.

He has been active in scouting and is currently on the Scouts' national panel for ethics. He is also a part time lecturer in soil mechanics and an avid football fan.



Johnny Åstrand was born in 1955 and was awarded the degree Master of Architecture in 1981. His research has mainly been concentrated to North Africa and Latin America. He was appointed Director of Lund Centre for Habitat Studies in 1988. He is currently involved in capacity building, through postgraduate courses and mid-career training both in Sweden and in cooperation with institutions in other countries.

He is an active member of SADEL the Swedish Association for Development of Low-cost Housing. He comes from an international family, and has a Danish mother, which shows in his appreciation of fine cuisine and his practical kitchen skills.

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Preface

When Swedish Development Aid was reorganized in 1995, a new Urban Development Division was established, acknowledging the importance of cities as centres of both dynamic growth and human hardship. It is responsible for setting policy, conducting programmes in infrastructure and housing, and advising the other sectors of Sida when they work in urban areas.

We are pleased to present four *Building Issues* as a Swedish contribution to the Second United Nations Conference on Human Settlements, Habitat II, Istanbul 1996. They address the themes of the conference: *adequate shelter for all* and *sustainable human settlement development in an urbanizing world*.

Mario Rodríguez and Johnny Åstrand have written one of these four *Building Issues*.

Göran Tannerfeldt

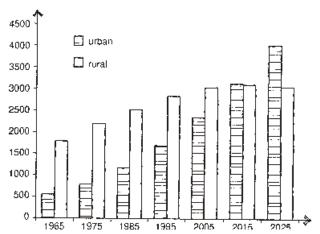
Head of the Division for Urban Development and Environment Sida

1 Introduction

Problem

Urbanization in developing countries has continued steadily during the last ten years. In the poorest countries, the rate of growth was higher than the rates during 1965–1980. There is increasing need for more and better housing. In many developing countries most dwellings are constructed within the informal sector and through self-help housing. The cost for self-help housing is considerably lower than the cost for dwellings of similar quality produced by contractors within the formal sector. When self-help housing is adopted within the informal sector, either the families do all the work themselves or they hire local builders for parts of the work, depending on their economic resources, local traditions, etc.

Most authorities responsible for housing have concluded that it is impossible to solve housing problems through programmes within the formal sector alone. Therefore interest in housing solutions in the "grey zone," between the formal and informal sectors, is growing. Organized self-help housing allows one to reduce costs by people's participation while improving physical planning and coordinating the purchase of materials and transport. Both authorities and non governmental organi-



Urban and rural populations in developing countries (millions). In 20 years time the urban population of developing countries will be greater than the rural.

Source Towards an Urban World, Sida 1995.



Unhealthy spontaneous settlement in Nairobi – a result of rapid urbanization and a rigid regulatory framework.

zations (NGOs) active in the housing sector have increasing interest in organized self-help housing.

Applying this type of programme efficiently requires knowledge and competence in planning and implementing organized self-help housing, in particular concerning the responsibilities and roles of the households, the facilitating organization and the authorities.

This study will present two experiences and aims to:

- Discuss the advantages and disadvantages of organized self-help housing compared to conventional housing projects in the formal sector.
- Provide practical recommendations on how to plan and implement organized self-help housing. These recommendations are mainly addressed to facilitating organizations, but are also relevant for policy makers, authorities, financial institutions and donor agencies.
- Provide insight that can contribute to institutional development for facilitating organizations.

Method

This report was written as a field study. It is mainly based on the experience of organized self-help housing projects by two non governmental organizations: Fundación Promotora de Vivienda FUPROVI in urban areas (1989–96) and the Swedish Association for Development of Low-cost Housing SADEL in Tunisia (1980–85) and Bolivia (1995–96). This basic material is supplemented by reviews of the literature, interviews and field studies in these countries.

The final report was written jointly by Mario Rodríguez, Director of Projects, FUPROVI and Johnny Åstrand, co-manager Rohia Project, Tunisia.

Organization of the Report

The report consists of two parts, Chapters 1–3 and Chapters 4–6. Part 1 gives a brief conceptual description of the issue and practical recommendations on planning and implementation of an organized small-scale self-help housing project. Part 2 includes two separate case studies from Costa Rica and Tunisia and a check list for planning and implementation of organized small-scale self-help housing projects.

2 General Considerations

Why Organized Self-help Housing?

Self-help housing as a solution to housing problems for low-income households is widely discussed. The intention here is not to contribute to the debate but to highlight the concept of organized self-help housing under certain limited conditions. By organized self-help housing is meant that there is a facilitating organization that both assists the households that have chosen self-help housing and that bears a responsibility to authorities and financial agencies.

Important aspects of self-help housing include: cost of construction, technical quality, construction time, social and economic development and gender awareness.

Organized self-help housing is often selected as a way of reducing the *cost of construction* through the participation of the households. Generally speaking construction costs are lower in organized self-help housing projects than in contractor built dwellings of similar quality. However the level of cost reduction depends on how the project is organized, the amount of time that the households can spend on construction, and the capacity and efficiency of the facilitating organization. Reduced construction costs makes organized self-help housing a possible solution for lower income groups that cannot benefit from commercially produced housing. Organized self-help housing often also leads to reduced costs for running and maintenance, since the householders have learnt how to repair and carry out maintenance.

The technical quality of self-help housing is often questioned. Experience from many organized self-help housing projects, however, demonstrates that it is usually comparable to professionally built houses, and in some cases even higher. One explanation is that households are aware and able to learn how to achieve quality. The risk for cheating in construction or corruption is also lower when you are building your own house.

Reducing *construction time* is very important to keep costs down and avoid problems with changing seasons such as rain periods. Delays are very common in self-help housing projects and will automatically lead to higher costs, lower motivation and conflicts. Only good planning based on realistic assessments of the capacity of the participating households, bureaucratic hinders, availability of building materials, etc. can assure holding the schedule.

Improved *social and economical development* can be an important benefit of a well organized self-help housing project. To participate in team work, such as self-help housing, for a longer period is a way of learning about your future neighbours and discovering the potentials of community work. A new house in a neighbourhood with infrastructure and services is a dramatic change for most low-income households in developing countries. The improved housing conditions often mean better physical and psychological opportunities to raise one's income. The impact of improved self-confidence (and access to electricity) should not be ignored as im-

portant contributions to new initiatives such as starting a small business.

When men and women, adults and children, work together in an organized self-help housing project *gender awareness* can be increased. A well developed strategy for sharing both work and responsibility in the construction process can actively contribute to this. In many cases women contribute most to the construction, but are excluded in decisions about housing design, legalization, etc. The work schedule must take into account the daily tasks of women, to avoid increasing their burden so much that they cannot fulfil their normal household functions. It is important for the facilitating organization to be aware of this.

Organized Self-help Housing – Definition and Classification

Organized self-help housing is not only a method to meet housing needs. Just as importantly it promotes the enhancement and organization of the resources of the community and institutions involved, to make community development possible.

It is important that the model includes two aspects – *mutual help* and *personal effort* – according to the characteristics of the community. This gives flexibility to respect local characteristics and to assure that each action meets the needs of the group and the project.

Mutual help is defined as a work method directing all efforts and actions towards agreed objectives and aims. There must be equal contributions from all members, according to their situation, knowledge, skills and abili-



Large-scale organized self-help housing by the government in Cuba.



Intermediate-scale organized self-help housing by a municipality in Ethiopia.



Small-scale organized self-help housing by a non governmental organization in El Salvador.

ties. Personal effort is the work done by the nuclear family to meet its own needs.

Self-help housing can be classified in different ways. Here it is classified by scale, since this is crucial to how the facilitating organization must act.

The *largest scale* organized self-help housing is a national programme, such as those implemented in Algeria and Cuba. These programmes characteristically involve great efforts in planning, coordination and training, requiring political commitment at national level and long term economic possibilities. Normally the goal is to build tens of thousands of units per year.

Self-help housing programme carried out by regional or local authorities, such as municipalities, are *intermediate scale*, and might also be implemented in collaboration with NGOs. There have been such programmes in Ethiopia, Tunisia and Bolivia. Normally several thousand units are built each year.

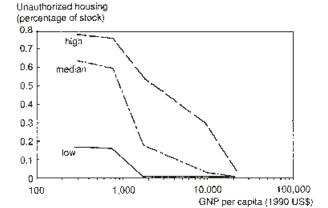
In several countries there are *small-scale* organized self-help housing projects, often run by NGOs working with housing or development in general. Sometimes these projects can also be carried out by Community Based Organizations (CBOs), cooperatives or private companies. The size of these projects is often 50-500 units.

Small-scale projects can either be carried out independently from central and local authorities or in collaboration with them. The authorities might support these activities in different ways, or they might try to block them

This Building Issue considers small-scale organized self-help housing on a project basis, which is an efficient and flexible method of producing housing. The projects should preferably be carried out by NGOs and municipalities, since they are well established locally. This study is especially directed to local organizations who work on several self-help housing projects at the same time, over a long period, and who wish to develop their own institutional capacity.

Housing Policy and Organized Self-help Housing

Housing policy in most developing countries has leaned towards self-help housing the last two decades, and it has become an accepted strategy compared to 30 years ago. This parallels international policies such as the *Global Shelter* Strategy to the Year 2000 (GS 2000) and the



Unauthorized housing in relation to GNP.

Source Housing Enabling Markets to Work.

World Bank's document *Housing Enabling Markets to Work*. There seems to be international consensus that solutions based on popular participation are necessary to improve housing conditions for low-income households.

The same level of consensus does not exist on how people should participate and the role of governments. Should people only contribute with their labour, or should they also participate in decision making? It is generally agreed that *enabling strategies* should be a key concept, and governments should act as *facilitators*.

What does this mean in practice? It is interpreted in many ways by different governments, and with very different results. Some key considerations are building codes and regulations, access to land, infrastructure and funding.

Building codes and regulations that prescribe high standards can hinder development of organized self-help housing. Many of these projects require small plots, simple infrastructure and the use of local building materials. It is important that the responsible authorities ensure that building codes and regulations allow this type of solution.

One of the best ways for regional and local authorities to facilitate organized self-help housing is to provide *appropriate land* at reasonable costs. To do this every municipality needs a long term land-use plan. The land can be prepared by the municipality or by the facilitating organization what matters is that the process of land allocation is efficient, transparent and sustainable.

Distribution of electricity can be solved on demand basis by the suppliers. Social infrastructure (schools, health clinics) can be developed step by step on a project basis, involving different actors. Water and sewage are often the most critical problems in *infrastructure*. A sustainable solution requires that the technology must meet the standard required and afforded. It is also important that the local authorities have a detailed plan for infrastructure and that all areas are integrated in this plan. The cost for infrastructure within a municipality should be shared equally among high, middle and low-income groups. Often today the rich pay less for services. Subsidies should only be accepted if they are transparent and reach low-income households.

If authorities allocate *funds for housing* they should be used efficiently, perhaps to support organized selfhelp housing in the form of guarantees or direct credits. This can be managed as a rotating fund by the facilitating organization, a bank or the local authority. This is likely to be a more efficient use of the resources than if they were channelled through a municipal construction and housing company.

Assistance from the Facilitating Organization

The facilitating organization should aim to assist the participants in a self-help housing project in such a way that the process will be efficient and the end product is a housing area of good quality and with a dynamic neighbourhood. The assistance can be through advice, support and training.

Advice

The facilitating organization must have the professional capacity to develop and recommend specific solutions concerning house design, site layout, technical solutions, legal solutions, financial solutions and social development. The final decisions should be made by the community but the facilitating organization should be able to show consequences of different solutions to ensure economic, healthy and durable solutions to the housing problem.

Support

By helping the community members to have complete and current information about all project activities, to *follow-up* achievements against the plans, to reinforce or correct actions as needed, the self-management will be more efficient. Regular technical *control* allows one to correct mistakes immediately and to reduce costs.

The regular support consists of continuous analysis, recommendations and instructions on ongoing activities to develop the project and to achieve its objectives. This occurs in several areas: social, legal, technical and administrative.

Training

Through training the community improves its knowledge and skills in technical, legal and economic matters. The training process should also aim at changing attitudes and improving management skills. The community should also learn how to negotiate with other institutions and to solve conflicts that arise during the organized self-help housing project.

Training should always be practical and specific, common areas are: social development of the community and families, organization and coordination of mutual help, conflict management and control, planning, organization and management of housing and infrastructure projects, programme and budget control, construction techniques for infrastructure and housing, procurement and stores administration, basic use of tools and equipment.

Advice, support and training can be developed in the four action areas named above: social, legal, technical

and administrative. For each area the facilitating organization must have access to relevant professional staff.

Financial Aspects

Those who work with organized self-help housing must convince banks, other credit institutes, and any donor agency that the methodology is not only "romantic and useful for showing the use of resources" but efficient and competitive in terms of costs and financial management.

Housing finance depends mainly on limited national and local resources. This means the organization must prove to national decision makers that using local resources in organized self-help housing is efficient and reliable.

When families become involved in organized selfhelp housing their expectations usually far exceed what can be achieved with the amount of credit they can obtain. One must be able to show where the resources available to the community go, and how this will help to solve their housing problems.

These reflections show that the facilitating organizations must get involved in financial aspects that go far beyond obtaining donations to build a few houses. It is important to show that this kind of project is financially viable. If we compare the cost of any given organized self-help housing solution with the cost of the same solution in the formal housing market, is the first option actually less expensive?

Type of cost	Organized self- help housing		
Land	no diffe	erence	
Materials for infrastructure	no diffe	erence	
Labour for infrastructure	cheap	expensive	
Building materials	no difference		
Labour for housing	cheap	expensive	
Financial costs during construction	on cheap	expensive	
Overhead and management		expensive	
Advice, training and support	expensive		

The cost should be less for organized self-help housing, otherwise this method is hard to justify. However the advantage for the families is not limited to the cost. In many countries financial resources and subsidies are available for the low-income population but in an uncoordinated way. It is a challenge for organizations working with organized self-help housing to channel some of these resources to their projects. To do this both the facilitating organization and the method for organized self-help housing must have credibility.

Sustainable Organized Self-help Housing

Normally when one thinks about the organizations that support organized self-help housing, the image is a non governmental organization permanently involved with this type of programme. The organizations see themselves as collectors of resources to be transferred to the beneficiaries, preferably at no cost for the latter. This perspective should be changed, considering that re-

sources are becoming scarcer, and organizations should be concerned to change, to find ways to give the highest benefits for the resources collected, and to provide the greatest number of dwellings possible. This leads to a different perspective on sustainability for the organizations. They cannot continue to depend on donations, but should look for permanent regular resources that would permit continuity with less and less dependence on funding agencies.

Two strategies seem to solve this problem.

The creation of a permanent fund, held by the institution, as a result of implementing projects where external resources are provided to the population. This is new way to channel resources to these programmes. In developing countries there are normally different types of subsidies from foreign donations that could be used as initial working capital. Instead of providing subsidies, the organization loans the families the starting capital to build their homes. When the house is built, it can be used as security for a mortage from a bank or building society, and the family repays the initial loan to the organization. Thus the funds are re-cycled, used as starting capital for another group of families. However there is a danger that when the NGO has financial resources, it will change its activities and become more of a bank than an implementing organization. Therefore the role of donor agencies that allocate resources to this type of revolving fund should be to establish clear rules and to guarantee that the resources will continue to be used on the same conditions and with the same objectives as those originally ac-

The second alternative is to create a commercial company. Its profits can be used to implement social housing projects. The risk is that the organization will be too absorbed by the financial burden imposed by the enterprise to develop the social programme.

It is important that the facilitating organization is aware of the risk of losing focus on housing for lowincome families when looking for funding.

Responsibility of the Facilitating Organization

It is important to define clearly the responsibility of the facilitating organization. Even though all decisions should be approved by the community, the facilitating organization bears the professional responsibility for the design of an organized self-help housing project. A bad design can never be justified by people's participation. The facilitating organization must analyse, compare and inform the community about the consequences of different solutions.

There is a risk of being too general when defining subsequent projects in housing improvements and community development. It is important to specify what is meant by housing improvements and community development, for instance with respect to health, safety, comfort, economic and social development. Is a legal new house of hollow concrete blocks but with bad indoor climate and no toilet better than an illegal house of local

building materials with good indoor comfort and access to sanitation? This must be carefully assessed for every project so that housing improvement is not only a slogan, but leads to measurable improvements for the families.

Interdisciplinary project evaluation is an important tool to determine the level of "housing improvements" and to improve the capacity of the facilitating organization. Such evaluations should be required by international and national funding agencies.

Some Unsolved Issues

At the beginning of a project, families may be reluctant to participate or contribute their labour. This attitude is reasonable if they have previously been promised new or better housing, perhaps by politicans during election campaign promises. Unfortunately these promises often lead to false expectations. Their scepticism is normally overcome in a self-help housing project when they see that the facilitating organization responds directly to their needs.

When a community or group of families is very active, they might buy land and even hire a consultant to make the site plan, before they make contact with the facilitating organization. It can happen that the land is not suitable or not zoned for housing. The site plan might be uneconomic or of a poor architectural quality. In the worst case the plan must be redesigned and/or new land bought, which leads to extra cost for the families.

The different actors in a self-help housing project might have different criteria to select families, especially where there are subsidies. National and international institutions often have an explicit policy to reach low-income households and the most vulnerable groups. Local authorities and organizations are more likely to be influenced by political pressures and social and economic networks.

A common problem in many countries is the lack of professionals trained for working with housing for low-income families. This applies to all professions, but is most critical for planners, architects and engineers. They are more likely to be trained for "high tech" solutions. There are only a few countries that have revised their university curricula to respond also to the needs of the low-income population.

3 Recommendations

The recommendations are intended for organized self-help housing projects in the size of 50 - 500 units. The proposed model should be seen as general guidelines to be adopted to local conditions. The organizational aspects are described step by step with emphasis on the role of the facilitating organization.

A Self-help Housing Project: issue by issue

A self-help housing project should address each of the following issues and integrate them in planning and implementation. The specialized staff of the facilitating organization should define, with the community, the work programme for each action area within the total project, including advice, support and training activities. Although each area is discussed separately, they are all part of a single process, and the importance of an area varies according to the stage and requirements of the project.

Social

The starting point is to ensure that the community sees the project from the perspective of community development and not only as self-help housing to solve a primary need.

The social experts of the facilitating organization have the task to help to define the mechanisms that will make it possible to build both housing and the community. Just as streets, electricity, the water system are built, one must also ask what are the elements that make up a community, in a social sense, and what needs to be done to build it. As the infrastructure for housing is built, social networks must also be built to allow the development of the community.

When construction of houses begins, the development, or re-definition, of family relationships is stressed. It is not a matter of building a house but a home. A strategy to transform the construction of a house into a means to build homes and communities should be defined by the social experts in collaboration with the community.

The active participation of the community in the social area is very important. This will foster the democratization of decision-making and executive process on the basis of joint work on community tasks.

Legal

Land ownership, establishing the legal framework of the group, development and forms of agreement with other entities, ways to collect rent and contributions, steps for division of land tracts are very important legal aspects. Division of responsibilities within the community and between the community and the facilitation organization is equally vital.

The legal expert can advise to the board of the community, in particular, when the board must make decisions on behalf of the group as a whole, and when the legal implications require an expert analysis. The advisor should then make recommendations and offer the necessary guidance.

The legal expert should also be able to authorize requests for changes of borrowers, make sure that the group exists as a juridical person, receive legal claims during the development of the project, apply procedures concerning guarantees and steps for collecting money, etc.

It is important to allow sufficient time for training, so that the families will understand all legal aspects, especially concerning the signing of contracts.

Technical

The facilitating organization should develop a preliminary project proposal including site plan, house models and preliminary budget based on the socio-economic conditions of the community. The project proposal should be carefully presented for and discussed with all families concerned, preferably in workshops.

Once the preliminary project has been reviewed and approved by the community it can be submitted for approval from the authorities concerned.

When the project proposal is approved the detailed planning of the project can start and the construction work programme can be developed.

The construction schedule, including time distribution, should be agreed jointly by the community and the facilitating organization. It should also define the training activities in construction. The cash flow needs should also be determined, based on the need to hire construction equipment and external services (topographical survey, electricity, treatment systems), and to procure building materials.

The community should participate in this process and approve the construction work program.

Construction requires physical effort and administrative ability by the families. There should be a permanent field team appointed by the facilitating organization to provide technical training and to find support mechanisms to encourage families and neutralize the physical and even psychological tiredness generated at this stage. One must also ensure that the construction work does not overshadow the social process that must develop in parallel

One positive impact of the construction process is that the participants often re-establish confidence in their personal, collective and community abilities.

Administration

The administrative programme includes two main aspects. One concerns management and participation during the different stages of the project itself, from project formulation to construction. The other aspect concerns financial administration. The families must understand the best way of using the allocated resources (credits), but they should also be aware of repaying them in instalments, to be used by other families in later projects.

The following activities should be carried out:

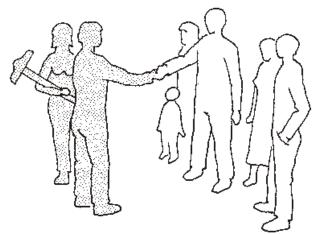
- Control of disbursements in total and per family for all the budget items, according to the stage of the project (income and expenditure).
- · Control of payments and general use of funds.

- Monthly control of expenses for training, advice and support components.
- Control of how the families are fulfilling their payment commitments (fees, contributions).
- Control of complementary programme sponsored by other organizations.
- Control of expenses on external contracts (topography, land movements, electricity, etc.).

A Self-help Housing Project: step by step

Initial Contact

The main objective is for the families who are interested in housing and the organization that is offering support to get to know each other. If the residents agree to participate in a process that they do not fully understand, there will be problems throughout the project. At the end of the initial contact the participants should know what is expected of them during the construction process, how they and their families are supposed to be involved, what support they can receive from the facilitating organization, how much this support will cost, how they will pay those and all other costs for materials, equipment and other resources used in the process.



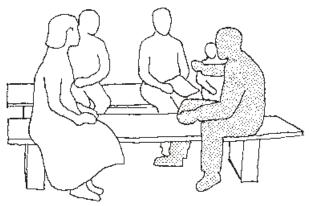
Initial contact – to create confidence.

On the other hand, the facilitating organization must be certain that the residents are prepared to construct their houses on the basis of organized self-help.

Preliminary Study

It is necessary to ensure that the group will develop a general awareness of their major needs, the resources they have available, the best way to do it, and the approximate terms and costs of the solution. The main stress should be on the problem of housing, land ownership, and on the organizational models currently used by the group.

The facilitating organization must analyse if organized self-help housing is feasible with respect to land ownership, physical conditions of the land, and feasibility of supply of services such as drinking water, electricity, transportation, etc. It is very important to estimate the total cost of the project to obtain resources, and to see if



Preliminary study – to understand local conditions, needs and expectations.

the families can afford these costs according to the conditions for the credit.

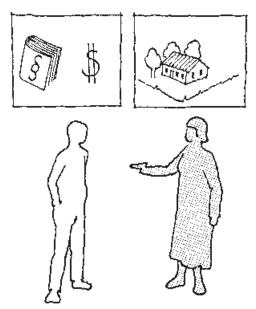
Each family in the community that is interested in the self-construction process should now decide on their own involvement in the project and a list of families should be drawn up.

Study

The study should result in a detailed feasibility study. This will make it possible both for the families involved to understand the scope of the project, and for the facilitating organization to decide whether to develop an organized self-help housing project in the given conditions.

The study must clearly show the following:

- *Legally* the families should not risk any land ownership problems in the future.
- *Financially* the preliminary costs for implementing the project should be calculated, and an estimate made of the individual monthly costs for each family.
- Environmentally the general guidelines for developing the project should be defined. The families should share their expectations in terms of urban design, the distribution and size of the houses, so that the facilitating organization's professional team can reconcile these expectations with the available resources.



Study – to develop strategies and approaches.

- Technically the development of the project must be feasible, durable and at a cost affordable for the inhabitants.
- *Socially* there should be no serious obstacles, and it should be possible to achieve adequate levels of contribution and participation by the families to carry out the project.

The families must know and understand the design of the project and at what level of finish the house will be completed, as well as efforts in terms of working time, resources to be used and payments after construction.

A clear model of the way in which different public and private organizations will be involved in the process of organized self-help housing should be developed.

Normally, this stage should conclude with the signing of all the necessary agreements for the execution of the work.

Design

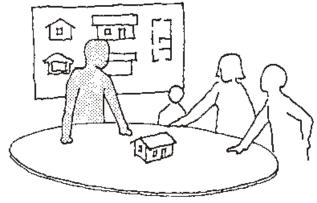
All the components of the project must be detailed at this stage.

Legally there must be clear procedures to ensure the legalization of land and the involvement required by the residents to resolve anticipated conflicts about land tenure.

Financially there must be detailed data about costs, cash flow, income sources, modes of payment and grace periods, and the financial burden to the participants.

Environmentally the families must have influence on the design both of the site plan and their own houses. Many of these issues have to do with technical criteria, and the facilitating organization should use working methods that facilitate participatory design. This is crucial to ensure high motivation during implementation of the project and to facilitate maintenance later on. This includes how to distribute main services, method of refuse and waste water disposal.

Technically it is necessary to work with the group in planning the infrastructure, the selection of building technology, levels of finishes, materials to be used, the most effective way of using communal resources, the need for training throughout the construction process, and the specialized labour available within the group itself.



Design – to develop appropriate, affordable housing and a good environment.

Socially it is necessary to decide the form of group organization to be used, the group's self-regulating mechanisms, and the division of tasks and responsibilities. This includes identifying the special cases in the community, collective support for the weakest or least protected groups, and how to deal with cases of violence or abuse.

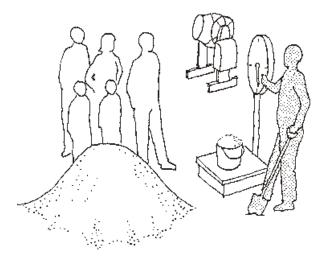
Concerning administration it is necessary to know the suppliers, how to purchase and store materials, and the way to control the costs and to inform the families about them.

Implementation

Project implementation includes four main areas:

- 1 Social: increasing participation and involving the residents in solving their own problems. It is very important to create the monitoring mechanisms to anticipate problems of relationships and leadership. Organized self-help housing processes can be exhausting, and breaks for rest and celebration should be included to help create a sense of success and achievement.
- 2 Construction: the focus of all activities, integrating the components and defining training needs. This includes quality control by the families themselves, and monitoring plans and schedules for community participation and work progress.
- 3 *Administration:* procurement of materials, distribution, and control of expenses.
- 4 *Financial activities:* cash flow control and monitoring the budget against the expenses and the progress of the work.

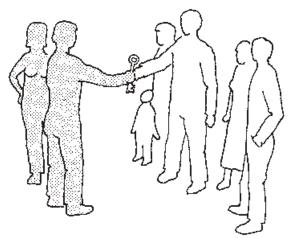
The involvement of the families should not be limited to construction of their houses. They should participate directly, through good distribution of labour and appropriate training, in all the stages of the work process. This includes supply of materials, cost control, preparation of work progress statistics, cash flow review, comparison of expenses to progress and budget, preparing reports to the residents on the level of investment, and so forth.



Implementation – to achieve quality and efficiency with community development.

Transition

One of the problems often mentioned in organized selfhelp housing programmes is that the projects are often delayed. Although the communities gradually discover new needs for joint communal work, one of the main objectives of the process is to develop the community's ability to solve its own problems without the involvement of external agencies. Therefore the parties involved must understand the time frame and keep the original project separate from new community development activities. These must be addressed by different means, but be based on the experience gained through the organized self-help housing project.



Transition – to allow the community to become independent of the facilitating organization.

Construction of houses is half the goal. If at the end of an organized self-help housing project, the community has not become more self-reliant, the project has not achieved the goal to increase democracy and people's participation.

Competence and Capacity of the Facilitating Organization

In most of cases, the outcome of a self-help housing project depends on the structure of the facilitating organization itself. There are two principal aspects that need special attention.

Staff

The facilitating organization must have access to professional expertise within all its fields of operation, whether as consultants or full time staff members. Legal experts, economists, architects, structural engineers, sociologists, social workers, administrators and technicians are likely to be needed in organized self-help housing. Good management of the facilitating organization should lead to:

- a clear idea about the role and approach of the organization towards the client (the poor families).
- specific short term and long term quantitative and qualitative objectives for the organization so that everybody in the organization knows what to do and when to do it.

- a clear idea about the professional role of every staff member.
- the credibility of the facilitating organization, which depends on the persons responsible for making decisions in each activity. This is particularly important when seeking financial assistance or other resources for a project.

Equipment

- Appropriate construction tools and equipment must be available for efficiency and good quality of work. The facilitating organization can hire this equipment to the families.
- The facilitating organization must have access to equipment to produce teaching aids (print, audiovisual) and to conduct training.
- Office and professional equipment is needed for architectural and structural design, time scheduling, budgeting, control and administration.

4 Case Study – Costa Rica

Costa Rica's current population is about 3.3 million, which means about 725,000 housing units. The existing housing deficit is about 140,000, of which 48% in the Greater Metropolitan Area. The problem is even more serious when we realize that 70% of this deficit is concentrated in low-income sectors. Therefore, government policy and the action of private entities must take more effective action towards making the principle of "distributed justice" a reality.¹

Participating Actors

The Community

The main actor is the community, or the group of families, at organizational, administrative and executive levels. Being the main actor they also contribute to their own development.

80% of the participants in FUPROVI (Fundación Promotora de Vivienda) projects earn less than two minimum salaries, an income below 55,000 Costa Rican colones² (US\$ 330 a month), and the remaining 20% are below one minimum salary.

Most families have only one income, and there is an average of five members per nuclear family.

There are groups of families who are legally organized and organized groups without legal status. FUPRO-VI has gradually adapted its work to both groups. However, the *de facto* organized groups are helped to gain legal status, to give them access to benefits from political, public and private entities.

Most of the families come from spontaneous settlements surrounding urban areas. Only a small percentage come directly from the rural areas. Many of the settlements have problems with drugs, unemployment, low school attendance and crime.

These socio-cultural features, among other things, led to the evolution of a work model that aims at developing a neighbourhood: a community where social organization and mutual help give the residents a chance to break the stereotype patterns, where they can become involved in their new environment and create a better quality of life.

Government and Local Authorities

The Costa Rican Government designs and builds the main services: water, electricity, main roads, etc. The community builds the inner networks, both into the newly developed area and into the individual plots. Once the project is finished, government agencies and public utilities maintain and sell the services.

Local governments (municipalities) contribute by constructing secondary roads and, in some cases, offering water supply. They support the process and approve construction permits in coordination with the National Institute for Housing and Urban Development (INVU).

¹ Aspectos generales de la vivienda en Costa Rica, Luis Manuel Navarro, 1994.

^{2 1000} Costa Rican colones approx. equal to US\$ 6 (1996).

State policies allocate resources for housing through the National Financial System for Housing (SFNV), a public sector structure, whose objective is to mobilize financial resources and to channel them towards housing projects. It allows for the involvement of many public and private entities, such as cooperatives, private and public banks, mutual help associations, etc. SFNV has several instruments including the family bonus for housing, a direct subsidy that allows families with the lowest income to obtain housing.

A nuclear family is eligible for the family bonus if its monthly income does not exceed the equivalent of four minimum salaries for a non-specialized worker in the construction industry (about US\$ 660) and if the family does not own a house. Except in cases of extreme need (wages below one minimum salary), SFNV grants complementary mortgage credit under market conditions. For low-income families, such as those assisted by FUPRO-VI, this subsidy is inadequate for basic housing (40 m²). But housing can be made accessible to this population if in addition to this subsidy, the efforts of the family and the community and the cost reducing technology and methods are added.

Out of 6,500 families assisted by FUPROVI in the last 7 years, 3,200 have benefited from the family bonus.

FUPROVI

FUPROVI is a Costa Rican non-governmental organization whose main goal is to promote sustainable social development. FUPROVI believes that housing and other social problems can best be solved through the participation and organized action of the communities. The government has recognized the possibility of extending FUPROVI's methods to strategic sectors of the poorest families in the nation.

Only low-income families can participate in FUPRO-VI's projects. Special attention is given to vulnerable groups such as families headed by women (25-40%) of participants in FUPROVI projects), the elderly, families exposed to natural disasters, and refugees.

FUPROVI functions as a facilitator in self-help housing and community development. It establishes the necessary foundation for the project, through advice, support and training, allowing the community to execute and administer it.

From its start FUPROVI received the largest part of its financial support from Sida. The amount of money has decreased over the years, as FUPROVI became more economically selfsufficient, and thus a sustainable organization.

The "Luz del Sol" Project

"Luz del Sol" (Sunlight) was implemented by FUPROVI according to the standard steps: initial contact, preliminary study, study, design, implementation and transition. The aim was not only to meet the need for housing, but also to promote the improvement and organization of resources of the community and of the institutions involved, to make community development possible.

Initial Contact

The first contact was in 1992 when the group received a donation of land from the Rotary Club of Alajuela. FU-PROVI provided legal support to identify potential problems with land titles. When these problems were solved at the end of 1994, the group contacted FUPROVI. Meetings were arranged to explain the concept of organized self-help housing, and ways to finance infrastructure and house construction. A general assembly of the families agreed on three points:

- They would construct their dwellings according to the FUPROVI model of organized self-help housing.
- They would sign a contract with FUPROVI for the advice, support and training necessary to implement the project.
- They would accept the financing offered by FUPROVI with the stipulated conditions for credit and the model for reimbursement, and they would not receive any other financing or subsidies.



It is important to reach as many families as possible with clear information.

Preliminary Study

The group organized as the Rotary Committee for Neighbourhood Enhancement. There were 142 members and the land could hold more families. The Rotary Club requested that they appoint a group of 25 representatives and elect a president. The requirements by the Rotary Club were:

- Families should come from the area.
- They should be poor, landless families who were hard working with no criminal background or problems of alcoholism, prostitution or drug addiction.
- They should be willing to work in cooperation with the Rotary Club.

The group consisted of 592 people most of them living in nuclear families of 3-5 members. Only six households were headed by women. Most families rented or shared houses with another family. All of them had access to basic services, and the average monthly income was 30,400 Costa Rican colones.

Family income was as follows:

0 to 1 minimum salary 29 families (20%) 1 to 2 minimum salaries 108 families (76%) 2 to 3 minimum salaries 4 families (3%) special situation 1 family (1%)

There were no elderly people among the population. One special case was reported due to illness. The families expected a housing unit that was simple but decent, with basic necessities but no luxury, with three bedrooms.

The project was located in the Province of Alajuela, Central Canton, District of San Antonio. The land was legally appropriated, but the legal status of the group had expired at the time of the study.

The land (57,700 m²) was reached by a paved street, and potable water, electricity and rainwater drainage were drawn to the entrance of the site. It was easy to drain the rain water off the street.

The land was bounded by electric power lines, and areas belonging to the Forestry Department and by other authorities.

Building lines were defined by the Roads Department. The property drawing was recent and the boundaries shown were current. The land was flat and suitable for housing. No soil conditions were observed that could interfere with the project. The surrounding buildings did not show any physical or mechanical problems that could affect the project.

The soil was permeable and there were no ponds, and neighbours did not complain about the functioning of septic tanks. However a formal soil analysis to examine permeability, support capacity, and stability of slopes was commissioned.

The land was within the buffer area of Juan Santamaría Airport which implied a noise problem. About 65% of the land was suitable for housing, which meant it was possible to create 182 plots with a minimum area of 200 m^2 each.

The Members of the Board of Directors were elected for a one year term in July 1994, and elections were annual. The group was encouraged by the Rotary Club to go beyond housing to the provision of maintenance to the area and the provision of sidewalks and traffic lights, because of the risk for accidents once the housing stage was complete.

The organizational structure was as follows:

General Assembly

Board of Directors

Recreation Security Finance Cleaning Supply of Kitchen Committee Commission Materials

The Board of Directors and the Assembly had regular formal meetings. There was 100% attendance at the meetings and field visits called by FUPROVI. The community supplied basic information in time and the families responded 90% to group activities.

The basic controls for the functioning of the organization were in place and up to date: minutes book, attendance record, treasurer's record. People relied on the Board and the Rotary Club.

All services, provided by the water and power utilities, were available at the entrance of the site.

The project had the support of the local municipality, and the Minister of Housing.

Conclusions

- The project seemed feasible as a project based on selfhelp housing and mutual help. The Board of Directors was aware of the financial commitment the group must undertake, and the level of the work required.
- There were no legal hinders to issuing a mortgage on behalf of FUPROVI, but if the possibility were pursued, an agreement by the Board of Directors was required, authorizing the president to take such an action. According to FUPROVI policies, approval of the Assembly of Members was also required.
- The land was owned by the Rotary Club Association of Alajuela and necessary legal steps had been taken.
- Survey maps with contour lines showing the legal boundaries and the availability of public services were collected to submit a proposal for the site design to INVU.
- More research was needed on whether airport noise would impose some site constraints.
- It was necessary to review the site design prepared by the contracted engineer.
- Land preparation and land movement were organized.
 The group cleared the land, held fundraising activities, and set a contribution of 100 colones for each meeting.
- The families' expectations could only be met if financing from SFNV was obtained. The credit from FUPROVI covered only infrastructure.
- The group could expect almost 40 million colones in credit, based on an average salary of 30,400 colones, with a paying capacity of almost 18%. There were 142 families, but if this were increased to 182, the total credit would be over 50 million colones.

Study

The only changes from the preliminary study were the following:

There was a problem of water availability in the area but the Vice-Minister of Housing offered to help obtain water approval.

The project included all the infrastructure work, up to the construction of housing. The whole system of drinking water had to be built. Sewage disposal was through septic tanks and drains for every house. It was necessary to build sidewalks, streets and paths, and to extend the electricity system.



Site plan. (Plot boundaries shown in the block on the right.)

Distribution of areas was as follows:

Function	Area (m²)	%
Plots	33,000	66
Streets	11,550	23
Public area	5,350	11
Total	49,900	100
Number of pl	182	
Average plot	181 m ²	
Minimum plo	155 m ²	

Seven of the plots were reserved for commercial use. Cash flow and budget (both preliminary) were obtained.

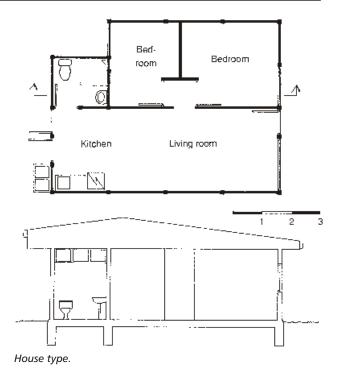
The group could expect almost 58 million colones as the total credit, based on an average salary of 35,600 colones, with a minimum paying capacity of 25% and a maximum of 30%. These standards were variable, with the intention to set realistic fees that could be paid.

To determine the paying capacity, the number of family members, and their economic commitments to institutions (according to official data), were subtracted from the net salary. The maximum individual loan for construction and infrastructure was 710,000 colones.

Design

Most important at this stage was that the architects and civil engineers improved the land use and increased the number of plots.

The families decided to construct their houses with simple, locally produced prefabricated building materials. An open tender among the suppliers led to a 50% rebate in the price of floor materials and a donation of materials and labour to build a 100 m² meeting room.



The initial training of the families, allowed them to take responsibility for the budget, schedule, control of the stores and cost of the materials.

With the assistance of the sociologist and social worker, the families designed the social plan, decided how to help the special cases, designed the method for monitoring the agreed hours of participation of every family in the process.

Implementation

An organizational structure was established for construction, administration, and social development.

- Construction: community coordinators for construction of infrastructure and housing, integration of work teams, and labour specialization.
- *Administration:* committees for financial control, building materials and tools.
- Social development: support service, child care, common kitchen, management and distribution of food, care for special cases, and inter-institutional relationships in the context of local development.



Construction work is shared by men and women.



The cost for infrastructure can be reduced through self-help.

The administration of the project was directed towards production management, programme analysis, budget compliance, and problems that arose.

FUPROVI's field team trained, advised and offered technical assistance in specific activities. It also assisted in dealings with other entities concerning drawings, permits, signing of agreements, and negotiations with municipalities and authorities.

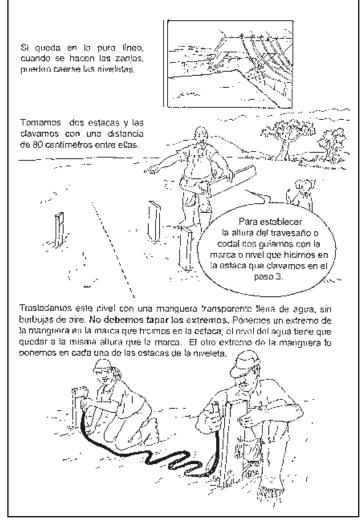
One of the most important problems during the implementation of the project was that no approvals were given before it was clear that the drilled well would provide sufficient water. Another condition was that the community should construct a sewage collector that could be connected to a general network later on.

When the first well was drilled, there was insufficient water at the depth agreed with the contractor, and it was necessary to drill a second well.

Transition

The families moved into their new houses and began to pay their monthly repayment.

There were a number of activities in the area to improve the neighbourhood environment, such as garbage collection and getting children and young people to plant trees in planned green areas. The group started community activities important for the development of a housing area.



The construction manual should be designed for non-professionals.

5 Case Study – Tunisia

This describes a small-scale organized self-help housing project in Rohia, rural Tunisia. In 1984 the then Tunisian Minister for Housing publicly proclaimed the project a model for constructing houses in rural areas, and the government changed its national housing strategy from contractor built standard houses to self-help housing.

The Rohia project resulted from a collaboration between ASDEAR (Association pour le Développement et l'Animation Rurale), a Tunisian NGO for rural development, and SADEL (Swedish Association for the Development of Low-Cost Housing) a Swedish NGO.

For many decades after independence Tunisia suffered from a serious housing shortage. In the 1980s there were government programmes to build 20,000 dwellings per year for a population of 7 million. However, given the needs created by population growth, crowdedness and low housing standards, a considerable increase in the rate of construction was necessary to solve the housing crisis.

The government housing programmes addressed urban needs. The rural programmes were mainly standard houses, designed by the Ministry of Housing and constructed by local contractors. Even though the houses were subsidized, a large part of the rural population could not afford them. Nor were the standard houses adopted to local needs, climate and culture. This was clearly shown when many of these dwellings where abandoned in spite of the family's investment.

Because of the scarcity of resources in rural Tunisia, whatever exists must be fully utilized. In most places there are locally available materials that can be used for construction, and there is one great asset – labour. This combination of circumstances was the point of departure for the organized self-help housing project in Rohia.

Participating Actors

The Community

All the families were farmers, most of them with a cultivable area of 1-10 hectares. Traditional farming methods dominated, and farming was highly seasonal. Income from farming was low and irregular for most families and met only the most basic needs.

The households consisted of 3-10 persons, with an average of 6. Most households were nuclear families, but some had different generations living together. Young persons both spoke and wrote French and Arabic, whereas the elderly only spoke Arabic and were often illiterate. Education and health service were available for all, but boys were more likely to continue beyond primary school than girls.

Religion and culture were very strong elements of daily life. The population in the area were all Muslim, and the culture was naturally influenced by the traditions linked to agriculture and its seasons.

Local Authorities

The role of the local authorities was to analyse the project and provide the necessary legal documents, building permits, etc. It was a new experience for some of the authorities to deal with a group of families building their own homes. The regulatory framework for low-income housing was not always appropriate for the rural economic situation. Discussions with central authorities could allow the local authorities to be more flexible. The initial scepticism about self-help housing was also overcome when the practical results were seen. The social branches of the local authorities were active in supporting and training the families during and after construction to support the social and economic development of the community.

ASDEAR

ASDEAR's work in Rohia began in 1974, and was related to agricultural development. The main method was teaching older primary students how to make the best use of the land. Through the children, a natural contact was established with their parents. The families were able to increase yields from their farming, through improved farming methods and by cultivating of new crops. In conjunction with these activities, ASDEAR subsidised the purchase of equipment and commercial seed. A watchword in all of ASDEAR's operations is "to help people to help themselves." The families must contribute both economically and with their own labour to receive assistance.

SADEL

SADEL was formed in 1980 by students and staff of the Schools of Architecture and Civil Engineering at Lund University.

The association is non-religious, non-political, and non-profit, and receives financial support from both governmental and non-governmental sources.

SADEL's activities include:

- Contribution to the development and implementation of housing improvements for low-income households, by the provision of personal and financial support.
- Development, testing and introduction of appropriate and resource-conserving materials and techniques for building construction in developing countries.
- Documentation and communication of current experiences in the field of resource-saving building construction.
- Organization of seminars and exhibitions to facilitate sharing of experiences.

During its 16 years of operation SADEL has worked in Tunisia, Ethiopia, Bolivia and Sweden.

The Rohia Project

Initial Contact

The participating families were all farmers and most of them owned some agricultural land. They participated in different programmes for agricultural development run



Traditional houses are built of stone with a mud roof on a wooden structure.

by ASDEAR to improve nutrition and incomes for the families.

After three years of successful agricultural development the households had improved their situation significantly and demanded better housing. They addressed themselves to ASDEAR, the local actor in whom they had confidence, even though ASDEAR had no experience with housing.

ASDEAR contacted SADEL to conduct the preliminary study together.

Preliminary Study

The objective of the preliminary study was to develop an acceptable and affordable solution to the housing problems of families in the rural area.

It was necessary to understand the local conditions such as: culture, economy, the role of agriculture, traditional building techniques, the layout of the traditional dwelling, the weaknesses of the traditional dwelling, local and non-local building materials available, construction skills, etc.

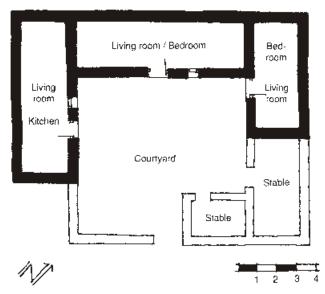
This inventory was carried out for the entire region through random interviews, observations and testing of materials.

It was concluded that it would be economically impossible for the households to buy new houses that corresponded to their needs and expectations. The only way to fulfil this would be through organized self-help housing that could allow individual solutions adapted to each family and reduce the cost for construction. With these limitations in mind the following goals were formulated:

- To produce dwellings of a minimum standard which entails improved climatic shelter, better hygienic conditions and less crowded living.
- To produce dwellings adapted to existing living patterns.
- To produce solid dwellings with a life expectancy of at least 25 years.
- To produce dwellings that result in a cost of living that can be met by the poorest families.

Study

The geographic area given priority was defined together with the local authorities. All households in this area were visited, interviewed and the current housing stan-



Traditional houses always have a courtyard and rectangular rooms.

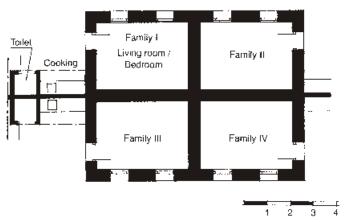
dard was documented. This diagnosis was very important since only limited data (demographic, housing, employment) was available in the region.

Interview questions

- 1 What is the name of the family?
- 2 How many live in the household and what are their ages?
- 3 How large is the holding owned by the family: total area and irrigated area?
- 4 How many cattle does the family own?
- 5 Does the family have its own well? Does it have a pump?
- 6 Does the family have any wage income?
- 7 Does the family have any other income, e.g. pensions?
- 8 Does anyone in the family have experience of building?
- 9 How many people can take part in the self-help construction?
- 10 How much time can these people devote to self-help construction?
- 11 How old is the family dwelling
- 12 What are the family's wishes for home improvements?
- 13 Does the family own land that is suitable for housing?

Observations

- The existing buildings were measured.
- Those areas used as living quarters were noted.



Standard low-cost dwelling in the government's rural housing programme.

- The technical condition of the houses was assessed and an assessment was made as of the feasibility of laying a new roof.
- The directions in which extensions could be built were checked.

At the same time a set of planning criteria for housing improvement were developed, including criteria for selection of families to participate in the programme. Building techniques appropriate for organized self-help were developed and tested in an experimental building.

The technical solutions where based on optimal use of local building materials (building materials produced locally), using non-local building materials (building materials available locally but not produced locally) only when they offered a much better solution or lower cost.

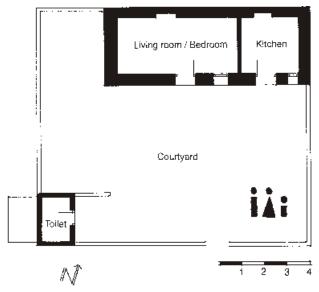
Design

Based on the preliminary study the project was designed with consideration for economy and financing, organization, building techniques and housing solutions.

It was necessary to keep the costs low to make the new houses affordable. To make the project sustainable there were three requirements for the financing:

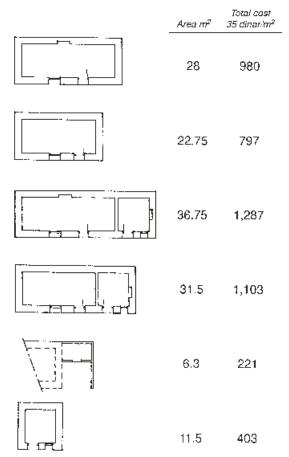
- the monthly outlay for the households must be reasonable
- the model should be adopted to meet current Tunisian forms of financing for social housing.
- repayments are ploughed back into a revolving fund for further projects.

A simple working model was developed to allocate work and responsibilities. The construction was organized in building teams of two to four families, and every team had a supervisor. The supervisor was a local mason trained for organized self-help housing by ASDEAR. The role of the supervisor was to guide and train the families and to do some of the more difficult construction. The families chose somebody to be responsible for the stock and distribution of building materials. All building materials and equipment were purchased by ASDEAR, the facilitating organization. The project manager of ASDEAR was also responsible for organizing the transport of building materials.



Example of a dwelling appropriate for one family.

Planning criteria were developed for the siting and the layout of the dwellings. New dwellings were always placed individually on the families' agricultural land. This was in contrast to previous government rural housing programmes where new dwellings were constructed in groups far from the fields. The planning criteria included the possibility of improving existing dwellings. If the existing dwelling was built of solid stone walls, it could be sufficient to add a new roof, more rooms, a



Different housing components allowing individual design solutions at low cost.

In 1985, 1 Tunisian dinar was worth approx. 1.5 US\$.

kitchen and toilet. A set of standard components such as living/bedroom of different sizes, kitchen and toilet were designed. On the basis of these components, an appropriate housing solution could be proposed for each family according to its needs, number of children, house condition and economic situation.

The building technique was developed jointly by ASDEAR and SADEL. The objective was to develop techniques appropriate for unskilled persons using locally available materials. Special attention was given to the roof construction, which was a problem in the region, and the construction of toilets. Some of the building materials were tested in a laboratory and then in an experimental building. This building also served as a demonstration house and for training the supervisors. Along with this work some special equipment was developed to facilitate the work of the building teams. Manuals and training materials were also produced.

Implementation

When the final design was agreed with each family, and the contract signed, construction could start. The discussion with each family was important not only to find the best solution, but also to explain how they would participate and share responsibilities. The project manager could easily calculate the total amount of building materials and the total cost for every dwelling based on the quantities and costs for every component.

Construction was carried out step by step (foundation, walls, etc.) by each building team. Each supervisor instructed his team, for example, about how to lay a foundation and distributed the necessary tools, equipment and written instructions. The calculated amounts of building materials were distributed for every step and signed for by each family. All families had to finish one step (e.g. foundation) before they could continue with next step.

Since the buildings were constructed with heavy materials: concrete foundations, 50 cm walls of natural stone etc., construction normally took one year. During this period the families learned not only about construction and future maintenance of their houses, but also how to improve hygiene, health and their social situation.

Transition

All families moved immediately into the new houses. Most of the families made additional investments in their new homes: kitchen equipment, furniture and television. The change from the old dwellings was dramatic in terms of health standard, comfort, indoor climate and not at least dignity. Different evaluations showed that the new environment led to a better life socially and also encouraged new initiatives such as joint activities to improve incomes.

It was significant that the poorest families were generally more regular in paying their amortization than the slightly better off families. This could be an effect of the former governmental policy that accustomed the population to subsidies without encouraging participation.

The project was followed for more than one year by social workers from ASDEAR and the local authorities. The objective was to strengthen the community and give

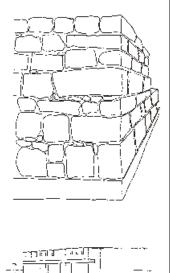
الحطائط الخطارجيي الحجيرى \$

يسانوسو الاستاسي و استنسارة افسواد الاوشطاد الهسائدي . بهتندا الهنباء بظهنط التربية مع وضع أحجار شعبية بنالزرات الأربعت و بقاميد استعمال أحجام صغيبرة الحجام للغيري, ويبط العجارة في الينباء يكنون ينالداول واحدة لاتفنير التماميل لا يتجاوز مكند 2 منم و لا يقيمين خدارة الحجير.

اختيان وحسب المثنان بكنان النبوافة والأسارة. أو الأفجيرة. - أما فالدار المفارسة المراكب المراكبة المراكبة المراكبة المراكبة المراكبة المراكبة المراكبة المراكبة المراكبة

خليدة الأستسن. تحسائط الأمساي يسيخ، بنساء مطبي مستبوئ تم يمسب المعينية ويحدهما بسؤاميل ينمائه معتم منسوى 2000م أمال طبيو المسائط الخلفسي، فينام 1000 ما ما

اللمس أن تشرك بطالحنا لط الأمناس و الخاري مناكن بشند الهنا الهيئسان الخديسي السقاسي . مكتابيان بطالمتين الباحدة .



In the building manual it was important to show how to make solid corners.



The new houses were built on the families' farm land, close to the old dwelling.



The new kitchens improved hygiene considerably.

advice and training in community based development, specifically in nutrition, hygiene, infant care and home economics.

6 Check List

	check list is intended for facilitating organizations	Stud	ly
implementing organized small-scale self-help housing, but can also be useful for funding organizations, authori- ties, professionals and community leaders.			What are the properties of the land for the housing area: location, topography, microclimate, infrastructure, accessibility, etc.?
Initi	ial Contact Do the families understand the concept of		What are the socio-economic conditions of the households participating in the project?
	organized self-help housing? Do the families understand how they		What are the current housing practices and how should they be addressed?
	should contribute in decision making, responsibility, coordination, construction		What is the monthly payment capacity of the families?
	Do the families understand the role of the facilitating organization in providing		What would be the environmental impact of the project?
	advice, support and training and what this service will cost?		Have necessary legal steps been taken?
	Are there any conflicts, or potential conflicts, within the group of families, or with other groups or authorities that could hinder the project?		Have necessary financial steps been taken?
V			Has a detailed contract been signed between the community and the facilitating organization to design the project?
Prel	liminary Study		project.
	What are the expectations of the families for housing improvements and community development?	Desi	ign Is the layout of the site plan appropriate
	What are the most urgent needs for housing improvements in areas of legality,		for the climate, topography and surrounding neighbourhoods?
	safety, durability, health, comfort and space?		Is the layout of the site plan economical, considering land use and infrastructure?
	What are the resources of the families in terms of level of organization and labour?		Will the layout of the site plan contribute to creating a safe, pleasant and creative
	Do the families have any resources such as land, building materials or existing		neighbourhood? Is there a need for different house types
	housing that can be used in the project? What are the possibilities for credit and		according to location, topography or family size?
	subsidies for the project nationally and internationally?		Are the house types appropriate for the needs and desires from a professional point of view?

	Are the building techniques and materials appropriate for self-help housing?		Is the project management plan prepared, division of responsibilities, working hours for each household etc.?
Ш	Are the building techniques and materials appropriate for the climate, risks for natural disaster etc.?		Is there a clear control function for the work quality, including steps to be taken if
	Are the building techniques and materials appropriate for future maintenance and extensions?		problems occur? Is the work schedule appropriate for the time available to the households?
	Are the working documents (drawings, specifications etc.) sufficiently detailed?		Are the stores and distribution of building materials organized?
	Is the training and instruction material appropriate for the skills of the families?		Are the necessary equipment, machines and tools available to the families?
	Is the time scheduling for implementation realistic?		
П	Is the cost estimate realistic?	Tra	nsition
	Is the cost estimate realistic?	Tra	Is the final result of the project according to the design and contracts?
Imp	Is the cost estimate realistic?	Tra	Is the final result of the project according
Imp	Dementation Are the legal documents for the land	Tra	Is the final result of the project according to the design and contracts?
Imp	Are the legal documents for the land ready? Are building permits and other official	Tra	Is the final result of the project according to the design and contracts? How can the project be evaluated to give feedback for future activities in the
Imp	Are the legal documents for the land ready?	Tra	Is the final result of the project according to the design and contracts? How can the project be evaluated to give feedback for future activities in the community? How can the project be evaluated to give

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