AN ALTERNATIVE APPROACH FOR
LOW INCOME HOUSING IN ALGERIA:
HOUSING COOPERATIVE

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Submitted to the Department of Architecture on May 6, 1983 
in partial fulfillment of the requirements for the Degree of 
Master of Science in Architecture Studies 

Abstract: 
The population which suffers most directly from deficit in housing, in 
developing countries are the low income populations. Why has the problem 
been allowed to develop, and why have solutions been not forthcoming? 
There are no easy answers. 

This study will undertake, to present and examine the current housing 
policy structure in Algeria, and to understand why it failed to meet 
expectations. Based on this analysis an attempt will be made, to provide an 
alternative approach to reduce the deficit. 

The study will be outlined in three parts: The first part will analyze how 
housing sector relates to developmental strategy. The housing crisis is 
closely linked to the secondary role housing has been allocated in the 
national policy for development. The problem is further aggravated by the 
housing policies adopted which are foreign to Algeria's socio-economic 
framework. 

The second part of the thesis looks at some specific strategies 
formulated in developing countries for the large majority of low income urban 
dwellers. These strategies take off from existing practice in squatter areas. 
They involve direct individual participation in the housing production process 
which will cut the costs and responsibilities of the government. These 
strategies have been largely investigated by some international development 
agencies and governments of developing countries. The experience today is 
old enough to have some appreciation in drawbacks and benefits of such 
approaches, which will be considered in the proposal. 

The third part of the study will propose a method of implementing this 
type of approach. The system considered is a housing cooperative as it 
offers a major instrument to organize and rationalize the participatory process 
among the low-income groups. The proposed cooperative system will be 
discussed in the light of the Algerian context as it is very important that any 
policy implementation needs to be totally adapted to the complex and 
difficult situation of each particular developing country. 

Thesis supervisor: Nabeel Hamdi 
Title: Assistant Professor of Architecture
CONTENTS

Acknowledgements .......................................................... 2
Abstract: ........................................................................... 3
Contents ........................................................................... 4
Introduction ....................................................................... 6

PART I: THE DIMENSION OF THE PROBLEM .............................. 8
1 - The Algerian Model of Development ................................. 9
2 - The Deficit in Housing .................................................. 15
3 - Housing Policy ............................................................. 24
4 - Housing Delivery System ............................................. 30

PART II: DIVERSIFICATION IN HOUSING STRATEGIES .............. 50
1 - Need for Private Housing Promotion .............................. 51
2 - The Minimum Shelter Approach .................................... 56
3 - Housing Cooperative ...................................................... 60

PART III: HOUSING COOPERATIVES FOR LOW INCOME GROUPS 63
1 - The Promotional Organization .................................... 64
2 - Projects Beneficiaries and Grouping System ................... 71
3 - Funding Aspect ........................................................... 80
4 - Planning and Design Aspect ......................................... 89
5 - Construction Implementation ....................................... 99
6 - Management and Legal Aspect .................................... 106

Conclusion ....................................................................... 113
Notes ............................................................................... 115
Bibliography ..................................................................... 118
INTRODUCTION

Algeria, like many other developing countries is experiencing an acute shortage of housing in its urban area. The deficit has been gradually increasing over the years and the situation will become more and more critical unless decisive actions are taken to improve the situation. The reasons for this deficit are varied and complex. One of the more easily identified problems is the high rate of growth of population, 3.2%, which is even higher in urban areas because of inevitable rural-urban migration. This task of accommodating the increase in the number of urban dwellers is a major problem not only for urban development and housing policies but also for the national development at large. But the shortage has also its origins in some other aspect of the country’s situation. It is directly related to the economy and development strategy of the country, and to housing policy options and implementation techniques. Housing is essentially the prerogative of the Government, in terms of planning, investment, and production. However the government was unable to deal with the rapid increase in demand. This failure to meet the needs is already acknowledged. New programs are being proposed some of which will encourage participation of people in housing production. But we will see in the analysis of housing delivery systems the limited implementation of this programs. The purpose of this study is firstly to identify the strength and weaknesses of the existing housing strategy and delivery mechanism by examining the present situation. This will lead to defining some new approaches for improving the system already established. A particular strategy - a cooperative housing system -
will be proposed as one of the alternatives for housing production. This proposal will be discussed and adapted to existing policy and social framework currently operating in the country.
PART I

THE DIMENSION OF THE PROBLEM
1. IDEOLOGY

Algeria’s housing policies and strategies for development are very closely dictated by its political orientation - an ideology based on a socialistic and egalitarian principles. Hence any discussion of Algeria’s housing needs, and ways and means to acquire them, must be preceded by a detailed understanding of her political ideology. The principle tenets of that ideology are to acquire means for her development, which means to create conditions
for economic independence and self-sufficiency. "The concept of development to be indivisible from economic liberation." (1) The economic goals are: Multiply the means and methods to improve the capability for creating income and capital accumulation, necessary for investment in large developmental project. These policies are implemented by the government. The State controls the overall production process for an equitable and rapid development. It assumes the transformation of indigenous natural resources and increases its use in the country, and it strives, in a long term strategy, for an efficient machinery of production which would meet the country's material needs.

2. THE STRATEGY OF DEVELOPMENT

Development strategies is phased over years in a planned way. Critical in the list of priority institutions for development is industry and education. The goal of industrialization is to set up an industrial base necessary for an economic takeoff. Education, as a means of development of human resources, is the only institution of social merit that has received large and reasonable allocations from the national budget. Four plans have so far been implemented. First Plan, 1967 to 1969, 11 million DA (Algerian Dinar), 45% allocated to industry.

Second Plan, 1970 to 1973, 27 billion DA, 36.5% allocated to industry, 5.5% allocated to housing.

Third Plan, 1974 to 1977, 110 billion DA, 43.5% allocated to industry, 13.3% allocated to social sector, among which is housing. (2)

An interim period where there were no national plans. The next plan, in the process of implementation, is
Fourth Plan (3), 1980 to 1984, 420 billion DA, which allocations are: 15% Hydrocarbure sector, 23.5% Other Industries, 12% Water Resources and Agriculture, 15% Housing Construction, 10.5% Education, 6.5% Social Institutions. The objectives of the first three plans concentrated on developing heavy industry, receiving an allocation of one third to one half of the budget. These heavy industries have their ultimate goal in setting up an industrial base, for transformation of raw material necessary for the development of an industry of finished goods. In other words, the goal is to set up an "Industrializing industry." Due to a lopsided allocation to industries, other important sectors tended to be neglected. Most significantly all sectors concerned with social services, excepting education, suffered adversely. This period is characterized by a decline in living urban standards and lack of development of housing schemes and service infrastructures. The Fourth Plan aims to finish the large scale capital intensive industrial sectors and will attempt to correct the deficiencies in other sectors, such as housing and services. This came after two decades of priority to capital accumulation. "A development policy goes further than the selection of investment, projects and distribution of capital done by the planning authorities." (4) The Algerian case is one in which a sector was given a priority without creating the social environment necessary for its success.

3. HOUSING AND THE CONSTRUCTION SECTOR IN THE ALGERIAN MODEL OF DEVELOPMENT

Housing is considered by the State as a social sector - but only next in priority to education and health. Hence the first three Master Plans did not incorporate housing as a sector which needed their special attention. But D.
Benamrane in his book, “Crise de L’habitat, perspective de developpement socialiste en Algerie,” which proposes a reorganization of housing policy, states that the construction sector should have been given more emphasis: The socialist approach has delegated its economic activities to two groups – or divisions.

Department I: Deals with production of “production goods”.
Department II: Deals with production of consumer goods.

The departments are then classified into sectors and budget allocations determined by a priority list. In Algeria, the construction sector is considered part of Department II, i.e., production of consumer goods. This has put this department to one of a low priority view the strategy of development. However, Benamrane makes a strong appeal for inclusion of construction in Department I and in fact argues for it being considered a leading section in this department. He argues:

“Construction sector is with no contestation an integral part of Department I... when it is concerned with production of service buildings, and more generally with infrastructures necessary for the development of other production industries. And it ought to be considered different from production of consumer goods...”

He further argues that: The construction sector, is an intrinsic part and a support of the Department I. That all production of construction material, machineries and tools should be centralized, which now are done by different Ministries. In his words, “the construction sector is a dynamic nucleus of Department I”. (5).
From the arguments presented by Benamrane it is clear that there are major economic advantages in considering both the construction materials production, and machine tools production as part of Department 1. If this had been done earlier the housing industry would not have suffered a shortage of construction material. But housing is being considered as a consumer good. A case in point is that housing output is generally measured as rent and interest charge. This view in the Algerian situation means that housing does not generate any income - it is not economically self-sufficient - since until recently most housing programs were largely subsidized by the Government. So housing was viewed as a sector with a negative opportunity cost. However, this view of housing is myopic. There are other benefits generated from housing, both social and economic, which cannot be easily quantifiable but that ought to be considered.

Orville F. Grimes in his book on housing for low income urban families states that: Construction sector creates employment; it has been proven that for the same investment housing creates more jobs than any other industry. Better housing means better living conditions, better health, greater productivity. If well located - close to work areas - can decrease the demand on transportation. At a macro-economic level, it can be used as a compensation sector. Additionally if the material and technique of construction is well chosen it can generate considerable economic activity. (6).

If housing is viewed differently, it has the potential of becoming a major sector for development. There is an urgent need to reassess its role in the economy and to stop viewing it only as an improductive sector, which
diverts the main stream of development. For that, it would require some basic changes in its policy and investment mechanism.
The housing shortage in Algeria is very acute. Having been a neglected sector in the past, the deficits can only be reduced over the next several years. This is provided that significant efforts are mobilized.

1. CAUSES OF HOUSING DEFICIT

In brief, there are three main reasons for the housing deficit:

a. The Strategy of Development.

As is apparent from discussions in the previous chapters, the construction sector in general and the housing sector in particular have received very little
public support during the past twenty years. The low priority given to housing, and the consequent low level of budgetary allocations, combined with underestimation of the housing deficit during the plan periods 1967 to 1977, has created a large backlog.

b. The Low Rate of Productivity of the Building Sector
Because the sector has not received all the attention needed for its development - insufficient investments in plans and productive equipment - there is a deficit in production of construction material, machinery and tools which constrained the development of the building sector. Moreover there is an insufficient distribution mechanisms which limit different areas of the country to have access to construction material. The low rate of housing production is also influenced by the choice of technology for production. The industrialized systems chosen have problems related to technology and management of production - to be discussed more fully in later chapters.

c. High Growth Rate of Population
The third obvious reason for housing shortage is the increasing demand due to high growth rate of population. The population growth rate was 3.2% from 1960 to 1980 (1). This situation is further worsened by a substantial immigration from rural to urban areas, which leads to a higher urban growth rate of 4.5% (2). For a larger city like Algiers, statistics indicate and urban growth rate of 5.7%. (1)

2. STATISTICAL EVALUATION

a. Evaluation of the Housing Shortage in Recent Years
- Prior to 1966:
At the time of independence the deficit in housing was already pronounced. It was estimated at 1,072,979 housing units, in 1963, 386,763 units in the urban area, and 686,216 in the rural areas. (3). In spite of the “Plan of Constantine”, prepared during the Independence War by the French administration, with 73,500 new dwellings to be built between 1958 and 1968, only less than 50,000 housing units were actually constructed (4). In fact between 1953 and 1963, during the War of Independence, the pace of construction decreased and the war took a heavy toll in terms of destruction of existing housing - especially in the rural areas. Later the deficit was aggravated by an overestimation of the dwellings left vacant by the departure of the European population. No or little immediate action was taken in terms of housing when a massive rural to urban immigration occurred. This rural to urban migration continues even today at an unmanageable rate. The period between 1962 and 1966 is characterized by a recession in housing construction. During this period not more than 6,000 dwellings per year were constructed (5), which figure includes both urban and rural sectors, giving us a total of 24,000 dwellings built during those 4 years (6).

Hence the situation in 1966 was 1,979,888 dwellings for 12,096,347 inhabitants; this gives an occupancy rate per dwelling of 6.1 person, which is high considering the average size of the dwellings (3 room per units). It was estimated that forty-eight percent of the dwelling units are overpopulated (7).

- During the 3 plan periods (1967 to 1977).

The actual realization was very modest (Tables 1, 2 and 3). An increase in population by 43.7% was only accompanied by an increase in housing stock.
of 11.5%. (In quantitative terms a population increase of 5,175,000 accompanied by an increase of 226,000 dwellings).

-Table 1-  Previsions and production of urban housing in physical terms.

<table>
<thead>
<tr>
<th></th>
<th>Production 1967-69</th>
<th>70-73</th>
<th>1974-77</th>
<th>Total</th>
<th>was remaining in 77</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan 67-69</td>
<td>20,548</td>
<td>9,775</td>
<td>7,140</td>
<td>3,633</td>
<td>20,548</td>
</tr>
<tr>
<td>Plan 70-73</td>
<td>41,115</td>
<td>-</td>
<td>2,127</td>
<td>18,318</td>
<td>20,445</td>
</tr>
<tr>
<td>Plan 74-77</td>
<td>156,681</td>
<td>-</td>
<td>-</td>
<td>5,208</td>
<td>4,208</td>
</tr>
<tr>
<td>Total</td>
<td>218,344</td>
<td>9,775</td>
<td>9,267</td>
<td>26,159</td>
<td>45,201</td>
</tr>
</tbody>
</table>

-Table 2-  Prevision and production of urban housing in financial terms.

<table>
<thead>
<tr>
<th></th>
<th>Production 67-69</th>
<th>70-73</th>
<th>74-77</th>
<th>Total</th>
<th>was remaining in 77</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan 67-69</td>
<td>930,138</td>
<td>148,315</td>
<td>604,155</td>
<td>121,752</td>
<td>874,225</td>
</tr>
<tr>
<td>Plan 70-73</td>
<td>2,704,215</td>
<td>381,770</td>
<td>1824,094</td>
<td>2,205,864</td>
<td>498,351</td>
</tr>
<tr>
<td>Plan 74-77</td>
<td>17,503,937</td>
<td></td>
<td>3094,000</td>
<td>3,094,000</td>
<td>14,409,937</td>
</tr>
<tr>
<td>Total</td>
<td>148,318</td>
<td>985,925</td>
<td>5039,846</td>
<td>5,174,039</td>
<td>22,850,671</td>
</tr>
</tbody>
</table>

-Table 3-  Summary of table 1 and table 2 in %.

<table>
<thead>
<tr>
<th></th>
<th>Housing production</th>
<th>During the plan</th>
<th>7 years later</th>
<th>9 years later</th>
<th>was remaining in 1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan 1967-69</td>
<td>Housing production</td>
<td>47.5%</td>
<td>82.3%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Funds used</td>
<td>15.9%</td>
<td>80.8%</td>
<td>93.9%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Plan 1970-73</td>
<td>Housing production</td>
<td>5.2%</td>
<td>49.8%</td>
<td>-</td>
<td>50.2%</td>
</tr>
<tr>
<td></td>
<td>Funds used</td>
<td>14.1%</td>
<td>81.6%</td>
<td>-</td>
<td>18.4%</td>
</tr>
<tr>
<td>Plan 1974-77</td>
<td>Housing production</td>
<td>2.7%</td>
<td>-</td>
<td>-</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>Funds used</td>
<td>17.7%</td>
<td>-</td>
<td>-</td>
<td>82.3%</td>
</tr>
</tbody>
</table>

Source: Benmatti
From the planned programs, 79% was not accomplished by 1977. Considering also that the planned programs underestimated the real needs, by the end of the second quadrennial plan the deficit was far greater than that in 1966.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Number of Dwellings</th>
<th>Occupancy Rate per Dwelling</th>
<th>Evaluation of the Deficit Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>12,096,347</td>
<td>1,979,888</td>
<td>6.1 (1)</td>
<td>423,600</td>
</tr>
<tr>
<td>1977</td>
<td>17,386,484</td>
<td>2,208,712</td>
<td>7.9 (1)</td>
<td>1,268,584</td>
</tr>
<tr>
<td>1981</td>
<td>19,762,386</td>
<td>2,407,877</td>
<td>8.2 (2)</td>
<td>1,544,599</td>
</tr>
</tbody>
</table>

(2) M.U.C.H., "Indication sommaire sur le secteur de l'habitat de l'Urbanisme et de la construction."

- The Present Situation

The housing deficit gets larger every year. In order to keep a balance between occupancy rate and housing supply, the housing production should be sharply accelerated. The number of units required per year, which will absorb the present growth rate and periodically reduce the existing deficit, should be in the range of 100,000 dwelling units. This is in fact envisioned in the quadrennial plan 1980-84.

The production mechanism is supposed to supply an average of 100,000 dwellings a year for plan period 1980-84 and reach a production figure of 200,000 dwellings/year at the end of this decade. The plan envisages a total
production of 450,000 dwellings, out of which 300,000 will be urban dwellings and 150,000 in rural areas.

b. Evaluation of Housing Needs in the Next Seventeen Years

To have a better understanding of the housing deficit, an examination of the evaluation of needs done by N. Benmatti in 1978, for his doctoral thesis, provides an insight. The evaluation starts in 1977 - this gives an opportunity to compare the actual evolution of the situation with Benmatti’s evaluation. In evaluating future production Benmatti gives two sets of figures, one optimistic and one realistic. However for the period between 1977-82 even the realistic estimates are optimistic as compared to what was actually achieved. In 1981 the occupancy rate was already 8.2 person/per dwelling while in the evaluation it was expected to be between 7.3 to 7.4 person per dwelling.

<table>
<thead>
<tr>
<th>Period</th>
<th>Hypothesis</th>
<th>Population Growth Rate in %</th>
<th>Occupancy Rate: Person Per Dwelling</th>
<th>Housing Needs</th>
<th>Realistic Hypothesis of Production Capacity (Exponential)</th>
<th>Cumulative Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Urban (2)</td>
<td>Rural (2)</td>
<td>Total (1)</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td>4.5</td>
<td>2.2</td>
<td>3.2</td>
<td>7.9</td>
<td>0</td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td>4.4</td>
<td>2.3</td>
<td>3.2</td>
<td>7.5</td>
<td>0</td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td>4.2</td>
<td>2.5</td>
<td>3.2</td>
<td>6.9</td>
<td>0</td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td>3.8</td>
<td>2.7</td>
<td>3.2</td>
<td>6.1</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>3.4</td>
<td>2.8</td>
<td>3.1</td>
<td>5.5</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>
Analysis of data:

1 - Growth rate hypothesis is high compared to World Bank figures which predict an average annual growth rate of 2.9% between 1980 and the year 2,000. (This means that the World Bank figures indicate a population of 1.8 million people less than that shown in the chart over this period of time). (8)

2 - Urban growth rate will hardly equal rural growth rate unless there is pronounced expansion of the agricultural sector. Rural to urban migration is difficult to forecast accurately but it is known that rural urban migration is inevitable in developing countries. So it is optimistic to predict an equal growth rate among the two by year 2,000. (World Bank figures state a growth rate of 5.7% for urban population from 1997 to 1998). (9)

3 - Occupancy rate was 7.9% in 1977 and is today more than 8%. This trend shows an increase in deficit rather than otherwise. This shows that a rate of 5 person per dwelling in 2,000 is a very optimistic evaluation.

4 - The realistic hypothesis of reduction capacity is optimistic compared to government programs. From 1980 to 1984 public authorities predict a total production of 360,000 housing units in public promotion - and for 1980 to 1990 a figure of 1,160,000 units. This can be interpreted as a total of 105,000 units/year between 1980 to 1990. While Benmatti’s figures indicate a production of 126,000 units/year from 1980-1990. These figures, although updated, give an idea of the production needed to resolve the housing crisis. Benmatti’s estimates of the needs indicates that more than 6 million dwellings have to be built between 1977 and the year 2,000, which would mean to reach an occupancy rate of 5 persons/unit to solve the housing crisis. Benmatti additionally argues that a production figure of 126,000
dwelling units is realistic and achievable. With this figure in mind the deficit will be 1,610,000 units.

To obtain this level of production it requires very large investment and commitment by the State which might be too optimistic. One way of lessening the problem is to use a diversified mode of production. As Benmatti also stated: "This hypothesis can be improved if individual private initiative is encouraged and organized."

3. QUALITATIVE DEFICIENCIES IN HOUSING STANDARD

a. Deterioration of the Housing Stock:

One of the side effects of housing shortage is that each individual unit is overpopulated. Hence due to overuse of services the physical deterioration of the units themselves is more rapid - decreasing the life of the units. This deterioration is further increased by a lack of maintenance due to the types of tenure. (In urban areas 56.96% of the units are rented and in larger cities up to 79.58% of the units are rented).

b. Inappropriate Realization Methods:

Whenever there is a shortage of housing the crisis is seen as quantitative - number of deficit units. The solution is to find the quickest way to produce these units. In order to make the production process more efficient Algeria attempted to standardize its units and rationalize its production methods. Industrialization, as means of production was the first choice to answer the problem. Entire systems were imported from Europe. Hence most of the designs did not take into account the socio-economic-cultural as well as climatic aspects of the Algerian environment. Additionally, the desire for efficiency, led to rigid housing standards specifying similarity in treatment of
units; spatial arrangements. This leaves very little possibility to the designers or the conceptor to try to consider users needs and expectations. This rigidity in repetitious units becomes obvious when one compares the family size to the floor area of individual units. Most of the families require large space as most families still exist as extended groups - average family size have 8 members. However the units provided generally have two bedrooms and no scope for additional bedrooms. In fact the average area per dwelling is 67 sq.m. Other deficiencies are lack of courtyard in early dwellings, which is a very important living space in rural housing. The concept of privacy which originates from the Algerian culture plays a major influence in the design of traditional housing units have been overlooked in the design of the industrialized units.

Conclusion:

The desire to fulfill the quantitative deficiencies in housing stock without a concomitant desire to upgrade the qualitative standards of dwelling units can adversely effect the overall value of these units. There is a very strong case for a diversified strategy which addresses a broader range of issues and does not see housing merely as shelter, but as an overall living environment.
This chapter will outline the salient features of the housing policy as it is outlined by the M.U.C.H. (Ministry of Urban Planning, Construction, and Housing). The goals and methods of implementation are described and analyzed. But the actual implementation of this policy will appear in the next chapter.

1. BASIC GOALS AND POLICY OF HOUSING

The basic policy may be stated as follows, "A house in decent condition and meeting minimal standards of modern comfort is a fundamental element for
the improvement of the level of living (well-being) of masses". (1) This is the basic tenet for housing as defined by the National Charter. For the Ministry of housing, housing is not just a shelter, it is also a tool for spatial strategy and economic development. The first goal of the ministry to resolve the housing crisis is to mobilize the housing sector and set up an institutional framework to regulate the housing construction sector. (2).

1. Decentralization and Rationalization of Institutions.

The State is planning a decentralized control of the planning and implementation of housing projects - to be effectively in place by the end of the quadrennial plan ('80-'84). The objectives are:

Restructuring of construction firms - institutions at regional levels
Rationalizing the existing means and methods for greater efficiency.
Increasing the capacity of production by creating new firms (59 new firms will be created under the umbrella of the M.U.C.H.).
Developing labor skills, specifically in relation to construction, by organizing an educational system along with all construction processes.

2. Necessity for Industrialization and Prefabrication

It is said that a rapid increase of production necessitates industrialization.' The Ministry realizes that traditional modes of construction cannot be eliminated immediately, and in fact might not be desirable, as at present they are more efficient and less expensive than industrialized techniques. However it is anticipated that ultimately industrialized techniques will dominate and may eliminate traditional modes of construction, and this as soon as there is an adequate pool of skilled workers. Their hope is based on the belief that mastery over the new technology introduced, or to be introduced, will make
traditional methods obsolete. If this level of skill development is possible then only will the importation of foreign technology be efficient.

The Experience of "Chlef", ("Chlef", formerly called El Asnam, is a city which was destroyed by an earthquake in October 1980), in use of prefabrication, generated a positive opinion as part of the housing rebuilt was done by use of light prefabrication. The projects were implemented in a very short time. In the Algerian situation of the building sector, with low rate of production and especially with limited appropriation of construction material, light prefabrication systems imported from abroad seemingly provide very efficient and hence attractive to decision makers. In March 1982 ONEP (Office natinal de la promotion de la construction en prefabrique') was created, with the idea that light prefabrication can be used for,

- relocation of squatter settlements
- helping to implement industrial projects in remote areas, by providing rapid housing delivery.

3. Redefinition of Rent Policy and Selling Policy of Public Housing.

This policy was formulated after 2 decades of high rent subsidies and after experiencing considerable problems of management and maintenance of housing stock. This policy will be explained in detail in the next chapter.

4. Encourage Private Ownership of Family Dwellings.

Private property ownership by individual families is accepted and encouraged as non-exploitative activity.

A policy has been formulated to help encourage people, individually or in groups to build their own housing. This will be equally described in the next chapter.
5. Encourage Private Participation in Financing Housing - through private savings.

It has become apparent that the public sector will not be able to finance all needed housing programs. The State is exploring other methods of investment in housing. One of the investment methods being promoted is that of private participation through contributions made by savings programs.

2. CONCLUSION

The new policies reflect a desire for change in the former housing policies. However most of the new policies are at a planning stage and those that have been introduced have encountered certain difficulties in implementation. The first policy issue, that of decentralization of project implementation, has already met with some success and positive effect. It has helped decision makers at a regional level to identify problems and needs and respond to their solutions spontaneously. It has decreased the coordination problems between various authorities. Transportation of materials and goods from far away places is being curtailed which is improving their delivery methods. It has further opened the possibility of developing in each region means of production of construction material and encouraged efforts to look for alternative solutions more appropriate to the locale. The issues related to industrialization and prefabrication are again gaining importance as decision makers are seeking rapid means of production. This emphasis on industrialization is surprising, where in fact most of the systems so far imported have proven inefficient and expensive. The light prefabrication option, if implemented, represents a rapid method of delivering housing whenever the need arises.
But at a national level, as the only option to relocate squatters it might not be feasible, as:

- There is a high cost to be paid in importing these houses with precious foreign currency.
- The life expectancy of the material is limited and there is no possibility of having adequate maintenance or replace parts that are damaged.
- This type of housing is not easily accepted as permanent dwelling.
- But in other countries' experience, it has been proven to be more useful for a long term strategy to develop local techniques and resources. It develops greater degree of self-sufficiency at a regional level as well as at a national level and decreases the outlay in public investments in local or foreign currency. When the investments do occur the beneficiaries will be local inhabitants or government enterprise either through manufacturing and selling of construction material or through employment and use of existing construction skills.

Some research has been done in this field in Algeria, which relates to use of stabilized earth blocks for construction in the southern part of the country. It is this type of effort that should be further encouraged and developed. But the most important aspect of housing policy currently being promoted is the emphasis on private ownership. "Encourage private ownership of familial dwellings" is a slogan which is linked to another slogan: "Savings for housing programs". The savings program is being promoted by a non-profit saving agency of C.N.E.P. (Caisse nationale d’epargne et de prevoyance). This policy is relatively old but its implementation has been slow. (The reason for it will be discussed more fully in a later chapter). The new policies in rent
and selling of public housing represents an effort to solve some of the management and financing problems. Changes in management and occupancy status of tenants, providing them with greater roles for management decisions was needed, however it is yet not clear that the tenants have the desire or the skills to respond to these roles.
The description of the housing delivery system will consider the two sector in charge of housing production. The public sector, representing the State's promotion of housing; and the private sector representing individual initiative and ownership.

I. PUBLIC SECTOR

The Public sector is the largest identifiable institution for production of housing, in Algeria. The housing programs are conceived by a centralized bureau and promoted by specialized agencies. However other local agencies
also participate in promotional activities but at a limited scale. This can be
done by offices of public administration or any other public agency for the
purpose of providing free housing to their employees.

The regular promoting agencies are:

"Office National the promotion et question immobiliere" (O.P.G.I.)

"Office Nationale de logement familiale" (O.N.L.F.)

1. O.P.G.I.

O.P.G.I. was founded in 1976, as a promotion and management organization,
and was initially an amalgamation of other agencies which had previously
handled similar functions but often had overlapping and sometimes conflicting
roles.

1 - Promotional Activities:

Planning: The programs are decided in the ministries levels and distributed
for implementation nationally.

M.U.C.H.: The housing Ministry with the cooperation of the wilayas (3) decides
the local repartition and staging of the programs.

Wilaya: At the wilaya level the programs are registered with the promoting
organization O.P.G.I.

The ministry of finance allocates the fund to all O.P.G.I.'s which have
registered programs. The O.P.G.I.'s are in charge of the actual payments for
the entire process of production. They are also responsible for contract
administration and interface with the different parties during the realization
process. It will contract with the D.U.C.H. "Direction de l'urbanisme de la
construction et de l'habitat" which will take care of the actual realization.
2. Financing

The first way of financing was done commonly by C.N.E.P. and the government. The C.N.E.P. usually financed 50% of the program at 4.75% interest rate with a lease period of 25 years. The State financed the remaining 50% of the program at 1% interest rate with a loan reimbursement period of 40 years.

A first modification in proportion of loans was first applied. The C.N.E.P. financed 25% and the government 75%. But recently a complete change happened in funding and promotional activities. The programs are funded only by one source either C.N.E.P. or government. The C.N.E.P. programs are integrated under the umbrella of a new agency O.N.L.F. A detailed explanation of why this new agency has been created is provided later in this Chapter. And the program funded by the government are now promoted under O.P.G.I. From 1979 100% of programs under O.P.G.I. are financed by the government. Out of this 15% of the cost is a subsidy to cover costs for servicing the site. 85% of the loans is reimbursable over 40 years at an interest rate of 1% (this low interest rate is an additional subsidy and incentive).

3. Realization:

O.P.G.I. and D.U.C.H. coordinate their activities in each wilaya. The D.U.C.H. is in charge of all activities for project implementation in its jurisdiction. Their responsibility ranges from master plan of city to construction of individual dwellings. It also coordinates activities of various organizations that are involved in the realization process.
- Site allocation: It is done as according to a master plan. The land is bought from the municipalities which are the responsible authorities on all urban land.

- Realization Process:
The public sector relies on industrialized methods, prefabricated systems, for new housing construction.

A large number of systems are used such as: Prefabrication by Panels (by S.O.N.A.T.I.B.A.) and three dimensional prefabrication system (E.C.O.T.E.C.) etc. Importation of this system started during the first quadrennial plan. Today there are about 25 different systems in use. The results expected in terms of production by this system were not reached. This is due to the fact that they are inappropriate for Algeria, as these systems are dependent on certain back-up elements which are not available in the country, such as:

- Inadequate human resources: prefabrication necessitates less labor and less qualified manpower than the traditional types of construction, however needs more skills technicians and professionals while the Algerian labor market is constituted mainly by unskilled workers.

- Maintenance problem: prefabricated systems are difficult to maintain. They require skilled personnel to repair. Moreover, most of the equipment is imported which makes the acquisition of parts very difficult.

- Inefficient functioning: prefabricated systems in Algeria have been plagued with management and administrative problems. These are due to the large number of complex tasks that have to be performed at the factory and also during assembly. They are dependent also on certain external factors, such as
material availability and delay of transportation. If the system fails at any particular point the entire system comes to a halt.

The epithet to a prefabricated system is best expressed by N. Benmatti, "Without going further in this debate, we consider that Algeria has already gone very far, more than necessary in the industrialization process for production of buildings, without formulating a well thought out comprehensive policy". (1)

4. Management

O.P.G.I. not only functions as a promoting agency but is also the management organization for all public housing in the country. O.P.G.I. faces a difficult task, as the housing stock is very large, and as part of this housing is old and obsolete. Its problems are further aggravated by insufficient funds and a lack of skilled manpower. Moreover as there is no incentive for the tenants to do their own maintenance work the responsibilities of O.P.G.I. are further increased.
Renting Policy:
The renting policy has been varied and confused because of the diversity of management procedure. Officially, for public housing, the rent was previously fixed at the very low price of 70 DA per room. However this rent was not based on the recovery of investment costs.
Renting policies are being revised lately to enable the State to recover its investment costs.
The renting formula is being proposed as follows:
- 15% of total cost are State subsidy to cover costs for infrastructure and services to plot.
- 85% of total cost - being the cost of land, design and implementation is considered to be recovered at 1% annual interest rate through rent. The period of recovery is fixed at 40 years. Rent is calculated according to the construction price and is directly proportional to the total rentable floor area. On top of this another 10% is added to the rent to cover administrative costs. The final costs comes to an average of 6 DA/sq.m. or roughly $1.30/sq.m.
The change in policy has brought about a rent increase of 100% to 150%, but the prices still stand in a reasonable range. The new rent policy will partially decrease the State’s burden in providing funds for housing. However the interest rate charged is so low that the housing is still substantially subsidized. This rent increase however might affect negatively the lowest income groups, and pose an affordability problem.
Selling Policy
The most radical step by the State on public housing is to transfer ownership of individual units to tenants. This will allow a shift of responsibility for maintenance and management from O.P.G.I. to owners. This policy of ownership covers not only new stock but is extended to old housing stock as well. The pricing system for old stock is determined by decisional public agencies in charge of all public properties. For the new housing the cost of production - fixed by M.U.C.H. - is determined at 2310 DA/sq.m. although the costs of construction are generally higher. The government is offering here again a subsidy to the buyers. Different financial packages are offered to the buyers:

Immediate cash down-payment

Long-term financing extending over 25 years.

“Saving for Housing” program ("Epagne Logement" program) offered by C.N.E.P. This policy has not had an enthusiastic response from the public. This is probably due to the fact that people do not have the financial ability to finance their housing, even through C.N.E.P. financing program. Another likely reason for the public's lack of support, is that the people do not wish to invest in collective housing where they do not have the same freedom to choose their neighbors and control their environment and where the structure does not allow any possible changes or extension of the house. The public sees public housing as a temporary form of accommodation and always hopes for accommodation and location of choice as their permanent dwelling. There is not justification for such hopes as avenues for their realization do not exist in the actual situation. Given these conditions people often prefer to rent as it often is less expensive.
It can be foreseen that some of the fear of management and burden of finance can be more effectively handled if there is some sort of co-ownership management housing program. This will mobilize them to address issues of legal ownership and rights and duties more adroitly, provide ground for proper management and give incentive to investments and maintenance.

2. O.N.L.F. and C.N.E.P.

1 - O.N.L.F.

The O.N.L.F. ("Office National du logement familial") was created in 1980 under the patronage of M.U.C.H. It was created as a substitute for the C.I.A. (Companie Immobiliere Algerian) another promoting agency, from which it inherited all its housing stocks, rights and duties over a total of 26,696 dwelling units. Like C.I.A., O.N.L.F. is a non-profit organization. The programs are developed within the perspective of housing policy, known as “Access to private ownership of family dwellings”.

- O.N.L.F. is the overall authority in charge of all functions related to the promotion of its housing program;
acquisition and management of land necessary for its realization
- construction of social infrastructure and housing development
- management of the housing built as long as O.N.L.F. is the owner.
- All O.N.L.F. buildings are funded by C.N.E.P. and dwellings are exclusively built for savings account holders of C.N.E.P., which meet the criteria for access to loans.
- O.N.L.F. housing are usually of higher standard that other public programs.
- Most of the units are addressed to middle and high income groups, and since they are produced for ownership, future expectations of owners are taken into consideration.

2. Savings for Dwellings Program
It is through this saving for dwelling program that C.N.E.P. account holders have access to O.N.L.F. programs. This program tried to promote savings among the populace by offering financial aid for construction or purchase of housing to those who would make a saving effort. The State actively promoted it originally to complement public funding for all housing programs. This program provides access to savings holder to a long term loan at low interest rates. Hence a large population which could not conceive ownership of dwellings on their small salary could finally think of such a possibility.

The access to private housing was promoted in several ways
- Buy a new housing unit (public construction)
- Build a new dwelling, tenant built
- Build a new set of dwellings as a cooperative group.

The financial package consists of:
- A maximum loan of 320,000 DA
- Term repayment in 25 years.
- Interest rate at 3 to 4%. The actual interest rate of C.N.E.P. is 6%.
The State will allocate 2% of 3% subsidies on interest rate.

Conditions of Eligibility for the Loan:
- Have a savings which generates a minimum interest of 400 DA (which will cover a loan of 10,000 DA)
- Have this rate of interest for at least two years
- Have 80% at least of the expected cost of the dwelling as savings.
- Should be less than 65 years of age.

3. C.N.E.P.

Savings holders in C.N.E.P. are mostly workers and small traders - and the amount saved generally is very small.

<table>
<thead>
<tr>
<th>Social category</th>
<th>Proportion of savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>- Workers and peasant</td>
<td>52.8%</td>
</tr>
<tr>
<td>- Students</td>
<td>10.2%</td>
</tr>
<tr>
<td>- Military</td>
<td>6.3%</td>
</tr>
<tr>
<td>- Small merchant</td>
<td>2.6%</td>
</tr>
<tr>
<td>- Retired</td>
<td>20.4%</td>
</tr>
<tr>
<td>- Landlord, Industrial</td>
<td>0.8%</td>
</tr>
<tr>
<td>- Not declared</td>
<td>0.9%</td>
</tr>
<tr>
<td>- Total</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>- between 10 to 1,000</td>
<td>62.0%</td>
</tr>
<tr>
<td>- between 1,000 to 2,500</td>
<td>7.9%</td>
</tr>
<tr>
<td>- between 2,500 to 7,500</td>
<td>9.6%</td>
</tr>
<tr>
<td>- between 7,500 to 2,000</td>
<td>9.5%</td>
</tr>
<tr>
<td>- between 80,000 to 60,000</td>
<td>7.0%</td>
</tr>
<tr>
<td>- + 60,000 DA</td>
<td>4.0%</td>
</tr>
<tr>
<td>- Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: C.N.E.P.

Most of the account holders save with the idea that this will provide them access to loans. In the words of one savings holder, "If it was not for a house, we would not deprive ourselves of so many things." (3) However it is found that 70% of the account holders have less than 2500 DA as savings, and that only 4% meet the criteria to have access to loans. The lack of
prospect for these holders is best represented in the words of Mohammed
Benchicou in his article called “L’epargne malades” or “The Sick Saving”. He
declares that there is a lack of confidence in the savings program because of
the limited accessibility of housing to savings holders and particularly to
small ones. Of the 132,000 housing demands only 50,000 were eligible, and
since 1974 only 5% of those eligible received a house - a mere 2300 families. (4) Such reportage has led to withdrawal of savings by smaller
savings holders.
The C.N.E.P. is conscious of its inability to provide houses to all and feel
helpless. The records show that most of the housing C.N.E.P. helped to
finance, which was done through “Wilaya”, was affected to “more urgent
situation.” However in spite of the fact that the financial support for housing
produced under the aegis of wilaya was partially provided by C.N.E.P., and in
spite of a legislative stipulation that says that 60% of the housing produced
should be reserved for C.N.E.P. savings holder, only 2300 units out of a total
of 64,000 units are owned by account holders. This has led to a division of
promotional activities so that the C.N.E.P. funded programs are being
promoted by O.N.L.F. and the government funded programs are being run by
O.P.G.I. O.N.L.F. now plans to produce 150,000 units for the quadrennial plan.
This is an ambitious undertaking, but if achieved, will provide much needed
housing units for savings account holders.
2 - PRIVATE DEVELOPMENT

Private housing development can be either individual or collective under a cooperative form. This is also part of the policy "access to ownership of familial dwelling".

1 - Individual Development:

The individual development is done under the observation of the municipality. It is addressed to those who have the financial capability to undertake such a project. They may have access to loans from C.N.E.P., however under the similar conditions as noted before. The individuals may build on a lot which they already own or have bought from the municipality. All architectural design and contracting for construction is left at the individual's discretion. He however does require a construction permit before initiating construction. The plans also have to conform to local building codes.
2 - Collective Promotion (Housing cooperatives)

1. A housing cooperative can be organized for different purposes. The idea is to encourage people to gather as a group, to outline a collective program and mobilize their resources for housing production. It is also meant to rationalize the use of land by encouraging walk-up apartment blocks.

- Construction of new housing program - with access to C.N.E.P. loans.
- Renewal and redevelopment of old housing stock or settlement
- Acquisition of a group of housing from a public agency such as O.N.L.F. and O.P.G.I.
- Management and organization of common spaces in an existing project.

2. Constitution of a Cooperative:

- A cooperative is a civil society.
- The cooperatives are assembled at the discretion of the members.
- All cooperative members or shareholders are part of a general assembly.
- The General Assembly determines the list of shareholders.
- determines their status
- elects a manager
- select a President from a list provided by the municipality

Shareholders subscriptions can be paid in:

- money
- in nature (land, etc.)
- services (self-help or manual or skilled labor)
Development is done by a General Assembly under the guidance of a management council which is elected by shareholders and the president of the cooperative. The financial control is exercised by an audit, elected for two years, and who is not a shareholder of the cooperative.

3. Financing:

Financing is done through the C.N.E.P. loans are available for shareholders and are allocated on an individual basis. Originally the criteria for access to loans were the same as in the “saving for housing” formula. It was found however that most of the people included in the cooperative were not eligible for loans, so a modification was proposed to make the loans more accessible. The modified proposal consisted of a “saving effort” program:

- The Savings holders should have 20% of the property cost in the account.
- The account holder will then have access to 50% to 60% of the cost as loan.
- The remaining 20% to 30% will be paid by the “Savings Effort” that the shareholder will provide during the first years of the cooperative by monthly payment of approximately 1000 to 2000 DA/month.
- The loan recovery will be over a period of 5 to 25 years.
- It will be given every month or trimesters.
- The interest rate for the loans will be 3 to 4% (2% to 3% subsidized by the Government).
4. Realization

The municipality is the overall authority responsible for development and control of the cooperative’s activities. Once the cooperative is formed and has been approved by the authorities it goes into a priority list for appropriation of land.

- Land Appropriation:

Land is under control of the municipality and it is the only institution which has the right of transaction on the matter.

Urban land - which is restricted to the urban perimeter - is fixed by a master plan and its boundaries are rigidly demarcated. All this land is theoretically in reserve and only acquired by the municipality at a fixed price, whenever the demand occurs.

The municipality is in charge of servicing the land and in most cases all servicing costs are borne by the Government. For private development municipalities are also in charge of lot sub-divisions, and sells them to individuals or cooperatives.

From 1974 onwards, the law outlined the role of the municipality as the manager of all land. But very little plots for housing development have been sold. The problems arise due to a lack of ability of municipalities to organize the complex mechanism needed to run a land banking system. The municipalities are generally understaffed. The registration procedure is complex and slow. The slow servicing of lots, because of high building standards, slows down the process as well. Administrative bottlenecks add to the delays. Municipalities have been unable to create a land reserve because the acquisition procedure is not efficient for a rapid dispersement of land. The
most adversely affected sector is of course the housing sector and particularly the private development.

In the city of Constantine, for example, no land was delivered for private individual housing from 1974 onwards, the date when the land banking system was promulgated and up til 1981 when all municipalities received an order from M.U.C.H. to deliver every year a number of lots for private housing construction. Lack of allotments has slowed private development and is one of the reasons why so few cooperative movements have actually been organized and have successfully undertaken development.

- Project Design:
The municipality is supposed to offer some assistance in the choice of the architectural firm or to provide a catalogue of "dwelling types" that can be used freely by the cooperative or the individual builder. But in most cases the cooperatives contracted with an architectural firm which would do the design.

- Construction:
The choice of construction is twofold.

- It can either be contracted to a builder and awarded based on most competitive bids.

- Or the construction can be self-built. However this has never been implemented as there is no particular organization, nor regulation to guide it.

- Management:
Management rules for the cooperatives are established by the General Assembly and their rules are effective at both the construction and post
construction phase. The final dissolution of the cooperative is left to the discretion of the General Assembly.

3. CONCLUSION

It is useful to summarize the housing delivery process in Algeria, in light of our discussions in Part I.

1 - One of the persistent problems public housing has been facing is that of low productivity. The problem is rooted in the choice of the technological system as well as in the development of the building industry, as has been shown in our discussions in Part I. The solution lies in a diversified strategy
of construction technology, and this technology should reflect its adaptability to the Algerian construction environment. The other aspect is that ventures which offer assured payback or are reasonably self-financing ought to be initiated. One of the areas which has not received attention but could significantly expand production of housing is self-help construction. However the Government ought to promote interest in research related to use of techniques which require a low level of skills and locally available resources for construction.

2 - Another significant policy revision, which is a considerable progress compared with the previous situation, is the change in the renting and purchasing policy of public housing. More leeway is being given to individuals to eventually own their dwellings. This will substantially reduce the Government’s role in maintenance and other subsidies which represent a large portion of Government’s housing budget. More significant than all other policies, is the attitude that all new buildings should be self-financing and the Government’s determination to recover its investment costs. Government is finally realizing that it cannot play the patron for all housing construction as it just does not have the means. The selling of units is one response to recovering investments. There are however problems to resolve, such as providing attractive incentives to buy the house by trying to meet the public’s expectations, or making the units not so expensive as to be beyond the common man’s purse.

3 - Private development offers good conditions for access to housing. But we have seen its limited application, particularly due to difficulties in land and material acquisition and difficulties in acquiring loans.
Recent changes in the housing policy is improving accessibility to decent housing possible for the common, and not necessarily only well-to-do Algerians. However these policies have not affected the low-income groups significantly and herein lies the challenge to the policy makers and the Government.

FIGURE 1
Realization Estimates
1960 - 1980

- Public and Private Constructions
- Public Sector Construction
- Private Sector Construction
# BRIEF SUMMARY OF HOUSING DELIVERY SYSTEMS

<table>
<thead>
<tr>
<th>Functions</th>
<th>Prevision of Units to be Produced (of lot to be)</th>
<th>Affectation to Different City or Regions</th>
<th>Promotion</th>
<th>Funding</th>
<th>Realization</th>
<th>Attribution to Users</th>
<th>Users Categories</th>
<th>Tenure</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE</strong></td>
<td>Ordered by M.U.C.H. to Local Authorities (Municipalities)</td>
<td>Individual</td>
<td>Individual Funding + C.M.E.P. loans and participate in the work</td>
<td>Of Lots Municipality</td>
<td>Middle and High Income</td>
<td>Ownership</td>
<td>Owners</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperatives</td>
<td>Cooperatives</td>
<td>C.M.E.P. Loans + Individual Funding</td>
<td>(Of Land) Municipality</td>
<td>Middle and High Income</td>
<td>Individual Ownership (mortgage)</td>
<td>Cooperative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART II

DIVERSIFICATION IN HOUSING STRATEGIES
From the discussions in the previous chapter we can see that the deficit in housing in Algeria has been closely influenced by the developmental policy and strategy as elaborated in the National Charter. In spite of an effort to revise aspects of policy which have proved detrimental to production of housing, we see that little improvement has taken place in increasing the housing stock and the deficit continues at an alarming rate. The problem today is not so much a lack of appropriate policy but more that a lack of adequate mechanisms to facilitate the production process. The Government
simply does not have the finances nor the technical expertise, nor the management skills to mobilize production to projected levels. The Government still feels like a "patron" that must offer decent housing to all as is the proclamation in the National Charter. In an effort to live up to that promise it monopolizes housing production. As a consequence of this people consider it their birthright to be provided with decent housing. This attitude is quite universal among the broad masses of the Algerian population. In itself this should not produce a negative response to the Government, but because of the Government's obvious inability to make its promise good there is considerable disappointment among the populace. The Government makes an enormous financial effort yet it simply cannot make enough dwellings to provide shelter to all. In fact most of this housing goes to the shelterless low income families living in camps and who will have great difficulty in paying for these units. Any remaining units will be given to civil servants and other privileged groups - privileged by virtue of their association with the Government - and who as well are suffering from the deficit in housing.

1. PRIVATE SECTOR DEVELOPMENT

The only option in the hands of the Government to increase its housing stock is to diversify its methods of production and delivery mechanism. One such strategy is to develop the potentials of the private sector. However the first step in this direction is for the Government to change its view of the private sector as a competitor but rather to see it as an ally, complimenting its efforts to increase the housing stock.

Housing policies, recently liberalized, have not really taken off due to certain basic constraints, discussed earlier. One of the reasons for this is the lack
of effort to increase the incentives to promote private initiative by people directly or indirectly related to its implementation by overcontrolling its process. This is partially due to the threat seen in private development as a form of capitalistic venture which contrasts sharply with the country’s socialistic ideology. These kinds of fears are unjustified - as long as the private development is non-profit it will comply with the main line socialistic-egalitarian endeavors. The ideology, as stated in the National Charter, in fact accepts private enterprise as long as the scale of activities is small and it is at the last phase of implementation. The enterprise however should be non-exploitative and should contribute to diversification and increase of the state production.

In other words if we pay heed to the divisions proposed by Benamrane in his book “Crise de l’habitat en Algerie”, between Department I and Department II, Department I should be exclusively the operation of the State, while Department II could have partial participation of the private sector. However even this partial participation will have its opponents - who believe any form of private ownership can have some negative effects on masses. In A. Benachenhou’s preface written for Benramane’s book “Crise de L’habitat”, it was said that, “If it is true that a distinction should be made between collective ownership of means of production and collective consumption of goods, however it is also true that “desocialization” of consumption of goods - housing in this case - can lead to changes culturally and politically among people, which is not always good for the socialization of individuals.”

Housing ownership is still questioned in Algeria even though experience in other countries clearly shows that providing a clear and definite form of
tenure results in a positive attitude towards residency and improves housing investment, maintenance and general improvement of the environment. Moreover culturally, Algerian people have an emotional response to ownership of their own dwelling units and these feelings cannot be denied. On the contrary these feelings ought to be encouraged since it can help the economy by generating investments and savings. It is in fact the only investment middle-income people are able and willing to make. The question concerning feasibility of these policies will depend on the effort made by the Government. We have seen earlier that private development really did not take off until the M.U.C.H. gave orders to make a determined effort to eliminate obstacles to private development. In an economic structure where all the resources of the State go to the public sector, an isolated private sector of this type needs a lot of support.

2. ADVANTAGES OF PRIVATE DEVELOPMENT IN HOUSING

One of the most important factors in favor of private development is its capacity to generate self-financing and its freedom from receiving monetary support such as subsidies. People have funds to invest in housing, even if they are from low-income groups, for they seem to have so-called invisible savings ability that are obvious when we look at the development of squatters. Moreover, the number of savings holders in C.N.E.P. are a proof of the desire of people to save and invest in housing even though the apparent savings are small.

If private development is encouraged this policy will reduce the considerably expensive and untenable subsidies that the Government is providing currently for housing. However then subsidies cannot be eliminated entirely - as the
deficit in housing stock is so large - and there are so many people who are just too poor to be able to generate the complete financing for their dwellings. One method will be to spread the subsidies more thinly to a broader spectrum of the population.

The second advantage that private development offers is the shift in responsibility of the production process to private individuals. The role of the government in this situation should be limited to provide the framework and assure provision of the basic component necessary for its development.
The second most important reason for the failure of the public sector to provide housing for everyone is because of its adoption of unrealistically high standards of the dwellings produced. Unfortunately, even though providing most comfortable houses is a very desirable objective, Algeria just does not have the resources to provide such accommodation to all. Hence the actual number of units produced annually are very low, and totally inadequate. The Government has therefore been forced to try to recover its investments. However this seems to be even more expensive for the individuals to afford.
It seems almost certain that the low-income groups will be unable to afford this housing and most probably will be the hardest hit by Government's policies on return on investments.

The policies on housing standards have to be changed to make them more flexible so as to adapt to the income groups. Hence one of the first steps should be to have a well defined housing policy for the low income groups with the intention of tailoring housing to their investment capabilities. Keeping this in mind "The minimum shelter approach" appears to be an appropriate strategy. The crux of this approach is that initially only a minimum shelter is provided and gradually expansion of the dwelling is done over time.

The minimum shelter approach can be attempted in different ways:

- It can just be a barren lot with a certain level of infrastructure
- It can be a core housing or shell house
- A complete unit with limited finishings.

The choice of the "minimum" and the feasibility of any solution will depend on the context: on the affordability of the beneficiaries, but also on the resources available, and the local conditions. Success or failure of the projects will be highly determined by these factors. This type of approach is not new and has been experimented with in several developing countries over the last two decades and has been proven to be more or less successful. This approach was developed because of similar restrictions on investments, what Algeria is facing today, and it became clear that Government must scale down its investments per unit. It developed when some observers brought out the potential existing in terms of housing in informal settlements. In
these situations, the housing start at very low standards, and progressively evolve into higher standards of housing over a period of 10 to 20 years with minimum or no public intervention. Experience in other countries with this type of approach - many of them sponsored by the World Bank - have already shown some response, that should be discussed here.

It is convincingly certain that these approaches are an immense improvement over previous attempts. However some drawbacks have been identified recently. For instance, it appears that low income families will "prefer to sell or rent their new house and return to the squatter settlement or other tenaments that they lived at previously. In most cases, the reasons for this move was not due to affordability problems but because most of the families preferred a lower standard of housing and a disposable income in hand." (1)

Another primary reason for reluctance for these types of projects is an economic one. This type of new housing settlement, sponsored generally by the Government, represents a cut in their major source of income. Government and public agencies promoting such projects feel obliged to limit speculative profiteering or alternate economically more lucrative uses. They set up rules which eliminate the possibility of economic activities by defining a very rigorous zoning of residential areas, where otherwise commercial activities could have taken place, and by freezing of rent and sale of assets acquired under public sponsorship. Such restrictions effect the ability of these communities to generate income, negatively. We know how important it is for these communities to have small informal businesses, as most of their income and most of the investments in housing, and money to refund their
loans are generated by small business activities and partial subletting of their residences.

In other words, Governments and in this case the Algerian Government should not view this type of approach as only a means of giving shelter to that population. Shelter is not only a house but an investment. Building a house is funding an asset and should be permitted to a certain extent to consider it as an income generating opportunity.

A settlement is not a residential quarter, but a milieu in which a community provides possibility of income, living and improvement.
In a minimum shelter approach, or any other low-income housing program, the success of the project depends on the participation of individuals and the community in building activity. It has been observed that isolated efforts lacking support from the community at large very often fail. One of the primary reasons for this failure is that individuals generally have limited access to the necessary goods or the institution to successfully build their dwellings. This type of housing development requires a well defined approach which is comprehensive in its scope and makes an attempt at rationalizing
the production process. One possible approach is development of a cooperative society to tackle all these issues as a group rather than as individuals. The principal behind a cooperative movement is to group people, who put together their effort and money to the process of achieving their common objective. A cooperative system, organizes and institutionalizes the procedures but leaves it to the participants to make full use of their capabilities and the opportunities.

In Algeria, it can be an important and effective alternative to providing shelter for low-income groups, as a cooperative system, which is organized by and for high income and middle income groups, already exists in the country. The idea is not unfamiliar and the existing framework can be taken as a base for the elaboration of a program.

A cooperative system has concrete advantages. It not only facilitates the housing development process, but it offers also certain social and economic advantages.

1 - It rationalizes the housing development process in two ways:

- It can mobilize people's resources and simplify the building process for self-help programs.

- It can provide better access to the various steps and components needed for development of housing programs. This aspect is significant in the Algerian case especially since we know that issues like acquisition of land, construction materials, play a very detrimental role in the development of housing programs.

2 - It allows financial savings by pooling resources and taking advantage of the economic of scale.
- Equally important is the fact that accessibility to loans is better when the application is done collectively rather than individually.

3 - The most important advantage of a cooperative system, is perhaps a non-economic one - that of building a cohesive social group with a defined sense of identity and commonality of purpose.

Through cooperatives, members learn to work together to achieve not only immediate material benefits during the construction activity but also achieve the objective of helping each other in the achievement of a better and more pleasant communal life.

It increases interest and responsibility during the project implementation, as well as after its completion, as management is left to the participants themselves. A greater interest in the community will assure better communal relationship, security, and a healthy social atmosphere. The houses will be better maintained and finally the cooperatives will exercise greater control over negative speculation and monitor and discipline the behavior of its members.
PART III

HOUSING COOPERATIVES FOR LOW INCOME PEOPLE
1. THE ORGANIZATIONAL FRAMEWORK

1. Degree of Integration

There are different ways of organizing a housing cooperative. A cooperative can be completely decentralized: The cooperatives or primary societies, formed by the members have most of the responsibilities of the promotion and the functioning. It is the case for example of the cooperative system in the Federal Republic of Germany, or a cooperative can be to the contrary
centralized: In this case most of the functions are exercised centrally by an
organization. It is the case of the Swedish system.

In Algeria the existing cooperative system is largely decentralized. The
municipalities are only in charge of the promotion and of processing land
acquisition and land control. The cooperatives have an elected management
council which is in charge of membership, organizing construction, financing,
and administration.

The cooperatives hire professionals for design and supervising construction of
the housing units and all other professional work, but they retain final say
and provide any coordination between agencies and general administrative
work.

One drawback of this system is that members, sometimes uneducated, are
inexperienced for this type of responsibility. It is often impossible for them
to take any action without advice and close guidance from specialists. A
need for some form of assistance is particularly valid in Algeria because of
special difficulties that exist in the construction process.

As Lewin points out, "Application of decentralized system to the developing
countries involves considerable problems of organization." "Centralization
often enables better planning coordination, mobilization and allocation of
resources." (1) The cooperative will prove successful only when promoted,
supported and backed by an effective reviewing organization.

The only possible development of a low-income housing cooperative will be
one where the process will be backed by comprehensive assistance, guidance,
and supervision. It is particularly so in Algeria as the elements necessary for
housing promotion are not easily available and their distribution is controlled and monitored by the State.

2. Sponsorship:
A sponsoring agency for cooperative housing can be, as it is the case in different countries, a union, a federation, a national organization, etc. It can also be a private non-profit organization or an agency affiliated to the government. In Algeria it can only be part of a Government institution. This is due to the structure and ideology of the Government. Conditions for the development of a non-governmental agency for housing does not exist in Algeria. Hence state patronage and affiliation is unavoidable. In the Government the Ministry of Housing (M.U.C.H.) is directly concerned with this type of work. Hence any cooperative movement cannot hope to succeed without affiliation and patronage of the M.U.C.H.. This patronage will be particularly useful when one considers cooperative societies for low-income people who must rely heavily on accessibility to building materials and technical assistance during housing production.

This observation is further reinforced after an examination of the difficulties cooperative societies for middle and high income people had to face from 1977 onwards, and which did not have notable success until 1981 when the Government made special efforts to assist them.

In Algeria there are two possibilities for sponsoring the development of cooperatives.

1 - Under the guidance of the municipal authorities, as it is done today.

2 - Under an independent institution sponsored by M.U.C.H.
- Under the Sponsorship of Municipalities:
The municipalities, which are present in every city, are the agencies that supervise all social projects unless some other special agency is appointed for certain specific purposes. However the municipalities have a poor record in supervising cooperatives. Their typical problems are lack of skilled personnel; lack of funds; overload with responsibilities and consequently unable to perform all their tasks. Municipalities will need a complete restructuring of their administrative set-up to implement their role as supervisors of cooperatives, successfully. They also need qualified personnel and the only way they can attract them is to provide higher wages and better conditions of work. For example, we have seen earlier that one of the tasks that they have found difficult in the past, and which remains one of the major obstacles, is the management of land, i.e., buying, selling, servicing, etc. It is not clear with the actual municipalities structure that they will ever be able to manage these responsibilities.

Under an Independent Institution:
The second option is to set up a new institution for the specific purpose of coordinating with cooperatives. This option is more realistic and appears more promising.

This institution can be under the authority of the local Government (Wilaya) and can be under the Ministry’s sponsorship and guidance.

This institution can be of the same status as O.N.L.F. - created for a corrective purpose, to promote housing for C.N.E.P.’s savings-account holders and to provide opportunities for private ownership of family dwellings when
the existing institutional set up did not perform these functions. A housing cooperative agency will help to reactivate the cooperative policy.

- Unconvenience of a public promoting agency:

Problems that exist in most public agencies, and particularly in developing countries, is that they often become congested by rigid organization, overstaffing bureaucratic procedures.

2. TECHNICAL SERVICE ORGANIZATION

To be successful housing cooperatives in developing countries need technical assistance. This should be provided by an implementing body or by what is called a technical service organization T.S.O. The T.S.O. can be an independent organization or can be integrated to the sponsoring agency.

But to successfully undertake and set up a new process of production and management in Algeria, and in developing countries in general, it is important that all the mechanisms and controls be under the same authority. One authority should be concerned with the entire functioning of the system. This is due to the fact that the institutional system in Algeria or in developing countries is new and often inexperienced - which leads to problems of coordination and efficiency when responsibilities are spread between different authorities. However this will not obviate the need for highly qualified personnel as the responsibilities will be varied and complex.

- Function of the T.S.O.:

The organization would be in charge of the functions assumed, in the existing set up, by the primary societies during the project development. Generally its relationship to the cooperative diminishes gradually during the construction
process and becomes nonexistent when the project is completed. Its help to the cooperative can be on:

- Providing advice and assistance and support to the primary organization.
- Mobilizing and organizing and financing loans, savings, and proceeding with negotiations with other agencies and institutions.
- Forwarding acquisition request to local authorities (APC)
- Facilitating material acquisition by negotiating with S.N.M.C. or other societies concerned.
- Protecting and representing the primary vis-a-vis the authorities.
- Supervising and auditing the primary societies

However its degree of involvement in the project will depend on its structure. Generally a T.S.O. does not provide all the services itself. It subcontracts some of the task, such as architecture and engineering services, or project construction, to specialized agencies but assures the coordination of all the work for the cooperative.

A basic technical service organization will be comprised of:

1) an administrative body (Director and secretary)
2) an organizational body in charge of the cooperative formation and promotion.
3) a technical body in charge of the project designs and implementation.
4) a financial body in charge of all the financial mechanisms.

All these bodies can be either fully developed to assure complete service packages, or can be simply represented by one individual in charge of coordinating with other institutions. This arrangement depends
on the functioning of the cooperative and on the type and number of projects headed.

Promotional Organisation

M.U.C.H.  
Ministry of Housing

Wilaya

H.C.A.  
Housing Cooperative Society

President

Formation and Organisation Body

Financial Body

Administrative and Legal Body

Planning and Design Body

Construction Implementation Body

Municipality

C.N.E.P.

Other government agencies

Contractor or Builders

Architecture and Planning Firm

Primary Society  
Primary Society

Primary Society

Primary Society

70
1. BENEFICIARIES OF HOUSING COOPERATIVES

One method of achieving this objective of forming an acceptable group is select an already existing community:

(a) A group of people who have been displaced - a group of squatters who have been evicted.

(b) A shelterless population - as a consequence of natural disaster, like earthquakes, etc.
(c) A workers community brought to an area of industrial development or for a large scale industrial project.
(d) Or simply a group of workers from an existing firm or a production unit.

In most of these cases the community will be already structured and will not require a period of familiarization and adjustment. The second case is of course the case where there was no previous community - the selection of applicants and the grouping will require specific criterias.

Two basic criteria ought to be considered:
- the socio-economic condition of the population.
- the housing conditions.

1. Socio-Economic conditions of the target population.

The target groups who ought to be the beneficiaries of the housing cooperative should be low and very low income families. Since the program assumes that a certain amount of subsidy will be given by the Government, and that the type of housing provided and the participatory process can only fit this category of families. The employment categorization of these families should be such:
- non-employed
- under-employed. Average of income per year below the minimum income level fixed by the government (13200 DA/year).
- employed (at the low end of the employment ladder - roughly between 13200 DA/year and 31200 DA/year).

Among the three categories the non-employed and the underemployed will pose certain problems in their inability to finance their housing but they have
to be viewed as groups capable of participating intensively in self-help schemes.

The idea is not to isolate the poor and the most needy from other less poor to whom they are linked. Very often poor families depend on less poor relative families to whom they are bound economically. The selection criteria should not eliminate them from the project.

As Dr. Lisa Peattie says in her "Second Thoughts on Sites and Services"

"It appears to be of great importance that sites and services projects are designed so that they do the absolute minimum damage to economic relations that bind those most likely to be interested in sites and services programs to the income groups just below them and in return depend on them for their livelihood." (1)

Housing Conditions

The second criteria for defining the target groups is the condition of current housing of that group. Priority should be given to those less properly housed or not housed at all.

In general poor housing conditions means:

1. Over-populated housing
2. Depreciated (old) housing
3. Squatter housing (temporary shelter)

1) Overpopulated housing in parts of the city where population density reaches 2,000 inhabitants/ha. where families of 8 to 10 people are living in no more than one room. Each house contains much more people than it can bear. This leads to poor housing maintenance problems and very poor living conditions.
2) Degraded housing: Hazardous for the security of the people living in it when the structure is unsafe, and the utilities unsanitary.

3) Squatter Housing: Occasionally they are located on preferential land and may eventually be removed. In that case it is necessary to relocate the inhabitants.

2. ATTITUDE TOWARDS PARTICIPATION

In this housing crisis people are increasingly looking to the Government for a solution to their housing problem, although they realize that the housing crisis is acute, and that the Government has limited means and won't be able to provide housing to everyone. They would be willing to improve by themselves their living conditions but they also are conscious of the limited action they can have, given the actual situation. The desire to participate in production of housing will very clearly appear only if incentive for it is provided, such as accessibility to land, funds, etc.

In terms of community sense, the social structure in Algeria offers some good ground. People still have strong family ties and strong communal feelings. These feelings might not be apparent in group activities in urban areas but in social terms those ties are still very strong. This is particularly seen in villages. Traditionally in rural areas construction of dwellings or any kind of important work was done by the community. This practice was called “Touiza” where all the work force of the village or the community would gather to accomplish a task when the beneficiary of the work will provide food or the gifts as a repayment.

Such practices do not occur in this form in the urban areas. But if one notices that a large part of the urban population consists of rural migrants -
there is a pool of people who have a very recent past in community activities. It has in fact been seen in squatter settlements, or in cases of private construction, that people help each other. The arrangements are made with members of the family, relatives, friends who would provide free labor. Others might be asked to help for more specialized tasks and be paid in kind in one form or another, but this help is always extended in friendship. Hence there is a resource of goodwill and this can be mobilized into cooperative movements. They also have a good knowledge in building dwellings, in traditional methods, and might be fully capable in doing so in their new urban environment with some technical assistance.

3. GROUP FORMATION

Group formation is a very important aspect of the housing cooperative because of its importance to the community and collective work. Inadequate grouping is perhaps one of the most common reasons of failure of cooperatives. A preferred group formation is a key incentive. Group formation is a question of finding homogeneous attributes to enable cooperation to develop between groups.

1 - In this case it is important to identify criteria which should be exploited to reinforce homogeneity and commonality of purpose: Traditional attitudes, economic interest, income groups, type of housing desired, family composition are all important criteria. But the question that needs to be persistently asked is, what is the best balance to make the project a success?

2 - It is also good to remember that a limited number of criteria should serve as a benchmark to facilitate the selection process of
cooperative societies. It should not entail exorbitant cost of great lengths of time and complex organizational procedure.

1 Affordability Criteria:
In all the previous experience of low-income housing in other developing countries, where there was a form of financial participation, the lowest strata, up to 20% of the population were ineligible. The big dilemma that persists in this kind of project is on the one hand the desire to help the poorest strata of the population by making them the beneficiaries, and the lack of ability of this lowest income group to participate fully in financial terms with the project’s activity. This comes from the fact that the recovery of funds is one of the basic components of the projects which makes the affordability criteria becomes often the most important one for membership.

In the Algerian case two issues have to be considered while considering the affordability issue:

- The government is usually prone to provide generous subsidies in housing projects. If some of them are kept in this proposed program - such as accessibility to cheap land, and infrastructure - this will reduce substantially the cost of units.

- Most of the low income people living in urban areas are in fact found to have substantial ways of generating incomes and saving to contribute to the financing of projects. An analysis made for a low income project in Annaba, showed that their ability to make this financial contribution does not present any major obstacle (2). Moreover the investments that these people put in their house in squatters for
example, are a clear proof of their ability to generate money for their housing.

The affordability question does not seem to be problematical. But still care should be taken in setting membership criteria, not to select strong parties - people economically more desirable - for the project, while leaving behind the lower income groups.

2. Social Structure as a Criteria

The social structure offers some way of mixing different income groups by keeping the ties that bind different families - the poorer to the less poor - together. We have said that people are still living in extended families in terms of social and economic relation. Very often they do not want to live in the same dwelling and would tend to ask to have separate units for each nuclear family. But they still depend on each other economically.

To take advantage of this situation, the membership of the cooperative could be considered per groups. Five to ten nuclear families would constitute a group. This system will allow people:

- to keep their dependent relatives together with them.
- to choose the people with whom they want to work, save, pool effort and live within an immediate neighborhood. This will make the participatory process spontaneous and more efficient.

This system will also simplify the grouping procedure usually the responsibility of the promoting agency. The registration for membership should obviously leave open to families the possibility to apply individually for those who do not have relatives or friends in the city.
Among those who will be included in the groups will be the employed and underemployed, who do not have the formal financial ability to participate in such projects. They will be accommodated by their patronizing family. Here the grouping system can be used again to compensate. A cross-subsidized system within each group could be set up where the “dependent” will benefit from the financial security of the “supporter”.

4. THE FORMATION OF PRIMARY SOCIETY OR COOPERATIVES

The size of a housing cooperative is a determinant issue in terms of feasibility. Both small scale and large scale cooperatives present certain advantages - and disadvantages - in terms of project implementation that we can observe by comparing them.

Cost Issue: In small scale cooperatives the administrative costs and servicing costs per unit will be higher than a large scale cooperative. It will not benefit from economics of scale.

Site Issue: In the case of large scale cooperatives, the only site that can be found for several thousand units are peripheral sites far from employment centers. While smaller cooperatives can fit in smaller sites which might be more integrated within the urban framework.

Community Aspect: There are more opportunities to have an integrated community in small scale cooperatives than in large scale ones. The participatory process is also easier to manage with a restricted group, in the decision making process as well as for the self-help organizations. While if the communal scale is too large the democratic aspect may disappear.

In Algeria a limited scale cooperative will be more easily implemented in view of the difficulties that encounter any housing project. A maximum of
100 households, which will gather several (10 to 20) subgroups mentioned earlier, will be manageable. If larger projects are planned, with larger sites, several primary cooperatives can be included.

5. ORGANIZATIONS IN CHARGE OF COLLECTING APPLICATIONS, SELECTING PARTICIPANTS AND FORMING GROUPS

The municipalities are the present authorities in charge of collecting housing applications but they do not proceed with any selection or distinguish between income groups, type of housing needed etc.

The municipalities may continue to be the approving authorities for building cooperative formation, but the selection and group formation can possibly be handled better by the housing cooperative agency.
2. FINANCING INSTITUTION

Cooperative societies in other countries have different methods of funding. The funds can either come from contributions of individuals, from private lending institutions, or from a quasi-public or public institution.

We have seen that in Algeria, there is no private lending institution and that there is a saving institution, the C.N.E.P. that provides loans for private housing construction and for private housing cooperatives.
But in general terms, we can say, that there are three alternative sources of financing low-income cooperative societies.

1 - Through government loan
2 - Through C.N.E.P. through current methods of providing individual loans.
3 - Through C.N.E.P. - but with a different loan mechanism - with group loans or project loans to the H.C.A.

1 - Through Government loans. The housing cooperative agency, such as O.P.G.I. would receive funds from the Government for development and construction of dwellings, with the same financial mechanism with a repayment of loans over 40 years at a low interest rate of 1%. The H.C.A. will have the responsibility to organize saving among members and implement repayment plans.

This process is a very secure way of funding the agency but does not present any financial advantage to the Government in comparison to the traditional approach, as the amount of subsidy - interest rate etc. - is the same.

2 - Through C.N.E.P. loans, with the present individual mortgage systems. We have seen that loans cannot be afforded by low-income groups because of the substantial saving deposit equivalent to 20% of the property value and the annual interest earning of at least 400 DA required before they are considered eligible for loans.

Even with the new saving effort plan proposed by C.N.E.P. to broaden the accessibility criteria it is still not possible for low income people to have access to the loans.
The only possibility of adopting the C.N.E.P. individual mortgage loan will be if some special loans program for low-income housing can be established with a lower criteria for accessibility. Some of these modified criterias would be a lower level of savings deposit - the 20% savings for the property value - which really acts like a down payment; that most low-income people cannot afford. Only the savings effort and duration of savings should be considered when evaluating the loan applications. It will adequately reward the savings holder for making the effort, and will complement the "savings effort program" advertised by the C.N.E.P. However this option presents a major obstacle for its application: managing small individual loans is more difficult, and would not be accepted by C.N.E.P.

3 - The third possible funding solution is through project loans from C.N.E.P. to H.C.A. Group loans or project loans: should be considered on the same model as O.N.L.F. is financed. C.N.E.P. would apply the same interest rate and same mortgage mechanism for a duration of 25 years. The advantages of this solution is that C.N.E.P. will avoid dealing directly with beneficiaries and avoid the problematical management of small scale loans. This taks will be taken by H.C.A.; it will also be in charge of the savings and repayment mechanisms and project financing. For this type of responsibility the H.C.A. will need a fully developed financial body with skilled personnel.

2. FINANCING MECHANISMS

A mortgage loans system on the house should be adopted to insure security. From the three possible lending systems the group loans system presents obvious advantages for low-income housing funding. Group loans system is
in fact one of the most obvious advantages of housing cooperatives as it offers a way of extending loans for low income housing.

"Procurement, disbursement, and amortization of housing loans by the cooperative as a corporate body rather than by the individual members can enable the financing institution to overcome most of the obstacles which currently prevent the granting of loans to low income households." (1)

In this case the H.C.A. becomes the legal borrower and the problem of loan security becomes less difficult.

1 - Procurement and disbursement
- H.C.A. will negotiate the loans with C.N.E.P. and will be in charge in the financing management of the project.
- H.C.A. will pay directly the different institutions and firms involved in the project implementation and will attribute to the cooperative the necessary fund to accomplish their task.

Procurement and Disbursement of loans

![Diagram showing procurement and disbursement process]
2 - Reimbursement

H.C.A. will be in charge of the repayment to C.N.E.P. from what it would have collected from beneficiaries. The loan mechanism can be maintained to what exists now, i.e., 25 years term payments, 6% interest that can be eventually be partially subsidized by 2% to 3%.

- Organization of Savings and Collection

Down payment and entrance fees are very often requested in housing projects, and this is very justifiable. But in the case of low income families the capacity of providing 10% to 20% of the expected investment is doubtful. However an initial deposit as membership fee for the cooperative can be asked and instead of a down payment members can be asked to start a savings effort immediately after the group formation which means that by the time the project will begin H.C.A. would have:

- Accumulated certain funds to start the project, exactly as a down payment acts.

- Started organizing savings.

- A good assessment of the type of effort people are able to make.

Early savings will also gradually stimulate the interest of the cooperative members. Saving collection will be made by the H.C.A. either by collecting directly from cooperative members; or from sub-groups in cooperatives; or from primary societies.

a - Leaving the task of collecting the payments by primary societies will have its difficulties. Default in payments will be difficult to control and act upon. On the other hand, it will simplify certain proceedings by avoiding
dealing with each member of cooperative directly. The advantages of running one account for each cooperative is obvious.

b - By collecting directly from individual beneficiaries, H.C.A. will be in charge of the saving organization and keeping individual accounts for each participant. This has some advantages in terms of repayment. In such a case there is less of a chance of default on loans, as there is a certain respect for institutional agencies in Algeria, which will provide more influence than communal or social pressure, to pay one's debts.

c - Another possible solution is to consider the subgrouping system for the repayment collection. H.C.A. will have to deal directly with a financial representative for each subgroup. This financial representative would be elected by subgroup members and would be in charge of collection of savings, account keeping and coordination with H.C.A.

To allow a greater financial flexibility, the subgroup itself could be considered as the borrower vis-a-vis the H.C.A. The elected financial representative would bear certain responsibility for the loan to insure some form of security. This situation will permit all kinds of arrangements between subgroups' members - pooling saving, borrowing, etc. Dependent families, or very low-income families whose incomes are very irregular, will find it much easier to deal with their "economic supporter" than with a regular institution. This will open access to very low-income families in need of shelter whose members are employed and who are dependent on other families. The families will help by pooling their savings.

Loan repayment schedule for low income housing is a key element, as the affordability will depend on that.
Long term repayment is necessary. The C.N.E.P. repayment plans are for a maximum period of 25 years that can be kept by H.C.A., on a general basis, but with open possibility for more rapid repayment if desired by the borrowers. But more flexibility in installment time should be considered; they should be in periods of larger than one month. Poor families are often unable to generate incomes regularly each month but on an average of several months they might be able to generate the funds necessary for the loan repayment.

In terms of amounts to be paid over time, a progressive annuity in repayment is often suggested but it is too difficult to administer. Fixed share repayment seems to be a simpler solution and may be more desirable. The first year's payment will be high but over the years due to inflation, they will be decreasing. And it is much easier for people to accept to make heavy payments and saving effort in the first years when the houses are still new than later on in time when the house will need improvements and maintenance.

3. GOVERNMENT SUBSIDIES

In any housing project, as we have seen, the Government offers large subsidies. Some of this could be kept for this proposed approach to facilitate the affordability of the income group addressed:

1 - In the C.N.E.P. loans, for the existing cooperative, the Government subsidizes the interest rate, when the loans are addressed to low income people. The C.N.E.P.'s original rate is 6%. - a 2% to 3% subsidy on interest rate will make the cooperative interest rate at 3% to 4%. This could be applied in the proposed form of cooperative.
2 - The second set of subsidies done by the Government for all housing projects cover costs of services and infrastructure. All social services and infrastructure are totally financed by the Government. This can equally be kept in this proposal. Usually the social services are either part of the municipality's duty or under the aegis of the various ministries concerned; the cooperative does not have to participate in this financially. For the infrastructure, the H.C.A. will receive direct government financial support for the different operations.

3 - Land provided by the municipality is sold at a symbolic price. In this, the government does not provide any subsidy as such but the land policy structure can be counted as a Government's help to housing.

4 - Building material can also be considered for some form of subsidies. As in the "rural self-help programs" a certain amount of material can be delivered freely to the beneficiaries. This will provide a financial benefit but also be practical considering the difficulties associated with appropriating materials of construction.

5 - The beneficiaries will be responsible for the financing of:

- Cost of the construction material (what is left for the beneficiary to acquire.)
- Cost of construction which can be decreased under the self-help methods.
- To pay for the cost of land - a small and affordable sum.
Planning and design are very important aspects of a cooperative's agenda. The most important consideration while planning and designing should be the socio-economic conditions of the beneficiaries. Social characteristics, religious, and traditional beliefs and desires of people have to be taken into account as the economic milieu. The adaptation should be of the project to the people and not vice-versa. A survey on the selected members should be done to determine their needs, expectations, and potentials. But to assure a successful cooperative, members should be allowed to participate in the planning right
from its initiation and follow it throughout its implementation. They should be able to discuss the site plan - the neighborhood patterns will play a significant role in their lives, and to the efficiency of the community control ultimately - to discuss the essential elements of housing design and establish priorities. This will also give them an opportunity to discuss their financial obligations.

1. LAND ACQUISITION

1. Site Acquisition

It is one of the most critical issues in most countries while dealing with low income housing project because urban land in most metropolitan areas of the world is scarce and very costly. However the issues concerned with acquisition of land, in Algeria, are not related to land value or cost. Land prices are fixed at very low rates. It is the availability of land for private development which is almost nonexistent. Land acquisition presently is on of the greatest impediments to the development of housing projects as it was discussed earlier, and actions for a better delivery should be taken.

It is one of the reasons why a powerful organization for housing cooperative promotion is needed, which whould have to have the direct support of the government. Affectation of urban land for low-income housing cooperatives can be done by reserving a fixed percentage of land reserved for housing in each urban center for this purpose.

2. Site Selection

The usual problems of site selection in the larger cities are:
- Urban land is more scarce in the larger cities where urban growth is significant.
Available land is far from the center of employment and if it is not properly serviced by buses and other means of transportation it will create problems.

Only the few major cities in Algeria, like Algiers, and to some extent Constantine, Oran, and Annaba have past problems of providing land for housing projects not far from urban centers. The other smaller cities are not so developed as to pose any such problems currently. The way to avoid this type of problem is to consider projects of small size which will be able to fit more easily in preferential urban land, where otherwise large projects would have automatically been relegated to the periphery of the city.

Second aspect of site selection is the quality of the site. The tendency in the past has been to allocate to low income projects the least desirable sites - such as sites on steep slopes, weak bearing capacity, or areas which are yet to be sewered. These types of sites increase the total cost of the project, cost of infrastructure which is in the hands of the Government and ultimately - after the Government has serviced them - appreciates its subsidy significantly. It will also affect adversely the cost of construction and therefore affect the ability to pay of the beneficiaries.

So an evaluation of the overall indirect implications on the cost, as well as non-monetary-social, etc., should be made before acquiring a site. However price should be also considered carefully as the low-income people have very limited resources.

(3) Financing of Land
We have already seen that land costs are not problematical. H.C.A. will acquire land from municipalities at fixed price. Land price is fixed by Government's decision, according to its location, physical aspect, and level of service. The only change from previous practices, in acquisition of land, which would be significant in terms of affordability, would be to extend loans for the purchase of land. The repayment of this loan should be incorporated with the larger loan for the housing unit.

2. NEIGHBORHOOD PLANNING AND HOUSING DESIGN

(1) Site Planning

Site planning is a very important aspect of housing projects. It has an impact on the cost of the project and on the overall community and social organization. The planning should take into account the priorities and expectations of the beneficiary groups.

Two considerations must be closely understood while doing the neighborhood planning process:

- Financial consideration or cost: minimizing the cost by optimizing land use and density.

- Social consideration: Respond to the social and cultural characteristic of the beneficiaries.

On the other hand land planning should follow the master plan regulations, which consist of: subdivision regulations, zoning ordinances, building codes. Most of these regulations are not applicable for low income housing projects, because they are too restrictive and of too high standards. For this reason the planning cannot be dealt with at the municipality level, as it is normally done. The H.C.A. has to have a large control over the neighborhood planning,
by setting up its own standards - which could eventually be part of a larger program concerning any low income housing project - and by actually designing the layout. This could be done only if a design section is provided within the H.C.A.; in other ways it has to be sub-contracted to a specialized firm with specifications on expectations.

a - Land Utilization

The main design objective should be to minimize public land and maximize private land, when the proportion of public land is high compared to private land the maintenance cost to the municipalities increases and ends up by being neglected. It is even more valid in Islamic culture, knowing that the exterior space, the street, market place, or any public spaces are rejected spaces by opposition to private spaces. This is expressed by the lack of care and interest public spaces receive in Islamic cities. However private spaces are not necessarily limited to the inside of the units. They are spaces in which the inhabitants have control and responsibility; they can be a court, a garden, the front door, a common courtyard.

Limiting public land and maximizing private land presents other advantages apart from its economic benefits. It provides better control over the neighborhood which means better quality of life. The neighborhood design should help to determine responsibilities and relationships among users, agents of municipalities, passers-by, by defining the territories for each use. This will also help the cooperative to manage and control the neighborhood.

The overall objective should be to minimize undefinable land use. "The most common consequence is misuse of the environment, destruction, vandalism, lack of safety, poor maintenance, inadequate garbage collection." (1)
2 - Circulation System

According to Caminos' and Goethert's definitions on the circulation system, a differentiation should be made between line of transit and line of access.

- Line of transit: Where the transit function is dominant.
- Line of access: Where the access function is dominant.

- Minimize lines of transit:
  From a cost point of view the length of the line of transit should be minimized because it determines the location of basic services, and because it minimizes utilization of public land.

- Line of Access should be differentiated.
  In the design, the objective should be to create semi-private land under control of users. These spaces, or lines of access should be dead-end alleys or streets with restricted use so they provide access to lots and dwellings but not for through circulation. This approach will also serve social and cultural purposes, as these types of streets are very familiar to the Algerian traditional environment where access to housing was defined by a hierarchy of spaces from public to private, with different degrees of control over the territories.

3 - Site Infrastructure

- Levels of Services: It is often suggested that services should not be provided at once, particularly for low income projects. This is done to limit the final cost of the project, where basic network with standpipe is provided at the beginning with an open possibility for upgrading.
But in Algeria services are under the charge of the Government for any housing project, so cost of services does not affect the repayment capacity of the beneficiaries.

The real problem lies in the capacity of the governmental authorities to provide efficiently and effectively standard level of services. Experience has shown that the servicing procedure is most often the cause of delay in starting construction. So, to facilitate the delivery of land and accelerate the implementation process a lower level of services can be provided at first, with an upgrading procedure which will come directly following the installation of the basic services.

4 - Block layout

The block layout will be determined by the circulation system. By minimizing the primary circulation, or line of transit, the block sizes will be maximized, and this is only possible if the secondary street patterns or "line of access" are provided in the layout to give access to all lots and dwellings. The access spaces, as mentioned earlier, should try to minimize through circulation by designing dead-end streets and courtyards centrally and commonly held by all. A cluster type of physical organization will have several advantages. As we have already seen, increasing private and semi-private versus public space has a positive impact on cost and community control in the neighborhood; moreover, the cooperative organization can be used by allocating clusters of units, sharing the common space to subgroups. The community aspect of a housing cooperative can have a large impact on the physical environment, if this environment is designed to take into account the community structure. It will simplify the designation of tasks and responsibilities among users. It

95
will take advantage of the already existing social ties in the sub-groups, which will help to obtain harmony and good relationships among the neighborhood.

5 - Lot Sub-Division

Individual Non-Detached Unit: Most low-income households are recent rural migrants to urban areas and still carry their traditional habits and way of life. So multi-storey apartment buildings can be acceptable to middle class people but not to these low-income households. Single unit buildings with a maximum of two stories will fit more their requirements. Moreover the progressive development concept in housing, that we have seen the advantages of in previous parts can mostly be implemented on a single unit building.

Density: One of the first objections that can be made on individual dwelling development is a problem of density. The density should be kept high enough to have a rational use of urban land. The lots layout design and lots dimension should be carefully sorted to provide an optimum space for the lot and a minimum space for the streets.

Size of Lot: Small lots of less than 100 sq. m. have been used in other countries where land price is high, to prevent overburdening land beneficiary with land cost. But it has to be kept in mind that morselling urban in too tiny pieces with full ownership on them might have some negative consequences on future development. Lots provided should be large enough to be able to develop, in a long term, in small apartment blocks - a reasonable range would be about 100 sq.m. and never larger than 200 sq.m. - when the need for more dense development will come as the settlement urbanizes.
Shape of Lot: Rectangular to rationalize and optimize use of land and infrastructure. A variety of lot sizes should be provided in each project to provide a wide range of solutions to the beneficiaries.

6 - Housing Design

Housing Design: Different housing designs should be approached at first by the H.C.A. With some experience the development of prototype models could be advantageous not only in reducing the costs but also in simplifying the process of implementation.

Housing Types: Like site planning house design is determined on the one hand by economic considerations and on the other hand by priorities, preferences, customs and traditions. It is also influenced by the type of construction method employed. A realistic design is dictated by the potential payment capacity of the beneficiary. For that different types of projects can be implemented which keep the concept of progressive development.

- The Core House: The approach provides a basic core as part of the house that is extendable in the future. This solution is the most suitable for the lowest income group as core houses are the least expensive housing types that require short term repayment plans - which allows the possibility for the user to develop his house progressively with the option of taking another loan. The participants will have to choose what will be the "core" according to their priorities. It seems that in the first place a wet core plus one room is the minimum absolute must. But some families may even prefer several rooms at the beginning, so the choice should be given to them.

- "Shell House": This type of housing is more expensive due to its being a more permanent structure. The shell house will consist of a permanent shell
which will be infilled or finished by the user at a later stage. It offers the advantage of being a secure shelter for a multi-storey expansion. This option is open to those who are planning and are able to afford a rapid and large extension of their unit.

- Finished Extendable Minimum Unit: More developed than a core house, this option is valid for low middle income households who want and can afford to move in a finished house.

The design of the house must be flexible enough to enable subletting - such as a separate entrance, or an independent staircase. It is very often the only way low-income people can afford the repayment of their houses and its extension. This should not be seen as an exploitation of the poor by the less poor - since rents at this level are generally limited by the tenants' ability to pay. It can also be seen as an opportunity for other poor families to find shelter. So "instead of prohibiting and trying to prevent it, subletting may play a dominant part in the successful economic, planning and design of housing for low-income households." (2) The second income generation aspect that should be considered in housing design is the economic activities that can take place in the house. Most forms of economic activity in residential areas are proscribed by zoning regulations. But we know that this type of economic activity at home is a very useful source of second income and acts as a resource during periods of unemployment. These economic pursuits should be allowed as this will act as a resource for the house building-improvement activities.
1. SELF-HELP PROCESS

Economic Benefits of Self-Help

One of the most common policies adopted for low-income housing is aided self-help. This type of project has its drawbacks in that it requires an efficient project organization and administration - in most instances provided by qualified personnel - but once these conditions are met cost of a project can be substantially reduced.

Social Benefits
Self-help cooperative programs have social advantages, complimenting the economic ones. By participating in the construction process as a group, the participants will increase their sense of responsibility, commitment, and community spirit.

Feasibility of Implementation:
One of the questions that will remain critical is the ability of the beneficiaries to participate in self-help. New migrants can often and easily participate in the construction process. They have a certain background in construction as most of them in their rural habitat had constructed and maintained their dwellings. But, among the overall members, those who are partially employed or are unemployed will be able to participate more actively than those who have full-time employment. So there will be families who will prefer to hire workers and this should be condoned rather than totally rejected.

2. CONSTRUCTION ORGANIZATION

There are different ways of implementing a self-help program. The most important differentiations would be based on the group organization and the level of participation. One method of organizing the group work program would be to have each family work on its own house with technical assistance provided by a small group of technicians to all the families.

The other alternative is to organize the families as teams and these teams work sequentially on all the houses.

Both the situations have their advantages and their disadvantages. The difficulties arise from the level of technical assistance and the time and effort required by teams, and the scheduling of team effort.
In our prototype proposal it will be better to work within the existing cooperative organization and develop mutual help arrangements. However in order that the groups of people working together work effectively and avoid personal conflict - the number of families making a group should be restricted to 8 or 10 households, which could correspond to the subgrouping system. This will result in more manageable operations.

Each group, for the construction on site should be lead by an experienced builder-worker. A system could be set up such as this leader will be responsible for training the individual members and organizing work packages. He will establish the schedule of construction and monitor progress.

These leaders should be hired by the H.C.A. during the construction implementation phase. The H.C.A. should only hire them permanently if there is enough recurring work to provide full-time employment. In a case where a permanent technical person is required he should be given the title of building supervisor and should be given technical control of all the projects.

Families will most often help as unskilled manual labor. It will occasionally happen that some people will have certain building skills - and this ought to be exploited. If adequately qualified such a person may be given a construction leaders role.

To simplify the construction timing and planning of the H.C.A. each sub-group should have the same number of skilled and unskilled working under the construction leader.

A certain balance can be struck between groups that have a disparate share of manpower by developing some sort of a manpower sharing program. Usually large families or groups with larger numbers of unemployed members
may be willing to rent some members to other groups. This will develop an economic link between groups and develop a feeling of mutual dependence and cooperation. This form of group assistance can be applied at small sub-group levels as well as at cooperative levels. This process will not be difficult to implement as Algerians normally participate in such mutual help activity - informally - in their day to day life. In the existing situations an individual family will hire a mason for a particular task, and other relatives and friends will provide the unskilled labor. Such working groups might not be difficult to organize but might require close attention and effort in setting up a management structure to keep track of flow of resources - in this case manpower.

3. LEVEL OF INTERVENTION

The level of intervention or participation by the cooperative groups and the public participation for housing construction will be varied and specifically defined by the developmental programs. It would be preferable in most instances to reduce external or public involvement, as it means greater cost. But this would be determined by the resources of the cooperative - manpower and skills that the cooperative has.

The level of intervention may be represented as in the chart shown below:

Stage One: This is a level where basic services have to be installed. Infrastructure development requires substantial investment at various stages of utilities installment and road network construction. This stage will require services of skilled professionals, and investment in expensive equipment. It is preferable to be developed by the Government as the cooperative organizations cannot invest.
in the equipment and manpower required for a one-time implementation. The individual beneficiaries of the project might be asked to provide manual labor, but there is little they can do beyond that at this stage.

Stage Two: Consists of providing a basis of a unit - core or shell house. - In the core house case, the construction could start directly with people's full participation as it does not require a high level of professional skills.
- In the shell house case, the skeleton frame can be implemented by a contractor or through self-help. However the advantage of getting it built by a contractor is in having a guarantee on the quality of construction. The work would be done more precisely and rapidly as this kind of work requires a higher level of professional skills and construction ability.
If the skeleton frame is put up through self-help it might require teamwork with a high level of assistance and control, which might not be as efficient as getting it done by a contractor. The trade-offs in cost and time will have to be carefully considered before making any approach justifiable.

Stage Three: Would consist of the completion of the unit base, to a complete minimum house.
- In the core house case, this stage will consist of adding the necessary elements or rooms to make the unit habitable. This stage will be more advantageous to have it done in self-help methods, particularly if the previous stage is also done with member’s participation.
- In the “shell house” case this stage will consist of erecting the infilled walls. This can easily be done by the members as it does not require a very high level of technical skills. Moreover, this will allow more flexibility to the user in terms of choice in the layout and the expansion of the unit.

Stage Four: This stage consists of the development and expansion phase of the unit. This will happen at various times after the occupation of each unit. It will depend on the financial means and needs of the inhabitants.
The “shell house” projects will for example develop more rapidly since they will be more suitable to higher income groups. This solution will fit those who are fully employed with stable income, as it requires more initial funds, and with limited effective participation in the site. The skeleton provided will also encourage the development of the unit.

The core house, less expensive, will be more suitable to lower income groups. Their rhythm of development will be much slower as the user will be poorer and as no structure is provided for a rapid extension.
4. MATERIAL ACQUISITION

One factor which acts adversely for housing development is inadequate supply of construction material.

One suggestion for a more effective supply would be for the H.C.A. to play a more central role in purchase and distribution of materials. The H.C.A. could buy the material needed in advance, and stockpile it. The distribution could be made directly to the sub-groups, rather than individuals to reduce its management level. The disadvantage from H.C.A.'s point of view would be that it will have more managerial responsibilities, it would have to find storage spaces, and would have to protect the stocks from physical damage due to inclement weather etc., and pilferage. It will also have to set rules of supply so as to provide equitably to various groups as per their need and qualification.
I. MANAGEMENT

A cooperative housing program offers an opportunity to individual members to participate in the management of all aspects of the program. This management experience is among the most important aspects of a cooperative housing program. The management organization takes roots once the housing construction starts, and does not have to dissolve once the houses have been built. In fact this organization might later become the cogenitor, and a
catalyst for other endeavors - economic and social - that the community might pursue once the houses have been built.

The principal function and activity of the cooperative society in the first phase is the construction of houses. The activity is performed under the supervision and guidance of H.C.A. All management work after completion of dwellings is done by the cooperative society. It will continue to help administer the loan and will start the second phase of the cooperative life. This second phase activities will consist of maintenance, improvements, or expansion of the units.

1. MANAGEMENT

1 - MANAGEMENT COMMITTEE

In the existing housing cooperatives the management structure is as follows:

A - General Assembly: Consisting of all the members of the cooperative society. Each member has one vote.

B - Management Council: Elected by the General Assembly. One representative for every 5 to 10 members.

C - President of the Cooperative: Elected by the General Assembly or the management council. Can have one or two assistants or directors.

External to the cooperative is an audit who is in charge of financial control.

In the existing Algerian system the cooperative is entirely managed by the management council with the approval of the general assembly.

In our proposed scheme a large part of the management work will be the responsibility of the H.C.A. This will particularly be true at the beginning of the cooperative. We have already dealt at length with the necessity for such an institutional backing.
The cooperative itself can still be organized the same way as it is done now, that is, a General Assembly which elects a management council and this in turn elects a President. In order to insure a democratic process the management council can consist of one elected member from each sub-group. The management council's responsibility will be limited at the beginning and will increase gradually with time and development of the project. For instance it will not be possible for the management council, which is going to consist of low-income groups and therefore less educated people, to take the responsibility of arranging contracts with different firms. H.C.A. will be in charge of these difficult procedures. The management council will begin its activities by collecting savings and establishing the savings program. It will be extremely involved in structuring the self-help construction process and will become dominant at the end of the construction phase, during starting of the maintenance programs and setting up of the housing extension and improvement.

2 - Maintenance and Upkeep:

It is one of the most important aspects of the cooperative once the project is complete. This is particularly important as very often housing projects deteriorate over a short period of time once a project is completed. We have seen previously the cases of public housing projects where the lack of maintenance was critical.

The management council with the approval of the general assembly will set up the governing rules. It will define private and public spaces; rights and duties of each of the members; and the common properties. It will be in charge for collecting fees for maintenance of the common properties.
3 - Housing Extension and Improvement:
This will be more or less at the initiative and responsibility of the household since all households will not expand their dwellings at the same time. However an organization at the sub-group level can be organized under the same format as the mutual help system proposed earlier.

4 - Subletting and Sale of Property:
Agreements must clearly state the conditions under which subletting and sale ought to be permitted. Subletting and sale should not be forbidden but it should be done under the control of the management council to prevent any type of speculation or transfer of houses to people which does not fit the criteria for eligibility. For example, agreements can be specific about acquisition and transfer of property taking place only from those on a waiting list which would have been previously settled by H.C.A. This provides for an excellent means of control and ensures that the benefits go to the target groups. Community organization will help also to control changes of dwelling users as any family coming into the neighborhood is immediately noticed.

5 - Communal Facilities:
In other countries' experience the development of communal facilities have very often been part of the responsibility of the cooperatives. But in Algeria such facilities are usually sponsored by the corresponding ministry in charge of development; for example schools will be built by the ministry of primary and secondary education. Although the lack of communal facilities is keenly felt in most housing projects, it will be difficult to consider it part of the housing project development. Any proposal where the cooperatives would
undertake the development of communal facilities will require a thorough understanding of the financial mechanisms, and the delineation of responsibilities and this is beyond the scope of this thesis. The only suggestion that can be made at this stage is that the cooperatives can define needs and organize petitions for installment of necessary services and try to monitor the installations to insure that the work is done.

6 - Training of Management Council:

The responsibilities given to the management council are large. There is a need to give to the elected people some guidance on issues like the purpose of the cooperative, its intent and functions, and their role. The training program should be extended and limited to the elected members of the management council. This will reduce expenses for manpower training. The elected members in turn would have the responsibility of informing and training the individual members of the sub-group.

2. LEGAL FRAMEWORK

It is necessary to outline the cooperative within a legal framework in order to insure its proper implementation. A legal framework for housing cooperatives already exists in Algeria. Many of the laws of these cooperatives can be retained to conform to this thesis. However, there are some suggested modifications for organization, management and funding. The by-laws should state:

1 - Creation and definition of role of a new promoting organization (which has been designed as H.C.A. in the text). The relationships with the cooperatives and institutional agencies, with its rights and duties specified.
2 - Membership criteria and group organization should be reviewed according to the new target group and proposal for organizing cooperative.

3 - The financing procedure would need a complete restatement for the new mechanism.

4 - Implementation procedures, self-help and mutual help construction process and basis for agreements between members and H.C.A. and between members themselves should be stated clearly.

5 - Finally the management procedures; rights and duties of members as individuals; of the management council; and of the cooperative at large.
<table>
<thead>
<tr>
<th>Operations</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project organisation</td>
<td>Project implementation</td>
<td>Housing extension and neighborhood management</td>
</tr>
<tr>
<td>Phase I</td>
<td>(one year)</td>
<td>(two years)</td>
<td>(as long as the houses are habitable)</td>
</tr>
<tr>
<td>1. Membership and group formation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Management council election and training.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Land acquisition.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Project design.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Cost estimate.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Savings collection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Site development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. First step in house construction. (core or shell house)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Second step in house construction. (minimum unit)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Third step in house construction. (extension)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Management maintenance and control.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of involvement</td>
<td>H.C.A. more than cooperative</td>
<td>H.C.A. and cooperative about the same</td>
<td>Cooperative more than H.C.A.</td>
</tr>
</tbody>
</table>

Role of the different parties involved in cooperative development.
CONCLUSION

This study was not intended to provide an exact framework of how to start a cooperative system in Algeria. The questions did not go into the details of implementation. The idea was to discuss the advantages and feasibility of such an approach for low income housing and to point out strengths and weaknesses to take into account within that context.

In order to initiate this type of approach, a pilot or experimental project should be first implemented. The project should receive a certain amount of attention in order to identify problems that the system might encounter, and
work out solutions for them. The solutions however should not lead to a completely standardized system. There should be enough flexibility to accommodate social, economic, cultural and even climatic particularities that occur in different parts of Algeria.

But it is important to remember that the search for housing solutions and particularly for low-income people in developing countries cannot be successful without first the government providing all necessary elements which are upstream to any housing project implementation.

This final quote will sum up the situation well:

"The potential strength of government intervention in housing is not in flexible assembly of components - land, labor, capital - into finished houses but rather in government's capacity to shape the flow of the components themselves." (1)
PART I

CHAPTER I


(4) Fritz Machlup, "Essais de semantique economique" (Calman-Levy), page 319.


CHAPTER II


(2) Benmatti, page 232.


(4) Benmatti, pages 217, 218.

(5) Ibid., page 220.

(6) Ministere de l'urbanisme de la construction et de l'habitat, page 5.

(7) Benmatti, pages 221-222.


(9) Ibid., page 149.

CHAPTER III

(1) F.L.N., "Chartre Nationale", page 186.

(2) The following description of housing policy is drawn from a ministry report, Ministere de l'urbanisme de la construction et de l'habitat, "Habitat Urbanisme et construction, contribution dans le developement economique du pays, et perspectives."

(3) Regional authority.

CHAPTER IV

(1) Benmatti, page 333.

(2) C.N.E.P.
PART II

CHAPTER II


PART III

CHAPTER I


CHAPTER II

(1) Peattie, page 14.

CHAPTER III

(1) Lewin, page 82.

CHAPTER IV

(1) Caminos, page 92.

(2) Lewin, page 56.

Conclusion

(1) Peattie, page 16.
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APPENDIXES

This section provides 2 cases of low and middle income housing projects in Constantine in Algeria.
APPENDIX 1

Case 1 - EL GAM AS
Low-Income Housing
Scheme for Relocation
in Constantine

- The project was initiated by the waly of Constantine in 1975 to relocate population living in squatter areas. This project originally received a lot of criticism but was finally considered as a successful experience, as the cost per unit is lower than the cost of the current public housing and as the construction process is faster (cost per unit was roughly 70,000 DA).

- The project is located at the periphery of the city, in an isolated site.

- It consists of 800 units with social infrastructure. The implementation of these units were done with no precise definition of the lots. The density is of 35 units per hectare. The site is fully serviced with water supply, sewage and electricity (average servicing cost 40,000 DA/unit which is 35 to 40% of the total cost of the house).

- The houses are light prefabricated units mainly in wood. They were imported from Scandinavia ready to be assembled on site. The area of the units are about 48 square meters (2 or 3 rooms with kitchen and bath).

- Most of the inhabitants are low and very low income people. There are families whose squatter dwellings were destroyed by the government and shelterless families who were living in camps. Most of them are not new migrants. They have 10 to 20 years of urban life. Each house was allocated to a nuclear family but some of them are inhabited by several families.
most often shelterless relatives.
- Families are mostly happy to have been attributed a house but these houses do not have a very clear tenure. Users pay a rent of 240 DA per month which they consider very high (it is in fact 25% of the minimum salary fixed by the government). They would prefer to have a clearer status, and to know their rights and duties over their property. Their desire is to own the house, (for they are willing to buy it), and to be able to make the necessary changes to accommodate their needs.
- They consider the wooden house as temporary shelter as the houses are degrading very rapidly and it is difficult to maintain them. A definite house for them is a masonry house which they are willing to build by themselves. They have a clear idea of how they would process it, in a progressive way with the help of relatives and friends and the occasional guidance of a specialized worker. They are aware of the financial difficulties they may have in building a house and assert that it will not be possible if they have to pay the 240 DA of rent per month.
- The settlement will have to evolve very rapidly. The houses will deteriorate and the users will start replacing them by constructing new masonry houses. The question of tenure will have to be decided by that time. For central to the development of the area is a clear division of lots, and building codes should be set up.
- Their desire to build their houses and improve their situation is very obvious. This should be a positive aspect that ought to be encouraged and supported.
APPENDIX 2

Case 2 - EL HAYET

Private Housing Development for Municipality Employees in Constantine

- The project is located in a residential area at the periphery of the city. It consists of 96 lots of an average of 250 square meters. The density is of 17 lots per hectare. Water supply, sewage and electricity are provided but streets and infrastructure have not been finished.

- This housing development started in 1969 as a cooperative of municipality workers (low and middle income) with the goal of obtaining land and developing individual houses. But it took five years for the cooperative to have the selected land serviced and the legal procedures achieved. Because of this delay the members lost interest and the cooperative dissolved.

- The construction started in 1974 but most of the houses today are not finished and some of the lots are still barren. At that time 20 families out of the 96 of the cooperative contracted with the municipality's contracting firm for the construction of their houses with some special agreements on the payment procedures (which consisted of a first deposit of 20000 DA followed by monthly payments). But in spite of this special arrangement some families were not able to pay. The firm stopped the construction of these houses and finished the very few houses of those who could afford it. Most of the other houses were built by the owners themselves who hired skilled workers and laborers.

- These skilled workers are generally friends or
relatives which are not always approached in a business deal. The arrangement can be dealt by an exchange of services which make the cost very accommodating to the owner. Children and family relatives are employed to help and assist the masons.

This solution allowed the necessary flexibility in the construction process due to the irregularity of construction material supply. It also accommodates the financial constraints that the owners have. The workers can be hired when the material is available and when the families have enough money to cover the expenses.

- Construction material supplies and funds were in fact the two main obstacles encountered by the owners during the construction process:

  - The responsible agencies were not able to provide the needed construction materials on time. Moreover the buyers were sent to other cities to get the bulk of materials when not available in Constantine. The transportation costs, which are very high, increased considerably the cost of the houses.

  - In financial terms the owners had a lot of difficulties in paying for the construction. Most of them, although aware of the C.N.E.P. loans could not have access to it.

- This is an exceptional case of private housing development of low and middle income families which developed during the seventies. What makes it an interesting case is that it gives a fair idea of what this income group is able to do to build their own houses with the limited means available. The results are obvious. After 8 years, a lot of the houses are still not inhabited. Apart from some 20 families who were able to finish their dwellings most of them would have needed some form of financial aid and assistance to advance their construction. Another reason why those families could not achieve their dwelling was due to the fact that the houses are very ambitious in terms of spaces; a simpler design at a primary stage would have lessened the costs.
ABBREVIATIONS

- DA, Algerian Dinard ($1 = 4.54 DA)
- H.C.A., Housing cooperative agency.
- O.N.L.F., Office national du logement familial.
- O.P.G.I., Office de Promotion et de gestion immobiliere.
- T.S.O., Technical service organization.