# Inner City Housing Solution

Case Study of a Model Cooperative Apartment Building in Addis Ababa

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# Introduction

Housing is one of the basic needs of human being but the most scarce goods.

These days, the problem of shelter becomes a global issue and holds the attention of policy-makers and governmental officials, because of its unique nature, housing remains the unmet needs of the majority and became a potential social crisis for most city centre of developing countries.

Like any other developing countries, urban areas in Ethiopia are adverse attacked by the problem of housing. Even within Ethiopia the magnitude of the problem varies from town to town.

Housing problem is much severs in bigger city like Addis Ababa, and other regional capital cities.

Therefore, this paper focuses on the one example of practical cooperative house, which is considered as a model apartment building for middle-income households to solve their housing problem and attempts to forward suggestions in light of its contribution to alleviate chronic housing problem in the city of Addis Ababa.

### Motivation for the Choice of Study

The reason that I am interested to write on this topic is:

- To review the implementation process of the project "housing cooperative apartment".
- To evaluate how housing cooperative helps to reduce housing problems.
- To suggest recommendations to ameliorate housing problems in Addis Ababa.

### Method of Study

All the materials that I have used to write this paper are secondary data like census result, government proclamations, research papers and all documents related to the that particular project (the housing cooperative apartment).

Moreover, the writer of this report is one of the members of the mentioned housing cooperative, so that all information that I know could serve as primary data.

# **Problem Definition**

Housing development is one of the appalling social problems of the developing countries. This is especially true in the urban areas of these countries.

The problem of housing in Ethiopia is also growing following similar trend and at the same time escalating speedily along with the growth of urbanization.

The current situation with regard to the social problems that constrained housing development in the urban centres of the country is attributed to the combined and/ or independent effects of several factors. Among these,

- Demographic dynamism of urban centres with regard to population increase emanating from migration (in this case inward migration/immigration where the flow is predominantly rural-tourban),
- Low level of regular income which is at or below subsistence level,
- Lagging infrastructure development compared to the expansion rate of the city and
- Lack of compatible policy environment and framework emanating from instability of political conditions and influences from within and outside.

For several years after the confiscation of private land and extra houses, the ownership of major part of the total urban houses the relevant policy aspect had been in the hands and at the disposal of the government. People were discouraged to build houses both for sale or rent. During the years since the confiscation of the extra private house the cost of housing rent and the cost of construction have been escalating at an enormously high degree.

# Background

## Country Level

**Ethiopia**, officially the Federal Democratic Republic of Ethiopia, is the oldest independent country in Sub Saharan Africa. Ethiopia is bounded on the northeast by Eritrea and Djibouti, on the east and southeast by Somalia, on the southwest by Kenya, and on the west and northwest by Sudan.

Ethiopia covers an area of 1,133,380 km<sup>2</sup>. The heart of the country is a high tableland, known as the Ethiopian Plateau that covers more than half the total area of the country. The country's chief economic activity is carried out in the fertile plateau area.

The climate of Ethiopia varies mainly according to elevation. The tropical zone below approximately 1,800 m has an average annual temperature of about 27°C and receives less than about 500 mm of rain annually. The subtropical zone, which includes most of the highland plateau and is between about 1,800 and 2,400 m in elevation, has an average temperature of about 22°C with an annual rainfall ranging from about 500 to 1,500 mm.

The population of Ethiopia (2001 estimate) is 65,891,874 estimates, yielding an overall density of 58 persons per km<sup>2</sup>. Population growth rate is 2.7%. Ethiopia has a diverse population, with more than 70

ETHIOPIA OVERVIEW MAP ERITREA Red Sea Adawa 🛥 YEMEN Mekele SUDAN Gulf of Aden DJIBO UT Bahi Da Des newafrica.com/maps Scale 1: 10,400,000 Addis Abab SOMALIA sela Goba Awasa Arba Minch Gid Lake SOMALIA KENYA UGANDA

distinct ethnic and linguistic groups. The 1995 constitution established Ethiopia as a federation and created nine regions for the country's main ethnic groups.

Map of Ethiopia

Ethiopia is one of the world's poorest nations, with a per-capita gross domestic product of \$100 a year in 1999. The economy of Ethiopia remains heavily dependent on the earnings of the agricultural sector. Participation by most of the people in the monetary economy is limited; much trading is conducted by barter in local markets.

Exchange rate is 1 US dollar to 8.56 birr (March 2002).

Capital city of Ethiopia is Addis Ababa (new flower)

#### Regional Level

Addis Ababa was founded in 1887. The city, which had started with scattered military-camp-type settlements, is currently stretching on total land area of 540 km<sup>2</sup> and has a population of 2.57 million in the year 2001, with the annual increment of 2.8%. The population of the city is also estimated to be 27% of urban population of the country.

The continuous and massive inflow of people from the rural areas towards the city of Addis Ababa has by itself aggravated the housing problem because the absorbing capacity of the sectors is too low to accommodate the influx.

The major cause behind the immigration to Addis Ababa has been for employment. Addis Ababa received more than 50 percent of the manufacturing industries operating in Ethiopia. Most of these migrants have low-income per household and low living and educational standards.

Efforts were made in the past to mitigate the housing problem for low-income group in the city. How ever these efforts fall short of achieving its goal due to lack of policy, institutional, financial and other socio-economic factors.

The cooperative approach to mitigate the housing constraints of low income group through urban housing projects of National and

International Organizations in mid 1980's was discontinued due to change of government could be an important illustration for the luck of sustainability.

Low household income is one of the major factor that impeded households with low-income access to sound housing unit. According to the Households income, consumption and expenditure survey conducted by the CSA 1995/96, about 22.9% of the household in Addis Ababa earn a monthly income of less than birr 217. About 61.1% of the households earn a monthly income of less than birr 550 per month. The largest proportion of the total household income (about 50%) goes to consumption (for food). Hence low household income together with higher proportion of consumption of the limited income resulted in limited saving to finance the household's dwelling unit.

# Strategies

## The Government

The existing government only issues proclamations and regulations regarding housing policy and land use status. Housing supply is left to privates and cooperatives.

From 1991 the Government adopted a land lease policy (proclamation 80/93), which regulates the possession of land through lease bases for a maximum of 99 years.

## Local Government

The city government has prepared a five-year plan (2000–2004). The plan among other things has a strategy to minimize the housing shortage with a target of building 7 to 10 thousand houses yearly. In doing this the strategy will focus on:

- Those who can build their own houses
- The housing cooperatives
- The real estate development
- NGOs and other international organizations.

Although there are efforts to implement the strategy there are still problems that need further analyses and studies. Half of the population lives with a meagre income and the unemployment rate is very high.

Therefore, such a program might benefit the higher and middleincome groups. However, the low-income groups are illegally settling on the vicinity of the city with no infrastructure facilities or living in very crowded houses in the city.

The high cost of infrastructure specially; the cost of road, sewerage system water supply, and telephone, electric power etc. is an impeding problem for the expansion of new settlement sites. Due to this fact, there are new settlement sites, which are on the waiting list for water supply and electric light. Some of these sites are not also accessible to the city bus and taxi services.

The inner city has very old houses that need up grading. There are also pockets of plots, which can be used for high-rise buildings. At the same time the middle-income groups working in the government and private sectors are more pressed with the housing problems. At present the cooperative development and promotion bureau of the city government has more than 500 housing cooperatives in the waiting list looking for plots of land. The minimum membership in housing cooperative is 14 while the maximum number is 24. A good number of these cooperatives members are also expected to be in the middle-income group. Although the emphasis has been for the lowincome group, it is time to think of both income groups and devise a good way of using both the infrastructure and the plot available in the inner city and alleviate the housing problem of the city.

At the same time it was the interest of local government to get developers that could under take construction harmonious with master plan, building high rising apartments in the centre.

This high-rise housing helps:

- To reduce horizontal expansion of the city.
- To lessen cost of new infrastructure investment.
- To upgrade the inner city.

Therefore, the housing cooperative apartment that has been discussed under this report conceived out of this principle.

#### Project Level (Case Study)

#### **Establishing Housing Cooperative Society**

A model housing cooperative society has been organized in 1992 with a membership of 20 voluntaries of government employees with middle-income who do not own house and have been renting private houses, small rooms at a very high cost, or sharing with their families with the intention of living in a place accessible to their work space, but who wants to build and live in an apartment building. The members, who are of different professions, were all with a problem of descent house to live in. In fact, the members are mainly old friends at school, work place or/ and in the neighbourhoods.

The cooperative society submitted the entire needed document to get a cooperative license to the cooperative organization department that issues the license usually called certificate. Then, it was accepted and registered as a legal cooperative society.

#### Availability of Land in the Inner City

The house cooperative requested the Addis Ababa city government bureau of works and urban development for a plot of land in the inner city. Their application was submitted with a project proposal and sketches of a five-story apartment building. The proposal was accepted and encouraged. It was the first of its kind. In fact, there was no such an initiative to that date. The existing cooperatives are mostly one or two story buildings, and are located in the outskirts of the city.

After five years of the bureaucratic procedure in delivering plots of land, the cooperative society was given 1190m<sup>2</sup> of land, in zone 2 wereda 23 (equivalent to district) and kebele 12 (sub-district) of the city centre with a good access to different facilities.

#### **Acquiring of Building Permission**

According to the master plan of the city and height regulation of that particular site, the proposed five stories building changed to be six. The cooperative was obligated to add one more storey to the building. This situation increased the cost of the construction. The building permission process also took a year of delay.

#### Availability of Funding

The cost of the building was estimated 3.9 million birr (0.46 million US dollar), and the cooperative was requested to deposit 10% of the total construction cost in the bank to precede the construction. But the member's monthly contribution and forced saving, was far below the required amount for the bank deposit let alone for the construction of the building. Thus, the members started to look for an investor who could join them as a member and use the ground and basement floors for commercial purpose.

The cooperative easily found the type of investor they wanted. This was possible because:

- The inner city of Addis Ababa is very expensive and is not easy to get a plot of land for a private business while co-ops are encouraged and helped.
- The site is on the way of a residential area mainly occupied by diplomatic mission and high-income groups, quite convenient for supermarket business,
- The infrastructure facilities such as power, water, telephone line, are easily accessed.

Therefore, the investor was very much interested to join the cooperative society as a member with a special agreement. He agreed to contribute 50% of the total building cost and owned the ground and basement floor of the whole apartment building.

Thus, it was possible for the members to request loan from the bank. Accordingly the bank was also very much willing to offer loan to the cooperative society taking the project it self as a guarantee for the loan.

## Actors

## Members of the Housing Cooperative Society

The members of the housing cooperative are the main actors for this apartment project.

At the initial stage of their organization they called a meeting of their members to form an organizer committee:

- General assembly is the supreme organ of cooperatives with responsibility of amending and approving of the cooperative elect and dismiss the members of the management committee, and to determine the amount of the share of society, it hears reports and give proper decisions, decide that the society either be amalgamated with another society or be divided and approve annual work plan.
- The management committee is responsible for maintaining the minutes of a meeting in writing and documents and books of accounts of the society. It is also responsible to prepare annual work program and budget of the society, execute such other decision given by the general assembly.
- The control committee is also elected by general assembly with major responsibility of controlling the proper functioning of the management committee and proper management of funds and

properties of the society. It is also responsible to control that various activities of the society are carried out pursuant to the bylaws and internal regulations of the society.

- Other sub committees of the cooperative society may include:
  - o Development committees,
  - o Purchasing committee
  - o Construction and
  - o Supervision committee with varying responsibilities.

As most of the members are professionals (architects, engineers), they decided to do all design and construction activities of the project.

Their participation in the construction of the building was mainly in the purchase and supply of building material; efficient supervision of the project, etc.

The main advantage of the cooperative form of organization may include the following.

- Creation of integrated urban communities, not only for the purpose of providing housing, but also for the supply of various services and facilities and the promotion of employment opportunities education and the raising of the standard of living in general.
- Collective system of financing and repayment by means of mutual responsibility, which considerably reduces the danger of defaults.
- Gradual assumption of responsibilities for the administration and management of the cooperative by the members, and subsequently a considerable cost reduction.
- Mobilization of saving and self help resources by the cooperative group.
- Collective maintenance and up keep of houses and neighbourhoods.
- Accumulation of experience and continual improvement of operations.

There is a common belief that shifting certain responsibilities to cooperative groups will greatly enhance and facilitate the work of the implementing agency of such projects. But comparing the major stages of the housing process, from the formation of a cooperative to moving in to a completed housing unit, with the process through which individuals had to go will show us that most of the assumed advantages of housing co-operatives can not be realized with out making a number of additional provisions such as time, money, effort, etc.

#### Private Investor

As a member of the society the private investor has been participated in all activities.

### Local Government

Addis Ababa City Government Bureau of Works & Urban Development and Cooperative Development & Promotion Bureau are the main important institutions with respect their role for implementing housing cooperative program.

# Addis Ababa City Government Bureau of Works & Urban Development (AACG-BoWUD)

Could play an important role in facilitating for the special consideration in the land provision; infrastructure service for the cooperative housing sites and processing constriction plan for cooperatives.

# Addis Ababa City Government Cooperative Development & Promotion Bureau (AACG-CDPB)

This is responsible for organizing, development, and promotion of housing cooperatives. It is responsible for facilitating of an all round assistance required for the smooth functioning of cooperatives.

Among crucial assistance by the bureau are formation and promotion of housing cooperatives and provision of technical assistance and facilitation of both technical, financial and other institutional capacity building assistance by government and nongovernment institution to the housing cooperatives.

However not much seems so be accomplished in this sector mainly due to recent establishment of the bureau.

The Addis Ababa City Government Cooperative Development and promotion Bureau which was established on September 1999 lacks the required capacity to render such assistance as issuance of regulations to provide land for cooperatives with minimum or no payment, to regulate the ever growing cost of construction materials, financial loan, provision of infrastructure, social services and technical assistance required.

As a result, the local government of the city intervened in this project:

- Giving legal cooperative license (certificate)
- Providing of plot of land.
- Building permission.
- Facilitating the utilization of the existing infrastructure.

#### **Building Design Enterprise**

This huge governmental consulting office was participating in consulting and providing materials for design process and cooperating in soil investigation and testing materials for construction of the apartment building.

#### **Financial Institutions**

The construction and business bank of Ethiopia was very much collaborating in providing the required sum of loan to the finishing work of the apartment building.

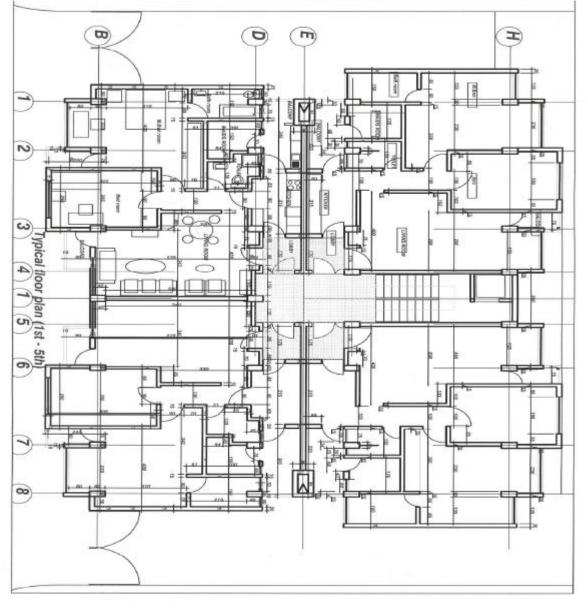
But, access to financial resources is the basic bottleneck to undertake investment in the housing The change in the financial policy made in fever of market economy together with the drastic change in the interest rate of 4.5% for housing cooperatives before 1991 to 12.5 in post 1991 resulted in financial bottle neck for low income housing cooperatives.

More over the change in the economic policy resulted in the respective change of financial policy, which brought about the discontinuation of the mobilization of housing finance from international sources.

The role of financial intervention in this regard is essential.

## Design

Professionals, architects and engineers within the members of housing cooperative society designed the project of the mentioned apartment building. The main aim of the designers in this project was to achieve a well substantively and environmentally attractive designed solution that follows the usual norms and regulations of master plan of the city.



Typical floor plan (from  $1^{st} - 5^{th}$ )

### Function

The design comprises all minimal residential requirements:

- From first floor up to fifth floor was arranged for residence, four families in each floor.
- Ground floor was arranged for commercial purpose and basement floor for store.
- Minimum corridors for circulation and verandas were included.
- Natural ventilation & natural light were considered.
- Vertical circulation is facilitated by staircase & by one small lift.

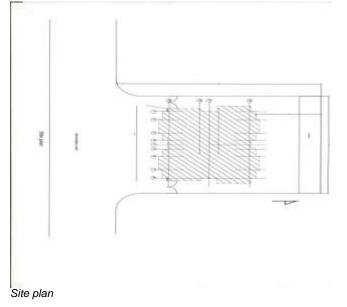
No.	Function / one family	Area/m <sup>2</sup>
1	Living/Dining room	25.00
2	Master bedroom with bath	24.00
3	Children's bedroom	12.00
4	Toilet & shower	3.00
5	Kitchen & Laundry	9.00
6	Lobby	2.00
7	Maid's room or Store	3.00
8	Circulation	5.00
	Total Area	83.00

Table 2 Ground & Basement

9	Super market	350.00
10	Store	350.00

## The Site

The site is located in Western side of the town. The plot is accessed from a secondary road. Main facades of the building were oriented north south and towards the road. The infrastructure facilities such as electrical power, water supply, and telephone line are easily accesed. The site is flat.



#### Form

Is dedicated by functional requirement of the building.



Front view of the apartment

#### Material

Mainly reinforced concrete structure isolated footing, hollow concrete block wall, and flat roof. Metal frames for windows, wood for internal doors. External finishing materials are plastered & painted. Internal finishing was left for individual members.

#### Services

Water supply & electrical power would be from the town mains situated a long the existing road.

Waste was to be discharged through septic tank

## Transition

The members contributed more than Birr 36,000 each, but still some finishing work was left out to be done by each member after taking their own rooms. At present each member of the cooperative is either living and enjoying his sweet home or renting his rooms. Farther more, the monthly contribution Birr 50 is raised to Birr 100 and decided to continue the contribution with out a time limit.

The supermarket is working successfully.

# Conclusions and Recommendation

At the moment many middle-income groups are looking for the construction of similar dwellings in the inner city and requesting the city government for such an access. On the part of the city government of Addis Ababa, there is also the willingness to consider these types of cooperatives. Therefore, based on the above-mentioned cooperative society experience and the present acute housing shortage in the city one can recommend: -

- The fast growing urban population has worsened the shortage of housing in the city. Besides, the city housing stock is not only in short supply but many of the houses are not fit for middle class income dwellings for many of the houses are made of wood and mud. To mitigate the housing shortage and improve the quality of housing, such cooperatives are essential.
- The city of Addis Ababa is expanding horizontally, due to this; some dwellings are not able to get infrastructure facilities like power, water and access to transport. Therefore such cooperatives are of great importance to keep the growth and development of the city vertically and get the benefit of the available infrastructures in the inner city.
- The cooperative societies should be given technical assistance in the provision of bank loan and plots of land with good access to infrastructure facilities.
- The development of expansion areas in the outer city is very expensive, while there are still unused areas and many places with depilating housing stock which needs up grading in the inner city. Therefore, these areas should be cleaned with an appropriate compensation to the occupants in order to give it to the investors and cooperatives that are willing to build apartments.
- Cooperative societies are also easier to mobilize for social and economic development of their community. To this effect, these types of cooperative apartment buildings should therefore be encouraged and supported or facilitated as to allow and attract the middle-income group.

But, taking the overall housing situation and economical status of the majority, building such apartment is unattainable without strong government intervention either as a facilitator or direct supplies. And, of course the full participation of private investor is also another important factor in housing development.

To this end, the local government should also take the following measures concerning policy issues, institutional setbacks, financial bottlenecks, and the socio- economic infrastructure that promote the operation of low income housing cooperatives.

- **Policy Legislation**: The Government (AACG-CDPB) should provide the policy legislation for an all round assistance that should be made to low income housing cooperatives.
- Emphasis on low-income housing cooperatives: The implementing agencies should aim at focusing on low-income projects and should render technical assistance and monitor the implementation of the projects and its impacts to ensure sustainability.

- Government grant to the low cost housing cooperative: The grant to cooperatives should consider its limited capacity to pay for all or even bigger portion of resources required for housing construction. Thus taking in to account the capacity limit of the low income house holds, government need to make special arrangement to facilitate the access to land and construction material with possible minimum cost.
- Loan arrangement: favourable loan arrangement should be made for low cost housing cooperatives taking into consideration their financial capacity and their contribution to solving the existing acute housing shortage.
- Fund mobilization: The city government should allocate funds available in its coffers, and be able to mobilize multilateral, and grant fund sources from similar institution to facilitate for the success of housing cooperatives.
- Strengthening the AACG-CDPB Cooperative Development & promotion bureau: The bureau should be able to render such services as organizing; promoting, technical assistance and render consultancy back up for low cost housing cooperatives.
- Provision of site and service: Site and service support facilities such as access road, water pipe line, main power line, which are the list start up housing cooperative members build their own houses.
- Support for social services: The cooperatives through time should be encouraged to join hands with city administration and fulfil basic social services such as kindergarten, clinic, schools, markets, sewerage disposal facilities, etc.
- Provision of city core land to cooperatives: The city administration should also consider the possibility of supplying pockets of land available in the city core. This will immensely facilitate access by the low income to housing, employment, cuts the cost of infrastructure & social services to be provided for the housing cooperatives at the suburban sites.

## References

CSA Central Statistical Authority

1995 Population & Housing Census of Ethiopia 1994, Result for Addis Ababa.

Fisseha, W

1993 Provision of Shelter in Urban Areas of Ethiopia, Houston, Texas.

Government of Ethiopia

1998 Cooperative Societies. Proclamation No. 147 / 1998.

World Bank

1993 Housing, Enabling Market to Work. World Bank Policy Paper.

MSN Encarta -- Ethiopia http://encarta.msn.com.