

# Shelter Development:

## Increasing Affordability of Housing to the Low-Income Families in Addis Ababa, Ethiopia



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### 1 Shelter Situation Analysis of Addis Ababa

Addis Ababa is a capital city of Ethiopia, is characterized by the predominance of unplanned neighbourhoods and slums. This situation is highly linked with the historical formation of the city. Addis Ababa is one of the largest metropolises in Africa. It consists of urban and rural areas and its population density varies between 2500 people /ha in the city core (slums areas)



Picture 1: Map of Ethiopia

and up to 75 people /ha in expansion areas of the city (ORAAMP, 2002).

According to the projection (CSA, 1994), the population size of the city in 2006 was 2,973,000. The city is a self-governing chartered city having three levels of administrative structure, municipality, 10 sub-cities and 100 *kebeles* (which is the lowest administrative body).

The ever-increasing urbanization with the high unemployment almost half of the households living in poverty and a third of the population under extreme

poverty, housing access and affordability to the poorest households results poor economic development.

## 1.2 Shelter Related Fact and Figures

Housing has been and still one of the major problems in Addis Ababa. The housing shortage in Addis Ababa was worse than it had been 10 years earlier. Census data indicated (CSA, 1994) the housing stock in Addis Ababa was 374,742 in the year 1994. Between the years 1994-2000, about 84,525 housing were built formally and informally making the total number of housing stock 449,592 (AACAA, 2004). Based on the different studies carried on, the total deficit is ranging from 350,000 to 450,000. Housing deficit studies do not indicate the effective demand; they only indicate the severity of the situation. These results can be taken as an indication to show the real situation of the existing housing stock since there is insufficient and unreliable data on the current housing stock and deficit.



Picture 2: Deteriorated houses in the inner city (pictures taken from internet)

The structural condition of most of the existing housing units in Addis Ababa is so poor that any long-term use is difficult to imagine. The 1994 population and housing census has revealed that 82% of the housing units are made of wood and mud wall. According to various sources in the core of the city where 80% of the total housing stock exists most of the housing units are old, dilapidated, substandard and

overcrowded. 23.9% have no toilet, 90.4% lack bathing facilities and 26.2% have no kitchen (PADCO,1996).According to CSA 2004; 97% of the total housing stock of the city is single storied buildings, 41% of the housing units are overcrowded with an average number of rooms per housing unit being 2.6 and an average of 2.1 people per room (ORAAMP, 2002).

## Housing Tenure

The Central Statistical Authority (CSA, 1992) defines housing tenure as the arrangement under which a household occupies its living quarter. Accordingly the following housing tenure types were defined:

- Tenants in rental housing (public or private sector owned).
- Households in squatter settlements

With respect of tenure, today 34.4% of housing units are owner occupied. Public and private sector rental units account 40.4 and 16. Four % of the total; housing stock respectively. The informal housing sector also contributes about 20 % of the total housing stock (ORAAMP, 2001).

## Housing Construction and Building Materials

The common type of housing construction in Addis Ababa is single story and semi-detached housing units. In most of the time the construction materials used for housing construction are mud and wood, hollow concrete block, brick or stone. Due to the economy growth of the city, two and three storey housing units is becoming common.

## Affordability and Cost

The development of affordable housing for the low-income groups in the city is the challenging issues because of the scarcity of land and high cost of building materials. According to PADCO (1996) house prices to annual income ratios ranging from 14:1 for mud houses to 29:1 for masonry units. The price of building materials has been rising constantly. It does mean the cost of building materials is very expensive, compared to the previous years. The construction cost of housing per square meter has been escalating and reached more than double mainly as a consequence of the rise in the price of building materials. Currently it is estimated

that cost of housing with minimum habitable construction materials per square meter of floor area is ranging from 2000ETB (200USD) to 2500ETB (250USD).

Affordable housing means accessible to people whose income does not enable them to buy or rent appropriate to their needs in the free housing market. Addis Ababa is a city where probably up to 2/3 live below subsistence levels. It means that the majority of the households are not capable of building or buying acceptable dwelling units. Most of the citizens spend nearly 50% of income on food, there would not be much money left to buy or build house. Research conducted by PADCO (1996), the median income of households in the city was 391 ETB(39USD), with a median of expenditure as much as 381ETB(38USD), that means most households were incapable saving a fraction out of their income and practically all income groups have an extremely low saving capacity.

## Housing Finance

Housing finance is a crucial element towards affordability housing especially for the low-income groups. Addis Ababa does not recognize the importance of finance in housing development and has introduced several policies and programmes to ensure that both the low income and the high income can access housing funds. We hardly find housing finance systems in Ethiopia. In such a way, the low-income groups are excluded from housing finance by eligible criteria and loan payment conditions which they cannot. This might be true due to high collateral requirements; the low-income groups have very limited access to these institutions. The source of housing finance in Addis Ababa is the government revolving fund, saving of the beneficiaries, initial down payment, low interest rate, and long-term payments. This only applies for government housing development project like Addis Ababa Grand Housing Development Project.

## Access to Basic Service/ Infrastructure

The housing related infrastructure of Addis Ababa is suffering so much from decades of neglect and inadequate policy attention. PADCO (Planning and Development Collaborative International) showed in its survey in 1996 large proportion of the housing units in the city had no direct access to sanitary infrastructure or services. Roads accounted for only 6.1 % of the total built up

area of Addis Ababa. According to (AAWSA), 2004 only about 10% of the built up of Addis Ababa has some access to a sewer system that is only 1600 units are connected. According to CSA 1994, 23.9% of households have no toilet, 11.95% of households use shared and private flush toilet. The majority of households 45.02% of households used shared pit latrine while 18.11% of households have private pit latrine. The overall rate of solid waste collection stood at about 50 % in 1996. Recently the citywide solid waste collection has risen to about 65%. The coverage of water supply in the city in 2004 was 69 % ( AAWSA, 2004).

### 1.3 Housing Policy

Irrespective of its long history of urban development, Ethiopia has no comprehensive national urban housing policy to up to now. Nonetheless, the country has been experiencing various policy measures that have greatly influenced the development of the national urban housing sector, in particular the capital city housing development. The city administration gave little attention to such policy and letting the housing development interventions to have a sporadic effect. In 2005, however the national urban development policy was formulated and within its framework, a national integrated urban housing program is established. Based on this policy the national integrated urban housing development program deliberated a five-year plan of constructing 396,000 low-cost housing in selected 33 major cities and towns of the nation (IHDP, 2004).

### 1.4 Actors in Shelter Delivery and their Roles

The main actors in the housing development sector are government in the construction of housing for rent through Agency for Rental Houses



*Picture 3: Individual Housing Development*

Administration (ARHA). The city administration also develops condominium and low cost houses to assist low and middle-income group.

Cooperative and individual housing development are also participating in group and individual lands. In this regard, the government

was directly involved in the supply of housing and created and managed the cooperative housing delivery system. From 1986 to 1992, about 2600 cooperatives with more than 50,000 members were organized and produced about 40,000 housing units (PADCO, 1998). The real estate developers play a vital role in housing development even though it is a new approach in Addis Ababa.

International NGOs also develop new housing to minimize overcrowding or to replace undeveloped houses. They are usually limited in the core areas. It is also essential to mention that individual form of housing development, who constructed detached houses by acquiring land from the government. They are major housing suppliers of rental units to citizens who cannot afford to join the housing market or construct their own new dwellings. On the other hand, informal housing developers are also actors to build on public owned land without the authorization of the municipality. They are continuing to play their role in supplying houses.

## 1.5 Shelter Design

The housing problem in Addis is aggravated by inappropriate design and physical planning of dwellings. Their spatial design, layout standards are all problematic, hindering execution of construction. The problem of standard and its implication in the cost and construction time have been dealt with in several works of integrated housing development project. The physical design itself has been dealt generally studied in terms of making a dwelling *low cost* but not in qualitative aspects of design. In most new housings in Addis Ababa, construction take longer than scheduled, cost overtakes the estimate and serious spatial difference and construction defects are seen.

The main challenges, as far as design of housing in the city is concerned, are in two groups: one, current building standards and second, building materials. Building standards are too high and are unaffordable by the low income. In some cases, some of these designs are not applicable to the local context. As a result, they are not stick firmly to in construction; some of the houses have opted for *foreign looks* in their designs as they do not consider the local culture and also have an effect on building material choice. House builders cannot understand some of the technical jargon used in house standards and designs and some



designs do not meet the needs of families and others are just plain ugly and out of character and function.

## 2 The Addis Ababa Integrated Housing Development Project Office

The integrated housing development project office was created in 2003 by the city government of Addis Ababa .The project office has seven departments and ten sub-city branch offices.The main objectives of the program are to provide decent and affordable housing for low and middle-income households, create job opportunities, transferring cost-efficient technology and empower citizens through ownership of houses. The construction of 50,000 housing units annually and in total 150,000-200,000 with in the five-year period (2004-2009) was among the main goals stated in this programme (AAHDPO, 2006).



*Picture 4: photo showing the housing project of Addis Ababa*

My project office has also tried to introduce change in culture and attitude towards living in high-rise apartments. Condominium laws were the first to enact and air rights are allowed in support of the high-rise low cost (condominium buildings) housing development strategy. The main successes are introduction of vertical and dense development followed by the attitude change towards living in high-rise apartments. The other main successes are creation of job opportunities

and increase of the housing stock, housing access for at least 32,378 families. One of the difficult tasks being addressed by this project office is that of low and middle-income households who cannot afford houses built by the formal sector.

### 3 Shelter Problem

Addis Ababa despite its economic and political importance in the country is facing multi-dimensional economic, social, political, and cultural problems and challenges. According to (ORAAMP, 2002), the main housing related challenges of the city are: severe housing shortage especially for low-income households that account for over 80% of the city's population; dilapidated condition of existing housing stock; poorly serviced working and living environment and the expansion of informal settlements. We can observe two paradoxes that exist at the same times. The first is the city the constructing of new roads and building and other hand there is a dynamic of challenges such as an acute housing shortage, wide spread of informal settlements, dilapidation of inner-city areas, lack of basic urban infrastructures and services challenge the proper functioning of the city.

Shelter problems in Addis Ababa manifest itself not only in terms of quantity but also in quality. It is understandable that with a deteriorating housing stock and tremendous housing shortage there are no easy solutions and strategies to apply. The attempt of governments to tackle the housing problem through controlling urbanization and by increasing capacity through speeding up economic development has not been achieved. Governments and NGOs have attempted to attack affordability problems for the low-income groups through a number of schemes such as *site and services, urban upgrading and self-help* programmes. However, the results were limited because of differences in historical background, capacity to design appropriate housing standards and policies and to implement them. In response, housing pressures became greatest in areas of low incomes groups, the imbalance between supply and demand has led to affordability problems, and thus, urban residents preferred informal settlements (Wubshet Berhanu, 2002).

The main impact of the policies in the previous period is the underdevelopment of the housing sector. Moreover, an efficient housing delivery system has not been



designed and implemented. Housing affordability in the city is extremely low. The main reason for poor affordability is an unresponsive supply side. As a result of the supply deficit and high household formation rate, the demand for housing is extremely high. However, since there are few residential plots available for new construction, production is very low. It is this imbalance between supply and demand that pushes prices out of the reach of most households. Another reason for low affordability is that household incomes are low. According to a 1996 study, the monthly median income in Addis Ababa was 391 ETB (39USD) (PADCO, 1998). Expenditure on basic needs such as food is also very high implying that most households have little money available for housing expenditure.

Low housing production and a generally unaffordable building construction means that the city's residential land delivery system cannot satisfy demand and become the major constraint on housing development of the city. Thus with the high unemployment almost half of the households living in poverty and under extreme poverty, housing access and affordability to the low income households are and will remain to be the main challenge for the Addis Ababa City Administration and other stakeholders.

Therefore, what measures have been done to improve affordability of housing for the low income groups, what problems were encountered and what must be done to address the challenges needs further investigation.

## **4 Proposal for Change and Improvement**

As it has been mentioned in the previous chapters, housing is a critical component in the social and economic fabric of Addis Ababa. It is not yet satisfied even quarter of the housing demand what has been promised by the city administration to construct from 375,000 to 400,000 housing units. In order to come across the pressing demand, it is essential to mobilize all actors to exercise their maximum effort in shelter design and development. Therefore ,the main objectives of the paper is to give an analysis of the problems and prospects of affordable housing development in the city of Addis ababa and to present strategic proposal for change and improvement linking my proposal with the opportunity of the existing

Addis Ababa Housing Development Project where I am working. Here I have identified some specific goals to be achieved.

## Introducing an Incremental Housing Development Approach as an Alternative Option

Designing incremental houses working with community members to contribute their labor and knowledge to lower costs, with affordable construction material are proposed to provide access to the low-income groups. This allows the community to initiate and construct low cost incremental houses & enables house owners to continue their business at their home. Ground plus one (G+1) building constructing in phases is more affordable than the condominium houses. The best option would be to accommodate these households at the core of the city which could support their livelihood i.e. houses with ground floors accessible for shops and other business activities. This kind of provision of houses will provide minimum housing area for living at the same time. The houses could be built in three phases and through cooperatives participation.

The plots area of 72 m<sup>2</sup> is proposed for incremental housing types. This is in order to minimize the initial investment on housing and infrastructural cost. This incremental housing is consisting of multipurpose room including toilet and shower. This will be accomplished with a total built up area of 22 m<sup>2</sup> at the first phase which is going to be extended. The second phase consists of the construction of living/dinning room of the main house and the kitchen which is going to increase to ground plus one(G+1) with area of 21 m.<sup>2</sup> And the third phase will be additional floor with two bedrooms and toilet(showers )with a total area of 32m.<sup>2</sup>

### How To Operate Or Implement?

Addis Ababa Housing Development Project Office will help by providing technical support such as giving houses designs, supervision, providing technical training such as construction skills, and over all construction management. The project will promote the production and use of locally produced construction materials at the first phase. The house cooperative should participate in the construction process through provision of labor. The other two phases shall be

developed by the households themselves. This is intended to give the chance to the households to have options and protect them from the bureaucratic obstacles. In this case, NGOs are recommended to support these communities in the construction and management process.

### **How to Finance?**

Other countries experience during my training (shelter design and development) showed me that subsidy is very important in supplying affordable housing for the low-income groups. Therefore, the cost of first phase house shall be financed by the city government. The initial costs shall be repaid through loan from micro financing .Constructing the first phase will help the household to have alternative development options through own saving. Addis Ababa Housing Development Project Office will take over and negotiate the process to access loan at lower interest rate with the concerned body. This needs further discussion with the communities and government officials. The household could get loan from micro financing to build the second phase, which is the ground floor of the G+1. This can be followed by the construction of the first floor after the individual gets economically stronger. Once the household own the first phase of the housing, they can uses is as collateral to access loans. This unit also can be used as collateral to get loan for the second phases and the third phase. As Philippines's experiences shows us home owners association could also play a vital; role to cover costs of extensions through own savings. This issue needs further elaboration.

### **Infill Housing Development**

I proposed infill housing development to encourage the development of vacant land or revitalization. Infill development can be expensive, so private developer incentives are employed to help reduce the costs of residential development. Incentives such as upgrading the local infrastructure, adding public amenities and lowering land price encourage residential infill development and make the inclusion of affordable units more feasible. Encouraging the maximum participation of the private sector in all aspects of housing development in the city is recommended. This will tap the private sector participation to complement

government's limited resources and utilize the idle government lands in the core areas for affordable houses.

In general, to come up with a workable strategy I propose that the government should formulate the basic housing policies, guidelines and implementing mechanisms and involve the community and potential private developers. My proposal will mainly focus on how to create awareness among stakeholders, information dissemination and promoting the different housing actors .I need to show Addis Ababa housing development status specially provision of houses for low income groups comparing with other countries experiences that we have gained from *shelter design and development* international training program. This will require sequence discussion and dialog with all stakeholders. My personal contribution to this proposal will fall from preparation of draft policy up to implementation of this incremental housing strategy.

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