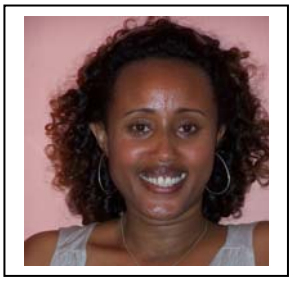
Housing Re-development in Addis Ababa

Mixed-use, Mixed Income Cross Subsidized Re-development



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Introduction

Housing has been one of the critical problems in Addis Ababa. A lot of studies have been undertaken and recommendations forwarded to solve this multifaceted problem. Part of these recommendations has been realized and different projects have been studied and already implemented. There are also new ongoing housing projects in the city. Yet, all the efforts made thus far fall short of the accumulated housing demand especially for the low income earners. Housing shortage, poor housing quality and living environment, shortage of related services and construction materials as well as poor mortgage system and appropriate loan or credit facility have been and will continue to be serious problems for the city of Addis Ababa.It is the intent of my study to suggest mixed-use,mixed income cross subsidy redevelopment which can complement and extend the efforts of the Low Cost Housing Scheme, with a particular emphasis on finding the financial resources to house the predominance of Addis Ababa's population who earn less than 700 birr per month.

1 The Shelter Situation Analysis

1.1 Background

Addis Ababa is the capital city of Ethiopia located in the centre of the country with an estimated population of 3.5 million people[1].The city lies at an altitude of 7,546 feet (2,300meters).Addis Ababa contains 22.9% of all urban dwellers in Ethiopia, with an estimated area of 530.14 square Kilometres (204.69mi). The current urban growth rate in Ethiopia is estimated at 4.1%; however, others have estimated an annual growth rate as high as 8% for the city of Addis Ababa. There for, it is the largest and the most populated city in Ethiopia. The city is divided into 10 sub-cities which are run by the City Administration of Addis Ababa led by an elected mayor.

The population number is significant, because it shows the direct effect on the housing need that is increasing significantly. In 2002, there was a backlog of 233,000 units. In 2010, which is a year from now, 223,000 more units are needed to house new households. This amounts to a total of 456,000 units needed by 2010.[2]

The issue of poor quality housing is an issue of public health and of economic development. Public houses in Addis Ababa are characterized by a "poor living and working environment that contribute to low productivity."[3] It is reported that 60% of the current disease burden in Ethiopia is attributable to poor sanitation and 15% of the total deaths are attributable to diarrhoea.[4] In addition there is a potential productive time lost to illness, caring for the sick and attending clinics. There are also costs of treatment for medicines and clinic attendance. Life expectancy for men are 45 years and for women it is 52 years.

In Ethiopia, we find a country in transition to democracy and also in transition from a traditional and command economy to some combination of a market/social

[1] "Structure Plan: Housing component – Improvement and Development Strategy" Addis Ababa:(Addis Ababa City Government, September 2002)
[2] Ibid, 36.
[3] "Structure plan: Housing Component", 1.
[4] Melaku Demissie, (editorial) "The sanitation Crisis in Ethiopia" The Reporter, Feb. 11, 2006.

welfare economy. The situation is somewhat complicated by Ethiopia's choice to retain state/public ownership of land.

This poses some challenges to creating a true mixed economy or modified market economy. What seems clearer is that the way forward to economic and human development is through a democratic path that balances market forces with concern for social, economic and environmental goals. A researcher working on land management in Mozambique made the following comment that seems equally relevant to Ethiopia.

> "In a situation where land is held by the State on behalf of the people it is important that both the urban population and the state are at urban level benefit. This, however, requires a political will and subsequent government policies and strategies concerning urban development. This ideally should be explicit and not implicit, as they are currently, and in a situation of growing democracy, there should be a wider political debate on urban development issues which permit broad equity issues to be raised."[5]

1.2 Shelter Related Facts and Figures

1.2.1 Housing Need

As mentioned in the background, by year 2010, 456,000 units are needed to meet the housing demand. If we go out another 5 years to 2015, an additional 91,000 units will be needed or about 550,000 units. This will require the production of about 70,000 units per year. In addition to the informal / illegal settlements in the expansions area, much of the core area of the city is believed to have a density of 5,165.1 inhabitants per square kilometres (13,378/sqmi).[6]

1.2.2 Income and Employment of Addis Ababa Residents

According to the table listed below, the incomes of the majority of Addis Ababa's household are abysmally low by international standards.

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[5] Paul Jenkins, "Emerging urban residential markets in Post-Socialist Mozambique"2001
[6] Ibid.,84 and Wubshet, 154

Estimated Household Income Distribution for Addis Ababa (in birr)								
		Percent of Population in 1995 - 2001*	Rough Estimate of Income Distribution in 2006**	Midpoint Income of Income Group	Monthly Payment Affordable at 15%***	Monthly Payment Affordable at 25%	Affordable cost of home with a 20 year 5% loan - no down payment	Size of Affordable Home at 1400 / m2
Extremely Low Income	0 - 200	16%	14%	100	15	25	-	-
Very Low Income	200 - 400	34%	26%	300	45	75	11,400	-
Low Income	400 - 700	24%	20%	550	83	138	20,800	15
Low-Moderate Income	700 - 1100	10%	15%	900	135	225	34,100	24
Middle Income	1100 - 1600	6%	10%	1,350	203	338	51,100	37
High Income	1600 - 2400	5%	10%	2,000	300	500	75,800	54
Very High Income	2400 and up	5%	5%	12,000	1800	3000	454,600	325

Figure 1

Based on this distribution, it is likely that the median household income is around 500 to 525 Birr (about US $40.40) per month. Bertaud comments that "Addis Ababa…appears…to be one of the largest cities in the world to have ever occurred at such a low income level…"[7] The employment level in Addis Ababa make it evident why so many households remain very poor. Only about 27% of the population is formally employed, about 43% are informally or self employed and 30% is unemployed. Income in the informal sector, is unreliable, inconsistent, and holds little hope for advancement or long term security. It also provides no opportunity for obtaining a housing loan.

1.2.3 Housing Affordability

Figure 1 also illustrates something about housing affordability for Addis Ababa's residents. Using the midpoint of each income group, an amount of affordable monthly payment for housing has been calculated, using both 15% and 25% of monthly income as the criteria for affordability.[8] Even at 25% of household income, no household in the first three income groups could afford a

[7] The Bertaud Model: a model for the Analysis of Alternatives for low income Shelter in the Developing World. Washington, DC:The World Bank,1981

[8] "Structure plan:Housing component", 38-42.

commercially constructed home of 25 m² (the minimum allowable size). It is clear that 70% of the population will not be able to afford the minimal allowable size.

In regards to the housing policy for Addis Ababa, it is not just about cost, regulation, or type of construction, but also about realizing social, cultural and economic goals. While the new City Development Plan, and the Structure Plan Housing Component express some well conceived goals for housing, there is still a great deal of uncertainty about which housing goals should be given priority and how they can be effectively implemented. For the time being I will focus on just three of those elements that are particularly pertinent to Addis Ababa's current situation: 1) Government policy towards housing for low income groups: 2) Privatisation of current government held housing through the low cost housing scheme: and 3) Housing development by the private sector & real estate developers.

1.2.4 Housing Tenure Type

In 1994, public rental housing was about 40% of the total housing stock with another 5 to 10% in private rental units. But there has been little official building of public rental housing since 1975. It accounted for only about 15% of the private housing built in the same period.[9] With the proliferation of both legal and illegal houses being built on the periphery, it is possible that the proportion of renters has declined, but surveys of the peripheral areas indicate that tenancy is much more widespread than would be expected, in areas that were meant for owner-occupants.

> …Between 20 to 30% of the dwellings in new housing areas were occupied by tenants. In general, the land-for-housing policy and the planning practices since 1975 have not served the majority of low income groups. [10]
>
> The housing policy did not privatize costs; the government was providing serviced land and other facilities, albeit in limited ways, to the few 'grantees.' This has resulting in two types of social groups in the

[9] Wubshet Berhanu.Urban Policies and the Formation of Social and Spatial Patterns in Ethiopia:The case of Housing Areas in Addis Ababa.Trondheim, Norway:Norwegian University of Science and Technology, (Doctorial Dissertation), July 2002

[10] Ibid., 240.

> expansion zones: in terms of ownership housing areas were predominantly privately-owned
> and occupied whereas these same areas accommodated tenants in fully tenant occupied houses or as co-dwellers with owners. The tenants accounted for about thirty percent of the total households inhabiting the areas.[11]

1.3 Housing Condition

There is currently a need for between 350,000 to 450,000 housing units to be supplied in Addis Ababa in the next 10 years to adequately 1) shelter new households being formed, including in-migration; 2) replace housing that is demolished or significantly below-standard; 3) make up the backlog of housing deficit for the existing, overcrowded population.

The extent of this problem seems overwhelming. In recent years, the Addis Ababa Grand Housing Scheme (also known as the “Low Cost Housing Scheme”) has made a courageous effort to meet some of this need by planning for 100,000 condominium units per year to be built in various sites in the centre and in the periphery of Addis Ababa, of which about 200,000 have been completed to date (within five years). While this effort makes a significant contribution to housing supply for the city, it is questionable if it will meet the total need, nor does it appear that it will provide sufficient housing for the very low and low income groups.

2 Organisation

Habitat New Flower Homes P.L.C., is a real estate development company established by group of individuals and BERTA Construction P.L.C. as its major share holder. As a sister company to BERTA, the developer is backed by the most experienced general contractor in the country. BERTA which is one of the largest construction companies in Ethiopia was established 40 years ago by two Ethiopian civil engineers. The company has constructed the country's most significant dames, irrigation schemes and water supply systems, bridges, roads,

[11] Ibid., 260.

factories, hotels, office buildings, higher learning institutions, residential housing developments and more.

The real estate developer is involved in managing the procurement of urban land, designing as well as marketing and sales of residential houses. The design office which I am working for designs houses as per the requirement of the individual clients and supervises the construction work while the houses are being constructed by the general contractor (BERTA). In addition to our current on going project the design team is conducting a feasibility study including design to expand its project by building more economical and low cost housing project to accommodate the housing shortage in Addis Ababa, Ethiopia.

3 Shelter Problem

About 80% of Addis Ababa's central city areas have been described as "slums", with a high proportion of substandard housing, insufficient infrastructure, and over-crowded conditions. Since it appears that the median income in Addis Ababa is currently less than 550 birr per household (perhaps in the 500 – 525 birr per month range)[12], and over 60 - 70% of the population work in the informal sector or are unemployed, most of these households:

- do not have capital to afford a down payment on market rate housing or even partially subsidized housing (such as the condominiums currently being built for sale as part of the Low Cost Housing Scheme);
- cannot afford monthly payments that would adequately cover the real cost of very basic standard quality housing
- depend on the livelihood and social network of their current central city neighbourhoods, and would suffer significant loss in livelihood security by being forced to move to a new settlement in the periphery.
- currently live on land that would have relatively high income potential for commercial redevelopment, given the free play of market forces
- do not have legal ownership or secure tenure in their current housing,

[12] This is an optimistic estimate. Based on the 1997 PADCO study, it appears that about 50% of households in Addis Ababa earned less than 340 birr per month at that time.

Therfore...

Providing improved, standard quality housing that is affordable to the urban poor cannot be achieved under current conditions, particularly in central city locations. However, it is the hypothesis of this proposal that if policies are developed and implemented which make the availability of valuable commercial land conditional upon including a certain percentage of low- and moderate-income residential development, sufficient funds would be available to cover the initial capital cost of standard housing for low-income households, to partially subsidize moderate income housing, and to provide adequate roads, sewer, and public space infrastructure to benefit both commercial and residential components of a mixed-use neighbourhood.

4 Proposal for Change and Improvement

4.1 The Mixed-Income Character of Addis Ababa's Core Neighborhoods

Ethiopia is an ancient country with many cultures and traditions. Its 80 million people speak 78 different languages and live among the eighty five separately categorized ethnic groups around the country. Addis Ababa which is the largest and most populated urban city in the country is the melting pot of all Ethiopians with different background and income levels. The population lives together in diverse neighborhoods striving to better themselves as the world changes around them.

Addis Ababa has historically prided itself on the healthy mix of income levels in most of its neighborhoods. This has resulted from the historic settlement patterns in Addis Ababa.[13] Mixed land use and mixed socio-economic groupings have been common phenomena in most part of the city and become the rule rather than the exception. This was the situation when the socialist regime decided to nationalize all urban land and "extra houses", banning any private rentals.

[13] Ibid., 110.

Landlords were allowed to keep one home for themselves, but all other houses became public rental.[14]

The Addis Ababa City Development Plan explicitly states the intention to "maintain mixed use and social diversity as one characteristic of Addis Ababa" and seeks to "promote [a] mixed income and activity profile in housing areas." [15] It further states the need to "keep the mix and balance of functions and income groups in residential housing development."[16] The degree of political will to maintain social diversity as well as a mix of commercial and residential uses in the central areas of the city is critical to the outcome of this study and proposal. My proposal of having mixed-income, mixed use neighborhood will:

- Upgrade the lives of many individuals that live in poorer neighborhood.
- Narrow the gap between the haves and the have not
- Provide employment to all citizens
- Improve the neighborhoods infrastructure
- Boost the aesthetic value and efficiency of the city.

4.2 Objectives of the study

This research paper is important because there is currently no obvious strategy which allows low-income households to remain in their central city neighbourhoods as major redevelopment (primarily commercial) takes place. Yet the current Addis Ababa City Plan explicitly calls for diverse, mixed income, as well as mixed use neighbourhoods.[17] Policies that gradually push low-income households to marginal locations, with the possibility of creating more "slum" or substandard neighbourhoods on the periphery, do not adequately address this problem.

Due to these policies auto transportation was required to serve segregated uses, more traffic and more congestion resulted. This has an increasingly negative impact on the environment, so that it is becoming even more critical to house people in closer proximity to jobs, commercial centres, and public transportation

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[14] Ibid.,7.

[15] "Addis Ababa in Action: City Development Plant 2001-2010 (Executive Summary)", (Addis Ababa City Government, August, 2002), 34.

[16] Ibid., 42.

nodes. This research paper aims to investigate the feasibility of alternative strategies for redeveloping the central city of Addis Ababa that can avoid some of these mistakes of the past, and create or maintain strong and attractive mixed-income, mixed use neighbourhoods within close proximity to commercial areas where many current residents work, either formally or informally. It is also the goal of the City Plan to create an "international standard" core area.[18] I believe this plan could achieve an improved city centre, without compromising its current mixed income character, and without causing the social discontent aroused by large scale eviction and resettlement of those currently living in the central part of the city.

My proposal on this paper will focus on the central areas of the city which are destined for "redevelopment", searching for ways that this redevelopment can provide new mixed-use, mixed income neighbourhoods without relocating of the poor households to the periphery of the city. Many of these low-income households depend on their central city location for their livelihood and social network, and suffer significant loss when they are displaced.[19] There are many advantages of maintaining mixed-income residential areas along with commercial and mixed-use redevelopment in the central core. The evidence of this paper suggests that a renewed, vital urban core that includes housing for all income groups is highly desirable, financially feasible, and politically possible.

Given the extremely limited financial resources of the urban poor in Addis Ababa, what public policies and finacing mechanisms could enable and support the provision of standard quality housing for very low and low to moderate income households in central city sites, in such a way that those households can maintain and\or improve on their current livelihood and social resources, as their neighbourhoods are facing redevelopment.

In simpler terms, we are asking,

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[17] "Addis Ababa in Action: City Development Plan 2001-2010 (Executive Summary)", (Addis Ababa City Government, August, 2002), 24, 34, 52.

[18] Ibid., 16.

[19] Ashenafi Gosaye, Inner City Renewal in Addis Ababa: the Impact of Resettlement on the Social, Economic and Housing Conditions of the Urban Poor. (Trondheim, Norway: Norwegian University of Science and Technology, 2001).

- How can we maintain mixed income, mixed use neighbourhoods in the central city, without displacing current low income residents?
- How can funds be found to help build better housing for the poor without compromising their livelihoods and social networks?

4.3 Implimentation Method

The proposed solution depends on formulating land use policy and implementation mechanisms through which public revenues generated from the more profitable commercial development of land can help to achieve social goals such as improved infrastructure and mixed income housing in redeveloping areas. In essence, this involves a type of public-private partnership, in which

- The private developers benefits from ready access to redevelopable land in the city center,
- The government regains some of its infrastructure costs, and
- Society benefits from improved and affordable housing and revitalized neighbourhoods.

4.4 Measures to be taken

Inorder to attain mixed use, mixed income development in city center, the following measures can be taken:

- Long-term affordability for low-income residents
- Household contribution at maximum affordable levels
- Integration of opportunities for improved livelihood for low-income residents
- Maintenance of the quality of building and its surrondings over the long-term
- Community participation, responsibility and decision-making
- A viable, beneficial relationship between adjacent residential and commercial uses
- Sense of ownership, investment, and pride
- Community integration and mutual respect

4.5 The Proposal

The propsal which I will present in this report is intended to show in a financially feasible way, how income generated from the commercial development can help defray the capital cost of housing for the lowest income groups. In order to demonstrate the financial feasibility of the approach, I will present an example of a mixed use, mixed income development on a one –hectar of land. This project is to be applied in 'Sengatera' area which is one of the oldest settlements in the inner city of Addis Ababa. As in the case of most part of the capital, the buildings, network and other infrastructure facilities of the area are extremely low standard. When it comes to income group of the inhabitants, the survey from 'Kebele' revealed that 75.80% are estimated to be of low income group.

Figure 2

Income group (In Birr)	**Percentage share**
Less than or equal to 350	**59**
351 – 650	**18**
651- 1050	**17**
Greater than 1050	**6**
Total	**100**

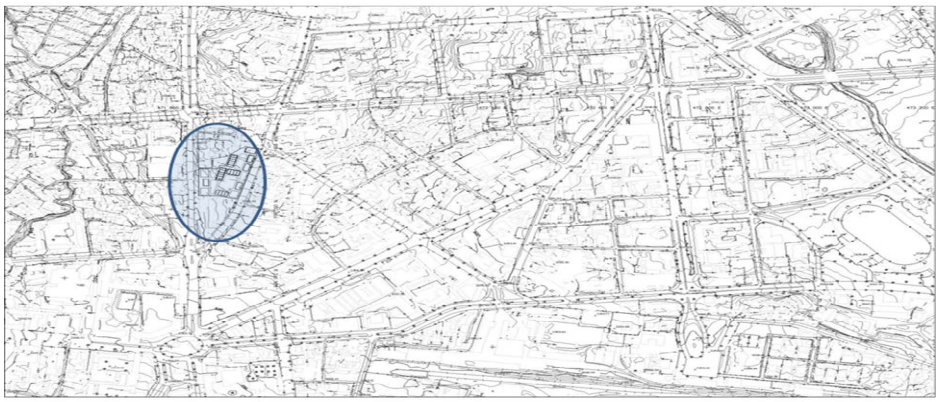

Figure 3: The proposed site(Sengatera area)

Calculation of basic costs

After considerable discussion with colleagues in our office and experts in the field, I have settled on some fundamental cost assumptions that I use in the example.

- Lease cost
    - 2000 birr/m^2 for a site with above average, but prime, commercial potential.
- Construction costs
    - 2500 birr/m^2 for residential. This amounts to about 100,000 Eth birr for a 40m^2 housing unit.
    - 3000 birr/m^2 for commercial construction.
- Maintenance and operational cost of buildings.
    - 100 birr/m^2 per year.
- Total infrastructure, including maintenance over first 10 years
    - 1.4 million birr. It is assumed that the adjacent sites share some of the total costs. [20]

Calculation of income generating potential

- Commercial income:
    - 160 birr/ m^2 per month or about 3200 birr per month for 20 m^2 of retail or office space.
- Residential income:
    - Based on different abilities to pay of very low to low income residents, I have assumed monthly rents ranging from 40birr to 200birr/month for units averaging 40 m^2 . For moderate income households I have assumed monthly rents of about 500 to 700 birr/month(but the range could be 300 to 2000 birr/month).

[20] Some of the infrastructure calculation is based on per km calculations done for a much larger site-the Meri-Luke development-by J.M. Rossignols. City Government of Addis Ababa and Lyon City Planning Agency, April 2003.

For this particular example, costs and income assumptions are necessarlily estimates, but are based on the best available information, with an allowance for increased costs over the past five years. To be on the conservative side, I have used higher estimates for costs and lower estimates for income than could probably be achieved in actuality.

The design of the one hectare (10,000 m^2) site could take many forms. In this example, the assumption is that the base/area ratio would be approximately 0.6. In other words, the footprint of the buildings would amount to about 60% of the total area of the site, allowing for enough landscaped open space – some public and some private.

For this proposal, I have propsed four G + 4 buildings with a total base area of 1,200 m^2 yielding a gross floor area of 6,000 m^2. This buildings could be retail or commercial with the exception of 2 upper floors of residential in one of the buildings. The total commercial in these four buildings would be 5,400 m^2 and the total residential area would be 600 m^2.

Four other mixed used buildings each with the base area of 200 m^2 would be G + 3 in height yielding a gross floor area of 800 m^2. These would be 25% (ground floor) commercial (800 m^2) and 75% (3 upper floors) residential (2400 m^2). This yields a total of 6,200 m^2 of gross commercial space. Applying a 12% discount for public area and 8% for vacancy, this yields approximately 4,960 m^2 of rentable commercial space.

In addition to the 3,000 m^2 of low to moderate income residential space in the G+3 and G+4 buildings, the plan calls for 12 townhomes of 72 m^2 (on 3 floors) and 8 townhomes of 84 m^2 (3 floors), yielding 4,608 m^2 of mid to high end housing. The total rentable residential space allowing for 11% public area in the G+3 buildings, would be about 6,947 m^2. *See figure below*

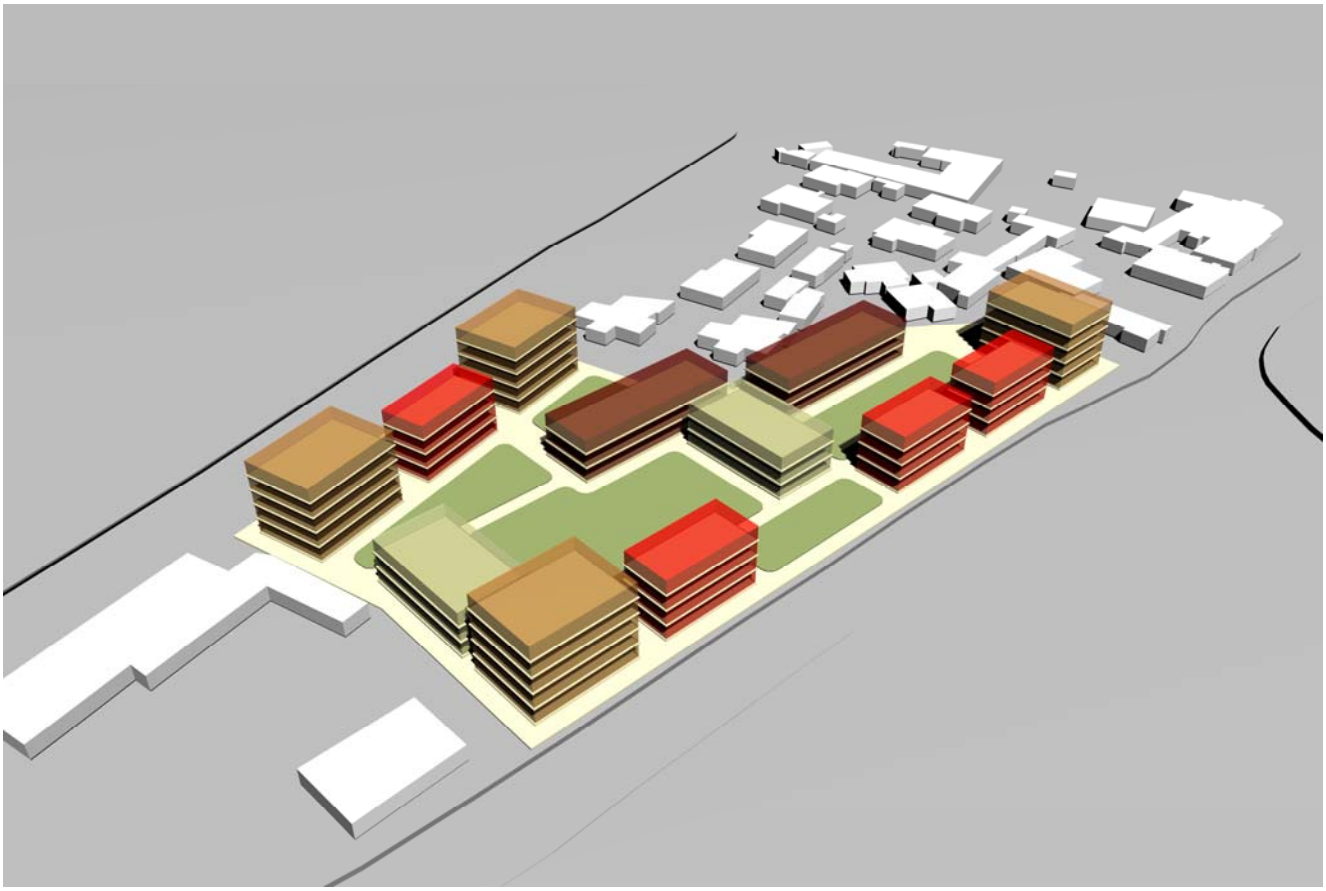

Figure 4: Proposal for One-hectare example

Detailed Calculation of Costs for the One-hectare Example

Table 1

Costs To Private Developer	Per m2	Per 1 ha site	For 6200 m2 of commercial space	For 7,806 m2 residential space	Total (for 14,006 m2)
Land lease (based on market-value bidding)	2000	20,000.00			20,000,000.00
Construction (above average quality incl. landscaping)	2500 / m2 residential & 3000 / m2 commercial		18,600,000	19,515,000	38,115,000.00
Operation and maintenance for first 5 years	@100 birr / m2 / year				7,003,000.00
Total Costs					**65,118,000.00**
Developer's Overhead @ 5%					3,255,900.00
Financing (interest) over 5 years	Based on annual financing at 6.5% for half of cost				5,664,253.19
Marketing of commercial space					100,000.00
Total costs including financing and marketing					**74,318,153.19**
Annual tax and/or infrastructure service fees for first five years	@ 150,000 birr / year for 5 years				750,000.00
Total including tax over 5 years					**74,888,153.19**

The final costs to the developer, including land lease, construction, five years of operation and maintenance, 5% for the developer's overhead, and financing over five years (at 6.5% for half the total cost), marketing, and tax or infrastructure fees would be approximately 74.9 million birr.

Table 2

Infrastructure Costs To Government or Shared (through tax or service fees)	Per km (asphalt 7 m wide)	Perimeter of site (km)	Amount needed for 0.5 ha site*	Total
Roads & sidewalks (where not already present)	2,500,000		375,000	375,000.00
Street lighting (one side)	330,000	0.3	99,000	99,000.00
Sewer line extension and share of treatment plant cost	250,000	0.3	75,000	75,000.00
Electricity lines	200,000	0.3	60,000	60,000.00
Water lines	100,000	0.3	30,000	30,000.00
Maintenance of roads, lighting, water and sewer lines per year				
Total for Capital Investment in Physical Infrastructure				639,000.00
Maintenance of Infrastructure over 10 years @ 80,000 / yr			80,000	800,000.00
Total Capital, Operation and Maintenance for Physical Infrastructure over 10 years				**1,439,000.00**

The total cost of infrastructure for the site, including a share of the cost of sewer line extensions and increased treatment capacity, and maintenance over ten years will be approximately 1.44 million birr.

Detailed Calculation of Income Potential for the One-hectare Example

Table 3

Income to Government / Public Sphere		
Land lease		20,000,000
Tax or service fee assessment over first 10 years		1,500,000
Total for lst 10 years		21,500,000
Infrastructure Capital and Maintenance Costs: (see above)		(1,439,000)
Total Income Minus Infrastructure Costs		**20,061,000**

The cost of the land lease at 2000 birr / m2 for 10,000 m2 (one hectare) will be 20 million birr. This is income to the government. A tax or service fee assessment for the first ten years will help defray the cost of infrastructure, so that the gross revenue to the government is 21.5 million, and the net revenue is over 20 million.

Table 4

Breakdown of Residential Rents / Income	Avg. size of units	per m2	Average monthly rent per unit	Total annual	Number of units	Percent of Units	Total annual rental income
4606 m2 total space for very low and low income	40 m2	2.5	100	1,200	115	59%	138,000.00
1405 m2 space for moderate income	60 m2	10	600	7,200	23	18%	165,600.00
1327 m2 space for mid - high income (townhouse)	72 m2	50	3,600	43,200	18	17%	777,600.00
468 m2 space for very high income (townhouse)	84 m2	55	4,620	55,440	6	6%	332,640.00
Total Annual residential income for 7806 m2					160		**1,413,840**
Average rent per m2			22.2	265.9			

Rents for the very low and low income would range from 40 birr per month to 200 birr per month, with an average of 100 birr per month. While this is considerably more than most current kebele rentals, if one assumes a monthly household income from 200 to 800 birr per month, these amounts would represent about 20 - 25% of monthly income. While these monthly payments would not be sufficient to pay off a construction loan, they would contribute significantly to the maintenance and operation costs, which was not the case with kebele rents. Moderate income units would average about 600 birr a month, or about 30% of a monthly household income of 2,000 birr, but the range could be from 300 – 2000 birr per month. Mid- to high-end town homes of 72 m2 would average 3,600 birr per month, while high-end townhomes of 84 m2 would average 4,620 birr / mo. It would be possible for some of the middle and high income units to be purchased with long-term mortgages instead of rented, since their construction costs could be recovered with 10 to 20 year loans. As mentioned above, it might also be possible to ensure a title to the low-income residents who occupied the unit responsibly for 10 - 15 years. In both cases owners would still need to be assessed a modest annual “homeowner’s association fee” to cover their proportionate share of taxes, operation and maintenance of the buildings. Details of management, ownership and tenant rights and responsibilities will be discussed below.

Table 5

Income to Private Developer / Property Owner (begins within 12 - 18 months of lease of land)	Per m2 per month	Per m2 per year	For 6200 m2 rentable commercial space*	For 7806 m2 rentable residential space*	Total Annual Income
Average Rent for Commercial Space*	160	1920	11,904,000		11,904,000.00
Average Rent for Mixed Income Residential	22.2	265.9		1,413,840.00	1,413,840.00
Total Annual Income					**13,317,840.00**
*					

Total annual income would be 13.3 million birr for the whole site.

Calculation of profit-potential and pay-off time

Table 6

Payoff time for Developer Investement	Total Cost including Operation, Maintenance and Tax for first five years	Annual income	Payoff time for financing in years
Without public subsidy for low income housing	74,888,153.19	13,317,840.00	5.6

Conclusion

In conclusion, the existing practices the Addis Ababa City Administration of allotting a plot of pocket land for real estate development has witnessed its inability to eliminate the cities main challenges. Only the coming up of such projects into existence with their strong social and economic impacts promote the efficiency of the Addis Ababa City which is at dismal position as it stands now.

In light of the above facts one can conclude that Habitat/BERTA mixed-use, mixed income development project which will be initially launched at the Sengatera area is financially, technically, economically, socially and enviromentaly viable.

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