APPROACHES TO THE HOUSING PROBLEMS OF ADDIS ABABA

by

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ABSTRACT

This study traces the housing problems of the growing population of Addis Ababa, the capital of Ethiopia. First it identifies the main problems. These are: (a) The lack of comprehensive planning; (b) The absence of a "house - building industry" which caters to the needs of people in low and middle income ranges -- eighty percent of the population live in semi-permanent mud houses. Nearly all permanent houses are custom built, and most are for families in the highest income bracket; (c) Ownership of land is concentrated amongst three major parties -- the church, the nobility, and the Royal Family; (d) Financing mechanisms are underdeveloped.

The third, fourth, and part of the fifth chapter analyze the nature of the housing problems. The argument is put forth that the problems of Addis Ababa are institutional rather than technical. In particular, the limitation of "self-help" as a strategy for solving urban housing problems is pointed out. It is argued that the "self-help approach", based as it is on rural tradition, is not always applicable to the urban area.

The fifth and the concluding chapter propose solutions to some of the problems. It is suggested that the solution to the housing problems is to be found in creating sound institutional frameworks -- in particular, strengthening existing financial institutions, improving

tax collecting mechanisms, and encouraging some land owners to put their land to residential uses.

INTRODUCTION

Addis Ababa (The New Flower)

Building on the foundations laid in particular by the Emperors Theodoros and Yohannis the IV, Emperor Menelik the II finally brought about the semblance of unity to Ethiopia during the latter parts of the nineteenth century. He then turned his attention to expansion and the acquisition of new territory. His attention was invariably drawn to the west and southwestern part of the country.

The present site of Addis Ababa was chosen as the starting point of a new Ethiopian empire. The Emperor could not have chosen a better site. His subsequent conquests attest to this fact.

In the first place, the Entoto mountain ranges surrounding it provided protection. In the second place, it dominated the routes that the Emperor was to use in his exploratory expeditions. Thirdly, although it is situated within the tropics it enjoys a "softness of climate" rather like the summer climate of Switzerland. Altitude is chiefly responsible for this. At a latitude of 9° N and a longitude of 38° E Addis Ababa is situated in the heart of the horn of Africa, as that part of the continent is known. It also lies more or less half way between the torrid valley of the White Nile and the

infernal coast lines of Eritria and Somaliland, the latter washed by the waters of the Indian Ocean and the former by the Red Sea. In short, it is found in a zone of semi-desert climate. Perhaps a "typical" climate of the area is represented by such cities as Assab and Dire-Dawa. Assab, a port on the Red Sea, has an average temperature of 30° C. and receives a maximum of 130 mm and a minimum of 27 mm of rain. Dire-Dawa, close to the Somaliland border at an altitude of 1200 meters has an average temperature of 25° C. and receives 614 mm of rainfall. Addis Ababa, on the other hand, has an annual average temperature of 16° C. and 1240 mm of rain, another story altogether.

On these heights, the Tse-Tse fly cannot survive; as a result, cattle and draught animals are to be found in abundance. In this respect, the diet of Ethiopians could have been somewhat more balanced than the diets of the people of central and west Africa. It is not balanced because the Coptic orthodox church is a powerful messenger of abstention. Still, more precious gifts of the altitude fall in the realm of health. The Anophelis mosquito has not been known to breed above the altitude of 1900 m;[12] as a result, malaria cannot spread on the plateau. Yellow fever has not been a threat and the germs of cholera are ineffective above 1500 m.[13]

These obvious advantages could not have saved Addis Ababa from sharing the same fate as the dozen or so capitals of Shoa or the scores of cities that have at one time or another served as "capitals" of Ethiopia only to be forgotten completely. A number of factors combined to make Addis a permanent settlement.

The increasing presence of diplomats and foreigners, along with many other aliens who had now started to make Addis Ababa their base of operations, was an important contributing factor in establishing the city permanently.

The fact that the fast growing Eucalyptus tree had been introduced just at the time when the fuel supply of the city was running low meant that moves in quest of new supplies was to be unnecessary. The railway line which connected Addis Ababa to the Sea was a vital factor in the continued growth of the city. By 1930 both Menelik and the daughter that had succeeded him to the throne were gone. Emperor Haile Sillassie had taken over the reigns of power, and Addis Ababa continued to grow in size and stature.

When the Italian forces took over the country in 1936, Mussolini probably had no other choice than to make Addis Ababa the capital of his African Empire. In so

doing he would assure the world that he had destroyed Ethiopian opposition and was in complete control of the whole country. Addis Ababa gained in stature and was destined to be the greatest city of Ethiopia since Axum.

The Emperor returned to his capital in 1941 to find a city which was beginning to take the form of a Euro-American urban center. The estimate of the population at that time was 100,000.

It had a highly transient population made up of soldiers, functionaries, and their large numbers of servants. It grew and developed without adequate control, essentially as a series of separate camps. Even its parts are badly related to each other. Its first buildings, consisting of round houses with conical roofs, were made of semi-permanent materials. Invariably there was a circular fence around each group of houses belonging to a family or to a military unit of an officer to whom the land was given by the Emperor.

The first roads ran along the upper banks of streams and climbed hills nearly always perpendicular to contours.

They must have been well-suited for mule treks.

The Italians wanted to build a city lower down on the slopes with the usual ingredients of colonialism. In 1937 Mussolini approved a development plan for the city. The basic aim was "the separation of the races by creating two distinct sectors -- one for our agents of civilization and another for the native beneficiaries."[14] Six square kilometers of land was reserved for the "native town", one hundred and forty square kilometers for the Italian town. In this same year there were five times as many "natives" as Italians.

By 1941 Mussolini's architects had not gone very far in the implementation of their plan. But they did give the city a new system of roads and several modern buildings.

After 1941 the Ethiopians expanded the urban form that had commenced during the Italitan occupation. At present the "settlement" is well on its way to losing its rural characteristics.

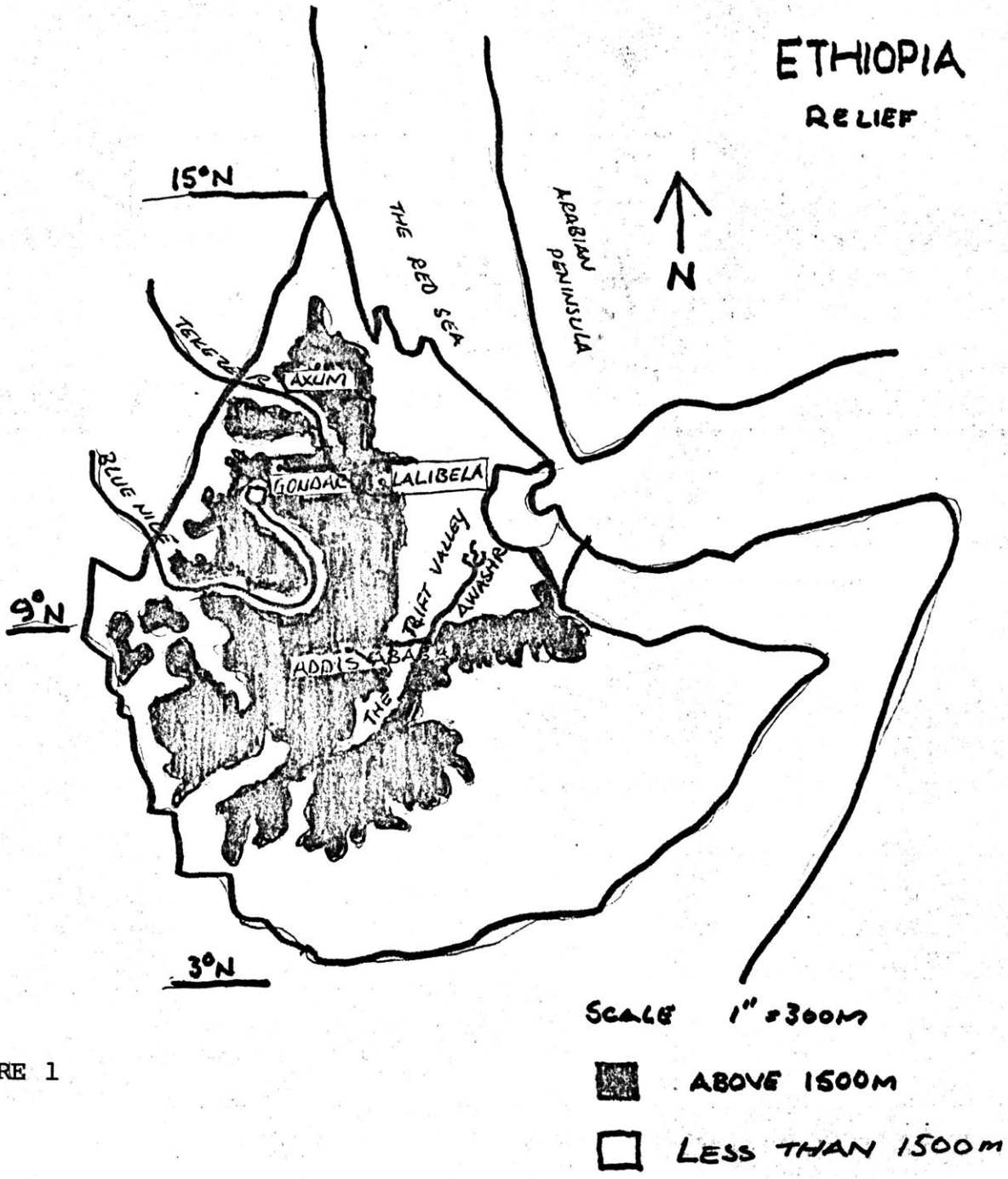
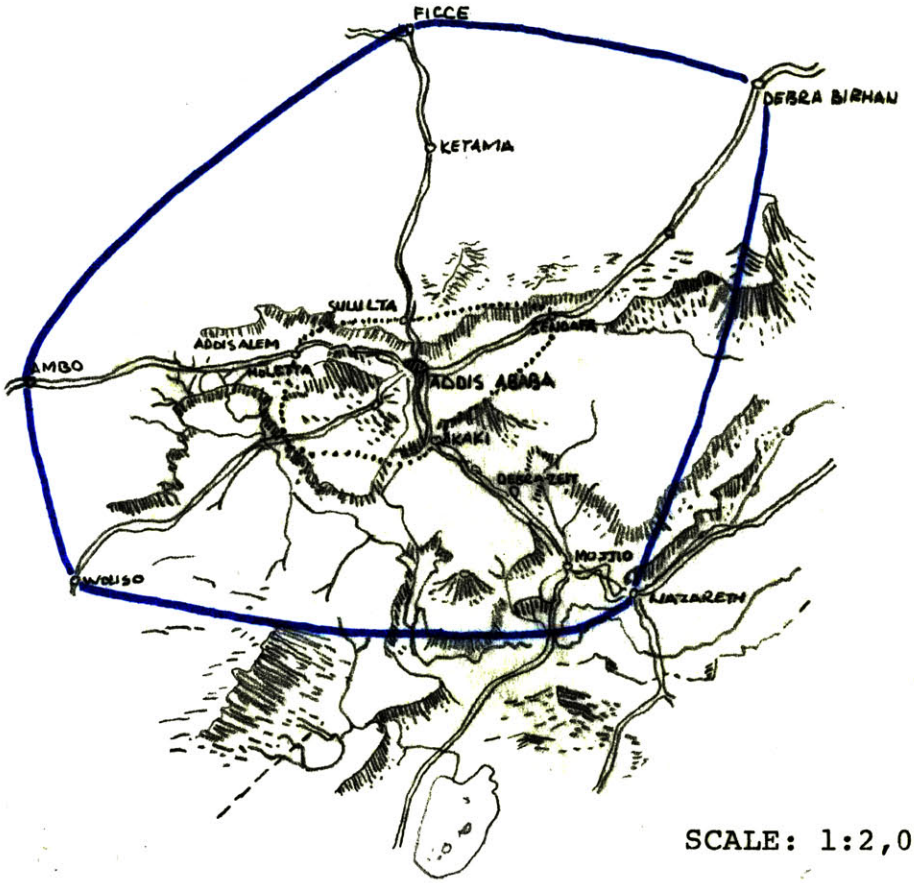

ETHIOPIA
RELIEF
15°N
THE RED SEA
ARABIAN PENINSULA
N
TEKEZE R.
AXUM
GONDAR
LALIBELA
BLUE NILE R.
RIFT VALLEY
AWASH R.
9°N
ADDIS ABABA
THE
3°N
SCALE 1" = 300M
ABOVE 1500M
LESS THAN 1500M

FIGURE 1



SCALE: 1:2,000,000

Figure 4

The Perimeters of the Market Areas
Of Addis Ababa

_____ The area within which Addis Ababa is the main market for the needs of the peasant population.

..... Limits of the area within which peasants walk to the Addis Ababa market.

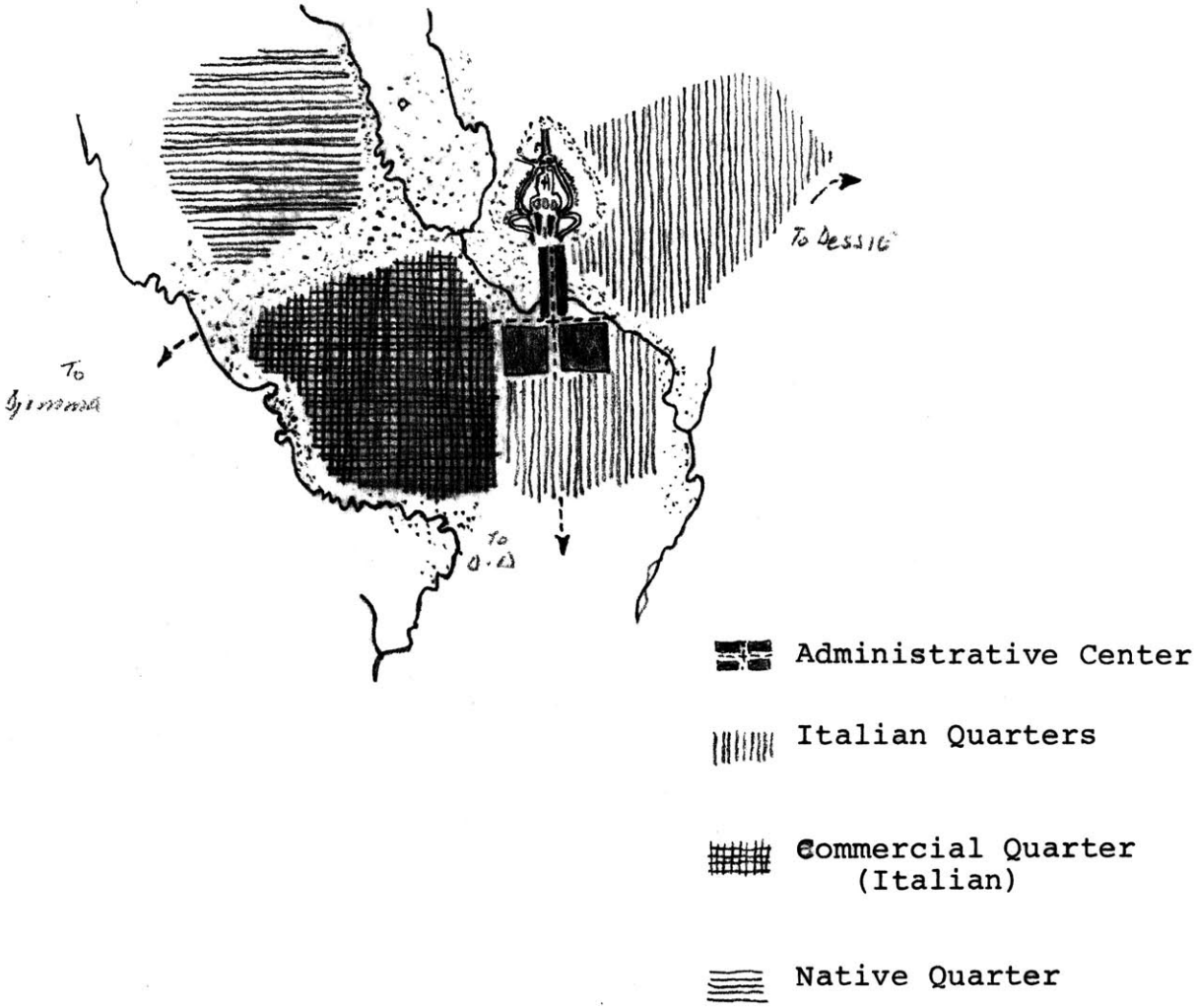


Figure 5

Addis Ababa

The Italian Plan for Ethnic Segregation

--Adapted from *Gli Annali dell Africa Italiana*

The 1967 population estimate is in excess of 500,000. It has become an important diplomatic center, and is the seat of a number of international agencies and commissions. It contains nearly all the head offices of the Imperial Ethiopian Government as well as the country's major industrial concerns.

What are the causes of the city's housing problems? The altitude (8000 ft.) is unkind to weak hearts. Low-landers find it difficult to do strenuous work. The heavy rains (1200 mm, June-September) paralyze the social and economic life of the city for a quarter of the year. Its present site may have been particularly suited for travel by sure-footed mules, but has been found to be extremely difficult to adapt to the demands of today's vehicular transportation.

Addis Ababa is spread out over a vast area (218 km^2) and distances between its various parts are long. Its regions and neighborhoods are badly related to each other. The distribution of water and electricity leave very much to be desired, and the city of over 500,000 does not have a sewage system. Only a few families have provided themselves with individual septic tanks. There is extensive promiscuous defecation along stream banks, in cemeteries, and in open spaces. Laws against urinating in the streets are only strictly enforced when Addis Ababa

hosts an international conference, i.e., when there are "guests" of the government in the city.

The quantity of domestic garbage which accumulates in an Ethiopian household is small. Those which are not reused by households frequently have some value to other members of the community and are removed for further use. Nevertheless, refuse does accumulate and threatens to be a health hazard. Some areas are served by trucks; many others are not. Still today scavenging hayenas come into town and carry away dead animals into the night.

In a country which is overwhelmingly rural (95%) and in a nation which has not had an urban center ever since Axum expired during the fifth century A.D., a concentration of population of the magnitude of Addis Ababa is an anomaly. The rural origin of most of the inhabitants and the long history of serfdom and slavery they bring to the city are still fresh in memory. Only sixty years ago almost fifty percent of the population of Addis Ababa was composed of slaves brought from the south and west of the country after Menelik's compaigns of expansion. While the absence of public toilet facilities may be an important factor in the practice of unsanitary habits, quite as important is the persistence of a rural village mentality amongst the populace. In the long run, establishing an urban tradition and equipping migrants with a frame of mind appropriate to meet the demands of living in

an urban environment may be a more illusive task than has been so far considered.

Very few of the population participate in any meaningful sense in the life of the city. Only a small percentage are employed in productive occupations. The low standard of living of the majority means that the consumption demands are relatively low and are composed primarily of the subsistence requirements of human beings.

Exactly what the nature of unemployment is cannot be said, since records are not kept specifically on this subject. A study of employment carried out by the Ministry of Commerce and Industry in 1961 revealed that there were 61,000 persons employed: 51,000 men and 10,000 women. This estimate represents only fifteen percent of the population, or twenty-two percent of the adult working population. The salaried males represent 38% of the adult male working population and the corresponding figure for females is 10%.

Employment broken down by type of industry was as indicated on the following page. Some of these estimates may be questionable, especially the figure for "domestics" which appears to be unusually low, but on the whole they give a general indication of the extent of unemployment and speak fairly accurately about the narrowness of the

Building and Manufacturing	15,200
Transport and Communications	2,500
Trade and Commerce	10,500
Government	13,000
Domestics	15,000
Others	4,650

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

economic base.

Until the beginning of the fifties there were few Ethiopians in trade and commerce, no entrepreneurs in industry, few technicians and artisans, and only a modest class of "white collar workers". Industrialization proceeded at a relatively slow rate, and urbanization did not as a result present as formidable a task as it would have, had there been significant opening of jobs in industry. But all that is becoming past history.

There are increasing signs of a rising middle class.

Economic activity (production, trade, and employment) has been and will probably continue to increase at a fairly vigorous rate. Most of the published data on economic activity covers the country as a whole, but Addis Ababa, playing a very large role in the total economy shares or exceeds the overall rates of growth. Material which is available, specifically for Addis Ababa, indicates that wages and salaries have been generally moving up at an increasing rate while prices have been rather stable, or have risen at a lower rate of increase.

The wholesale price index for major commodity groups (1958 = 100) stood at 85.5 for 1961, declined in 1962 (80.6), held stable in 1963 (81.2), and increased in 1964 (98.6). The index for "other goods," the nearest available to "consumer price index" (1958 = 100) stood at 96.2 in 1961 and gradually increased to 98.4 by the second quarter of 1964.[15]

Average pay for operative and other employees in manufacturing industries throughout the Empire increased from Eth. $418 in 1959 to Eth. $486 in 1962 to Eth. $663 in 1963,[16] an increase of 58% in four years.

A study of the income distribution of government employees reveals that in the last three years the percentage of those below Eth. $50 per month has decreased from 54% to 34%. The study also shows that the groups

between $50 and $300 per month have increased both in absolute and in relative terms.[17]

Percentage Distribution of Income for Government Workers in Addis Ababa, 1962 and 1965

Monthly Income (Eth.$)	1962 By Class	1962 Cumulative	1965 By Class	1965 Cumulative
Less than 50	54.0	54.0	34.0	34.0
50-100	10.0	64.0	15.4	49.4
100-200	14.5	78.5	18.0	67.4
200-300	8.5	87.0	12.0	79.4
300-400	5.0	92.0	6.0	85.4
400-500	2.5	94.5	3.5	88.9
500-600	2.0	96.5	4.3	93.2
600-700	0.7	97.2	1.7	94.9
700-800	0.8	98.0	1.2	96.1
800-1000	0.5	98.5	1.4	97.5
1000 and above	1.5	100.0	2.5	100.0

Although figures are not readily available for the private sector, the same trend of increasing incomes can be surmised. In fact, it is generally recognized that the larger and more progressive private firms pay their employees higher salaries than is generally to be found in government service. Thus an increasing number of people are enjoying a higher standard of living and a growing number of workers are entering the "middle class."

A crucial question may be posed: How is the resultant demand for better housing being met?

The subsequent chapters of this thesis will deal with those questions in more detail, but in general these demands are not being met adequately. As we shall see, the problems are not so much "technical" as they are "institutional." Any approach must make due note of this fact.

There is no "home building industry" which caters to the need of people in the low and middle income ranges, or for that matter even to those in the upper income range. Houses now being constructed are entirely custom built and most are for families in the highest income bracket. Many of the better quality houses have been built to rent to Europeans and Americans or to Embassies. Custom built housing obviously results in higher costs than would be the case if housing were constructed in groups.

At present there are basically two types of houses in Addis Ababa. One is the traditional semi-permanent cheap construction and the other is the Euro-American permanent and expensive construction. Not infrequently the plans for the latter come directly from copies of *Better Homes and Gardens* magazine. The absence of any intermediate

class of housing in Addis Ababa means that those in the middle class make do with the cheaper, less permanent type of housing, competing for available housing with those in the low-income group. As a result, the housing problem of the low-income group is aggravated.

Thus, the ranks of a frustrated and dissatisfied middle class are growing and so are the pressures on the lower class. A growing number of the children of bus boys, domestic helpers, servants, unskilled workers, etc. are now going to school, and tomorrow they will insist on being admitted into the "bourgeoise class" -- the pressure is thus not letting up. It is only unfortunate that the efforts required to meet some of the basic demands fall short of needs not always because resources are meager, but because they are either misplaced or wasted.

Instead of ameliorating the housing condition of the poor, the ostentatious ambition of the leadership has tended to intensify it.

Addis Ababa has a first-class international airport, a Hilton Hotel is under construction, and a number of prestigous projects dot the city skyline. Many of these public and private projects are built on land which had previously contained the sub-standard housing of those in the low-income bracket. The number of displaced families

is growing, and so far there are no measures taken to assist in rehousing such families. A United States survey team studying the problem of housing in Ethiopia asked the municipal official responsible for planning of Addis Ababa what happens to such families. His reply was, "They just disappear."[18]

A badly needed sewage system is not yet planned and the present facilities for the distribution of water will soon be inadequate to meet the needs of a fast growing city. The ambition of the present leadership of the country seems to be to make Addis Ababa the leading political and diplomatic center of Africa. No doubt the astuteness of the Emperor has assured the city a leading place in such affairs. The large number of delegates who come to the city to attend numerous conferences may be witness to the role of Addis Ababa. Tourism is also becoming an important industry. This is all very well. The unfortunate thing is the crude "manner" in which some of the city's chronic problems are solved. Invariably the "poor" and "undesirable" are pushed around. In an effort to make the city respectable, municipal authorities give it pathetic airs. Nine-foot long corrugated iron sheets are put up along the main thoroughfare to hide the slums. The city's prostitutes

are instructed not to solicit in public. Urinating along the streets is forbidden, and police vans pick up the numerous beggars and deposit most of them in an institution called Kolfe, some kilometers west of the city. These beggars are kept in a fenced compound. They sleep in barracks made out of the ubiquitous iron sheet. Once a day they are given a meal of "injera" and "wot."

During conference weeks, Addis Ababa wears a deceptively middle-class air. The rich can eat in expensive restaurants without any "moral" pangs. At the completion of a meal one may leave the establishment without the danger of being confronted by a beggar half wasted from hunger.

Of course, the absence of "moral pangs" tends to be short-lived. Beggars come back to the city as soon as the delegates have flown to their countries. At Kolfe the guarding system relaxes. Meanwhile the tourist who stays on is told that Addis Ababa is "a city of contrast."

The renown English "town planner," Sir Patrick Abercrombie, had prepared a master plan for the development of tomorrow's Addis Ababa. It was a plan based on the topology of an existing land-tenure pattern,[19] where together with 1700 feudal lords the Emperor and the church own 75% of the land. The fact that the plan did not make a dent in the anarchic growth of Addis Ababa is living witness

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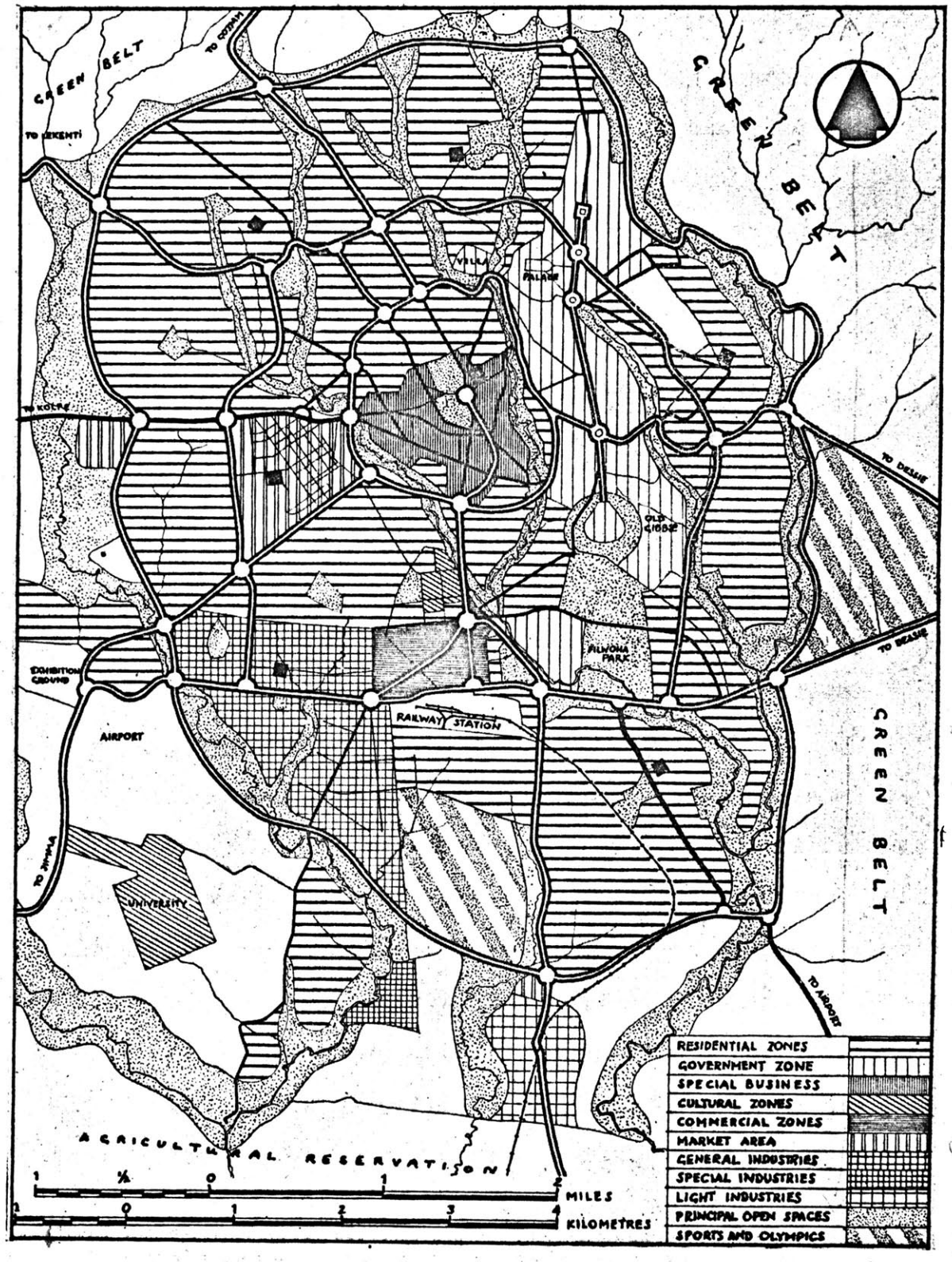
[19] J.C. Amos has described the basic features of the plan in an article in *Ethiopia Observer*, Vol. VI, No. 1. Berlan has a section on master plans in his book.

FIGURE 7



Plan of Addis Ababa, showing Sir Patrick Abercrombie's scheme for the road network and the sones allocated for various purposes

FROM: *Ethiopia Observer*
Vol. VI, No. 1

to the indispensibility of a responsive and responsible political and administrative machinery as pre-requisites of urban development.

Land costs in the city are highly exaggerated. The distance between home and work have become longer. Unwarranted statutory limitations and a conservative attitude towards mortgage financing have curtailed the production of housing especially for the middle income groups. As more and more substandard houses are cleared to make way for public buildings, those in the low-income bracket crowd into existing units, invariably situated far from the centers of employment. The worker now spends a disproportionate part of his time and income in getting to his job and back to his home.

Addis Ababa does of course possess, as J.C. Amos has put it, "much of the requisites for creating an efficient, handsome, and satisfying city."[20] There is no doubt that in time even the ambitions of the present Emperor could be fulfilled. Much will depend on whether the present policy can be corrected or not. Much of the correction will depend on the disposition of those who govern and those who own land -- one and the same group. This group is composed of the Church, the Emperor, and the nobility.

This group owns eighty percent of the land and a

substantial majority of the buildings of Addis Ababa.

[NOTE: Dollar figures throughout the report are designated as Ethiopian dollars. The conversion rate is approximately 2.5 Ethiopian dollars to one U.S. dollar.]

CHAPTER ONE

ADDIS ABABA AND THE OVERALL DEVELOPMENT PATTERN

General

Urbanization is a relatively insignificant phenomenon in the Ethiopian scene. Ninety-five percent of Ethiopians live in the rural areas. Apart from Addis Ababa, there are only five cities of any size (above 30,000).

Yet these cities, and in particular Addis Ababa, feature in a most significant way in the manner in which they consume available resources. Much more attention is payed to the physical development of these cities than would be indicated by their potential for bringing about overall economic development. They are provided with scarce resources in spite of the fact that there is a widely held view that the future of the country lies in the extensive development of its agricultural potential.

It appears that resource allocation decisions are not closely allied with the rapid overall growth of the country. One must bear in mind that this is too broad a subject to be dealt with only briefly. Indeed, it may also be beyond the scope of this thesis. We need to address ourselves only to one minor aspect of

the question. That is, what is a realistic growth pattern for Addis Ababa -- one that would not steal valuable funds from other growth patterns? A brief look at the country's economy might provide some clues.

The Economy

Agriculture is the mainstay of the Ethiopian economy. As can be seen in the table below, it forms the major part of the gross domestic product. In terms of per capita income, Ethiopia is a poor country. The current figure is Eth.$120/annum.

Agriculture in the Gross Domestic Product[1]

YEAR	G.D.P. (Million Eth.$)	Share of Agriculture	% Of Total
1961	2,130	1,477	69.6
1965	2,613	1,660	63.2

Ethiopia has an export-oriented economy. Exports contribute almost eighty percent of the money product of the country. Furthermore, the contribution of agricultural products to the value of total exports is approximately ninety percent, of which by far the greatest contribution is made by coffee (sixty percent).[2]

When the world price of coffee declined, the Ethiopian economy experienced a severe setback. By 1962 the fall in coffee exports had cost the country income of foreign currency equivalent to Eth.$129 million.[3] A considerable number of projects dependent on this income have had to be slowed down or postponed.

Since the agricultural sector plays a dominant role in the overall production of the economy, it is evident that the slow increase in agricultural production must be to some extent checking the development of other branches of the economy.

Lack of Regional Planning

Clearly a vigorous policy of diversifying agricultural products could have helped, but such policy was not forcefully followed. Available resources could have been allocated to those agricultural regions thought to contain promising potentials, but such was not always the case.

The evidence shows that the rural agricultural areas give substantially to the central treasury and in return receive little or nothing. Capital expenditure for 1961-1962 was Eth.$71.3 million, out of which only Eth.$3.4 million went into agricultural expansion. The figures for 1962-1963 are less encouraging in this respect.

The amount of investment in rural agriculture declined both in relative and absolute terms. Out of Eth.$94.3 million, only Eth.$2.4 million went into rural agriculture.[4] The bulk of the investment was made directly in the urban areas or was of such a nature that it promoted principally the growth of the few existing cities. Taxes derived from agricultural production are an important source of government revenues (Eth.$46 million in 1962-1963); yet budgetary allocation for agriculture is lower than for many other sectors of the economy. The Ministry of Agriculture has only half the budget that is allocated to the Ministry of Information (the propaganda arm of the government) and the Ministry of Foreign Affairs is allocated nearly three times as much. Nearly forty percent of government funds go for defence purposes.

The significance of this for regional development is obvious. The funds of the Ministry of Foreign Affairs and those of the Ministry of Information are spent almost exclusively in Addis Ababa or in embassies and consulates all over the world. The rural sectors derive only marginal benefits from this pattern of resource allocation. It is claimed that investment resources not directly funneled into enhancing the agricultural export market eventually benefit even the

rural farm communities. This suggests that it is superfluous to bicker about the exact placement of investment funds. The proponents of this thesis suggest that ultimately the whole country would gain. At best this is sugar-coating a deception. The key question is one of timing. Very few are prepared to say how long a time is implied by the word "ultimately." In reality rural farm communities would have to wait for a very long time before visible benefits accrued to them from the operations of an International Airport in Addis Ababa or Asmara. The construction of the international airports of Addis Ababa and Asmara, along with the purchase of three Boeing 707 jets, consumed 77% of the capital expenditure of the nation for the year 1962-1963.[5] In Government documents, this investment appears under the unassuming table, "Development of Infrastructure". One does not quarrel with the advantages offered by the modern airline and the country should not be derided for having the forsight to acquire such a service. However, attention needs to be focused on the generally held view that the salvation of the country lies in developing its rich agricultural resources. Urban centers like Addis Ababa and any other new population centers that may be planned in the future must need to be placed within this general

frame of aspirations. Their growth must emanate from the planned pattern of development that needs to be elaborated for the country as a whole. Urban centers would then be allowed to consume resources in relation to the functions they perform in the Ethiopian economy. In the past this has not been so. One hopes for change in the future.

Regional Planning Procedure

Let us assume that Ethiopia will embark on a major policy of attempting to improve present agriculture, thereby emphasizing the physical development of the rural sector. It is not the purpose of this study to examine or debate the merits of such a policy. Rather it is to consider any relevant matter which may assist in the formulation of a framework for the planning process that will be required. In particular, the aim is to extract a guideline that would help, as the title of this section implies, to establish the place of Addis Ababa in the overall development pattern.

It is essential that development be carried through on a regional planning basis. So far development plans have focused only on a sectoral approach.

(A) First, some criteria must be developed to define a region. These criteria should be broad enough

in scope to include a converging number of different but essentially related problems. For example, a region implies a unit wherein a distinct pattern of socio-economic characteristics prevails. A region need not necessarily imply a single geographic unit; nor should it be necessary for a region to coincide with political or administrative units.

(B) Secondly, some sort of an "inventory" would have to be taken of the different regions so that areas could be systematically categorized. Georgulous of Syracuse University has suggested a checklist of elements that he has found useful in evaluating a region's potential.[6] This evaluation provides a classification system for a country embarking on development based on promising agricultural potential. It appears to be readily applicable for the case of Ethiopia. A summary follows.

Physical and Environmental. Rainfall potential, water supply, soil topography, natural pastures, animal and human diseases.

Cultural. Population and density, main occupation, tribal, political, and religious characteristics.

Technical. Communications, available irrigation, manpower and technical "know how", education, health,

agricultural surplus (if any), types of agriculture (live stock, cash crop), etc.

Much of this information exists, though perhaps in it is not/readily digestible forms. Obviously supplementary research is necessary in order to fill the gaps.

(C) Thirdly, planning regions will have to be defined. These regions would differ from general regions defined earlier in that certain problems and characteristics are assigned "numerical weights" enabling a methodical comparison of different areas. For example, areas of similar population densities, soil conditions, water deficiency, etc. may be defined and coded by a numerical weight. This analysis might lead to a series of ranked regional groupings which will form the basis for decisions for resource allocation. In the case of Tanzania, Georgulous[7] has suggested the following four groupings that also appear to meet the needs for regional planning in Ethiopia.

1. Highly promising regions, which will include all areas which have favorable characteristics for rapid development involving the least expenditure.

2. Promising regions, which will include all areas which have favorable physical environmental and cultural characteristics but which have inadequate technical

facilities, the provision of which is likely to be expensive.

3. Moderately promising regions, which because of severe inadequacies of certain essential requirements, such as water, would be restricted to extensive rather than intensive development.

4. Limited promising regions, which because of the overall adverse condition would not hold great promise of improving their existing state.

The four suggested regional definitions provide a basis for the criteria which can be selected to determine the degree of desirability for development. One must bear in mind, however, that there are certain political realities which cannot be overlooked. For example, too much concentration of development resources in any one particular region may generate dissatisfaction and unrest in other areas. Note that this has not been too much of a problem so far as urban centers are concerned because cities and towns lack homogeneity in tribal makeup.

(D) The final stage of the process is the preparation of regional development plans. Limited resources (both capital and human) available for development necessitate concentrated investment if maximum returns are to be realized. For this reason, development priorities

must be determined. It might be suggested that regions where the least expenditure is required and which are likely to develop more rapidly and hence contribute positively in terms of productive output receive priority investment. In such a system the development of the lower ranking regions would not be encouraged initially.

Regional classification is not intended to convey a static nature of homogeneous units, for as regions develop their characteristics inevitably change. Regional development creates a chain reaction which influences surrounding areas, creating in these more favorable conditions for development. Flexibility in classification and a periodic redefinition of regions is essential if a changing economic environment is to be accomodated.

Guidelines for Addis Ababa

Perhaps two major points could be made in regard to the place of Addis Ababa in this scheme of things.

(1) It may be that resources for the development of housing in Addis Ababa will be provided only after the resources for a village development scheme designed to exploit the richer agricultural potentials of the lowland have been considered. It is clear that a sound

regional development plan based on the exploitation of promising resources would tend to stifle arbitrary funnelling of funds into the aggrandisement of the city. The city's projects will have to be justified in terms of the contribution they might make to overall development. This is as it should be.

(2) It might be more profitable to focus on the role Addis Ababa might play in accelerating the growth of its immediate vicinity. The city should be able to play a vital role in promoting the growth of export agriculture in the Shoa province where it is located. It does seem to make more sense for the city to play host to the needs of the farming community of its hinterland than to pay dearly for the distinction of being the home of the headquarters of the Organization of African Unity.

Obviously, in spite of what has been said in (1) and (2), Addis Ababa does merit some special consideration, particularly as it fulfills the role of the nation's capital. In this case, such resources as are required to make it function efficiently would have to be provided independently of any regional development considerations.

Planning Agency

Some words need to be said in regard to the agency or agencies that would "author" and "audit" regional development plans for Ethiopia.

At present the series of five year development plans are worked out by the Ministry for Planning and Economic Development. This institution is headed by the Cabinet level minister. So far the work of the Ministry (and the board it has replaced) has consisted mainly in documenting the activities of the various other so-called development ministries. The Ministry of Planning controls no funds and in the past has not had much say in the allocation of public resources. Each development minister has fought for those projects which he is especially interested in. Obviously, coordination of efforts has been seriously lacking.

If the regional development scheme is to have a better than average chance of success, two important things must happen:

(1) The Minister of Planning and Economic Development must have greater say in the planning process. The present functions of the so-called development ministries need not change. But their final product must meet with the approval of the Planning and Economic Development Ministry. This ministry should take all the

planned projects and pass them through a final loop, applying appropriate tests to see that regional, sectoral, and national goals of development are being enhanced.

(2) No drastic revisions in the present organizational set-up is required, but the post of the Minister of Planning and Economic Development needs to be elevated to that of an Assistant Prime-Minister so that he may be able to fulfill his expanded duties satisfactorily.

Meticulous care and effort during the planning process is not in itself adequate to ensure the success of a regional plan. Existing political arrangements are very often responsible for the success or failure of the plan. In the final analysis good planning is dependent on good politics.

CHAPTER TWO

HOUSING REQUIREMENTS AND EFFECTIVE DEMAND

General

Housing is and should be a public interest. Because of the diversification of the building industry, no single individual or firm in the complex range of trades, professions and manufacturing industries has sufficient interest to initiate a comprehensive approach to housing. The only party with vital interest, the occupant of the dwelling, has been unorganized and unable to formulate his needs articulately. The representative of these occupants is the government which should hold a watching-brief at least in matters of health and safety. A government so inclined would obviously need to state the problem of housing in more specific terms. It would probably start out by asking key questions.

The type of answers sought must include estimates of that part of the housing need without which the regional development program would never be fulfilled.

Professor Rodwin has argued the futility of making total housing estimates if these needs stand no chance of ever being fulfilled. The point is well made. But an

important Evangelical purpose might be served if the exact measure of the housing shortage is graphically documented. Depicting squalor and sordidness may not move the housing expert, who no doubt witnesses these shortcomings as a regular part of his or her experience; but it might move certain of the local leadership who are far removed from knowing the lot of the poor. Therefore, although one recognizes the importance of working with realistic and attainable housing goals, it does seem to be necessary to devote some space to the measurement of total housing needs; that is, a measure of all families who are inadequately housed in relation to some present minimum standards as to housing quality. In addition, it is desirable to try to measure effective demand in terms of the number of units required by families in various income groups and the prices at which they can afford to

acquire the needed housing. Finally, consideration must be given to an estimate of immediate, or near-term market demand which is limited to that portion of effective demand which can be supplied by private enterprise. This portion must usually be discounted by the number of families who, for one reason or another, may be expected not to enter the market or to delay their entry.

The type of information needed to determine housing requirements and effective demand includes: (1) reliable and up-to-date data on population and family characteristics and trends; (2) data on migration; (3) data on wages and salaries paid and a percentage distribution by income groups of total family, or household, incomes; (4) information on the level and trends of economic activity and employment; (5) a reasonably current survey of housing conditions (quantity, quality, size and density of occupancy of the existing stock of housing); (6) the rate and trend of "standard" residential construction; (7) a concept of accepted minimum standards of accommodation; and (8) financing terms available, or that can become available, in the market area. A considerable amount of data on these questions was found to be available for Addis Ababa, albeit not as complete or timely as might be desired, but sufficient to provide the framework for analysis.

What follows is a description, explanation, and account of results of that analysis.

Measurement of housing requirements in any given housing market area is a difficult and precarious exercise at best. I am well aware that this is especially true in this analysis, but a start would have to be made somewhere. All too often the analysis of Addis Ababa's housing problems have been taken only as far as some choice moral statement would take them: "It is bad!" "It should be improved." "The government should do something about it."

Of course, effective action cannot be taken only on the basis of moral statement. However, sufficient warning cannot be given that this analysis is only preliminary, perhaps a first phase construction of a perspective of needs and requirements.

Analysis of Total Housing Need in Addis Ababa

The Housing Market Area

A housing market is defined as the area within which the population normally lives and works. This would usually consist of the central city which contains the principal population and employment concentrations and the adjacent suburban areas. In the case of Addis Ababa, such suburban development as exists is within the limits of the city proper which, without adjustment either outward or inward,

makes up an appropriate area for housing market analysis. It should be borne in mind, however, particularly in considering market demand, that some of the outlying areas within the city, while not great in distance from the central area, are not adequately served by roads, public transportation, water or other facilities and would not, therefore, be attractive to home-seekers unless, and until, such facilities are provides.

Population Growth and Migration in Addis Ababa

During its early days, Addis Ababa knew extreme variations in the size of its population. At the time of the Battle of Adwa in 1896, it was no more than a large village of women, priests, and infants. Every conquest of the Emperor Menelik brought to the capital large contingents of slaves.

The city that Gleichen saw in 1897 contained 30,000 people on an area approximately fifteen square kilometers, which works out to a density of 20 persons per hectare.[33] Dr. Merab's estimate of 1909 was 60,000, a number which he said may fall to as low as 40,000 during the heavy rainy season when work was scarce.[34] From a rough plan made by De Castro at about the same time, Berlan has estimated that the city covered thirty square kilometers. This area again gives a density of twenty person per hectare. Merab suggests that of the 60,000 inhabitants of the city 25,000 were slaves, 15,000 from Shankalla,

8,000 from Oulamo, and 2,000 from Gurages.[36]

We are indebted to A. Zervos for the next series of estimates: 70,000 in 1916 and 100,000 in 1935.[37]

In 1938 the Italian Colonial Regime carried out a survey of population of the Ethiopian inhabitants of the city. The number given was 86,468. It is important to note that this estimate did not include the Italian population, nor did it include the Ethiopians in the service of the Italian government -- civil or military. Berlan estimates that there might have been 25,000 Ethiopians in the service of the Italian government and ascertains from Italian records that there were 28,000 Italians in Addis Ababa at the end of December 1938.[38] The Ethiopian population of 1938 then was given as 110,000 (which confirms Zervos' estimate of 1935). All Italians and other foreigners in the population totalled 140,000.

After the reestablishment of Ethiopian independence in 1941, there was a sizeable migration to the city from all over the country. In 1946 a town planning committee gave a new estimate of population -- 180,000 inhabitants.[40] The area included within the city limits was seventy-two square kilometers. This worked out to a gross density of twenty-five persons per hectare.

In 1950 the municipality of Addis Ababa together with the Ministry of Interior and with the assistance of

two hundred students made a partial survey of the population of the city.[41] The estimate arrived at by this survey was 400,000.[42] The area now officially being included within the city limits shot up to 240 square kilometers, but seventy percent of this area was farm land. In any case, the survey result was able to record that the gross density had now gone down to seventeen persons per hectare.

Finally, in 1961 a more elaborate survey of population and housing was carried out. Addis Ababa had by then become the largest city in Africa between Cairo and Johannesberg, and the fifth ranking in population of all African cities.

The 1961 census[43] reported 435,016 population in private households, exclusive of institutional population and the homeless, with 123,755 households -- defined as a group of people who slept in the same or related quarters and who had common arrangements for meals. The average size of household was 3.51 persons (median 2.39). The corresponding figure given by survey I is 3.53; by survey II, 3.93. (See Appendix A for details of surveys I and II.)

Population Growth

The estimated rate of natural increase in population for Ethiopia has been a subject of controversy. Most

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[41]The author was amongst these students.

[43]See appendix -- extract from *Statistical Abstract*

of the early estimates were based on Italian estimates, given out in 1936-1941 when Mussolini's forces occupied Ethiopia. It is believed that the Italians may have underestimated the population at that time to suit a policy of colonization and a program of white settlements. Subsequent estimates based on the Italian estimates are believed to be on the low side.

It is also believed that even the Ethiopian estimates themselves tend to be on the low side, but for a different reason. As Professor Mesfin puts it:

> These estimates are essentially based on the estimates of the "chica shums," or village chiefs who, it must be noted, are mostly illiterate and do not have any idea of their purpose. For them 100 is a very big number and 1000 is the ultimate number. Actual count by these village chiefs is difficult to effect simply because they themselves are victims of the general superstitious belief that to count people will bring bad luck to them.[44]

The National Planning Board's estimate for Ethiopia as a whole is 1.6 percent per annum.[45] Professor Mesfin's estimate is 2.0 percent per annum,[46] but other estimates have been lower. United Nations documents nearly always put it at 1.8 percent per annum. For the purpose of this analysis we have adopted the U.N. rate of growth because it seems to be a compromise between the conservative and the liberal estimates. It will also result in housing requirements somewhat larger than official esti-

mates would make them out to be.

Addis Ababa, the capital city, is of course a magnet for in-migration from other parts of the country as well as from outside the country, so that its growth rate is bound to be larger. Between 1938 and 1957 the growth rate was about 2.73 percent per annum. In the future this rate is likely to be higher.[48] The marked growth of the industrial sector is likely to push Ethiopian society into a more and more urbanized society.

In the rural sector, as total population increases, fragmentation of land-holding will dimish farm sizes until only one heir can eke out a living from working the land, while other claimants must be obliged to look for salaried employment in the city.

A survey carried out by the University College of Addis Ababa, in cooperation with the Economic Commission for Africa, early in 1962, revealed that of the reasons offered by 600 immigrants for their move to Addis Ababa, employment was given as having provoked the immigration in 57.5 percent of the cases.[49]

Secondary factors will also accelerate the process. People move towards towns not only to escape from unemployment and hunger, but also so that their children may have easier access to education, medical care, and the numerous advantages of modern civilization.

According to the E.C.A. survey (already mentioned), the desire for educational opportunities (in most cases professional or vocational training) was the third most important reason (after employment and "family ties") for migration (11.7 percent). The desire for modernization, which is springing up in the most remote country districts, will precipitate urbanization. Visits of emigrants to birth places, exchange of news, spread of novelties from the town will add speed to the process.

The expansion of the network of highways of the nation is also likely to increase the quantity and the diversity of immigrants. The ECA survey which related origin of the immigrant population to difficulties of communication seems to substantiate this view. More than half of the immigrants interviewed came from SHOA province in which Addis Ababa is situated. This province has more than its share of towns and villages that are served by buses and lorries.

Although the province of Illubabor is nearer to Addis Ababa than Eritrea, there were more immigrants from the latter province. Eritrea is connected by road to Addis Ababa; Illubabor is not.

More women migrate to Addis Ababa than men. According to this survey, they outnumber the men in all age groups, except that of people over fifty years of age. In the rural areas the woman has always been unobtrusive. The

most noteworthy accomplishment of urbanization has perhaps been the emancipation of women. It is only a pity that a closer look reveals that this emancipation has stripped the Ethiopian women of their traditional means of existence without giving them access to new ones. Prostitution appears to be the most popular occupation of immigrant women. It is debatable whether this is a new means of existence or a subtle form of slavery.

The ECA survey also reveals that 59.8 percent of the migrants were in the adult age group (15-31 years).

All told, to the potential migrant, the prospect for a better life in Addis Ababa appears to be so much greater than anywhere else in the country that in the future increased rates of urban population growth can be expected.

For the purpose of this analysis we have chosen two rates of increase -- 3.2 percent per annum, cumulative, to estimate increases from 1961 (the census year) to 1967; and 3.5 percent per annum, also cumulative, to project population and households to 1970.

Using the rates of increase of 3.2 and 3.5 percent, compounded annually, and the average number of persons per household of 3.51, we arrive at the following estimates of population and households for 1967 and 1970. We have not considered any change in the size of the households. The main reason for this is that, as we have already taken

the lowest figure of the three available survey results, we may have already compensated for any future reduction in the household sizes.

	Census 1961	1967	1970
Population in Households	435,016	519,500	592,300
Households	123,755	148,000	169,000

Interestingly, the estimated total population for 1967 approximates the 500,000 which those with informed opinions most frequently cite as an estimate of current population.

Family Income Estimates

Family income, as a determinant of ability-to-pay for housing, is a crucial factor in housing market analysis. The 1961 census did not report on incomes, and the results of surveys I and II in this respect were found to be incomplete. Two published sources were found which were helpful in constructing a picture of incomes and income distribution by various groups. One was a table on Civilian Employment paid by the head offices of the Government Ministries and departments in Addis Ababa as of January, 1962 (excluding the Defense Ministry but including the Municipality).[50] The income of 19,812 employees

was reported in a detailed distribution by income groups. The other source was a similar table for the year 1965. This table included a section on salaries of employees of selected private firms, also reported in a detailed distribution by income groups.[51]

Two income distribution curves were constructed: one for the private sector, and the other for government employees.

It was recognized that the distribution curve constructed for the private sector was probably weighted on the high side because the firms selected have a reputation of paying higher wages. Besides, the private sector's coverage excluded the many tradesmen and individual entrepreneurs whose remunerations are known to be lower. It was decided to select an income distribution curve slightly biased towards the public sector's curve. It is felt that, in this way, a reasonably representative distribution of incomes from all types of employment will be had.

An adjustment was then made for secondary sources of income in the form of earnings of secondary workers in the family, bonuses, and other employment benefits; also rents received and any other extra income in cash or in kind. Reliance had to be placed upon the results of surveys I and II. The adjustment factor derived had the effect on the average of increasing family income by ten

percent in the less than Eth.$200 per month group, fifteen percent in the Eth.$200 to $500 per month group, and twenty percent for families receiving over Eth.$500 per month of primary income. The resulting income distribution is shown in Table 3.

Backlog of Housing Requirements in 1961; Setting Minimum Standards

The 1961 census reported four types of construction. To make comparisons easier the results of survey I and II, so far as "type of construction" is concerned, have also been arranged in the same format as the census reports.

The census report states that "if the first two classes of construction can be regarded as providing reasonably complete protection from the weather then it would appear that forty-three percent of households were living under these conditions." It follows that the remaining 57 percent were living in conditions below this standard of weather protection.[52]

In the case of survey I, thirty percent of the houses provided reasonable protection from the weather while seventy percent were below this standard. The corresponding figures for survey II were thirty-five percent and sixty-five percent.

Setting minimum standards of acceptable livability in an economy such as that of Addis Ababa is an extremely

Table 3

PERCENTAGE DISTRIBUTION OF TOTAL FAMILY INCOMES

Family Income Monthly, ETH $	Percent By Class	Percent Cumulative
less than 50	27.05	27.05
50 - 100	16.20	43.25
100 - 200	20.50	63.75
200 - 300	13.50	77.25
300 - 400	7.50	84.75
400 - 500	4.65	84.40
500 - 600	4.10	93.50
600 - 700	1.80	95.30
700 - 800	1.10	96.40
800 - 1000	1.30	97.70
1000 and over	2.30	100.00
	100.00	

difficult thing to do. No such minimum standards have been pronounced, or suggested, either officially or unofficially, unless the census classification by type of construction may be taken as a suggestion. Since the setting of such a standard is essential to the analysis of housing requirements, it is suggested that the "weather proof" criteria be adopted as an approximate bench-mark for present purposes of analysis. Depending on whether we adopt the census figure for the number of non-weather proff houses, or the one indicated by surveys I and II, we conclude that in 1961-1962 between 57% and 67% of the houses in Addis Ababa did not provide protection against the weather. The larger sample of the census would probably give a somewhat more representative picture than the results of the much smaller samples of surveys I and II. For this reason a figure close to 57% - 60% is adopted for the purpose of this analysis. This properly leaves to the future, and to local determination, the more specific definitions of what should be considered to be minimum standards of construction and occupancy in the interest of safety, health and livability.

If we apply to the total number of households of 123,755 in 1961 the sixty percent figure of those considered to be below minimum standards of livability, we derive 74,250 units of substandard or overcrowded housing.

Now that we have derived the total number of sub-

standard dwellings, we must attempt to apportion them amongst the different income groups. It is generally agreed that such units are to be found among all income groups. Although the households of surveys I and II do not represent the whole range of income groups, the results do attest to the fact that sub-standard houses are found in the various income groups. For example, it is indicated that there were proportionately equal segments of the houses in the income groups below $50, $50-$100, and $100-$200 which needed major and minor repairs on the roof. We may therefore feel justified in apportioning the total sub-standard units amongst all income groups in accordance with the percentage of families in each, as shown in Table 4.

Adjusted Housing Requirements in 1967 and 1970

To determine the current housing requirements, and to project them three years in advance for 1970, it is necessary to take into account new family formations and new standard residential construction over these periods. Ordinarily vacancies in "standard" housing, if they existed in significant numbers, would also be taken into account. In this market, vacancies are a negligible factor in the supply of housing.

Based upon the assumed annual rate of increase in population and households of 3.2 percent, there would have been 24,300 additional households created in the

Table 4

BACKLOG OF SUB-STANDARD AND OVERCROWDED HOUSING 1961

Monthly Income ETH $	Percent of Families	Substandard and Overcrowded Housing
TOTAL	100.00	74,250
less than 50	27.05	20,120
50 - 100	16.20	12,060
100 - 200	20.50	15,250
200 - 300	13.50	10,020
300 - 400	7.50	5,540
400 - 500	4.65	3,430
500 - 600	4.10	3,120
600 - 700	1.80	1,710
700 - 800	1.10	1,790
800 - 1000	1.30	930
1000 and more	2.30	1,680

period 1967-1970 (based on a 3.5 percent increase).

It is assumed that the average household size of 3.51 would not change appreciably during this period. A variety of unit sizes would have to be provided in the housing market to cater to different household sizes.

Standard Residential Construction

Essentially, a "standard" residence as we have thus far used the term means a residence that is above minimum standards; i.e., a "weather proof" house.

It is not possible to find accurate and complete statistics on new residential construction from 1961 to the present, to say nothing of the extent to which units built were of "standard" quality. Figures on building permits issued are acknowledged to be faulty with respect to the extent and variation of coverage. The 1964 Municipal figures on building permits, which are the main source for columns (4) and (7), list 5500 units of houses that roughly correspond to this definition of a "standard" house. Fifty percent of these are in the price range Eth.$6000 - $12,000, and twenty-five percent are in the price range $12,000-$20,000 and twenty-five percent above $20,000.[53] This represents about three-fourths of the actual standard units constructed. The other quarter are built without proper permits from the planning office of the Municipality. Column (4) of Table 5 has

Table 5

TOTAL HOUSING REQUIREMENTS, 1967-1970

1 Monthly Income (ETH $)	2 Total Housing Requirements 1961	3 New Family Formations 1961-1967	4 "Standard" Residential Construction 1961-1967	5 Total Requirements 1967 2+3-4	6 New Family Formation 1967-1970	7 "Standard" Residential Construction 1967-1970	8 Total Housing Requirements 1970 5+6-7
less than 50	20,120	6,590		26,710	5,700		32,410
50 - 100	12,060	3,940		16,000	3,400		19,400
100 - 200	15,520	4,980	410	19,820	4,300	300	23,820
200 - 300	10,020	3,270	410	12,880	2,840	300	15,420
300 - 400	5,540	1,820	740	6,620	1,570	450	7,740
400 - 500	3,430	1,130	740	3,820	980	450	4,350
500 - 600	3,120	990	740	3,370	860	450	3,780
600 - 700	1,310	437	740	1,007	370	450	927
700 - 800	790	267	740	317	230	450	97
800 - 1000	930	316	910	336	270	525	81
1000 and more	1,680	500	1,750	490	480	900	70
Totals	74,250	24,300	7,180	91,370	21,000	4,275	108,095

been adjusted to reflect this situation. This explains why the total of this column is higher than the total that would be shown by the records of the municipality.

Column (7) is an attempt to project the estimates of 1967 into the 1967-1970 period and to prorate the numbers among the various income groups. The figures for "standard residential construction" for the period 1967-1970 reflect substantial increases in the price range, Eth.$6000-12,00 and $12,000-$20,000 corresponding to the income range Eth.$100-$800, and a small increase (less than four percent) in the houses with a price range above Eth.$20,000. It is assumed that as the housing situation of the higher income group improves, and the demands of European and American families and embassies get fully met, the market for expensive housing will no longer be as important as it used to be.

By and large, the substantial increase in the rate of construction of houses in the lower price range would be composed of improved "chica" construction. As indicated earlier, this method of construction can provide housing of acceptable standards if well-done; i.e., if the houses are provided with an adequate overhang of the roof, a foundation, insurance that the main wooden wall frames are not in direct contact with organic matter, and walls covered with white wash to provide protection against rain.

The total housing requirements in 1967 and 1970 may be seen in Table 5. The requirement figures shown for 1967 and 1970 represent the quantitative need by various income groups for housing to overcome the deficiencies in the present inventory as to quality of construction and high density of occupancy and to satisfy the requirements of the population expansion. It may be observed that the housing situation for families with incomes over Eth.$600 per month has been gradually improving and may be expected slowly to improve further without major change in present construction and financing methods, costs, and terms. However, the situation for families with incomes below Eth.$600 per month is seen to be getting worse as their numbers increase, and provision of standard housing under present means of construction and financing does not keep pace with the growing needs. A further factor, which most affects and aggravates the situation for the lower income families, is the expropriation and demolition of numerous, mostly substandard, dwellings in the central area of the city to make room for large scale construction of public and commercial buildings.

It will obviously take a long-range program over many years, seeking all possible means to reduce the costs of construction and financing, to reverse the trend of further deterioration of the housing situation for lower income families and to hasten the satisfaction of housing needs

on the part of the middle income families. Beyond this picture of total needs and requirements, it will be useful to develop a picture of effective demand for housing; that is, what families in all income groups can reasonably afford to pay for improved housing, and effective market demand on the part of those in the middle and higher income ranges whose needs and desires may be expected to be met by private enterprise.

Effective Demand for Housing

To determine effective demand it is necessary to estimate the prices which families at various income ranges will normally pay for housing. The development of such estimates assumes that families at various income levels are able and willing to allocate certain proportions of their income to pay for the amortization and interest charges on a mortgage or to make rental payments. The first step is to convert income into the maximum amount a family is able to pay for monthly charges. For sales housing, this latter amount may be translated into a mortgage amount (assuming certain terms as to interest, period of amortization, and amount of down payment) which in turn may be converted into the price of a house. While this analysis concentrates on the effective demand for sales housing, the total demand may be divided between sales and rental housing and rental payments which families can afford

may be equated with maximum mortgage payments. To pursue this analysis of effective demand there is need to develop (1) appropriate ratioes of mortgage payment to income, and (2) the most appropriate financing (mortgage) terms.

Ratio of Rent to Income

The results of surveys I and II in this respect reveal unusually low rent-to-income ratioes, that of survey I being 12.57% and that of survey II being 12%. The average rent paid indicated by survey I was Eth.$5.91; for survey II, $12.50 per month. Surveys I and II are not helpful in giving indications as to what the rent-to-income ratios are in the middle income and upper income bracket. Indications are that rents are higher and that they are rising fast as a result of the shortage of good quality housing.

Higher cost (Eth.$20,000$50,000) single-family villas (rented mostly to foreigners) demand rents of Eth.$500 to $1,000 per month, which is widely reported to amortize total investment in three to five years. Similarly, recently built modern apartments, occupied in considerable part by Ethiopians, and with long waiting lists, rent from Eth.$125 for small efficiency units to Eth.$250 for 1-1/2 bedroom units, which rental income is again reported to amortize investment in three to five years.

It also appears that families are prepared to pay

twenty to twenty-five percent of their income (even higher) to obtain better quality housing. The Imperial Savings and Home Ownership Public Association[54] reports from its experience that most of its clients (and these are mostly in income ranges exceeding Eth.$700 per month) were paying an average of twenty percent of income at the time of application for loans and were quite willing to make monthly payments of twenty-five percent or more for the opportunity to own a modern house.

Perhaps a more realistic ratio of mortgage payment (or rent) to income, and one which seems to be indicated by ISHOPA's information, looks somewhat as follows:*

Income Group	Ratio of Monthly Payment to Income
Less than 50	12%
50-100	12%
100-200	15%
200-300	15%
300-400	17.5%
400-500	20%
500-600	20%
600-700	20%
700-800	22.5%
800-1000	25%
1000 and more	25%

From this is derived a table of maximum monthly mortgage payments (or rents) by income groups (Table 6).

Financing Terms

Except for the very exceptional case of the individual who has large enough assets and income to finance the con-

*That is, they can retire the mortgage more quickly -- ISHOPA's policy is to have loans repayed as quickly as possible, and thus ask a higher proportion from those with higher incomes.

Table 6

ESTIMATED MAXIMUM MORTGAGE PAYMENTS BY INCOME GROUPS

Estimated Household Income/ Month (ETH $)	Ratio of Monthly Payment to Income (Percent)	Estimated Maximum Mortgage (or Rental) Payment (ETH $)
less than 50	12	Less than 6
50 - 100	12	6.00 - 12.00
100 - 200	15	15.00 - 30.00
200 - 300	15	30.00 - 45.00
300 - 400	17 1/2	52.50 - 70.00
400 - 500	20	80.00 - 100.00
500 - 600	20	100.00 - 120.00
600 - 700	20	120.00 - 140.00
700 - 800	22 1/2	157.50 - 180.00
800 - 1000	25	200.00 - 250.00
1000 and more	25	250.00 and over

struction of a house entirely with his own resources, there are presently only two, rather limited, sources for obtaining the means to finance house construction and ownership. One is through the commercial banks, and the other through the Imperial Savings and Home Ownership Public Association.

The only commercial bank which makes loans for the construction of housing is the Commercial Bank of Ethiopia, whose shares are wholly owned by the Imperial Ethiopian GOvernment.[55] The Commercial Bank has three categories of loans supporting either the construction of housing (in which case the interest rate is 7-1/2 percent) or the purchase of existing housing (interest at 8-1/2 percent): (1) for loans up to Eth.$20,000 the Bank may finance the full value providing that satisfactory collateral up to twice the amount of the loan is pledged; (2) loans between Eth.$20,000 and $30,000 are limited to not in excess of fifty percent of the cost or value of the property involved; and (3) loans over Eth.$30,000 are limited to not over thirty percent of the cost or value of the property, exclusive of land. The maximum time period is five years. These loans are made mostly by investors who have sizeable assets in land and/or cash, not for the purpose of building and owning a home in which to live, but to construct one or more houses of a "villa" type (Eth.$20,000 to $50,000) for

rent, mostly for foreign families, at rents of Eth.$500 to $1000 per month or more.

This type of "marginal" financing does not and cannot be expected to serve the vast majority of the general public in meeting its housing needs. Very few families may be expected to have or to accumulate in advance assets amounting to fifty percent or more of the cost or value of a house. Furthermore, this type of individual "custom" construction, which is costly, cannot take advantage of large cost reductions possible through building in large numbers.

The Imperial Savings and Home Ownership Public Association (ISHOPA) makes mortgage loans for housing at maximum terms of sixteen years, six percent interest on individual homes, and seven percent on duplexes, and twenty-five percent down payment or equity. The maximum mortgage amount is Eth.$20,000 for a single house and Eth.$30,000 for a duplex. In practice, the Association has generally required a higher equity than the twenty-five percent minimum and has reduced the term of the loans somewhat below the sixteen year maximum (average 13 years).

In spite of the rather stiff down payment -- a requirement imposed because of a government edict -- a lot of families have found the possibility of acquiring a house through ISHOPA loans. However, because of its limited capital and the limited volume of savings it has been able to attract, the Association has not been able to meet the

demands of borrowers. At present it has more eligible borrowers than it is able to accomodate.

It is obvious that at present the Association is a very limited financing facility, not only because of the shortage of capital but perhaps mainly because of the 25 percent equity requirement and short (16 year) amortization period.

If a readjustment could be made so that a slight raise in interest rate (to 8.5%) is combined with lowering the down payment to, say, ten percent and lengthening the amortization period to, say 20 years, the prospects of constructing a considerable volume of housing at prices and financies terms within the reach of many more households (families) would be brightened.[56]

These terms which are both realistic and reasonable, have been selected for this analysis in determining mortgage amounts and prices of houses which families in the different income groups can afford. It should be realistically possible for Ethiopian financial institutions to approach these terms in the near future. Using these terms, Table 7 has been constructed to indicate the estimated mortgage amounts and sales prices which families in various income groups could afford.

Effective Demand

The effective demand for housing may now be constructed

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[56]These terms are similar to the terms used by investment guarantee projects of U.S. AID. One such project for Addis Ababa is under discussion.

Table 7

ESTIMATED MORTGAGE AMOUNT AND SALE PRICES

8 1/2 Percent - 20 Years: 10 Percent Down Payment

Estimated Family Income/Month (ETH $)	Estimated Maximum Amount of Mortgage (ETH $)	Estimated Sales Price (ETH $)
less than 50	less than 600	less than 700
50 - 100	600 - 1300 - 1500	700 - 1700
100 - 200	1500 - 3000	1700 - 3300
200 - 300	3000 - 5200	3300 - 5800
300 - 400	5200 - 8000	5800 - 9000
400 - 500	8000 - 10,000	9000 - 11,000
500 - 600	10,000 - 12,000	11,000 - 13,200
600 - 700	12,000 - 16,400	13,200 - 18,000
700 - 800	16,400 - 20,000	18,000 - 22,000
800 - 1000	20,000 - 25,000	22,000 - 27,000
1000 and more	25,000 and more	27,000 and more

by relating the number of families in each income group to the number of units needed by each group and the prices of housing which its members are able to afford. This has been done in Table 8.

Market Demand for Housing

Effective demand is only the potential of market demand which is limited in two respects: (1) the lowest level of cost or price at which private enterprise can be expected to construct a house or apartment of minimum but adequate standards of quality, space and sanitary facilities on developed land suitably located with regard to community amenities and; (2) the extent to which families needing and able to pay for improved housing will actually have the will and desire -- the motivation -- to purchase or rent new housing made available on the terms indicated. With respect to sales housing this includes the willingness and ability to make, or to quickly save and accumulate, the down payment of ten percent of the purchase price plus the amount of closing costs.

As to the first limitation, the current level at which the private market provides an acceptable house (two bedroom house) has [redacted] been mentioned in th[redacted]

Table 8

EFFECTIVE DEMAND FOR HOUSING 1967

Monthly Income (ETH $)	Estimated Housing Units Needed	Estimated Sales Prices (ETH $)
less than 50	26,710	less than 700
50 - 100	16,000	700 to 1700
100 - 200	19,820	1700 - 3300
200 - 300	12,880	3300 - 5800
300 - 400	6,620	5800 - 9000
400 - 500	3,820	9000 - 11,000
500 - 600	3,370	11,000 - 13,200
600 - 700	1,007	13,200 - 18,000
700 - 800	317	18,000 - 22,000
800 - 1000	336	22,000 - 28,000
1000 and more	490	28,000 and more

APPENDIX [redacted] dealing with "The Housing Condition." The building price of such a house is Eth.· $5200 and making an allowance of 200m^2 plot (at Eth. $6 per square meter), the total sum would be ETH · $6400.)

Some experimental houses built by the Ethio-Swedish Institute have been able to demonstrate that these costs can be lowered considerably. But these approaches are only at the experimental stage and time will tell whether they will catch on. This analysis is based on the capabilities of the present private market.

At the minimum cost, private enterprise can only reach the lower segment of the ETH · $300 - $400 income range. The 86 percent of the population which falls below this income range (a total of 78,720 households) would apparently find this financial arrangement unsuitable. In a nutshell, this is what the housing problem of Addis Ababa is all about.

The second limitation is more difficult to deal with since it has to do with a number of intangibles and the many value judgments that a family considers and makes decisions on before it makes up its collective mind on whether or not to purchase or rent a new house. The limitation will be less -- and the market demand

maximized -- to the extent that the housing is attractive and appealing to Ethiopian families and is considered to be a good value for the money. This means a challenge to contractors, builders, developers and financial institutions to provide the best possible in quality of construction and design appealing to Ethiopian families (with particular consideration to the traditional "injera" kitchen and the desire for courtyard or other outdoor space), the provision of sanitary facilities and basic utilities of water and electricity, with location served by improved roads and public transportation and reasonably convenient to places of work, shopping, churches, schools, etc.

Without doubt, many of the government civil servants and other private persons now living in poor housing desire to purchase or rent new housing if it were made available at prices and terms within their ability to pay. However evasive the answers on home improvement were found to be by surveys I and II, it will be recalled, that only <u>five percent</u> indicated that they were <u>satisfied</u> with the present facilities. The general response has been that the motivation for better housing is very strong; particularly for home ownership and particularly among middle income families. Those so motivated would afford a down payment of ten percent.

The amount of closing costs, if high, might make some difference. Some would not want to be among the first to go into new project-type housing, but would wait to learn from the experience of the first occupants. Therefore, even if effective demand appears to be close to market demand, in practice lags and delays must be reckoned with. Both producers and purchasers must have time and opportunity to get acquainted with each other. The industry would probably go through a preliminary trial and error stage and productivity would probably be low. Perhaps it is likely that only one-half of the effective demand in the income ranges will be served by private enterprise. Applying these ratios to effective demand by income groups above the minimum which private enterprise can reach results in the schedule of numbers of units of market demand with related sales price ranges shown in Table 9.

The total units of immediate market demand may be compared with the volume of "Standard Residential Construction" column 4 of Table 5. Even with the rather conservative market demand estimate that was made, the shortage in supply is not insignificant. An expanded level of supply would have been possible if the minor adjustments suggested were made in the financing arrangements of "ISHOPA". Fortunately both the building

Table 9

UNITS OF MARKET DEMAND WITH RELATED SALES PRICES RANGE

Monthly Income	1967 Units of Effective Demand	Units of Market Demand	Price (ETH $)
$300 - 400	6,620	3,300	5800 - 9000
400 - 500	3,820	1,900	9000 - 11,000
500 - 600	3,370	1,700	11,000 - 13,200
600 - 700	1,007	500	13,200 - 18,000
700 - 800	317	160	18,000 - 22,000
800 - 1000	336	170	22,000 - 28,000
1000 and more	490	250	28,000 and more
TOTAL	15,960	7,980	

materials industry and the construction industry seem to have sufficient unutilized capacity to be able to cater to a greatly expanded demand schedule.[57] The only bottlenecks might be municipal administration, and the availability of land. More will be said about these in the next chapter.

Considerations with Respect to Rental Housing

According to the 1961 census only 23 percent of all households occupied their own homes. Of the remaining 77 percent, 67 percent rented and ten percent had other arrangements. The corresponding figures for survey I were 60 percent renting and survey II 75 percent. The largest proportion of home ownership occurs in houses of the poorest type of construction and the smallest proportion in houses of the best type of construction.

But these figures do not bring out the strong wish by most Ethiopian families to own their houses. However, in spite of such strong preferences, a program of housing development would have to strike a proper balance between renters and owner-occupiers. Some families would not wish to make the commitment involved in home purchase, so that a certain portion of new housing should be made available for rental to meet such circumstances.

What propotion within market demand should be devoted to renting is a matter open to question. Perhaps a minimum level would be 20 percent. The total market demand for both sales and rental housing with sales price and rental ranges is shown in Table 10.

Considerations with Respect to Unit Size

Something should be said as to what has been learned that would give some guidance to the proper distribution of housing provided by size of unit. The average (3.51 persons) and median (2.39 persons) size of household have been cited and they are, obviously, on the small side. The median is pulled down by the large proportion of single-person (19.9 percent) 2-person (23.1 percent) and 3-person (18.2 percent) households.[58] Four and five person households amount to 22.4 percent, 6-9 person households 13.7 percent, and 10 and over, 2.7 percent.

This suggests that the need is for a distribution of units by size somewhat more heavily proportioned in the smaller sizes than is usual. There are some offsetting factors. Some of the single-person households are undoubtedly made up of young men who have postponed marriage partly because good housing was not available at a price they could afford to pay. Many Ethiopian

Table 10

UNITS OF MARKET DEMAND WITH RELATED SALES AND RENTAL PRICES

Units of Market Demand for Sales Housing	Sales Price Ranges ETH $	Units of Market Demand for Rental Housing	Rental Ranges ETH $/Month
2,650	5,800 - 9,000	650	52.50 - 70
1,520	9,000 - 11,000	380	80 - 100
1,360	11,000 - 13,200	340	100 - 120
900	13,200 - 18,000	100	120 - 140
128	18,000 - 22,000	32	157.50 - 180
136	22,000 - 28,000	34	200 - 250
200	28,000 and more	50	250 and more

families not only aspire to home ownership, but also a home where they may have room for relatives or for servants living in. Houses with too little space will not appeal to such families.

As is generally the case, apartments or rental units should have a higher proportion of smaller units, and none of the larger units, as compared with sales housing. Sales housing should have a higher proportion of smaller units, and fewer larger units than is the case in most developed countries.

It should be emphasized that all the preceding figures are, at best, approximations. Housing market analysis is by no means an exact science. Any impression that the use of exact figures through the various stages of the analysis lends exactitude to the final results should be dispelled. They should be used as a guide only.

Decisions to purchase or rent a new home are individual decisions based upon a large variety of considerations. There might, for example, be quite a transference as between the indicated income groups and price, or rental ranges. Some families of relatively low income might choose to pay a higher proportion of income for housing than is imputed to them on the average and thus enter the market at a higher level than indicated. Some may also have significantly higher secondary income, and thus be able to pay more for housing than is indicated in the analysis for their income level. Families of higher income may be satisfied with less in the way of a house than they can actually afford and thus enter the market at a lower level than that imputed from the analysis. The market is actually a fluid thing with great variety in the individual choices made and the reasons for those choices.

Every effort has been made to be as objective and as realistic as possible. However, as the information available was less extensive than would be desired, it was felt advisable to deal with all factors rather conservatively.

It is not easy to analyze a market which has not known large scale construction and ready financing on reasonable terms.

Summary

General

The need for a realistic long range housing program in Ethiopia is evident. There is no question but that such a program should be based on an inter-disciplinary approach. The needs involved are too many, too broad in scope and variety to be dealt with by short range solutions. As Prof. Rodwin has remarked in an article entitled "Measuring Housing Needs in Underdeveloped Countries"

> "...measuring housing needs obviously involves aesthetics, ethics, physiology, psychology, sociology, politics, economics, ethics, statistics, and some poetic licenses."

Serious housing shortages exist in Addis Ababa. Not that there are any substantial number of people without shelters who are sleeping in the streets, but there is acute overcrowding and the bulk of the population,

including many in the middle and low-middle income brackets, are living in substandard dwellings. Many of these dwellings are located in areas which lack acceptable means of access, safe sewage disposal facilities, or even piped water supply. The dwellings themselves are often of semi-permanent (chica) construction in bad repair, without adequate light and ventilation, piped water or even minimum toilet and bathing facilities.

Available statistics also indicate that not nearly enough new dwellings are being constructed annually to satisfy the increase in population, at any income level, much less to allow for: (1) a reduction in overcrowding, (2) for replacement of substandard dwellings, or (3) the rehousing of low-income families in Addis Ababa displaced as a result of public and private construction.

The analysis indicates that the present total requirement to bring housing in Addis Ababa up to quite minimum standards conducive to health, safety and liveability is some 91,370 units. Most of this requirement or need is on the part of the lower income groups and characterizes a problem that will undoubtedly take a long time to solve.

But the severity of this problem could be minimized if

(1) a proper agency is established to show special concern and to assist both recent migrants and those who have lived in the city for a while but still have low income, with their housing problems;

(2) emphasis could be laid on improving environmental facilities. At this stage shelter standards appear to be less important than community standards.

Capabilities of Private Enterprise

There are significant numbers, however, in the higher income groups where income should be sufficient to make it possible to satisfy their needs through private financing providing the proper institutional framework is developed which will afford a sufficient volume of home financing on reasonable terms and thus contribute to the development of a home-building industry capable of reducing costs.

The total current housing need by income group is summarized below with indications of what families in each group can afford in the way of monthly payments for housing, and the sales prices of houses those payments would command on reasonable financing terms (8 1/2 percent interest, 20 year amortization, 10 percent down payment):

Income Group (ETH $/Month)	Housing Needed	Monthly Payments (ETH $)	Sales Prices (ETH $)
Lower (less than 300)	75,400	Less than 45	Less than 5,800
Low-Middle (300-500)	10,440	45 - 100	5,800 - 11,000
Middle-Middle (500 - 800)	4,694	100 - 180	11,000 - 22,000
High-Middle (800 - 1000)	336	180 - 250	22,000 - 28,000
High (1500 and over)	490	250 and over	28,000 and over

Private enterprise is able to meet these needs well down into the low-middle income group. Actual immediate market demand is likely, because of various factors, to be considerably less than the indicated need, but could well amount to one-half. Thus, if the housing were properly distributed within the price ranges, well constructed and attractively designed, reasonably conveniently located, and adequately served by community facilities, there should be a fairly well assured near-term market of some 5,000 units units in the low-middle group, 2,000 units in the middle-middle group and 400 units in the high and high-middle group, for a total of 7,400 units. A part of this might best be built as rental rather than sales housing. This market could readily expand toward the need figures if there developed general and enthusiastic acceptance for the housing initially constructed.

The most crucial bottleneck may be the absence of a land market.

Housing for Middle Income Groups

At the present time, the problem which appears to require immediate attention for several reasons is the provision of housing for the growing middle income groups in Addis Ababa (those earning from ETH $300 to $1000 per month). These total some 15,960 families, of which about 9,600 need better housing and can pay for it. These are the younger educated heads of families or in some cases single men and women who are holding responsible positions in government and private industry and are acutely unhappy either with the quality of their housing or with the unreasonably high rents they are forced to pay for decent accommodations.

Although these families and individuals are well able to pay for satisfactory housing, given reasonable financing terms, there are only two institutions financing housing for any segment of this group. One of these is the Imperial Savings and Home Ownership Public Association and so far it has financed only 100 houses, all of which are valued (including land) at about ETH $20,000 or more. In most instances the Association

has served only the high-middle income group (those with total family incomes of ETH.$800-$1,000) or those in the middle-middle income group who had accumulated substantial savings and/or had other resources to enable them to own a fairly expensive home. It presently has no money to lend and has a long waiting list of applicants for loans. The Commercial Bank of Ethiopia also finances the construction of houses, but its terms are so stiff that only a limited number of high-middle and high income families, or those with substantial resources, can afford them.

Although the shortage of capital is no doubt a handicap, the more perplexing thing may be the statutory limitations placed upon ISHOPA in the interest rate it pays to savings accounts, the amount of down payment it is forced to request, the interest rates it can charge on mortgages, and the liquid assets it is forced to maintain. In order to maintain the monopoly of financial dealings for the government owned bank, the charter of ISHOPA, ratified by a rubber stamp parliament, limits it to a charge of 6 percent to 7 percent on its mortgages, which in turn virtually limits payments on savings to 4.5 percent. It is also limited to a 75 percent mortgage requiring a 25 percent down payment. The interest paid on savings accounts by the Commercial Bank of Ethiopia is presently 4.5 percent, but its mortgage rates are 7.5 percent on

construction loans and 8.5 percent on loans for the purchase or improvement of properties. No statutory limitations are imposed on the state bank, so that it can and does adjust its rates and payments to the market conditions. ISHOPA is a private cooperative association and enjoys no such privileges.

Housing for the Low Income Groups

Over 80 percent of the households of Addis Ababa cannot afford the housing that is provided by the private sector without some kind of help. Granted that the government may not be able to afford subsidy to provide shelter for all these people, but in lieu of shelter, community standards could have been upgraded. The inadequacies of individual homes could have been tempered by adequate safe water, a reasonably efficient sewage and garbage disposal system, access to all dwellings to permit passage of fire equipment and ambulances, as well as commercial and private vehicles. The housing of the low-income is situated in parts of the town which lack most of these facilities.

At the present time there is no continuing program nor adequate provisions for those families displaced as the result of the construction of roads or public and

commercial buildings or the destruction of deteriorated housing in the central city. This number has apparently been fairly substantial in the past and probably will continue to grow as further public improvements are undertaken and as new large buildings are put under construction. It appears that these people either move to a new site (sometimes provided by the municipality) and erect another substandard dwelling or possibly move in with friends or rent an old house or portion of an existing house, thus contributing to already overcrowded accommodations. One official, when asked what happens to these displaced people, responded, "They just disappear."

No provisions are made for those low income families who are migrating to Addis Ababa from rural areas and other communities. While immigration does not appear excessive at this time, indications are that it is increasing and a laissez-faire attitude could result in an extensive squatting problem such as that found in cities of many developing countries.

Serious slum problems of the future are being created and will intensify unless steps are taken to improve the provision of housing for displaced and in-migrant low income families. Present policy, or lack of it, simply results in increasing the intensity of the problems.

CHAPTER THREE

URBAN LAND OWNERSHIP

Urban Land Policy -- A Major Obstacle

Ultimately the availability of land at the right time and in the right quantity will be the most decisive factor in the success of any strategy for housing development. There can be no middle class housing in adequate quantities if land is not made available for this purpose. It will also be futile to elaborate on a serviced plot scheme if the plots are hard or impossible to come by. Perhaps the main reason why there is no response to land demand is the excessive concentration of ownership, particularly among those who make and administer law and government.

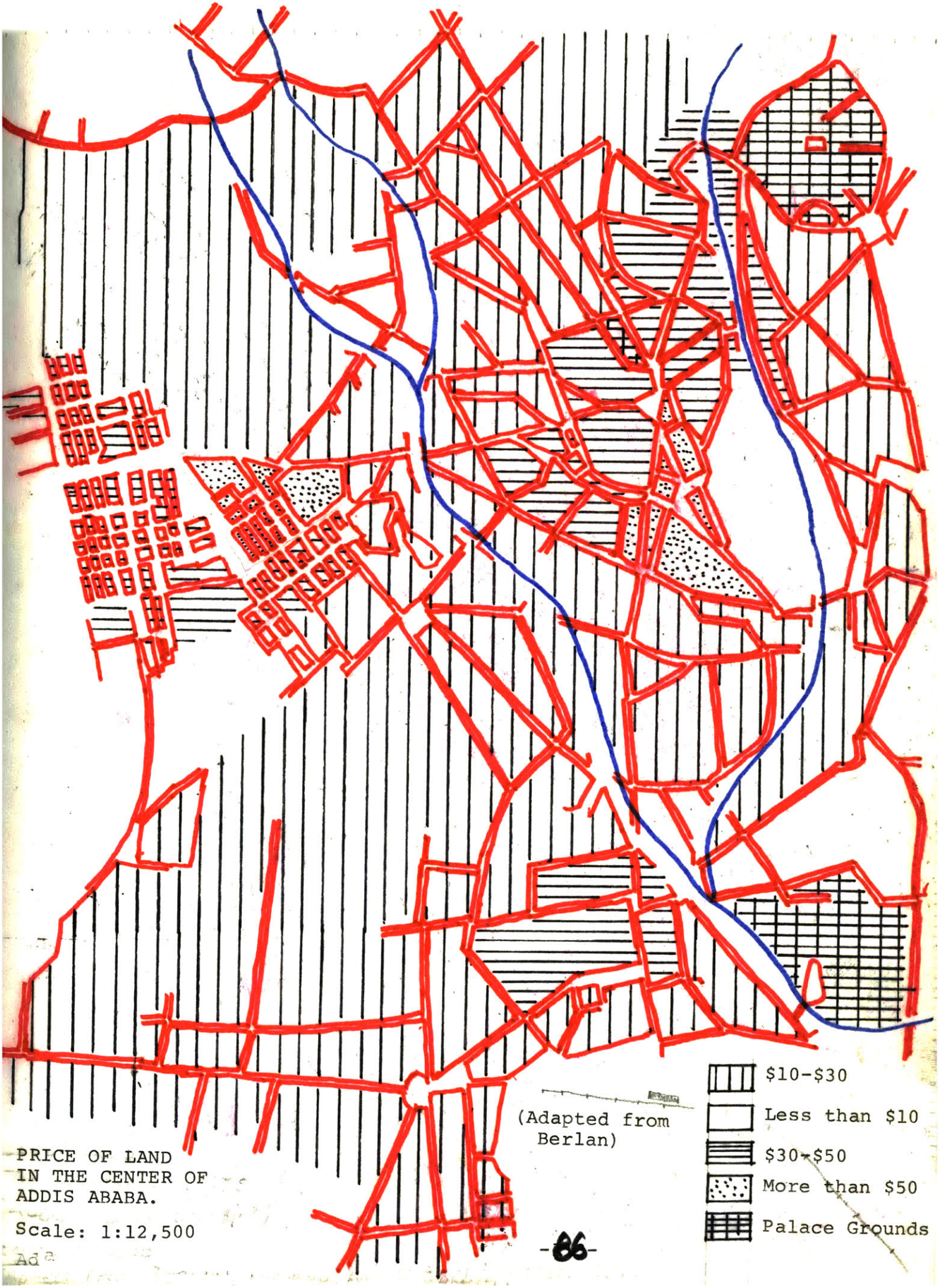
The Pattern of Land Ownership

In 1961 a survey of land ownership in Addis Ababa indicated that 58 percent was owned by 1768 proprietors averaging 71,000 square meters each, and 7.4 percent was owned by 24,590 proprietors averaging 150 square meters each. Government agencies owned 12.7 percent, and the church owned 12 percent. Royal lands accounted for about 9.9 percent.[59]

Of particular interest is the fact that only 65 percent of the land in Addis Ababa is taxable. Until recently,

there was no effective mechanism for recording ownership. Except for the substantial holdings of the families belonging to the aristocracy, the small holding of the majority has been and is the subject of controversy and litigation over ownership. Feuds over boundaries are frequent, and settling them seems to be the major source of occupation for the courts. Recently, cadastral surveys have been made and the possibility to acquire title is, in theory, possible. But the system has been burdened with so much corruption that the small holders especially find it difficult to come to terms with.

While land speculation is a recent phenomenon, its occurrence has grown rapidly. It is reported that land is bringing from ETH.$100 to $200 per square meter in the central city area. Land cost along the Bole airport road has been as high as ETH.$8 to ETH.$15 per square meter. Berlan has suggested that the land costs of the centre of Addis Ababa are generally equal to those of the centre of Paris.[60] It must be borne in mind that relatively few high density apartments have been constructed, and land in Addis Ababa is really not "developed" in the sense that a sewage system, adequate access roads, etc., exist.



(Adapted from Berlan)

PRICE OF LAND IN THE CENTER OF ADDIS ABABA.

Scale: 1:12,500

Ad[illegible]

One thing is definitely certain: the present system of land ownership provides a disincentive for progressive housing development. The nobility, by its huge land holdings, by its apparent failure to allow land to be developed -- land which is badly required, and by artificially inflating land costs, have caused hardship on the rest of the population.

This phenomenon of "holding" land just for "holding" sake is not unique to Addis Ababa. Ethiopian's society is based on the ownership of land. The acquisition of much land by anybody who considers himself to be somebody is a sine qua non. As Professor D. Lavine remarks:

> The possession of much land has always been a basis for considerable deference in Abyssinia.[61]

The one who owns much wealth is regarded by the society as a man of some weight; for Power -- in its various forms -- goes with the ownership of vast areas of land. Even if there is very little material benefit, relative to the size, the mere process of owning hectars of land provides perhaps the chief "drive" for life.

The Origin of Large Estates

Acquisition of land by royalty is, of course, a routine matter as the Monarch, the head of royalty, is, in fact, the source of ownership. War lords and bishops in turn have acquired land as gifts, either directly from the monarch or from other members of the royal family.

Of special importance is the Riste-Gult form of ownership. A holder of such land is entitled not only to exact personal services for his private domain, but he is also allowed to collect approximately 75 percent of the land tax which normally should have been turned over to the central treasury.[62] When the Emperor Memelik II moved his palace to the present site of Addis Ababa in 1887, he apportioned land to his most important military chiefs, and these chiefs established Riste-Gult rights over their land. Addis was born then, essentially, as a series of military camps or "sefers" as they are called in Amharic.

The former lord mayor of Addis Ababa, Fitawnrari Demissie Wolde-Emmanuel published a document[63] in which he states that in 1886-1887 the following portions of land were allocated in some cases to important personalities of state, in some cases to groups of servants or soldiers.

1. Luel Ras Makonen. 2. Negus Mikael. 3. Ras Wolde and Fitawrari Hapte Mariam. 4. Lig Entele. 5. Ras Darge. 6. Dejazmach Wolde Gabriel. 7. Etege Taitu (the empress).

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[62]This estimate has been given by Ato Asefa Demmisse, in a paper presented to the Center for International Affairs, Harvard University, "Ethiopia -- Some Internal Problems in Adopting a Strategy for Economic Development."

8. The palace guards quarters. 9. Butchers quarters. 10. Ligaba and Dejazmach Tasseu. 11. Afanegus Nasibu. 12. Tsehafe Taezaz Gabe Sellassie. 13. Ras Nadeu. 14. Echege Gebre Sellassie. 15. Bajerond Fikre Sellassie. 16. Ras Abate. 17. Dejazmach Germame. 18. Fitawrari Aba Karan. 19. Negadras Ageslen. 20. Workers quarters. 21. Djazmach Wubie. 2. Dejazmach Beru Haile Mariam. 23. Fitawrari Gebeyehu. 24. Gola "Sefer" (area). 25. Negus Wolde Giorgis. 26. Azaj Gezaw. 27. Ras Bitwoded Tessema. 28. Dejazmach Beshah Aboye. 29. Likemekwas Adeneu. 30. Riflemens quarters. 31. Ras Leul Seged.

Even today, neighborhoods in Addis Ababa retain the names of the person to whom Riste-Gult land was originally granted.

We recall that currently there are about 1,700 big landowners in Addis Ababa. In seventy years, then, the thirty-odd ownership has been spread out amongst 1,700 descendents, followers and faithful servants of Menelik's war lords. Riste-Gult rights still persist insofar as very little land is transfered for cash consideration.

The Nobility as Landlords

The descendents of the war lords now make up the ranks of Addis Ababa's nobility. It is out of these

ranks that the leaders of government and of the military are recruited. It is from these ranks that the emperor appoints the lord mayor and eight of the members of the city council.

Some of these persons are relatives of the royal family. Many are war lords (Leul Ras Makonen was the father of the present emperor, and Negus Mikael was the father of the late empress). Until the liberation from the Italian occupation (1941), most of the war lords had served as provincial governors, enjoying almost complete autonomy from the central government. As governors of the provinces, they also acquired very large areas of land for themselves and apportioned land for their followers. The nobility also enjoys additional income from building expensive villas for renting to foreigners. Their extensive land holdings give them advantage in the exploitation of the "marginal" financing facilities available for housing construction.

The nobility does not have a formal organization, but intermarriage, mixing of social habits, customs and the persistence of a few of their leaders gives them a fairly viable form of unity. The emperor's appointment of people exclusively from these ranks to the more important positions of the city's administration indicates to what extent power is deliberately reserved for the benefit of the royal family and the nobility.

The Emperor and the Royal Family as Land Owners

The immediate beneficiaries, constituting the royal family proper, number about fifty; and their estate accounts for 9.9 percent of Addis Ababa's area. Like all private revenue from such sources, the total annual income from royal estates is unknown. Most of them do not depend upon their income from land ownership; they hold sinecures which entitle them to draw handsome salaries plus allowances from the civil list.

Acquisition of land by the members of the royal family is, of course, a routine and relatively easy matter. As already mentioned, the monarch is the source of ownership. It has also been noted that only occasionally is land transfered from owner to owner for cash consideration,[64] a fact attested by a U.S. survey team which studied the water resources of the country.

Another less frequently used method of acquiring land is through expropriation from those owners who have fallen into disfavor, usually for political reasons. If there is a title deed for the land, this

is now transfered to the state domain, which is now one of the important land owners in the city. The emperor can hand out such land, either temporarily or in perpetuity, to whomever he pleases. One of the more important gifts that the emperor bestows on a person for faithful service is a piece of property in Addis Ababa. Through the years, the monarch's generosity in this respect has not dwindled. Large areas cleared of low income houses to make way for some public building remain vacant for a number of years until the government has decided on a definite plan and until it has accumulated sufficient funds to undertake the project. In the meantime, as often happens, the land is appropriated to some individual or private concern. No questions are raised with regard to the destiny of the displaced families. One recalls the statement of the municipal official, "They just disappear!"

It has been suggested that "squatting" is not a very big problem in Addis Ababa. Even municipal officials admit as much. This is perhaps so because of the awesome power of royalty and nobility. Article IX of the revised constitution of Ethiopia[65] states:

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[65]Thirty-six of its 131 articles are devoted to the Imperial Institution.

> ...by virtue of his Imperial blood, as well as by the anointing which he has received, the Person of the Emperor is sacred, His dignity is inviolate and his power indisputable...

Obviously, few dare squat on the land of such an august personage as His Imperial Majesty Emperor Haile-Sillassie I, Elect of God, King of Kings, Ruler of Ethiopia, Conquering Lion of the Tribe of Judah. Few also squat on the land belonging to those who are close to him as their power also tends to be indisputable.

The power of those who govern is so overwhelming that it can and does squash in an indiscriminate manner the formation of a rudimentary rubric of aspirations.

Much has been written with reference to squatters. Much of it appears as an oblique condemnation of the "lawlessness" of squatting. Professor Abrams suggests that squatting is the usurpation of the force of law by the law of force.[66] This point of view, besides being academic, is probably the result of the outsiders' blurred image of the so-called underdeveloped world. In its popular form, this image portrays valiant countries fighting the age-old scourges of poverty, ignorance and disease. The long-standing existence of these evils is readily taken as proof of their normal and impersonal character; such old and well established difficulties

are seen as natural conditions bravely opposed by dedicated yet helpless and somewhat inexperienced leaders and governments.

This picture not only is patently false but results in the complete abnegation of human causes on the one hand and responsibilities for human injustices on the other. And even if there were any semblance of truth in this image for the newly independent states just emerging into the unkept promises of the twentieth century, no iota of plausibility can attach to it as it concerns Ethiopia. If she suffers from the miseries of over-exploitation, one must look to indigenous causes as she boasts a long heritage of "National Independence." Those who govern are so well entrenched in their positions, so impregnable in their form and structure that they have been able to scortch winds of change already at the time of their inception. Squatting has not been able to grow on Addis Ababa's soil because it is regarded as the first important sign of an agitation for land reform, the first blow on the power structure. When the urban landless and those who cringe from housing famine begin to appropriate land for themselves, then the first hopeful signs of change and progress will have started. In fact, the "squatting" stage may be regarded as an important

evolution in the process of urbanization. So that the fact that Addis Ababa has not yet reached this stage -- in spite of a population size greater than many cities beset by the problems of squatting -- is a matter perhaps which must be regretted, not applauded. The city is at the stage where the urban poor, the rural migrant make do with the little space that is made available, quietly and in a docile manner.

Ruling over this mass in medieval splendor are the emperor and the few to whom he has given power. The administration of the royal domains goes under the disguise of a modern twentieth century label, The Haile-Silassie I Foundation. But, in fact, nowhere is the feudal system fully displayed as it is in this case. The head of the foundation draws his salary from the central government.

It is unlikely that the royal family as it is presently constituted can make significant contributions to the betterment of housing -- or, for that matter, any other aspect of social welfare. As more and more citizens of the city join the ranks of the middle class and create pressure for a more representative political framework, the powers of royalty may diminish. But now the contributions that Royalty can make to housing improvement are so loaded with the unpredictable that no practical and realistic suggestions could be made. In history,

we may have an insight into the future; all the pomp of royalty, all the arrogance of power, all that wealth ever gave to the very few comes to a slow but sure end. The question is if this form of tutelage will be replaced by an equally oppressive but more subtle form of subjugation.

Let us look at another important land owner -- the church.

The Church as Landowner

The church has throughout Ethiopian history been identified with the monarchs and the nobility. Her role has been more of a political actor and manipulator of state craft, unconsciously pursuing and encouraging the Machiavellian tradition, rather than the cultivator of the spiritual well-being of her illiterate and weak followers. Professor Ullendorff has perhaps more aptly described the Ethiopian church when he says, "In its peculiar indigenized form, impregnated with strong Hebraic and archaic Semetic elements as well as pagan residue, Abyssinian Christianity had long become the storehouse of the cultural, political and social life of the people."[67]

Both in time of peace and in war her authority and voice has always been a constant source of strength to the monarchs of Ethiopia: the church has not only

participated actively by allowing members of the clergy to march side by side with the soldiers but also by her exhortation of the people to fight and die for 'king and country'. "The regular clergy continue to have the same supportive attitude they have always had toward Ethiopian military endeavors. The two establishments are acknowledged partners in maintaining civil order."[68] In peace time, her spiritual inspiration and teaching amounts to haranguing the people to avoid worldly temptations and indulgences; but instead to respect saint days, to strictly observe fast days and to pray both for their sins and for the life and well-being of those destined by providence to rule over them. Since a great number of the clergy hardly can read or write, there is no nonsense of theological disputation among them.

For such services to the monarchs or emperors of Ethiopia, the church has been made wealthy by being allowed to own land throughout the country. In Addis Ababa, her holdings amount to 12 percent of the surface area of the city. Most of the church's land is concentrated in the heart of the city and in the vicinity of the more important churches and schools. As landlord, the church collects rent in amounts which are not at all insignificant. In the rural areas, the church is even allowed to collect taxes; taxes in lieu of tithes and education. According

to estimates[69] the total sum of taxes and rent collected from church-controlled land, both in the rural areas and in Addis Ababa, amounted to ETH.$3.75 million in 1965. This is 15 percent of the total revenue for the whole country. The income from real estate in Addis Ababa is presumed to be ten percent of this total. If this revenue had been collected by the municipality, the income of the city would have been increased by almost ten percent.

The 1944 land tax proclamation which abolished services that were customarily given by tenants to landlords created such an uproar on the part of the church that the relevant article was amended. It is interesting to quote the amended article, as it provides insight on the effect of church holdings on tenants. The article which was amended had the following rider.

> ...This does not mean that contribution towards the spiritual education imparted by the church to the parishioners, construction of churches, and in general fees given for the usual spiritual protection afforded by the church to its Christian parishioners during life and death, as well as corn and firewood for the church and salary for the store-keeper or any such other works which shall be carried out by the local population in union are prohibited.[70]

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[70] Article 4., Legal Notice No. 93 of 1947.

Rent and taxes collected from church owned land are meant to be used for the administration of ecclesiastical affairs. As there is no public auditing of the church's revenue and expenditure, it is anybody's guess where the money goes. One thing, however, is certain: the church's main area of expenditure is in building very expensive apartments and villas for rent in Addis Ababa. Apart from the Patriarch, there are fourteen archbidhops (one for each province) and all draw a monthly salary from the central government, an amount equal to that of a cabinet minister.

Churches are either built by contributions from the faithful or by the Ministry of Public Works out of the ordinary revenue of the government. The church, of course, claims that this purely 'non-functional' income she collects is spent on the education of young priests and for the maintenance of old churches and monasteries. This is hardly a credible story as most priests are 'trained' in monasteries and churches by rendering services to these institutions. Because the church collects education taxes, she also claims that she gives instruction to an often-quoted figure of 600,000 in secular education. UNESCO and even the Ministry of Education have refused to attach any importance or value to this claim.

Not only her acquisitive instincts, but some of her teachings have adverse effects on general developments. These teachings have had most telling effects on the poor and illiterate. First, the faithful are urged, and in some cases forced, not to engage in any type of productive work on Saint Days. The minimum days that have to be observed, apart from Sundays, add up to 172 days in a single year. (Fortunately, government departments and the industrial concerns pay no attention to this part of the dogma.) Secondly, the church imposes on her followers a formidable array of fasting days. For eleven months (the month following the two-month Lent period is exempted), every Wednesday and Friday are fast days. In addition to the above, 136 days are added during which time a self-respecting Christian avoid indulging in eating meat, eggs or drinking milk or any type of food having protein content.

In summary, out of the 365 days of the year, 268 are fast days of one form or other, 186 of these are obligatory while 82 are considered voluntary fasting days.[71] In a population where malnutrition already is a serious problem, an obscure religious dogma has added insult to injury. A generation of Ethiopians brought up without sufficient protein can only result in a nation of mentally retarded people. In this respect, the church cannot possibly be preaching the message of a loving god!

The few who receive secondary and college education are gradually abandoning this part of the church's 'teaching'. But many of the illiterates, fresh migrants from the country, still follow the church's commands ardently and steadfastly.

The church is, indeed, the incarnation of conservatism. In the parliament its representatives (in the upper house) can, in alliance with the nobility, effectively block any measure of reform which it considers to be too liberal. Only last year the church played an important role in blocking a very mild bill giving tenants four years grace before eviction notice could take place and reducing the maximum level of rent from 75 percent to 35 percent.

The Use That Church Land Might Be Put To

A considerable improvement will have been made if part of the church's land could be used to implement a scheme of "serviced plots" for the benefit of the lowest income group. If half of the households below the income of ETH.$50 per month were to be supplied with a serviced plot, the total area required (as mentioned before) would be around $5Km^2$, or less than two percent of the area of Addis Ababa. The church controls 12 eprcent of the city.

Admittedly, some of this land may not be available or is otherwise unsuitable for this purpose. The municipal council and its technical advisors would know precisely what land could be used for what purpose, and it would be up to those in the municipality to draw up a program of this nature and discuss its content with the authorities of the church. Would the church be willing to participate in such a program? It is, of course, hard to say. Church reform and clerical reaction is beyond the scope of this study. Perhaps no one can tell until the municipal authorities have made the church privy to this sort of information, have exposed church leaders to this plan of action to aid the poor and the weak. The first order of business then towards the amelioration of the housing situation in Addis Ababa should be to bring into involvement one of the society's most important land owners, the Coptic Church. The initiative needs to come from the municipality of Addis Ababa. Under the circumstances, the council would be doing nothing more than reminding the church to live up to its fundamental mission in life.

CHAPTER FOUR

MUNICIPAL ADMINISTRATION

> "Municipal institutions constitute the strength of free nations. A nation may establish a system of government, but without municipal institutions it cannot have the spirit of liberty."
>
> Alex de Tocqueville

The revised constitution of Ethiopia empowers Parliament to grant corporate charters to municipalities subject only to Articles 88, 89 90, and again, Article 129 specifies that "...all towns shall be incorporated by charters and municipal councils shall be established respectively in all municipalities of the Empire."[72] The Emperor appoints one mayor from three candidates presented to him by the Council. By constitutional provision, therefore, all towns are destined to have a "Mayor-Council" form of municipal government. So far only Addis Ababa has been granted a charter. The Charter of the City of Addis Ababa, General Notice Number 172 of 1954, Negarit Gazeta, provides for a municipal council composed of thirty persons, twenty of whom are elected by ten districts, eight of whom are appointed by the central government, plus the Kantiba[73] -- the Lord Mayor -- who serves as president and the vice-Mayor, both of whom are also appointed by the Emperor. The Kantiba is appointed for an indefinite tenure.

The Council is supposed to have the usual powers of a municipality with "local autonomy." It should

prepare its own budget, levy and collect taxes and fees, buy and sell land, provide for public works, social welfare, and law and order. A brief analysis of the contents of the charter will illustrate its shortcomings:

A. The Myth of Self-Administration

While the Charter purports to give the city a basis for "self-administration", it does so by denying it the slightest form of autonomy. This is of course a general reflection of the political climate of the country. In Ethiopia all political parties are outlawed, and all media of communications are controlled by the central government. In spite of the fanfare attached to the passage of the charter of Addis Ababa, the Emperor's preamble to it reads:

> Now therefore we, of our grace, certain knowledge and mere motion do hereby grant and ordain to our capital, Addis Ababa, the following charter on the basis of self-administration.

The document turns out to be nothing more than a grandiose plan for administrative decentralization, while political power remains as centralized as ever.

The city remains under the tutelage of the Ministry of Interior. Specifically, the Council's power to assess and collect taxes is limited by Article 4:

> A Municipal Council shall have power to consider and decide on the following matters, but no such decision shall come into effect until it has been confirmed by our Minister of Interior.

The result of this kind of centralization by the central government is, as Professor Seyoum has put it:

> ...a senseless process of checking and double-checking local decisions and frequently substituting their own. 74

Article 59 empowers the Minister of Interior to disband or deactivate the Municipal Council in the event of neglect of duty or non-feasance of "state-law." In case the council is disbanded, there is no provision in the charter to make possible reinstatement of previous members or new elections. The only provision is that of Article 26 which provides in case of vacancy for elections to be held in the same district for a new member to fill such a vacancy. It is questionable if this applies to banned rebellious councilmen. So far every member has "towed the line" and there has never been an occasion for interpretation.

B. Control of Police Force

Article 9 charges the Mayor with the maintenance of law and order in the city. But at the same time the power to appoint or remove any policeman or officer is retained by the Minister of Interior. The peculiarity of the system is that the sole and only communication the Mayor has with the police force authorized for municipal duty is through an appointed officer whose responsibility is to the Ministry of Interior, by whom he is paid.

C. The Duties of the Kantiba

The charter (article 28) outlines three rather broad

functions which the Kantiba fulfills:

1. He is the chief executive of the Municipality and presides over the Council.

2. He is an agent of the Imperial Authority who takes his orders directly from the Emperor.

3. He is charged with the maintenance of law and order in the city.

Under the circumstances, it must be impossible for the Kantiba to fulfill function number three. We might surmise that as chairman of the Council he might induce a strong mayor-council type of municipal government. Yet the vice-chairman (vice Kantiba) who is also appointed by His Majesty tends to weaken the coalescence of such "strength." In the final analysis both the Kantiba, the Vice-Kantiba, and the Council end up by becoming very effective agents of the Imperial Authority.

D. Organization Plan

Article 32 of the charter requires that the "administrative authority be drawn up in accordance with a particular organizational plan, illustrating and describing all departments, sections and institutions of the municipality. Such a plan is not yet accepted, legally adopted, or recognized. There have, however, been a few studies of organizational charts. One chart which shows the 1962 hierarchy is attached.[75]

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[75]The present Kantiba uses this model in an unofficial manner.

It is notorious for stating what is not (e.g., hierarchical position of the police force!) and in omitting crucial functions (e.g., land and building tax, assessment and collection). Perhaps the greatest failure is the way it has ignored these functions for fear of the political repercussions which they may create.

E. Municipal Elections, Council Members

Article 29 provides for an electoral commission appointed by the Emperor and empowered to prepare rules and regulations for elections, which are to be officially published. This commission, whose number is not specified, was to have the power of supervision of the entire election proceedings. Municipal elections are very poorly publicized; it is not hard to come to the conclusion that this is done deliberately. In comparison, the government owned and operated communication media have been known to be effectively used to urge the public to come out and cheer a visiting dignitary. It is hardly reasonable to suggest, therefore, that municipal elections are not properly announced because of lack of means or know-how.

Each Woreda is allowed to elect two representatives. Population-wise, some woredas tend to be underrepresented relative to others;[76] but this may be somewhat of an

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[76]The population of each Woreda (District) and the way it has changed in the last ten years is shown in the appendix. This table is adopted from the *Ethiopian Economic Review*, Number 5, Ministry of Commerce and Industry. February 1962, p. 58.

academic question, as the overall setup of the election process is suspicious. Article 30 of the charter indicates that qualifications for council membership are Ethiopian citizenship and attainment of at least thirty years of age. In point of fact the election committee has been known to favor candidates who own property. This concept comes from the previous proclamation which ruled over elections, and which is now superceded by the charter. This earlier proclamation, known as the Decree Number 1 of 1942, in effect limited eligibility for council membership to

> Ethiopian residents of the area certified [by the elders of the town or city] to be from among property owners and principal merchants known by their work and conduct.

All told, an election run by persons faithful to the Emperor, grateful recipients of land from the monarch, can hardly be expected to put into office council members who have the inclination to straighten out the tax collecting machinery of the municipality and to live up to the provisions of the charter.

Article 20 of the charter provides for public meetings of the council open both to the press and to the general public, with the proviso that exclusion is permissible if 'unconditionally necessary for the benefit of the city.' The council is also urged to make its own internal rules by laws and regulations and to have these published in the Nagrarit Gazeta (Article 30). So

far this has been neglected, and as a rule the council meets in Camera and the meetings are not announced to any but the council members. This is certainly not an exercise in democracy. It is only a pity that it goes under such a label.

F. Powers of the Council

The council never uses (and often misuses) the powers it is given by charter. For example, Article 15 authorizes the council to issue bonds and none have ever been issued in the history of the city. The rights of eminent domain given to it by this article have been used almost exclusively for removal of sub-standard dwellings and almost always these have been replaced by monumental public buildings. Examples are:[77]

	Households Displaced
The site of the Hilton Hotel	200
The site of the Ministry of Foreign Affairs	100
The site of the Ministry of Agriculture	100
The site of the Prince Macconnen Hospital	50
The site of the Ministry of Posts and Telegrams	100
The site of the New Municipality Hall	300

This partial list does not include all the families that have been displaced as a result of their property

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[77]These estimates are for the period 1961-1967. They were arrived at in the following manner. The approximate area of the land given (or appropriated)

(continued on following page)

being taken for the widening of roads and streets.

Article 36 seems to give the municipality the power to "run or control" public utilities and public works. However, this power has never been used in full, nor is it likely to be used unless state laws and practices are changed. It has already been mentioned that the provision of electricity to the city is the responsibility of a special government authority without ANY connection to Addis Ababa, AND completely independent of municipal control.

Public works are the responsibility of the Ministry of Public Works, a department of the government which often carries out works without even the prior knowledge, much less the approval, of the municipal authorities.

G. Political Influences in Municipal Administration

In reality, the provisions of the charter are never fulfilled and the function of municipal administration in the end becomes merely another tool by which the Emperor and the nobility keep control of city government. The Emperor has always had the final word, even on minor matters of detail. Important buildings are sited after his consent. The Kantiba and the city council serve primarily his pleasure. The emphasis is mainly to create a city image that will impress visitors. The

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for those public buildings was first determined (average size is 40,000 sq. meters). From a large arial map (scale = 1:2000) the number of houses included within the appropriated area was determined.

legitimate needs of the city are incidental to this objective. Monumental public works are preferred to the functional types. Perhaps one reason that the municipal council has never seriously considered installing a sewage system for the city is that such works would be installed below the ground, where no one could see them, no one could marvel at the amount of work and toil that had gone into them. The author recalls being instructed by the Emperor to cut down a grove of Eucalyptus trees in front of the main building of the Ethio-Swedish Institute; it was said that they were obstructing the view from the road of one of the few important buildings. A modest housing pilot project (100 units) built out of funds contributed by the United Nations, the Swedish government, and the municipality of Addis Ababa remains unoccupied because the form and style of the houses and the planning of the site do not quite meet with the pleasure of the Kantiba who was in turn expressing sentiments held by the Emperor. His Imperial Majesty's power is indisputable. The Kantiba and the council may give advise, but none question his judgment or wisdom. His will prevails. Everything is done in his name. By virtue of his power to appoint and dismiss important city officials he wields enormous power. A subtly graded system of economic and social rewards encourages those who "towe the line," and as Levine has put it, he can and does:

> ...forestall threatening coalescences of interest through a multiplex surveillance network and a skilfully applied policy of *divide et impera.* [78]

Under such circumstances municipal office is very rarely distributed according to merit. Many of the men in the municipality retain their office either because of a monotonous adulation of the status quo or because they are members of certain families who are already in the system. The few in the municipality with education and with the ability to fulfill specialized functions are surreptitiously encouraged to develop their individual ability along the lines of what Professor Hirshman calls the "ego-focused image." There is little dedication to the solution of the city's problems. Many of the young educated individuals pursue their own personal interests, perhaps unaware that in this way they support the present regime and that for this purpose the regime seeks to perpetuate individualistic pursuits of interest.[79]

The provisions of the Charter, the powers of the Council, and the democratic process of government these are all supposed to bring about remain largely a myth. The outside world is erroneously made to assume that the capital city of Ethiopia has the advantage of and enjoys the benefits and facilities provided by a modern administration.

In actual fact the administrative setup uses these

"facilities of modern administration" as a smoke-screen to hide the manipulations of both the Emperor and the few others to whom he has given power. In the final analysis the Kantiba and the council are there only to carry out the instructions of His Majesty.

The council members who have thus far served in the municipality have been big land owners. Clearly they have not been known to work against their own interests. It is therefore obvious that the existence of a municipal council has served only as a mere hortatory institution of propaganda, having no relevance for the real needs of Addis Ababa.

H. Political Influences and Municipal Income

Nowhere are the unfortunate manipulations of the charter more evident than in the collection and assessment of land and building taxes. The model organization plan simply does not make provisions for this important municipal function. In fact it is relegated to a small department called "incomes". It rates in importance after "vehicle licensing fees," "cattle tax," etc. The 1960 income, budgeted and actual, of the municipality reveals some of the curiosities and inconsistencies inherent in the system of taxation.[80]

First of all, the council simply failed to levy

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[80]Refer to the appendix for a more detailed enumeration of incomes for 1962.

taxes and the municipality did not collect land tax for that year, saying that it was not authorized to do so.

Secondly, while the municipality shows undue laxity in the collection of land tax -- reflecting the popular attitude of not wishing to clash with big land owning interests -- it exhibits equally undue harshness in collecting taxes from the small petty trader. The tax on farmers bringing in produce to sell on the local Saturday market is not only diligently collected, but rates have been raised once since 1964 without any real justification.

Thirdly, a tax on professions, business and licenses, levied after a complicated classification of trades and professions into several categories, is so flexible that -- as Professor Seyoum says -- "It has been the source of corruption and undue favoritism."[81]

All of this happens in full view of a great number of ordinances, notices, proclamations and regulations passed and approved within the spirit of the charter. If only these provisions were adhered to the municipality would be in possession of much more revenue that it has at present.

In 1964, a revised schedule of taxation of land and buildings was announced. It was published in the Negarit Gazeta of December 30, 1964, 24th year, No. 5 under the title, "Addis Ababa Land and Building Tax Regulation - 1964." These regulations provided for the assessment and notification of tax upon all land within

the city. All taxes are to be paid to the Woreda office of the city not later than April 22 of each year. Provision is also made for summons, appeals, penalties, and exemption of taxes on land and buildings of the government, churches, mosques, hospitals and schools.

(i) Building Tax

Building tax is payable only if the building yields rental income or is used for business purposes. In other words, owner-occupied homes are not taxed. Where applicable, building tax is two percent of the annual rent or assessed rental value. The system is full of loop-holes, and is in addition so ridden with corruption that the city gets little revenue out of the building tax. No serious checks are made as to whether the house is indeed occupied by the legitimate owner or whether it is in fact yielding rental income. As a rule municipal officers seem to operate in complete ignorance of the distribution of owner-occupied and renter-occupied houses. This unawareness is even more perplexing when one ponders the fact that by the municipality's own census results only 23% of all households are classified as owner-occupied, while 67% were renters. This regulation may in effect be considered redundant.

(ii) Land Tax

Land tax is assessed according to location, accessibility, and use, with a sliding scale of rates applying to seven "sections" within three major "zones." The highest

tax assessment is $\$0.10/m^2$ and the lowest is $\$0.00075/m^2$. These rates are low and the classifications are not closely related to true market value. Even so, only a fraction of the tax revenue that could be collected is in fact accounted for. It has been pointed out before that only 65% of the land is taxable. According to Berlan only twenty-five percent of the taxable property is in fact taxed. [82] The total receipts of the city are on the order of Eth.$4 million dollars. This is made up from: one percent municipal tax on imports *ad valorem*; permits and license fees; motor vehicle registration; and land and building tax. It is hard to understand how a city of 500,000, with part of its land assessed for as high as Eth.$100 per square meter can collect such a low sum of money. Dakar, the capital of Senegal, with a much smaller population and smaller area, had a revenue of Eth.$11 million in 1961.[83] Nairobi, which has only one-third as many people as Addis Ababa, collected nearly five times as much in revenue (Eth.$21 million) in 1961.[84]

Low assessment is not the only explanation for this tax income problem. Part of the cause may be a poorly prepared and inadequately staffed municipal organization. Out of the budget of $4.0 million, $2.0 million goes to pay the salary of 2,000 municipal employees.[85] (The police are

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[85] For a more detailed breakdown of expenditure, refer to the appendix. Note, however, that the figures in the appendix are for 1961 (1953 Ethiopian calendar). The figures in the text are for 1963. Berlan is the source for the latter estimates.

paid by the central government.) The two thousand workers (most of them unskilled, with average salaries of $116/month)[86] can hardly be expected to make a dent in the problems of a sizeable urban center of the twentieth century. Stockholm, for example, had one municipal employee for thirty-seven inhabitants in 1962.[87] Addis Ababa, on the other hand, has one for every 2,500 inhabitants. As long as there is a shortage of skilled municipal employess, crucial services can be expected to be poorly done or not done at all.

Perhaps an even more important reason that land tax is not collected in the quantity that it should be is the persistence of a "riste gult" mentality amongst the big land owners. The land-tax regulation of 1964 and the spirit of the charter of Addis Ababa should have rendered this "mentality" null and void. In practice it does nothing of the sort. It is true that the war lords or those that have followed them do not collect tax as such (at least not in a conspicuous manner), but they do manage to evade the payment of tax to the municipality. They manage to evade payment of tax because in practice the laws are administered by them. The question here is who is to be judge and against whom is judgment to be made? It is obviously in the advantage and interest of the land lords to see to it that the stipulations of the land and building tax regulation is not implemented. Such interest

permeates throughout authority, church and secular alike, and therefore the administration of regulations that threaten such interest is discretely sabotaged. It is very unlikely that the sentiments of a growing restive middle-class can be indefinitely contained when it is increasingly becoming evident to them that the sole purpose of such legislation is appeasement. No amount of talk about development or democracy could make material differences to the majority of the population if this majority has little to say about the conduct of officials appointed to run the city in particular and the direction development of the city is to take in general.

CHAPTER FIVE

IN SEARCH OF STRATEGIES FOR HOUSING

General

Thus far we have examined the housing situation in Addis Ababa and have indicated in rather broad terms the nature and magnitude of the problem. Now, in search of a strategy we will look especially into the contribution that "self-help" can make to the solution of these problems.

We have, for example, traced the rise of a middle class which needs better housing in greater and greater numbers but which is at present ignored by a production process which caters solely to those in the highest income group. We have noted the absence of a "house building industry" and the production of houses solely on a "custom built" basis.

We have seen how usurious interest rates and exceedingly short amortization periods put the mortgage market beyond the reach of most but the members of the "Mercedes-Benz Tribe."

We have seen how unsatisfactory the distribution

of water and electricity is. We have seen how the cost of these utilities works hardships on the households with low incomes. We have surmised that continued planlessness may eventually wipe out open land. When open land and houses become more and more scarce, all the potential dangers of congestion will be more acute. Without the tempering effect of open land, airy, sunny slums will become stuffy, grey slums. Addis Ababa (the new flower) may turn into a solid jungle of corrugated iron sheets imported from Japan.

We might look at two aspects of the problem of housing in Addis Ababa. One is the problem of providing housing to the increasing ranks of the middle class, a group that is capable of paying for the type of house that the private market is prepared to provide.

The other aspect of the problem is the provision of housing to those who cannot afford to get it from the private market without some sort of assistance. Perhaps two sub groups may be identified within this large group of Addis Ababa families. The group with income below ETH.$50 is one, and the other would be those with incomes between $100 and $300 per month.

Middle Class Housing

This gruop is capable of meeting their housing needs if only relatively minor institutional changes are installed. If, for example:

- An immediate seed capital loan is made to the Imperial savings and home ownership Public Association, thus enabling it to increase its lending capacity for the benefit of all three of the middle income groups.

- If the statutory limitations on its interest rates on both mortgage and deposits and on down payments are lifted, and it if is allowed to install a flexible policy on those questions.

- An enterpreneural capacity either through co-operatives or the education of contractors is developed. At present, there are no builders in Ethiopia who are catering to the low-middle or middle-middle income groups. The main reason why there is no enterpreneurship in house building is because of the difficulty of acquiring land.

Most building contractors are foreigners and are not therefore allowed to buy or sell land. But even Ethiopian enterpreneurs, unless they are members of the aristocracy, are bound to have difficulty in doing so.

In the end, then, the most crucial point that needs to be solved is the problem of bringing sufficient quantity of land for housing development. The old procedure of developing tiny plots for one or two expensive villa-type houses will not do for the growing numbers of the middle class.

Low Income Housing -- Less than ETH.$50-group

The approach to the housing problem of the lowest income groups, especially those below the $50 mark, does not easily lend itself to the so-called "classical methods." These families are for the present beyond the reach of even the most reasonable financing mechanism. Perhaps no amounts of ingenious technology can assist in the production of suitable housing. In fact, the problem may be somewhat immune to the abrasions of technology. Perhaps the frontiers of the problem are more likely to be found in the realms of administrative, and community development. The quality of the shelter, at this stage, is perhaps less important than is environment; and as a result even self-help is probably less effective than it is generally thought to be. This is so because equiping the environment (with safe water, access roads, sewage disposal systems) so that it functions as a plausible organization is a task best handled by and under an authoritative, high command and not by the process of self-help. It is felt that the messages of aided self-help, at least in the form they are dessiminated at present, carry a number of false promises.

Self help is here understood to mean:

- The maximum (sometimes the only) use of traditional materials. (Traditional materials generally mean non-manufactured materials, primarily of rural origin.) Another variation of self-help occurs when traditional materials are upgraded by laboratory tests and studies. This form of self-help usually carries the label "aided self-help."
- Self-help also means a labor intensive in contrast to capital intensive approach to building housing. What is more, the building process is, whenever possible, made to lend itself to the capabilities of personnel working at a low technical level.

The Basis of Self Help Housing

Self-help has been and is still being used most effectively in the rural areas, but its continuation in the urban areas has given rise to many problems. The "chica" house studied in APPENDIX A illustrates some of the shortcomings of self-help when applied in an urban setting.

Let us look at some of the issues in more detail.

Low-level Skills -- Flexible Materials

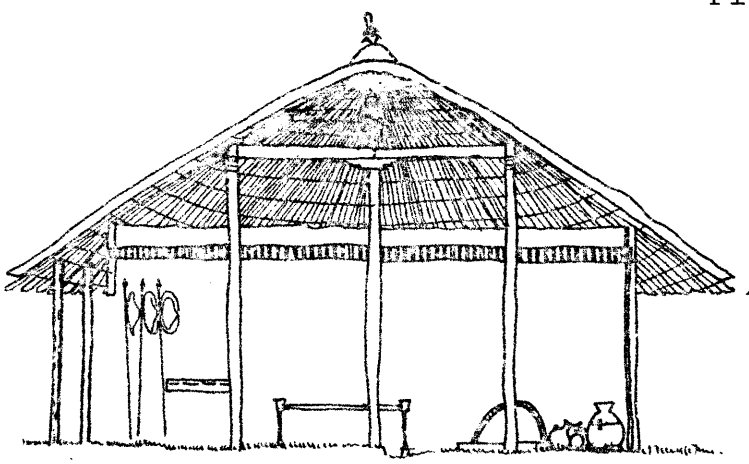
In the rural environment, housing is a product of the cooperative endeavors of non-professional builders. In an

urban environment, where the standard of house required is in any case imperatively higher, house building needs to be a systematic cooperation of a number of specialists such as masons, carpenters, fitters, plasterers, painters, etc., using a variety of manufactured building materials. The difference between rural and urban house building may be illustrated by the way in which two roofing materials are used.

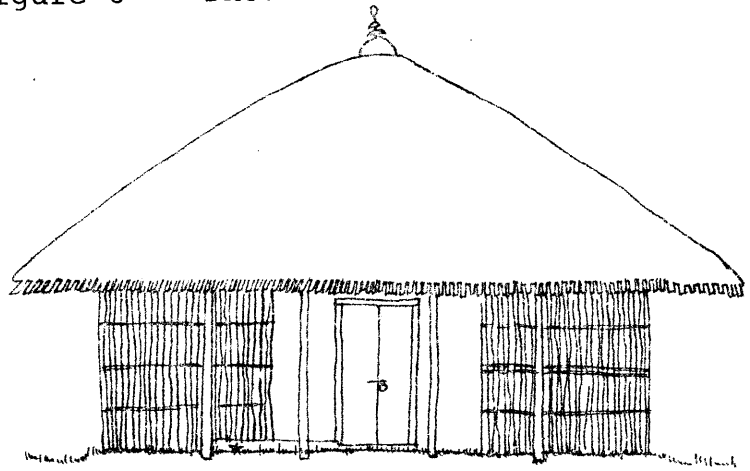
In the rural areas, thatch is used extensively. It is such a flexible material that it can be "stretched," so to speak, to cover up any loopholes. Manufactured materials, on the other hand, demand the observance of some accuracy. Corrugated iron sheets can't be stretched to cover up every size of hole. These sheets must rest on purlins spaced at specified distances; no more, no less. A crude patchwork of repairs cannot undo mistakes of construction, and errors of dimension are irretrievable. Nails fastening the iron sheets to the purlins can't be driven just anywhere. A hole in the gulley means a leaky roof. Window openings must fit the outside dimensions of pre-cut window frames. "Any" size opening just won't do.

In contrast, the flexibility of rural building materials lend themselves to being handled by almost every one. Note, for example, the Gala house shown in fig. 3. When the house is ready to be fitted with the

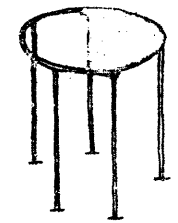
Figure 8 -- Shoa Galla House



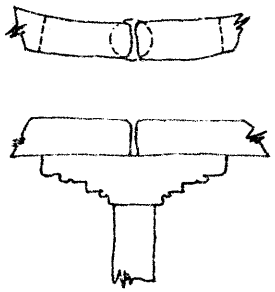
SECTION I-I SCALE 1:50



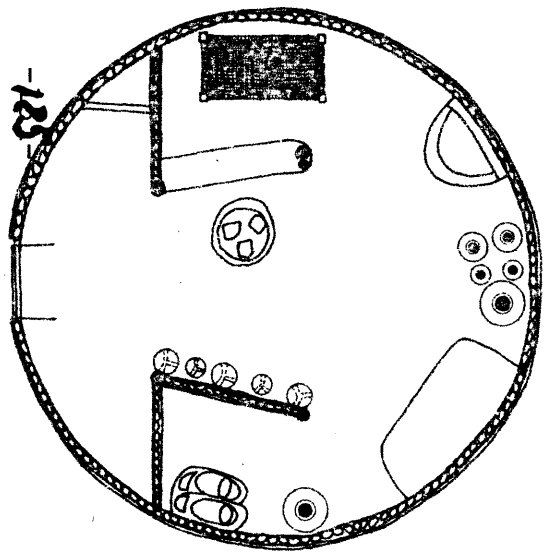
FRONT ELEVATION



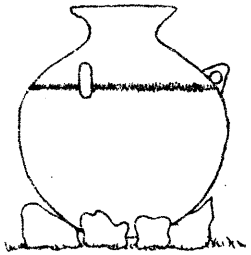
STRUCTURAL PART CARRYING THE ROOF
SCALE 1:100



DETAIL I SCALE 1:10



PLAN
SCALE 1:50

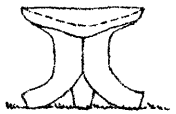


TELLA

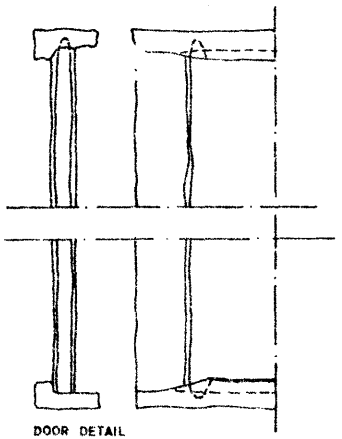
POTS FOR WATER

TELLA

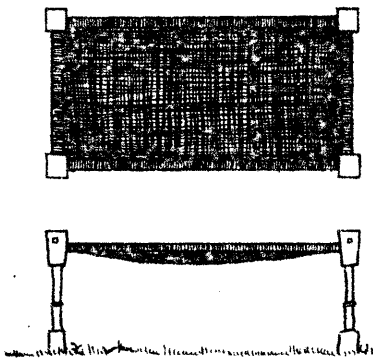
SCALE 1:10



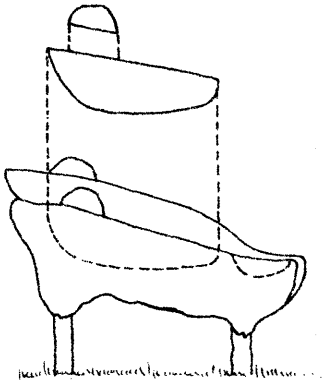
A SEAT MADE FROM ONE-PIECE OF WOOD



DOOR DETAIL
SCALE 1:10



BED MADE OF WOOD & STRIPS OF SKIN
SCALE 1:20



GRINDERS SCALE 1:10

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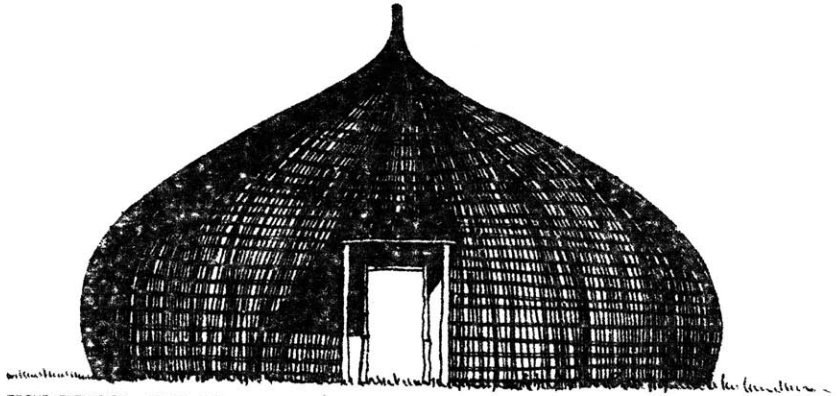
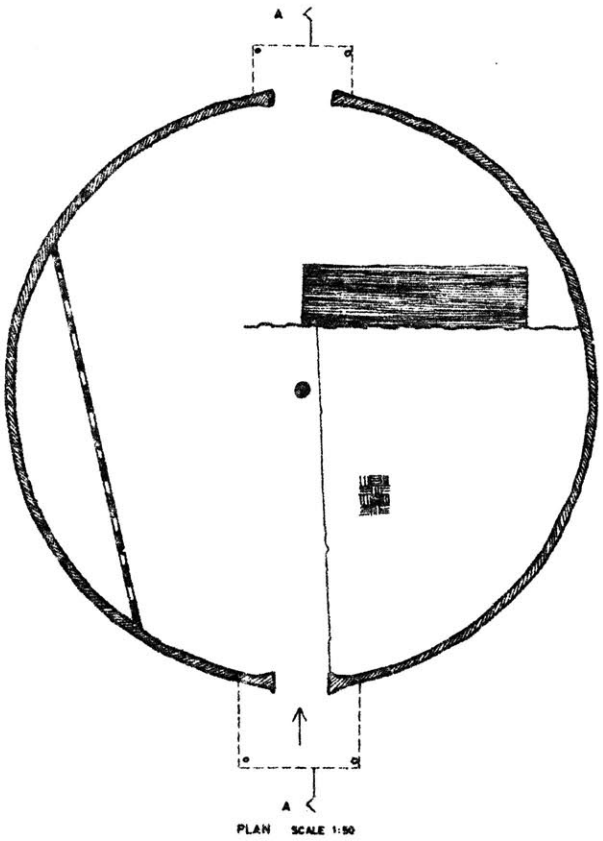
structural parts that will carry the roof, the closest neighbors are called to assist and, in a matter of a few hours, the poles and the circular carrying beams are fastened in place. There are no tolerances to observe, and these elements can always be put in place by force if necessary. Hardly any damage can be done. The "cost" of assistance given by neighbors to the home owner is nill; it is only a favor that may be returned when and if occasion permits. This delightful system of co-operative building is called "Debo" in some parts of the country, "Wenfel" in others. It is a simple process by which a community of people help each other to build their houses.

The re-creation of this process in the urban setting is not entirely applicable, nor is it practical. For one thing, urban dwellers do not have the time or the inclination to give such assistance to each other and, for another, the standard of house required is not only higher but is different. The urban house is called to provide services generally unknown and unheard of in the rural areas. A child brings homework from school and needs light to work on his tasks. The beautiful Sidamo house shown in fig. 10 is nice to look at and serves its limited purpose admirably, but it cannot provide sufficient lighting and for this, and for many other reasons, is unsuitable for urban use.

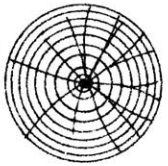
Figure 10 -- Sidamo Bamboo House



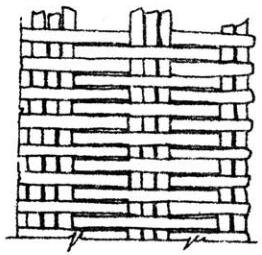
FRONT ELEVATION SCALE 1:50



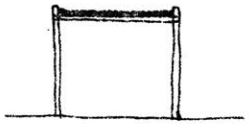
PLAN SCALE 1:50



UMBRELLA FROM BAMBOO LEAVES
SCALE 1:25



DOOR DETAIL
SCALE 1:5



BAMBOO BED
SCALE 1:25

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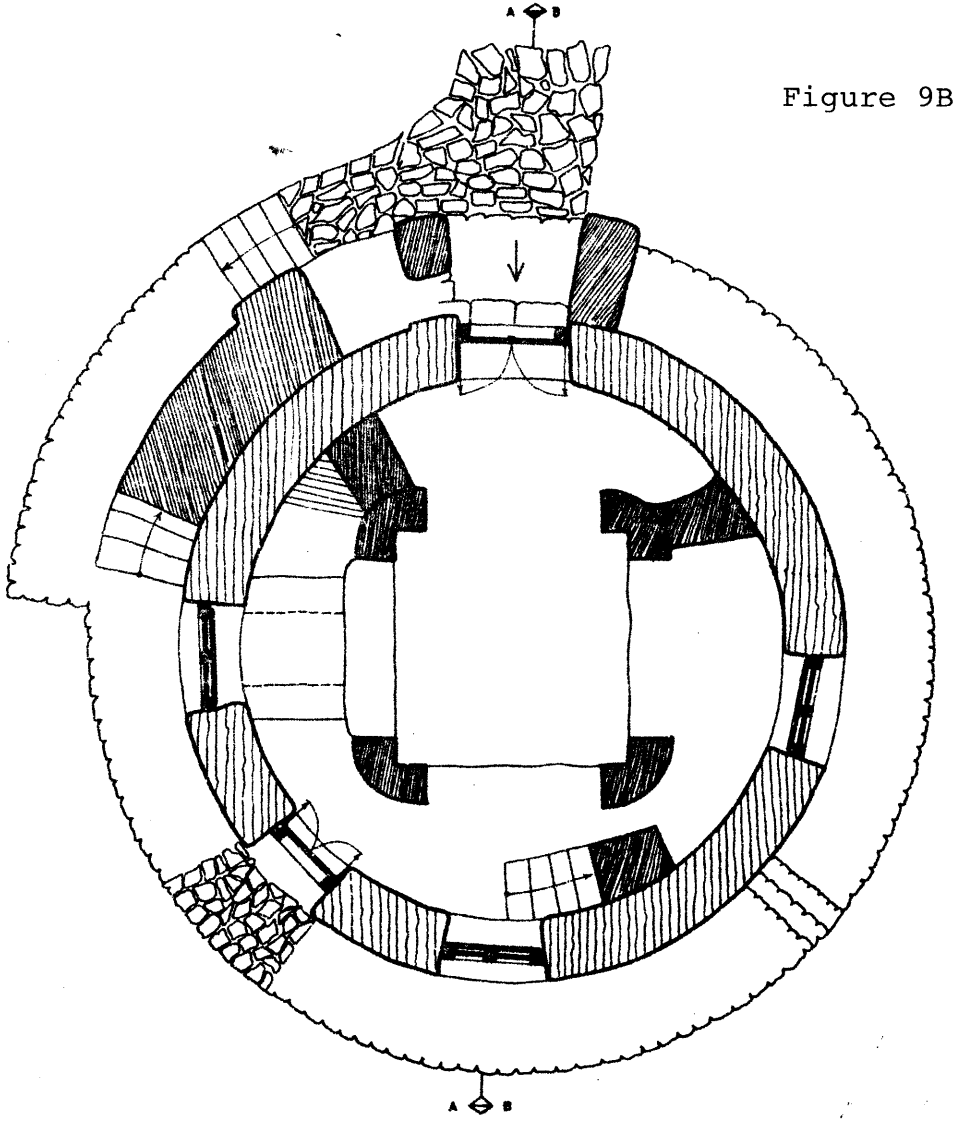
What is more, in its present form, it cannot even be "fitted" with window openings without rendering it useless as a protector against rain.

For the rural tradition, house building is an exercise in improvisation carried out within the framework of a few basic facts which have long been commited to memory. Complicated as it is, the Tigre Chiefs house (see fig.9A, 9B) was essentially built out of memory -- without the aid of plans drawn to scale, without any reference to any recorded guidelines. The two Coptic priests who built the Tigre Chiefs house on the grounds of the Ethio-Swedish Institute in Addis Ababa were asked how it was possible to carry out a project of this nature without the assistance of plans and drawings. They are credited with the following response: "Plans are only for those who don't know what they are doing!"

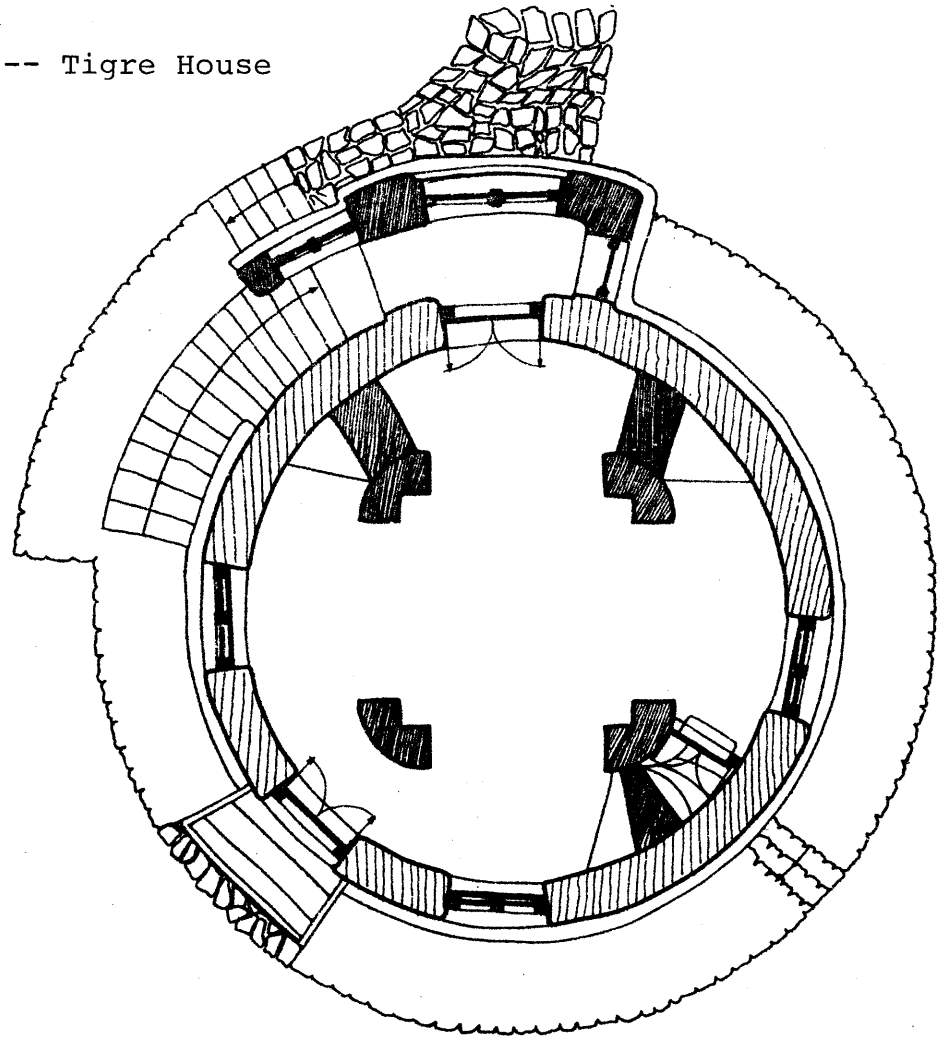
It is only a pity that Aleka Abraha and Aleka Terefe (the builders of "The Tigre House") are mere mortals and that when they die the unique skill which they possess dies with them. In the meantime, their descendants will probably live in the planless confusion of an urban setting and until this vacuum left by traditional skills is filled by a modern building culture suitable to the callings of the twentieth century, forlorn "chica" houses are called in to fill the gap.

Figure 9A -- Tigre House

Figure 9B -- Tigre House



SECTION C-C



SECTION D-D

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Reference is made to the results of surveys I and II dealing with the extent of the availability of building experience among the inhabitants of Teklehaimanot and Lideta. The paucity of skill, even in the construction of chica houses (only 8 percent of adult population said that they had had any experience), is an indication that traditional skills are indeed dying out.

Besides, these skills are not being replaced fast enough by more modern skills. According to surveys I** and II, less than half of one percent of the adult population said they had building experiences using permanent materials.

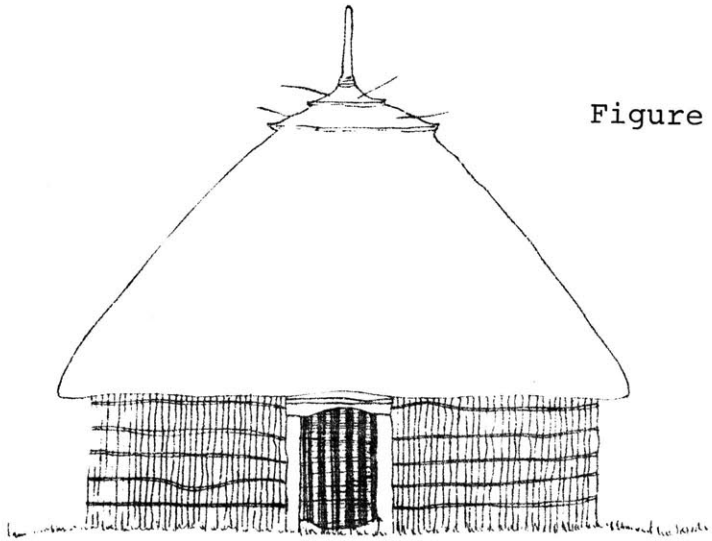
Cheap and Abundant Materials

Rural housing is essentially built of material which is collected from the land. Nearly always this material is free for the taking. If one excludes labor, no exact monetized value could be placed on it. The "sembelet" used for thatching the roof of the "Gurage House"*is acquired freely in most of the highland area around Woliso-Wolkite, 50 Km southwest of Addis Ababa. When a model of this type of house was built in the compound of the Ethio-Swedish Institute, the expenses of bringing "sembelet" from this area to Addis Ababa was so great that had the hut been roofed with iron sheets it could have cost far less than it did.

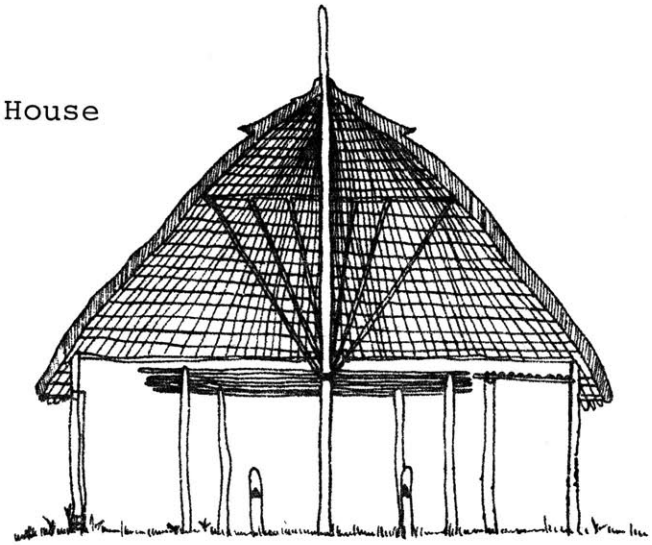
*See figure 11.

**See Appendix A for details of surveys I and II.

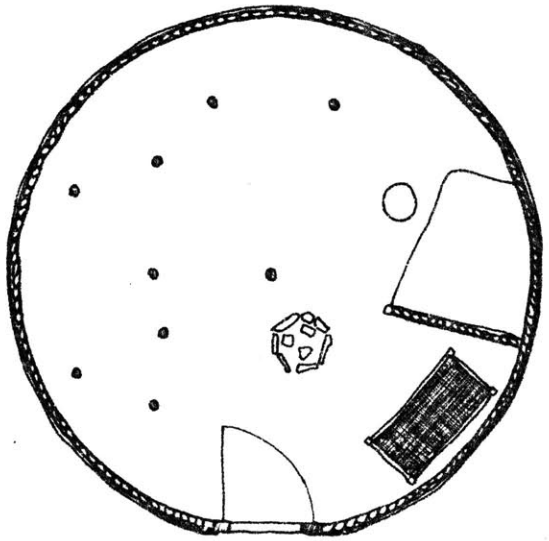
Figure 11 -- Gurage House



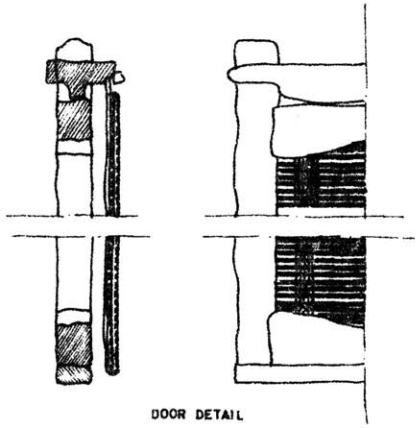
FRONT ELEVATION
SCALA 1:50



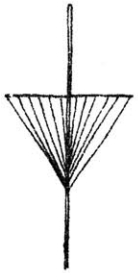
SECTION I-I
SCALE 1:50



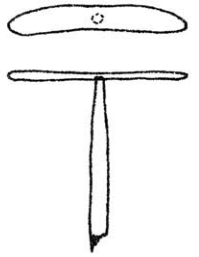
PLAN
SCALE 1:50



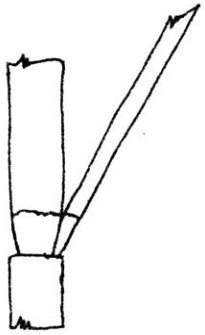
DOOR DETAIL
SCALE 1:10



MAIN SUPPORT



DETAIL I SCALE 1:10



DETAIL 2 SCALE 1:10

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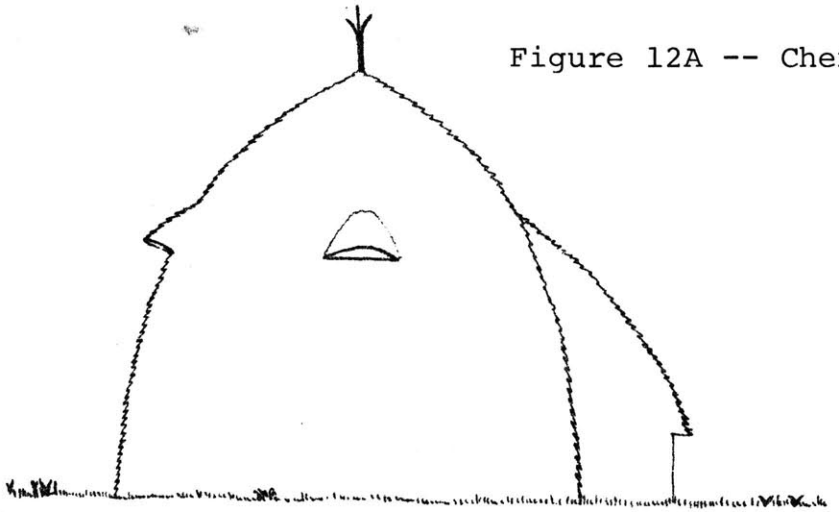
Periodic Replacement

The Chencha Bamboo house (see fig.12A, 12B) is built (perhaps "woven" is a better word) to a height of 8m. The casual observer may question the efficacy of such a dimension; 8m. appears to be too extravagant, but this height is required for a sensible reason. As the portion of the hut in contact with the ground rots, the whole structure is allowed to sink until a fresh and firm supply of bamboo takes over the load carrying functions. This neat process of obsolescense is allowed to continue until the height of the hut becomes too small for usual human uses. The "left over" hut is not entirely discarded. It finds various uses, such as a store room, a chicken coop, weaving room, etc.

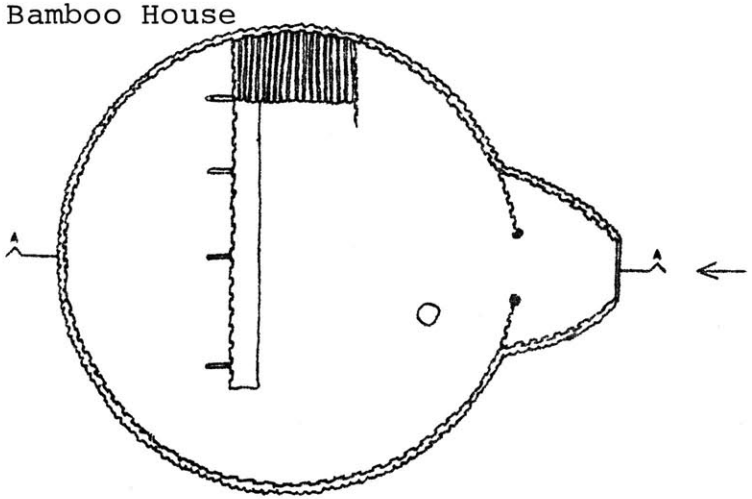
The Shortcomings of Urban Self Help

What does a sinking bamboo house tell us about the relationship between tradition and innovation? It is of little value to develop a technique for, say, making bamboo rot- and insect-proof if it is to cost considerably more than periodic replacement. Yet, as a matter of principle, the aided self-help approach would advocate the upgrading of bamboo.

Figure 12A -- Chencha Bamboo House



SIDE ELEVATION



PLAN

FRONT ELEVATION

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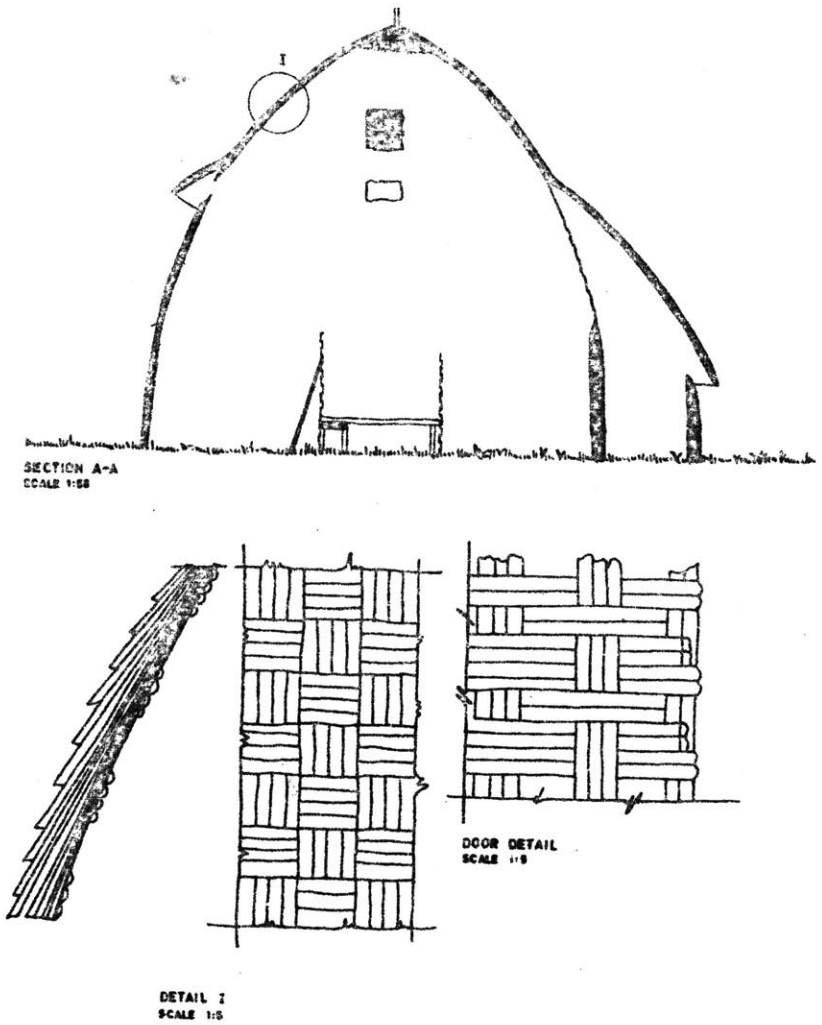

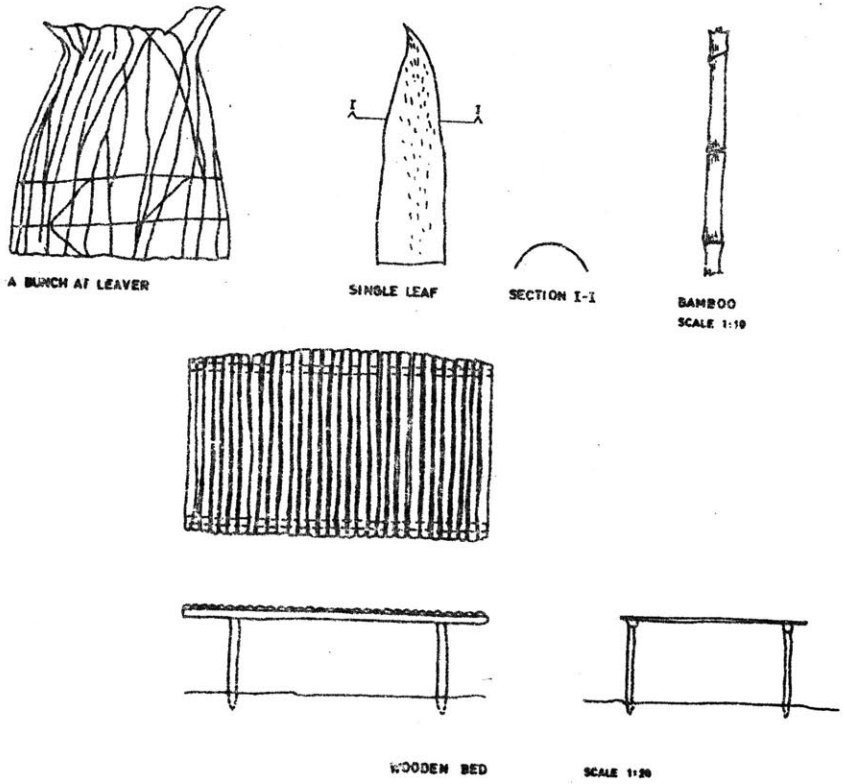

Figure 12B -- Chencha Bamboo House

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This example and the one of the Sidamo bamboo house which cannot accomodate a window opening without being rendered useless, seem to suggest that traditional houses, and local building practices need to be taken only for what they are worth. It appears that they do not lend themselves to partial or intermediatory improvement. Indeed, instituting innovation might only result in making them unworkable propositions. For example, the smoke from open fires (especially those ones fueled by cow dung) is believed to provide the thatch with increased protection from rotting. If open fires are to be abolished (as well they might, because frequently small children fall into them), it needs to be remembered that the thatching may rot in an accelerated manner.

Doctor Webb of the Building Research Station in Watford has suggested that the mere reduction of persons per sleeping room in tropical housing without a corresponding improvement of the thermal qualities of walls results in the excessive lowering of temperature. His argument must surely hold water in the case of traditional houses occupied by both animals and human beings. It may be that the segregation of the two will only result in such loses of latent heat that temperatures inside huts (at least in the highland areas of Ethiopia) will fall to uncomfortable levels.

These remarks underline the need for balance in the planning of housing in societies in the process of urbanization. They stress the need to be objective in determining what kind of "traditional approaches" are likely to be worthwhile and deserve propagation. There should be no qualms made about rejecting such traditions if they prove to be inadequate and inappropriate in the urban setting. The "chencha" bamboo house is one example. It has no urban message, even in Chencha; it is good only as long as bamboo costs nothing. As Atkinson has put it, "the importation of rural building materials and the attempt to upgrade these by laboratory investigations are unlikely to result in major improvement." 88A

Too many romanticists have spread the confusing message of the importance of preserving traditional methods of construction. As the English traveler David Buxton in his excellent book, Travels in Ethiopia, has suggested, "...The visitors perverse preference for the color, texture and association of thatch..." inadvertently succumbs to the "pursuit" of much thatch and the rejection of much corrugated iron.

The fact is that self-help even when it is souped up by large doses of the "classical approach," is bound to be

a dismal failure, because it is bent on crossing two dissimilar breeds with each other. When Swedish technical experts, or for that matter any highly skilled technical experts, attempt to teach Ethiopians, say, about the best method of building a "chica" (mud) house, the result could not be anything but amusing. Efforts from outside to improve local traditional techniques are on the whole destined to fail. It is important to understand that when traditional practices are breaking down, it is usually because craftsmanship is dying out and/or suitable materials are becoming scarce. For example, thatch is more expensive in Addis Ababa than in Woliso because the wasteland where thatching materials could once be found is now built on. It has already been suggested that the upgrading of inferior materials by such means as chemical treatment of grasses, is unlikely to be economic. Even in rural areas where suitable natural materials can still be found, it is probably more difficult to revive traditional craftmanship or introduce better traditional practices from another district than to adopt techniques using manufactured materials. This may also apply to the improvement of earth building by stabilization techniques.

Atkinson has suggested a two-fold reason for this.[89] First, "in the atmosphere of progress characteristic of developing countries, traditional materials like thatch or earth are regarded by the more go-ahead in the community

as being "bush," (to use Atkinson's word) Despite its durability, there is resistance to living in a stabilized-earth house because it is built of earth; concrete is demanded because it is "up-to-date."

Secondly, many of the traditional ways of building are craft activities organized in ways which are breaking down under the pressure of economic and political development.

A further difficulty is that many community workers, though skilled, are illiterate (or only literate in the vernacular); thus improved methods are not easy to teach. As a rule blue prints are unsuitable instruction material for the largely illiterate self-help participants. Under the circumstances the best method of passing building information would have been "to build, not to write," but demonstration buildings have not been frequently seen.

Even when stabilized soil construction is acceptible to households, its economy -- compared with efficiently made concrete blocks -- is often marginal. Especially where block-making machines of the "egg-laying" types, which do not require pallets and make rather lean mixes practical, are used, the amount of cement required (in terms of kilograms per square meter of finished wall) differs little between pressed cement-soil blocks and cored cement sand blocks. In large projects, where the supply of soil

has to be put on an organized basis, there may be little difference in cost from sand. Certainly the savings in using cement stabilization are unlikely to be sensational.

These remarks suggest that in Addis Ababa better housing for the lowest income groups (the primary aim of aided self-help) will depend more on the introduction of sound financial and management practices then on the novelties of aided self-help. Much has been written about self-help as a means of providing more dwellings in tropical countries. Although under certain circumstances there is a place for families building their own homes, the Ethiopian government may be better advised to concentrate on the technical and commercial education of professional housebuilders rather than training amateur builders.

The preceding has not been stated as an argument for the wholesale abolishment of the so-called self-help approach; rather its aim has been to caution against burdening it with the cumbersome and what often appear to be inappropriate innovations. The attempt has been to develop the idea that technical assistance, either from the government or from international experts, should supplement the current efforts of people building their own houses -- not by working "in" the movement itself, but outside it.

So far as the government is concerned, for example,

part of the resources it might have at its disposal might best be devoted to setting of minimal environmental facilities (serviced plots, Etc.) and a sound institutional framework within which the household would work to gradually enter into the money market. Fifty-seven percent of the migrants to Addis Ababa came to town in search of employment. Eight thousand families in the lower-middle and middle-middle income range can afford to purchase housing in the private market and yet are not able to do so because a professional homebuilding industry does not exist. What better opportunity could the municipality have to kill two birds with one stone? create employment by encouraging a building industry.

As far as the lowest income group is concerned, it cannot be imagined that dwellings, the monthly rent of which is often higher than the income of the slum-area families, will one day be bestowed on these families. As long as "the shanty-town question is more a question of employment than of construction,"[90] architects and building research workers are bound to make only marginal contributions to the ultimate solution of the problems.

What will make the difference is whether there is a willingness to come to grips with the problem and whether there will be sufficient land brought into the development market to cater both to the middle and lower income groups.

Areas for Temporary Housing

Meanwhile, the grave potential dangers to which low income families are exposed because of the risk of epidemics and fire could be greatly reduced by accepting as a fact that enough good quality housing will not be available for a decade or two and, in consequence, that the lowest grade of housing will continue to be used. Much could then be done to make these accomodations healthier.

Daldy, of the Tropical Section of the Building Research Station at Watford, Great Britain, has suggested a format for areas of temporary housing[91] which may be adopted by Addis Ababa with great advantage. He suggests that temporary accomodations could be made healthier by:

(1) setting aside areas (known as Temporary Housing Areas) in which housing built of temporary materials would be permitted, provided it complied with the regulations described. These areas might be inside the municipal boundary (in which case enforcement of these regulations would be by the municipal staff) or outside it (implying enforcement by some other body): the former is usually preferable because adequate machinery for encorcement may be in existence in most municipalities and is lacking in many cirum-urban areas.

(2) making a set of Regulations for Temporary Housing to be applied only in such areas: these regulations would

lay down low standards of accommodation and say nothing about the materials to be used. Compliance with these regulations would cost the inhabitants of the shanty towns -- or those who let houses to them -- very little extra money and would greatly reduce the danger to health and safety. All ten regions of Addis Ababa would set aside Temporary Housing Areas, and these would be marked on development plans. Provision would be included for shops, open space, schools and other public buildings. Particular attention would be paid to:

(a) the provision of wide road reserves around the blocks on which temporary housing is permitted: this is an obvious precaution against the spread of fire;

(b) setting aside whole blocks for grouping the buildings other than temporary housing;

(c) the plots on temporary housing blocks would be given sizes similar to those for permanent housing: this would cover future redevelopment (about 200 square meters);

(d) consideration might be given to subdividing these plots for the lifetime of the temporary housing to prevent houses from growing by the addition of extra rooms (for letting) until they become a serious fire risk to the occupants;

(e) the provision of a piped water supply to each plot: however, in some places it may be inevitable that the water supply should comprise only the provision of communal

wells at certain street intersections.

If an adequate area is developed in this way, the shanty towns would be brought under control at a minimum cost and to the considerable advantage of the inhabitants.

It is presumed that the whole question of Temporary Housing Areas would be reviewed every five years at the same time as the normal review of any development plan made under planning legislation, if such exists.

The suggestions outlined above include both town planning and building control. As adequate planning legislation does not exist the necessary regulations could be introduced under and in conjunction with existing municipal rules for construction of new buildings.

Draft "Regulations for Temporary Housing" are attached in the appendix with notes on the implications of some of the regulations.

If all those in the under Eth.$50 per month income bracket were to be included in a "serviced plot" temporary living area program, about 10 square kilometers in Addis Ababa (less than five percent of the total area) would have to be placed under this program.[92] A program of this size is neither necessary nor desirable. Besides, it is hoped that rapidly rising household income would elevate an increasing proportion of this segment of the

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[92]It is assumed that the plot sizes would not be less than 200 square meters.

population into higher income brackets, thus putting them in a position to afford more than the rudimentary facilities offered by "serviced plots." If a housing development plan could anticipate accommodating one-third of those in the Less than Eth.$50/month bracket, a realistic and clearly manageable task would emerge. This program would involve about 10,000 households and three square kilometers of serviced plots.

So much for those families whose income is below Eth. $50 per month. What could be done for those whose income is substantially more ($100-$300) but not high enough to afford the cheapest house-type provided by the private market.

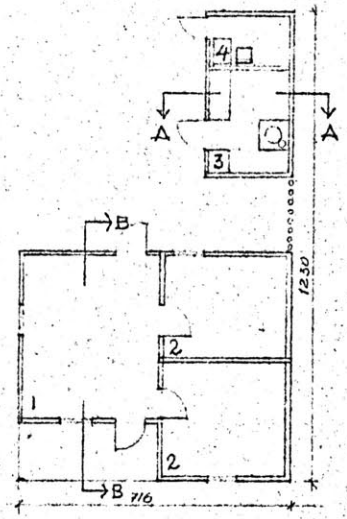
This is an area of housing which can benefit from the "classical approach." Here is an income group to whom the results of "cost-down" research may be addressed. To this group, the contributions of "experts" -- architects, building research workers, etc. -- would make the most sense. The series of house plans shown in this chapter are attempts to use the knowledge gained by research to build housing cheaper than it is presently provided by the private market, and as close as possible to the price range which families in the income group $100-$300 can afford. These type houses have been built on an experimental basis by the Ethio-Swedish Institute of Building Technology.

Figure 14A

A Type-Plan for an Improved Chica House

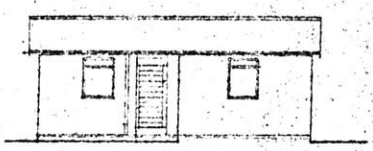
Building Cost: Eth.$4227

Considered suitable for Addis Ababa households in the income group Eth.$100-$300

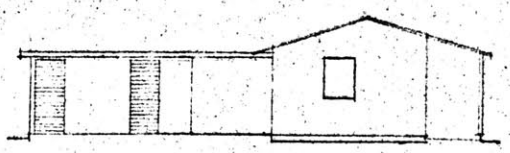


1 LIVINGROOM
2 BEDROOM
3 KITCHEN
4 LAVATORY

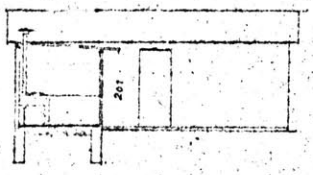
PLAN 1:200



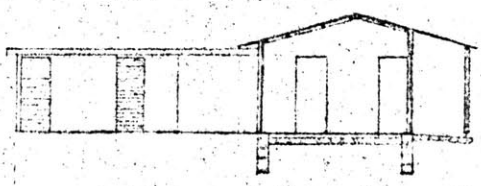
FRONT ELEVATION



SIDE ELEVATION



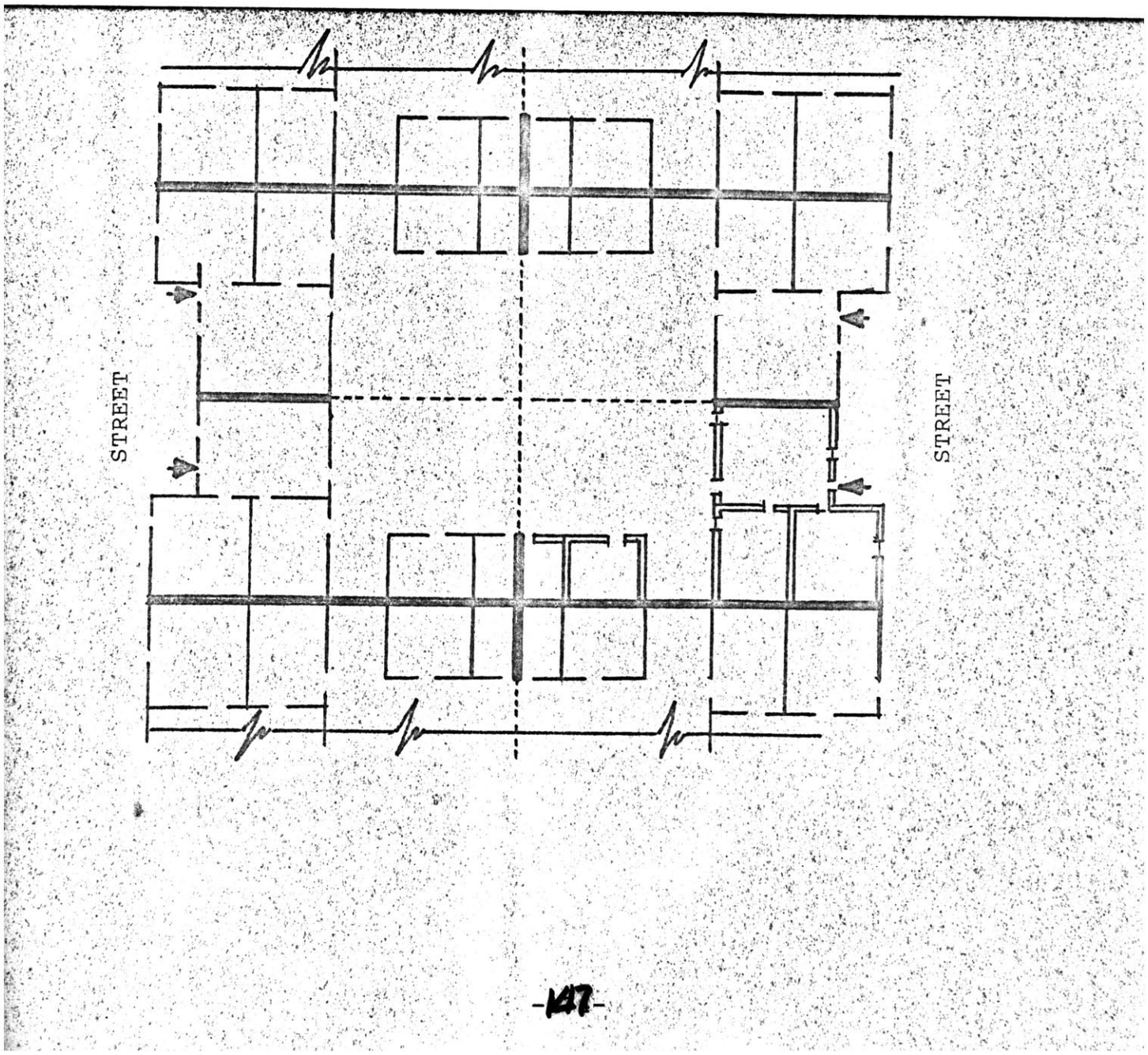
SECTION A-A

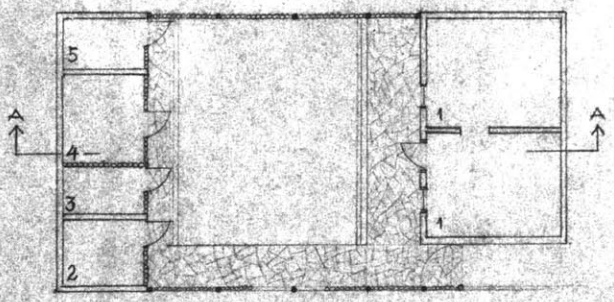


SECTION B-B

Figure 14B

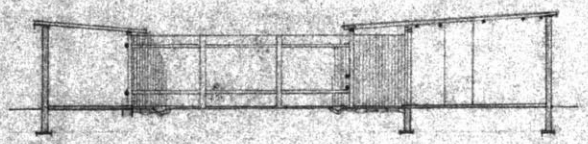
The Improved Chica House in
A Compact Town Planning Scheme





1 ROOM
2 KITCHEN
3 STORE
4 POULTRY
5 LATRIN

PLAN 1:200



SECTION A-A

ROAD ELEVATION

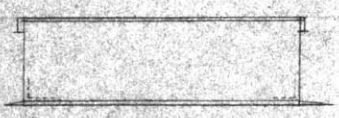


Figure 15A

A Type-Plan for a brick house (with chica mortar)

Building cost: Eth.$3884

Considered suitable for Addis Ababa households in the income group Eth.$100-$300.

Figure 15B

The Low-Cost Brick House in a
Compact town planning scheme

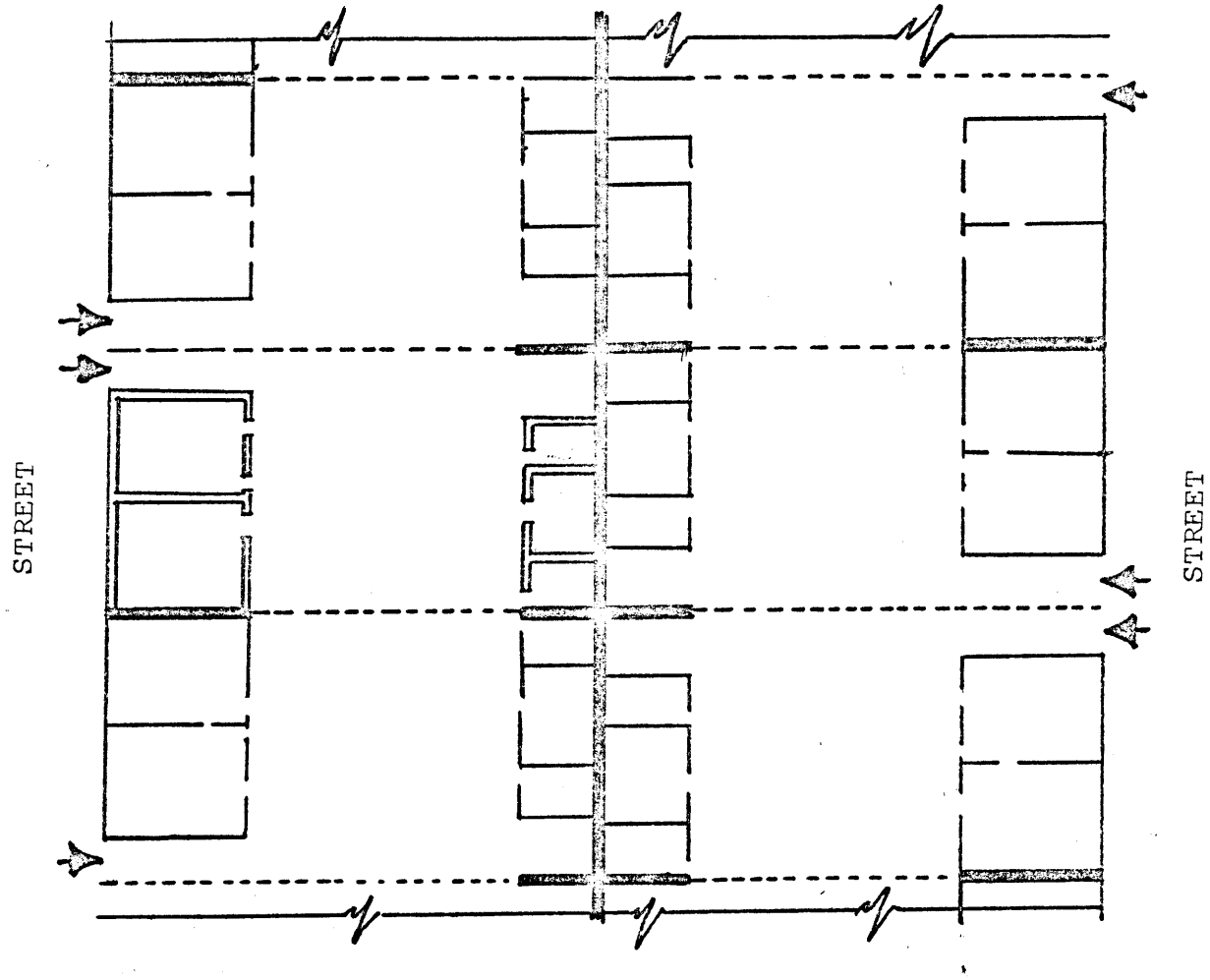
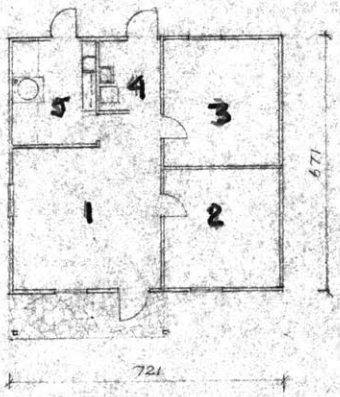


Figure 16A

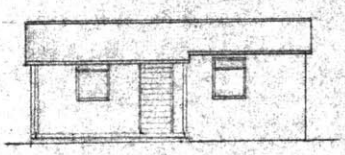
Type-Plan for Sand Cement Block House

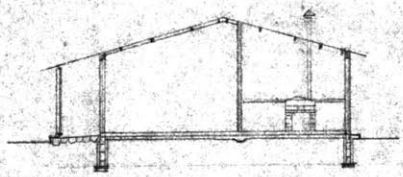
Building Cost: Eth.$4369

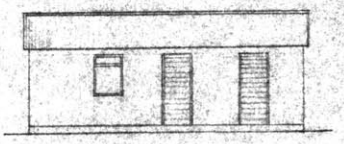
Income Groups Eth.$100-$300



1. Living Room
2. Bedroom
3. Bedroom
4. Shower-Toilet
5. Kitchen







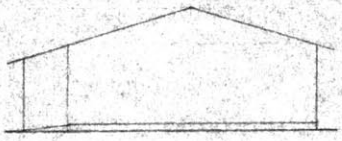
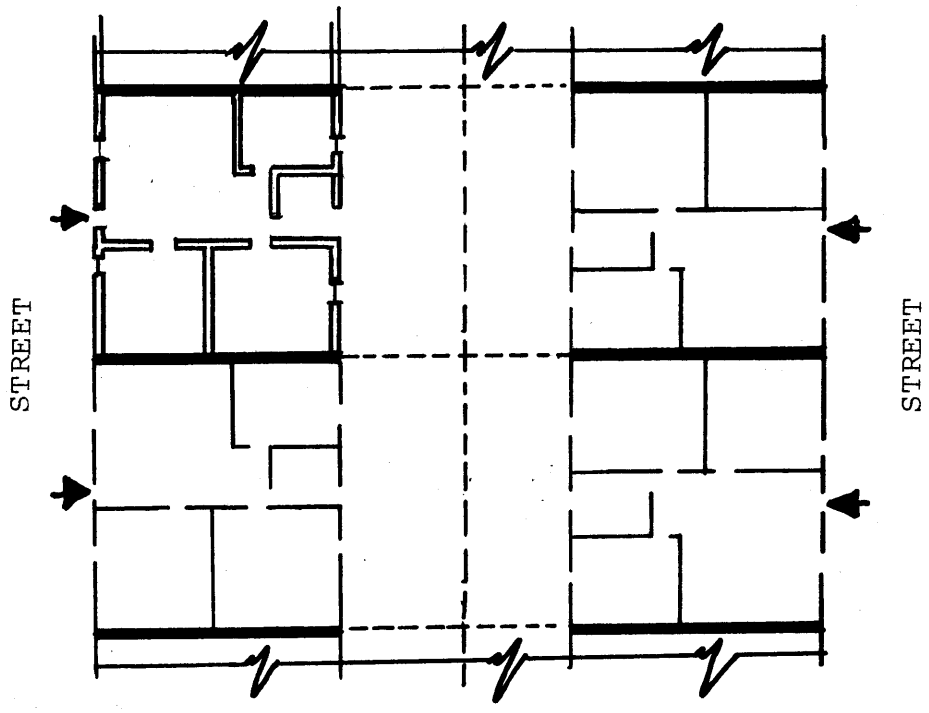


Figure 16B
Compact Town Planning Scheme for
the Sand Cement Block House



A respectable proportion of the families in the $100-$300 income groups, in particular the upper segment of this income group, could and should be able to find satisfaction in this type of housing. The plans were worked out to suit a variety of needs -- e.g., the need to keep domestic animals (a need attested to by surveys I and II -- 35% of households kept domestic animals); the need to expand as the requirement for space grows; the need to meet dual siting possibilities -- as a detached house or as row houses in a compact town planning scheme (see sketches).

These three houses, which are virtually identical, contained 45 square meters (except that the "chica" house had a ten square meter Injera kitchen, making the total 55 square meters). In all cases, foundations were of reinforced concrete, roofs were corrugated galvanized iron sheets on wood trusses with ceilings of fiber board. Floors were exposed concrete slabs, troweled smooth. All had two bedrooms, combined living-dining room, small kitchen with sink, and a bathroom with shower and W.C. The cost of these houses without land was as follows:[93]

Chica house - Total cost, $4227 or about Eth.$76 per square meter. (See figures 14A, 14B)

Brick house (with chica mortar) - Total cost $3884 or about Eth.$86 per square meter. (Figures 15A, 15B)

Concrete block house - Total cost $4369 or about Eth.$97 per square meter. (See Figures 16A, 16B)

The unit prices of these model houses may be compared to the unit price of the house type provided by the private market ($135/m^2). In the least favorable type of house (concrete block house), there is a reduction of costs in the neighborhood of thirty percent. Even if it is difficult to make unqualified comparisons between the standard provided by the model experimental house and the private built "standard" house; the promises that the model experimental houses holds for the income groups below Eth.$300 cannot be discounted. The only unfortunate thing is that the Ethio-Swedish Institute has not been vigorous enough in sharing or selling its knowledge to the public, and municipal authorities who are in a position to use this newly-found information have been as a rule quite unconcerned.

Further study and testing will no doubt improve the situation. The model experimental houses that have been built have resulted in such impressive lowering of building costs, and have been brought about by several years of study and experimentation by Swedish engineers and architects working with their Ethiopian counterparts. In this respect Ethiopia, and Addis Ababa in particular, is fortunate. It is not many developing countries that have Institutes of Building Research supported generously

by external funds.[94]

Perhaps it is unfortunate that the Institute is not in the best organizational position to disseminate its knowledge to the public. Of course, scale drawings of these and of similar low cost houses are freely offered to anyone who would take them. But that is considered to be a "marginal" method of building information broadcasting. What may be effective would be to have these model houses built "amongst" the people -- in a conspicuous spot at the market place, in the midst of the slum areas, so that the people could see a "living" demonstration of what can be done with a good knowledge of available materials.

The municipal authorities who are best able to arrange for such demonstrations have been largely quiet and unconcerned. What is more, the few times they had agreed to cooperate in a demonstration scheme, they have been fairly short on their promises and have changed their minds, thus frustrating the project.[95] In contrast one

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[94]Since 1954 the Swedish government has put in approximately Eth.$10 million in the Ethio-Swedish Institute.

[95]In 1962 a demonstration project of six low-cost houses had to be demolished after the building had proceeded to the window level, when the municipal authorities changed their minds about the use of this particular site.

cannot help but notice the vigor and vitality municipal employees show at numerous opening ceremonies of large public buildings, or when they "decorate" the town in preparation for the welcoming of a visiting dignitary.

These remarks suggest that good building knowledge alone cannot make significant differences in the housing problem. A certain amount of political good will is desirable.

A Roof Loan Scheme for the Lower Segments of the Eth.$100-$300 Group

Those in the lower segment of this income group could benefit from some sort of scheme that would help them acquire materials for the roof because it is the part of the house which they find most difficult to complete unaided. The very nature of this form of aid to this group of home builders requires a different system of administration from that suggested for mortgage financing of buildings. A pattern which may prove successful without involving too complicated a bureaucratic procedure is here mentioned. The idea is not new, as it has been tried in several countries -- even in Africa. As far as it is possible to discern, Professor Charles Abrams, has worked out in detail a number of such schemes for developing countries -- one which seems to be particularly suited for Addis Ababa -- follows the format he has suggested for Lagos.[96]

(a) A revolving fund could be established out of which small loans can be given for roofing materials to applicants who have completed their houses up to the roof level.

(b) The amount of loan should be limited to a maximum of $1000 per house. The aim should be to help many applicants by small loans rather than to assist a few by large ones.

(c) Applicants should be encouraged to organize themselves into neighborhood housing societies. One of the existing traditional mutual associations could be the basis for this society. Ukub has already been mentioned. Others include Idder, a welfare and financial cooperative in which periodic contributions are made to the chief of the association from which payments are made to the needy or for burial expenses, at which time services are also contributed; Mahber, a kind of social club for the mutual celebration of the feast day of a saint, sharing of invitations for food and drink; Senbete, a church-supper society in which members living around a church compound prepare food in turn each Sunday. Every single one of these associations can serve, almost without change.

In general, such societies may include house owners as well as would-be house owners, and should incorporate a minimum of about twenty of the heads of the families of the neighborhood or the mutual association.

(d) Each neighborhood housing society should be entitled to propose annually five of its members for a roof loan. The whole society should be responsible for the repayment of the loans it has sponsored.

(e) A small team of specially trained municipal[97] inspectors would check the houses proposed for roof loans and provide the owners with vouchers against which they could obtain the necessary materials from a merchant of building materials. No cash would change hands at this stage.

(f) The loans would be repayable in five equal annual instalments beginning one year after the issue of the roofing materials.

(g) This would ensure that the resources of the Roof Loan Fund could be recouped and re-used in a cycle of approximately five years. In case of default, not only the individual borrower but also his housing society should be held responsible. A society which does not see to it that its members fulfill their obligations should be black-listed and precluded from receiving further loans. Notice of this decision together with the names of the members of the defaulting society should be published in the local press.

(h) The roof loans should be interest free except for

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[97]The Ethio-Swedish Institute could quite easily undertake to train such inspectors.

a small charge to cover the cost of administering the scheme.

The Roof Loan Scheme would have the following advantages: It would direct a part of the government's financial efforts towards the lowest income families; it would rely primarily on local initiative; it would permit the building of large numbers of houses at the expense of a small sum of government money; it would hold down the loan on a new house to an absolute minimum (usually less than thirty percent of the total value of the house).

Roof loans would be applied only to the last section of a building and therefore would allow the lending authority to be selective and judge the quality of the walls and foundations before making the loan. The size of the loan could be adjusted to the durability and quality of the roofing materials. The loans would be well secured as they would represent only a small fraction of the cost of the building and the site taken together. Strictly speaking, the security for roof loans should be the buildings, not the land. This is important because it eliminates the necessity of time- and money-consuming investigations into the validity of the applicant's title to the land. The building should be mortgaged, and in case of default the government should take possession and charge rent from the owner occupier until the amount of the loan

is recovered. Conviction should be resorted to only in the worst cases.

The most effective safeguard against defaulters seems to be the corporate responsibility of the neighborhood society. The formation of such societies is therefore one of the most important features of the scheme. It has the added advantage that it can become useful too for community development in as much as neighborhood housing societies might be encouraged to support mutual aid in other spheres of community life.

The formation of neighborhood housing societies and the administration of the Roof Loan Fund might be made the responsibility of the ISHOPA working through and with the Woreda municipal office. It will be important to associate the activities of these housing societies with local government, although there may be certain advantages in retaining administration of the Roof Loan Fund with the Ministry of Community Development.

Summary

In brief form the strategies thus far suggested are:

(1) The development of home building industry to cater to the growing ranks of the middle class who are able to purchase housing in the open market. As correlary, a home building industry will create jobs for new migrants and for ~~all~~ residents who are unemployed. A "home building industry" can be fairly easily brought into existence by

making it possible for entrepreneurs to purchase urban land. It has been suggested that there is unutilized capacity (at least in some types of materials) in the building material industry.

It will be recalled that the main reason that land is not sold or bought is:

(a) most building entrepreneurs are foreigners who are not allowed to own land.

(b) most land in Addis is owned by very few people who find it lucrative to speculate.

(2) The strengthening of ISHOPA as a viable instrument of financing middle-income housing, by

(a) making immediately available a loan as seed capital for lending purposes;

(b) removing some of the statutory limitations on the interest rates both on mortgage and on savings accounts, and also on the amount of down payment.

(3) By creating a roof loan fund to be administered by ISHOPA in conjunction with the neighborhood housing association and the Woreda offices of the municipality.

(4) By taking greater advantage of the lower cost housing developed by the Ethio-Swedish Institute and in general by fully exploiting the excellent facilities available in the Institute; also by disseminating information as widely as possible.

(5) By creating an area for temporary housing with serviced plots but with no restrictions as to the material which may be used in housing construction.

(6) By making a program for the improvement of public amenities. Detailing a financing scheme for the creation of a sewage system, expansion of the water supply, opening up of new roads in areas that are not served by roads.

(7) By refraining from undertaking wholesale demolition of poor quality housing occupied by families with low incomes to make way for public buildings.

(8)By improving tax collection apparatus to bring the revenue of the city up to the capacity that a city of the potential of Addis Ababa has.

CHAPTER SIX

CONCLUDING REMARKS

The Community of Addis Ababa

Has this thesis placed undue emphasis on describing the shortcomings of officials? And has it done this by understating the problems of the community as a whole? Do the inhabitants form a true social community possessing, as Robson writes:[98]

> ...a real sense of civil loyalty towards the locality, a conscious regard for the common weal, a solicitude for the welfare of the general body of citizens, and a genuine concern for the excellence of local institutions.

or are these superfluous questions?

At least the Charter of Addis Ababa, leaving aside for a moment the abuses it is put to, is a recognition in the citizens of Addis Ababa of a true social community. In any case, "community feeling" is a living concept which can be nurtured or destroyed, both by the leadership and by the citizens at large. But because of the greater power and responsibility it wields, the leadership's role in community creation is bound to be crucial. On it will depend the emergence of strong community feelings with a large reservoir of good will or a cauldron of dissatisfied citizens ready to tear up the fabric of society.

Priorities

Let us assume that the present leadership intends to adopt the strategies of development suggested for Addis Ababa. Where should it begin?

(1) It must live up to the spirit and the letter of the Charter. The people must be given the genuine advantages and benefits of a "modern" administration, promised by the Charter. Some of the shortcomings of the Charter have been enumerated in the section dealing with municipal administration. No purpose would be served in repeating them here. Obviously it will be for the best if these shortcomings are corrected and some of the corrections could be instituted without major difficulty. It will not be easy to abate some of the subtler political forces that have tended to subvert the formation of genuine democratic processes.

(2) It should, in keeping with changing demands, establish a new organizational plan including this time two new functions and offices:

(a) An Office for Housing and Planning

(b) An Office for Tax and Revenue Collection and Assessment.

(3) It should as the first order of business seek ways and means of reforming the present land ownership pattern. The task is not so much to disown those who currently own the land, but to find a workable medium

whereby sufficient quantities of land can be easily brought under development. The use that church-held land can be put to has already been mentioned. Land in Addis Ababa is not scarce. Its distribution needs to be regulated. The Council must be prepared to revamp its eminent domain practices and use its power in this respect in concert with needs. The abuse of land by big landowners must be curbed. It can also be put across to big land owners that well-planned projects of development can be of benefit to them as well as to those who will occupy houses built on such land.

Pressure

External Pressure

What pressures can bring about such reform? External pressure, for one, could be very effective. The leaders of Ethiopia no longer live in isolation. They are sensitive to the sanctions and approval of other nations, especially the rich ones. The economic assistance and the loans that are being given to the country both by international agencies and by individual countries could be an effective lever of reform. Indeed, past loans and assistance from abroad were less effective because they were not accompanied by certain institutional reforms. A policy such as the one initiated at Punta del Este, insisting on certain internal measures being taken before U.S. aid is given, could work wonders in Ethiopia.

Would the leadership reject such conditions for aid? The answer is probably 'no.' The heydays of cold war politics are over. The leaders know that small countries would be undertaking futile efforts if they tried to put one "block" against another. Internal reforms must preceed aid, or the aid must accelerate such reform. It should not reinforce archaic systems or give credence to ostentation. Where and by what method is the sewage from a large Hilton Hotel (being built by loans from EXIM Bank) going to be disposed? What good has $92 million* in U.S. military aid done the country?[99]

External pressure need not and cannot wait until it is "invited" to bring about the required reforms. The Imperial Ethiopain Government, in its present form and structure, will probably never request assistance for instituting, say, genuine land reform. A case in point is the need for a sewage disposal system. It is understood that the former U.S. Ambassador had suggested that the U.S. Government would be most willing to assist in regards to the provision of a sewage system for Addis Ababa "if a request for such was made." So far the municipal response takes the form of a deep silence.

Internal Pressures

In the final analysis, change will depend on the people of Addis Ababa. Discontent, the common denominator, will probably be the only potent force which could bring

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*In U.S. dollars

about desirable social and institutional change. In a few years the ranks of the "class" that is able to "articulate" its problems will be large enough to insist on getting the rights to pursue life in a habitable environment. The present leadership could accelerate this process. If it does so it will have affirmed the basic rights of people, and thereby gained their support and cooperation.

It is not the lack of capital that is preventing progress. It is the irreverance attached (by the system) to the life of the poor and helpless, those that have not been born into the family of the war lords. "The material achievement," writes Robson, "of a municipality will never soar high enough into the realms of imaginative efforts unless its social architecture is informed by a spirit which is not material."[100]

FOOTNOTES*

1. Second Five-Year Development Plan, 1962-1967, p. 48.

2. Ibid., p. 16/4; and Statistical Abstract, 1965, p. 18.

3. Second Five Year Plan, 1962-1967, p. 16/2.

4. Statistical Abstract, 1964, Table 106, p. 129.

5. Ibid., p. 129.

6. Georgulous, Nikos. "An Approach to the Economic Development of Rural Areas in Tanzaniyiker with Special Reference to the Village Settlement Program." Program of East African Studies, Occasional Paper No. 7. Fall 1963.

7. Ibid.

11. ~~Gebre Sillassie, Chronique du Regne de Menelik II, p. 240.~~

12. Berlan, Edouard. Addis Ababa: La Plus Haute Ville d'Afrique: A Study in Geography. p. 60.

13. Ibid., p. 60.

14. Gli Annali dell Africa Italiana, Vol. II, p. 370.

15. Statistical Abstracts, 1964, p. 112; also 1965, Table M-3.

16. Statistical Abstract, 1965. Imperial Ethiopian Government, Central Statistical Office, Table E-5.

17. Ibid., Table J-7.

18. A Survey of Housing in Ethiopia, June 1965.

20. J.C. Amos, article in Ethiopia Observer, Vol. VI, No. 1.

23. Statistical Abstract, 1964, Tables 6A, 6B, and 6C.

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*Notes omitted here have appeared in the body of the thesis.

26. The UN Statistical Yearbook, 1963, gives the following estimates of employment in the construction industry:

1961 -- Construction Industry

1. No. of licensed entrepreneurs engaged in construction	125
2. Employees	30,000
(a) Masons, Carpenters	6,000
(b) Others	24,000
3. Wages and Salaries	Eth.$17,200,000
4. Value Added	Eth.$20,300,000

27. F.J.C. Amos, Addis Ababa Social Survey, 1962.

28. Statistical Abstract, 1964, p. 18, Table 21.

29. Berlan, op. cit., p. 147.

30. A Survey of Housing in Ethiopia, June 1965, op. cit.

33. Gleichen, Lord Edward, With the Mission to Menelik.

34. Docteur Merab, Impressions d'Ethiopie, 1921-1929, Vol. II, p. 118-120.

35. Berlan, op. cit., p. 80.

36. Merab, op. cit., p. 120.

37. Figures quoted in Ethiopia Observer, Vol. II, No. 1.

38. Berlan, op. cit., p. 81.

40. Ibid.

42. Also reported in Berlan's work.

44. Ethiopia Observer,"An Estimate of the Population of Ethiopia," Vol. V, No. 2, p. 136.

45. Second Five Year Development Plan, 1962-1967. Imperial Ethiopian Government, Addis Ababa.

46. Ethiopia Observer, op. cit., p. 138.

47. Documents: ECA 183 C
ECA E/CN·14/239, Table 26, Para. 222-223.

48. Document ECA SEM/URB/AF/4, p. 12.

49. Document SEM/URB/AF/27, April 1962.

50. Statistical Abstract, 1964.

51. Statistical Abstract, 1965, Table J-7.

52. Report on Census of Population, Sept. 10-11, 1961, Municipality of Addis Ababa.

53. New construction in Addis Ababa, by value of buildings, Table F-1, Municipality of Addis Ababa, 1964.

54. Imperial Savings and Home Ownership Public Association, Prospectus. Addis Ababa, 1963.

55. National Bank of Ethiopia, Quarterly Bulletin, June 1964.

57. Although the building material industry in Ethiopia is relatively small, it produces most of the basic materials including cement, lime, brick and concrete block. In addition some plywood, concrete pipe, cement floor tiles, ceramic tiles, lumber, wood sash and frames, doors, steel sash, marble, and reinforcing bars are manufactured. Ceramic toilet bowls and bath tubs are also produced in Asmara, a northern province.

Cement, which is probably the most crucial material, is produced in adequate quantity. In fact the 1961 production is only 84% of that year's capacity. (See Doc HOU/WP/4 Annex p. 11) Since then, two more plants with a combined capacity of 150,000 metric tons have been built. In all respects this may be regarded as a fortunate state of affairs. If the Algerian experience is a reasonable indication of the future consumption pattern of cement, then it may be expected that the doubling of the per capita income trebles the per capita consumption of cement (see UN Document HOU/WP/4, p. 29-30).

58. Statistical Abstract, 1964, Table 5.

59. R. Pankhurst in Ethiopia Observer, Vol. V, No. 2, "The Foundations and Growth of Addis Ababa."

60. Berlan, op. cit., p. 188.

61. Donald L. Levine, Wax and Gold, p. 69.

63. Addis Ababa Ketema Gizet, Vol. I, p. 241.

64. U.S. Bureau of Reclamation, Farm Data and Summary, Blue Nile Basin, July 1961, p. 7.

66. Charles Abrams, Man's Struggle for Shelter in an Urbanizing World, Chapter 2.

67. Edward Ullendorff, The Ethiopians: An Introduction to Country and People, p. 97.

68. Donald L. Levine,"The Military in Ethiopian Politics," Working Paper No. 50, p. 25.

69. Asefa Demmisse, op. cit.

71. Pollera, Co Stato Etiopico e La Sua Chiesa.

72. Revised Constitution of Ethiopia, 1955.

74. Seyoum Gebregziabher, Municipal Administration in Ethiopia (with particular reference to the municipality of Addis Ababa).

78. Levine, The Military in Ethiopian Politics, p. 18.

79. Ibid., p. 21.

81. Seyoum Gebregziabher, op. cit., p. 28.

82. Berlan, op. cit., p. 145.

83. Ibid., p. 145.

84. Ibid.

86. Seyoum Gebregziabher, op. cit., p. 31.

87. Berlan, op. cit., p. 147.

88A. J. Atkinson, The Contribution of Building Research to Housing Programs in Developing Countries.

89. Ibid.

90. Descloitres, Jean-Claude, and Claudine Descloitres, L'Algeria des Bidonvilles, p. 132.

91. A.F. Daldy, A Note on Areas of Temporary Housing and Suggested Regulations for Temporary Housing Areas.

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APPENDIX A*

THE HOUSING CONDITION

*Footnotes to Appendix A appear with the other footnotes which follow the body of the thesis.

Appendix A

THE HOUSING CONDITION

Surveys I and II, Census of Population 1961

The information given in this section is largely extracted from two small sample surveys carried out at the research section of the Ethio-Swedish Institute of Building Technology,[21] under the supervision of myself and Professor Torvald Akesson (currently at the University of Lund, Sweden).

The first survey was carried out on February 13, 1962 in the Tekla Haimanot district, the district with the second highest density of population (6,786 persons per square kilometer). This area lies on the north and west of the Ethio-Swedish Institute (see map and sketch).

The interviewing of the survey was made by the graduate class of the Building Centre. Twenty-three

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[21]Herein after called the Ethio-Swedish Institute. This Institute is a charter member of Haile Sillassie I University and was established in 1954 when the governments of Sweden and Ethiopia signed an agreement for technical cooperation. In the context of this agreement Sweden has continued to supply equipment and the services of building experts. Ethiopia has been responsible for local expenses and for buildings and grounds. The aim of the Institute is to improve housing conditions by carrying out research and documentation, the testing of materials, and the training of building technicians. At the time this survey was carried out, the author was co-director of the research section. Between 1963 and 1965 he served as principal of the Institute.

students participated in the survey. Out of the 23 students, one student helped with mapping the area to be surveyed, while the rest did the questionnaire, which included the size and composition of the household membership, technical information about the construction of the house, ownership of the land and house, cost of building, building experience, size and uses of household accomodations, household services and amenities, activities in the home, and shopping.

Out of the 23 students, 19 were selected to perform analysis. The 19 students interviewed 222 households consecutively and the total number of people living in these households was 789.

The second survey was carried out on March 9, 1962 by eight students who took part in the Tekla Haimanot survey. This survey took place in the Lidetta District. It was made with a slightly revised questionnaire. Each question was printed both in Amharic and English in order that the students might understand more clearly the meaning of the questions.

Whenever possible the results of surveys I and II were compared and contrasted with the relevant information contained in the census of population of Addis Ababa. The census was carried out in September of 1961.

General

Addis Ababa is divided into ten administrative units known as "woredas." The city limits were legally defined in 1937 and its boundaries established by proclamation (Article 6, Section II, General Notice No. 74). The sketch shows the density of each woreda as determined by the census of population of 1961.

A population in excess of 500,000 live in the city on 218 square kilometers, an average of 2,350 per square kilometer, housed almost entirely in single story buildings. To those driving through the main thoroughfares, the city

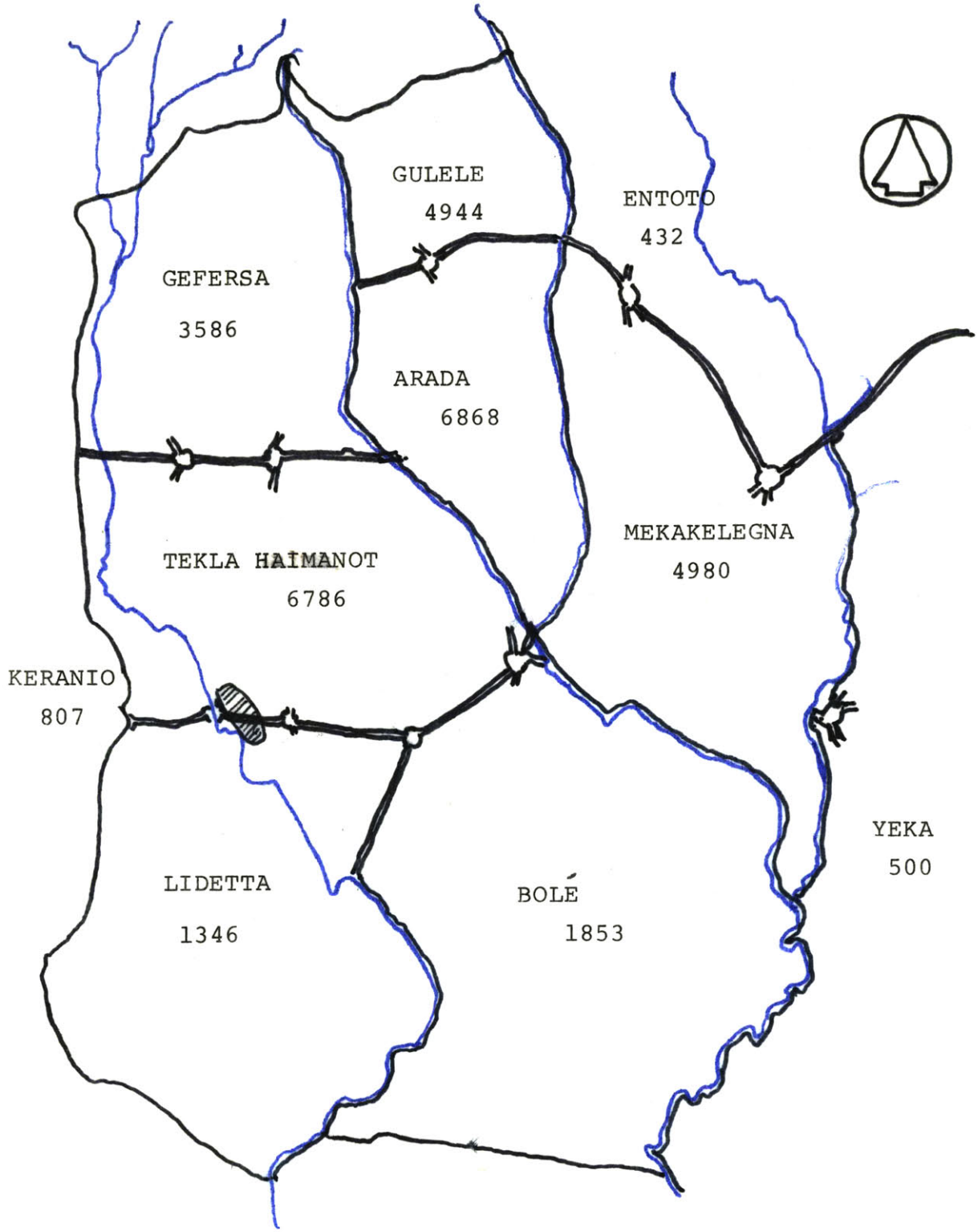

FIGURE 6

Density of Population by Woreda

(Persons per Square Km.)

WOREDA BOUNDARY

STREAMS

SITE OF SURVEYS I AND II

From Addis Ababa, Census of Population, Sept. 10-11, 1961.

presents a sense of spaciousness. A substantial number of new public buildings, hospitals, and office buildings have been completed within recent years or are under construction in various parts of the central city. In the several business areas, streets are lined with small shops. Only occasionally does one see an apartment house or large group of dwellings. The effect is somewhat startling and one wonders where the 500,000 inhabitants of Addis Ababa live. Only when leaving the main streets or driving through the outskirts does one discover the settlements, often resembling small villages, which in fact many of them are, in which are located the homes of the majority of the people. These settlements are often not readily visible from the main streets because they are screened by walls, fences, shops, groves of eucalyptus trees or because they are situated on the sides of the valleys which lie between the ridges on which the principal thoroughfares are located.

Densities

These residential areas in the central part of the city have relatively high densities despite the fact that most of the houses are small single story structures either detached or in rows. According to the 1961 census, while the average population density for Addis Ababa as a whole was only 2,035 persons per square kilometer, densities in the various districts of the municipality ranged

from a low of 432 persons to a high of 6,868 persons per square kilometer. Actually, three of the ten districts in Addis Ababa are beyond the urban area proper and contain sections of a rural character. If these three districts are excluded, the average density in the remainder of the city, containing eighty-six percent of the total population, is 3,920 persons per square kilometer.[22]

The census does not report the actual number of dwelling units, but rather the number of households.* However, the Municipal Tax Office[23] reports that in 1965 there were 83,000 residential buildings in Addis Ababa which according the rough calculations probably represents about 130,000 dwelling units. In any case, the census data do show that severe overcrowding exists. For the city as a whole the median density was 2.65 persons per room,[24] although sixty percent of the population were

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[22]Compare Addis Ababa's 3920 per square kilometer to:

Washington, D.C.	5200	"	"	"
Chicago	7500			
Cleveland	5000			

*A household was defined as a group of people who slept in the same or related quarters and who had common arrangements for meals.

[24]Rooms included were living rooms, bedrooms, dining rooms, servants' quarters, and kitchens, as well as rooms used partly for living and partly for working purposes.

living at a density of less than three persons per room (see Table 1). Nevertheless, only four percent of the population had more than one room per person. Furthermore, the median household was smaller than the median number of persons per room, which indicates that in many cases more than one household shared the same accommodation. It was estimated on the basis of incomplete data that about sixteen percent of the population were living in households which shared accommodations with other households.

In addition to the private households, there were some 8,527 persons,or less than two percent of the normal residential population, living in institutions, including hospitals, hotels, etc., and only 185 persons were classed as homeless. It was thought that the latter figure was probably somewhat low because the census was taken on New Year's Eve and many people may have been moving about who would normally have been sleeping in the open.

The census did not indicate information as to the size of the dwellings occupied by households. Sample surveys I and II give some clue to the crowded conditions under which a high percentage of families in Addis Ababa live.

The first of these surveys carried out in the Tekla Haimanot District revealed that the average floor space

Table I

PROPORTION OF POPULATION LIVING AT SPECIFIED DENSITIES

Persons Per Room	Percent	
	1961 Census	Survey I
Less than 1	4.3	1.0
1-2	27.5	20.0
2-3	28.1	47.0
3-4	16.8	47.0
4-5	9.5	
5-6	5.6	
6-7	3.5	
7-8	2.0	32.0
8-9	1.1	
9-10	0.7	
10 or more	0.9	

used by 206 households was 23.58 square meters (excluding the kitchen which was generally in a separate structure). The average size of the household was 3.53 persons. Thus, the average living space amounted to less than 6.7 square meters per person.

Of 212 households, thirty lived in single rooms and 112 in two rooms; only 70 used three rooms or more. The average number of rooms used was 2.28. Furthermore, 78 households kept large domestic animals and in some cases the animals shared the household rooms.

The second of these surveys, carried out in the Lidetta District revealed that the average household size was 3.93 persons and ranged from 1 to 12. However, the average amount of floor space used by these households was somewhat greater -- 30 square meters (with a range from 6 to 120 square meters) -- than was the case in the first survey which resulted in an average area of 7.6 square meters per person.

The average number of rooms used by these households was 2.63. Two and three rooms were the most common number used by these households (34.38 percent and 35.42 percent respectively). As in the case of the first survey, some of these shared rooms with other households.

Type of Construction

The dwellings in Addis Ababa, in addition to being

small and overcrowded, are usually of only moderately permanent construction. The walls of the vast majority of the houses are of "chica". According to the 1961 census, 90.4 percent of the households in Addis Ababa were in houses with chica walls (see Table 2). Surveys I and II give higher percentages (98% and 97% respectively). The census figure is probably more representative of the situation.

"Chica" construction consists of a framework of Eucalyptus poles set in the ground with split poles or poles of small diameter placed vertically in between the main supports, tied in place, and in some cases diagonally braced. These are then plastered on both the inside and outside with a mixture of earth (usually a red volcanic soil), straw,[25] and water which has been prepared in advance and allowed to "ferment" prior to putting in place. The walls are built up in several layers to a thickness of from 15 to 30 cm. and when well-finished and painted or whitewashed present a substantial and attractive appearance. When properly built the walls seldom crack. If they are well built in the first place and constructed

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[25]The straw serves a similar purpose to that of steel reinforcement in concrete. Usually the straw of millet (called "teff") is used. "Teff" is the ingredient from which "injera" is made -- a pancake-like bread which is the staple food.

Table 2

TYPES OF HOUSING OCCUPIED

Class of Construction	Percentage of Households with Specified Class of Living Quarters		
	1961	I	II
1. Stone walls, metal or concrete roof with foundation	4.4		3
2. "Chica" walls, metal roof with foundation	38.7	30	32
3. "Chica" walls, metal roof with no foundation	41.9	43	57
4."Chica"walls, thatched roof, no foundation	9.8	25	8
5. Others not stated	5.2	2	0

on stone or other masonry foundations to minimize damage at the base due to splashing and capillary moisture, and if the walls are protected by eaves from excessive rain, and if they are repaired when water damage does occur, they are reported to last up to fifty years. However, in too many cases the conditions for long life are not met and the buildings may deteriorate badly in five to ten years. Another hazard to the life of these buildings is termites, which -- although reportedly not present in substantial numbers in Addis Ababa -- do cause serious damage when they attack the wood frame of the building. In all cases, the portion of the wooden frame rots very easily if it is not kept dry. Eucalyptus, which is the primary building material, is extremely susceptible to rot.

The most common type of roof found in Addis Ababa now is corrugated galvanized iron supported on pole rafters or trusses which are also commonly made up of light poles rather than sawed lumber. Corrugated iron sheets are usually imported from Japan or Belgium, and as we shall see in the following sections, this item represents the biggest share of the cost of building materials. Until recently there were no possibilities to check for the quality of iron sheets imported. Unsuspecting and helpless builders have been known to be taken in by false marking of gauge number and misleading claims as to the

amount of zinc coating on each sheet. The establishment of a materials testing laboratory attached to the Ethio-Swedish Institute has been responsible for improving matters in this field. The cost per sheet varies from Eth. $3 to $6, depending on thickness and quality of zinc coating.

Thatched roofs, which are the most prevalent type of roof in the rural areas, are still found in Addis Ababa. Twenty-five percent of the houses in survey I and eight percent in survey II were covered with thatch. Nearly always these roofs were in poor conditions, and it was only the lack of finance which prevented their replacement by iron sheets. It can also be mentioned that thatching -- at least in Addis Ababa -- is a dying art. For very special works, persons with thatching skill have been known to be imported from the rural areas.

A high percentage of the floors in chica houses are of mud and are often below the level of the surrounding ground (94% in survey I, 64% in survey II). This appears to be one of the worst features and one that could easily be corrected by building up the floor and possibly stabilizing the earth with cement.

Both the first and second sample surveys, as mentioned earlier, showed a somewhat higher incidence of households living in dwellings with chica walls (98% and 97% respectively). Some 22 percent of these were painted chica and 75 percent

were unpainted chica. The houses of about 72 percent of the households had no ceilings and about 94 percent had mud flooring. Furthermore, according to survey II, nearly sixty percent of the household dwellings did not have any foundation except for the wooden poles set in the ground.

So much for the existing housing stock. While no data exists, it is acknowledged in the building field that some of the new housing construction, particularly that for the middle and higher income families, utilizes more durable materials--including brick, concrete block, and stone. The latter is frequently used for foundations and sometimes for walls and there appears to be a substantial group of stone masons who are reasonably skilled.[26]

Condition and Age of Dwellings

As was mentioned earlier,when properly built and maintained the chica houses will last for a considerable period of time, but according to surveys I and II only about eight percent of the households had repaired their walls in the previous two years and only about seven percent had repaired walls, roofs and floors. It is not surprising, then, that the interviewers reported that 99 of the 222 household dwellings (44.6 percent) had walls in need of major repairs and 37.4 percent needed minor repairs or painting. It is also not surprising that the average age of 103 of the houses (terrace houses were counted as a single unit) was only 10.81 years, because it is likely that

many of the existing houses replaced earlier houses which through neglect had become uninhabitable.

Facilities for Dwellings

Water

There are two sources of water in the city of Addis Ababa. There is the municipality controlled piped water system which provides purified water to some parts of the city, and there are shallow private wells in which the water is frequently impure due to the seepage of polluted surface water. Water is obtained from these sources by the households in the following proportions:

		1961 Census	Survey I	Survey II
Municipal piped supply	In House	29.7%	70.4%	
	In Compound	44.6%	31.0%	31%
	Elsewhere		91.0%	18%
Private Well	In Compound	2.3%		
	Elsewhere	6.5%		1%
Stream		7.5%	2.2%	39%

The extensive use of pure piped water by the households of survey I is an exception and was caused by the presence of a fiber factory in the area in which the survey was carried out. This factory allowed the people in the immediate vicinity to draw water from its own tap

"freely." The very low percentage of use of piped water by the households in survey II is probably not representative for the type and location of the area in which the survey was carried out. It may be true for some of the semi-rural areas of Addis Ababa's region. The high percentage with a piped supply in the house reported in the census differs sharply from the picture presented by surveys I and II and indeed from other estimates of Addis Ababa's water distribution system. J.C. Amos' figure for this category of users is less than five percent.[27]

In any case, well over three-quarters of the households have access to pure piped water supply. However, there is still some risk of the contamination of water for all but those that have it piped inside their homes. The normal water container used for this purpose is a large earthenware "insera" (see drawing number 8), which is slightly porous, rough surfaced, and without adequate means of closing the aperture through which it is both filled and emptied. The difficulty of keeping vessels clean makes them very unsatisfactory containers for pure water.

Twelve hundred millimeters of rain falls over Addis Ababa every rainy reason, and the hills running across the north of the city are there to collect sufficient water to provide an adequate and cheap supply for a population far greater than the present one consuming water at a rate similar

to that in Europe or America. But now water is expensive. A thousand litres costs Eth. $0.50. It is not surprising that less than thirty percent of the population have running water installed in their homes. Almost all those households in survey I had their water free (94%). This opportunity was not available for the households in survey II. Only those that could afford it (40%) paid the municipal rate. If the average water cost per month ($2.52) is any indication of the quantity of water consumed, then we can deduce that the per capita consumption per day per person is in the vicinity of fifty liters. This is a rather low rate of water consumption. In reality many use far less than this amount. If, for example, the households in survey I, which got their water free from the fiber factory, had maintained this rate of consumption, the factory management would have been presented with a yearly bill of Eth. $8,395 from the water works department of the municipality of Addis Ababa.

It is unlikely that the fiber factory would continue to provide water freely if the prospects were as expensive as we have made them out to be. After all, according to the 1964 statistical yearbook the annual salary list of this factory was a modest Eth. $60,000. It is indeed unlikely that close to three percent of this turnover would be devoted to the arbitrary provision of piped municipal water

to the neighborhood. Perhaps the fiber factory's generosity is sustained by the "comfortable" knowledge that the aggregate consumption of water of 222 households is a mere pittance.

Only the rich are likely to consume Addis Ababa's expensive piped water in any great amounts. Perhaps the declared monthly expenses of water by the households of survey II may be an exaggeration. If so, it need be taken only as a measure of the importance that the household attaches to this sort of expenditure. In a sense this attitude is a valuable asset that should be exploited in health and sanitation programs.

The maximum distribution capacity of the system is only 30,000 m^3/day. The 1961 population of Addis Ababa (450,000)[29] would have been limited to 66 liters per person per day if a water ration had been proclaimed.

By now, of course, the population has grown. The new expanded water supply system will not be ready until the end of 1968. The shortage of water is more acute now than before. Fortunately prices have not been raised, but the municipality has had to allow people to dig shallow wells to satisfy their needs. The poorer prople have resorted to this source and the "Institut Pasteur" of Ethiopia reports the increased use of polluted water.[30]

Waste and Garbage Disposal

The most critical lack is that of a community sewage disposal system. Survey I showed that 20.36 percent of the households in the Tekla Haimanot District had no means of taking care of human waste while 68.17 percent said that they used pit latrines. The remainder had other unspecified means of waste disposal. In the second survey, out of the 96 households 55 reported having pit latrines while 38 did not have any means of waste disposal. Only three had a water closet in the dwelling.

By general observation it is known that few households make provisions for the hygienic disposal of human waste. It is therefore to be doubted that the declared methods of waste disposal are the true ones. The conditions of unenclosed and conspicuous pieces of land is witness to this fact.

Declared methods of garbage disposal were as follows:

	I	II
Pit	15%	32%
Other	20	11
Collected by municipality	-	6
Burn	15	2
None	30	53
Throw into street	12	

The quantity of domestic garbage which accumulates in an Ethiopian household is small. Nevertheless refuse does accumulate and can be a health hazard if not properly

dealt with. As in the case of human waste disposal these figures cannot be regarded as reliable. From general observation the number of households which have no means of refuse disposal is much higher than the number recorded. In survey I, the interviewers saw only eleven of the thirty-seven pits which were declared by respondents as their means of garbage disposal. In survey II twenty-nine households declared that they had pits, but only nineteen were actually seen by the interviewers. Six percent of the households in survey II said that they had municipal service. This accords with municipal records. The conditions of the streets in Tekla Haimanot attest to the practice of throwing garbage into the streets.

Pits for refuse, when they occur, are too often too close to the living area and are left uncovered, thus becoming the breeding place of flies and the source of offensive odors. It may therefore be concluded that the method of disposal of refuse is generally quite unsatisfactory.

Future studies could usefully explore the methods of and attitudes towards human and domestic waste disposal, comparing it with incidence of sickness and beliefs about the causes of disease.

Electricity

In Addis Ababa as a whole electricity is far more

frequently installed in dwellings than is water. According to the census of 1961, 58% of households have electricity installed, whereas only 29.7% have piped water. There is a slightly larger proportion of owner-occupied households with electricity than tenant households, and no households are found which have water installed but no electricity. In both owner-occupied and tenant households the proportion of households with electricity or electricity and water decrease as the intensity of occupation goes up. Since high intensity of occupation is an indicator of low income, this is probably the explanation of the distribution pattern.

LIGHTING SYSTEM

	% of Households 1961 Census	% of Households Responding Survey I	Survey II
Electricity	58	38.3	66
"Gaz"		59.9	28
Candles		1.2	5
Other (open fire, etc.)	41		

The price of electricity is between Eth.$0.25 - Eth.$0.15 per KWH. This high price is beyond the capability of a low income family, and the unfortunate thing is that the government owns all electric power plants. Young engineers at the government-owned Power AUthority feel that even if the rates were halved they would still cover the cost of production and the usual overhead administrative costs. It is ironic that the present regime sells expensive

electricity to the people of Addis Ababa, since the facility for producing the electricity -- the Koka Hydro-Electric dam -- was built entirely from money collected on behalf of the people as war reparation costs from the government of Italy.

It is against the law for anyone else but the Power Authority to produce electricity for domestic consumption.

Fuel

While there are no statistics, it appears that a very high percentage of the families in Addis Ababa use wood, and some charcoal, for fuel. This, along with the traditional method of cooking injera, accounts for the fact that in the Tekla Haimanot District, 92 of the 222 households cooked in separate, private kitchens and 81 in separate kitchens shared with others. Only 46 households cooked in part of the household rooms.

Size of Houses

The typical dwelling in Addis Ababa is small, both in terms of the number of rooms and in area. The sample surveys I and II in the Tekla Haimanot and Lidetta Districts showed that there were only 745 rooms in the 318 households, or an average of 2.3 rooms per household. Of these 318 households, 14.15 percent were in one room dwellings, 45.6 percent in two room houses, 28.3 percent in three room

houses, and only 5.3 percent in four room houses. In addition, there were 7 five room houses, 2 six room houses, 7 eight room houses, and 10 households living in houses the size of which was unknown.

While there is little doubt that these figures are quite typical of the dwellings occupied by the average family in Addis Ababa, the newer houses now being built for those in the upper middle and high income brackets are comparable in size and amenities to houses built for families in similar income brackets in Europe or the United States. It is only too bad that all too often these are built for the purpose of leasing them to Europeans or Americans at very high rents.

Tenure of Dwellings - Rent Levels

The majority of the households in Addis Ababa are renters. Only about 23 percent owned the dwelling they occupied, while about 67 percent rented their houses according to the 1961 census. In the Tekla Haimanot District, survey I showed that 60 percent of the households were renters, while the sample survey II showed that about 75 percent lived in rented houses. The households in survey II paid from Eth.$2.35 to Eth.$20 per month, with an average of Eth.$5.90 per month. In response to the question regarding the ownership of the land on which the house was built, forty-eight of the eighty-nine households

responding in survey I said they rented the land, and only seventeen owned it. Four of the families occupied the land free. The remainder did not know who owned the land. The extent to which these latter households might be "squatters" is of course unknown, but municipal officials report that while the illegal occupancy of land was not widespread, it was known to exist. In sample survey II, the 75 percent of the families living in rented houses paid between Eth.$2.50 and Eth.$80 per month rent. The average rent was Eth.$12.50 per month.

Of the 21 families answering the question as to ownership of land, about fifty percent reported renting the land and paying an average rent of Eth.$1.32 per month. This is generally regarded as rather low. Normally, land rents are between $3 and $4 per month. Such land is nearly always situated far from the center of town.

Although it is reported that a substantial number of individuals and families in the middle and upper middle income brackets own land either as a result of inheritance or purchased as a form of savings, the long term leasing of land is not uncommon. This form of tenure has some advantages, since the land rent is usually considerably less than would be the payment necessary to amortize the value of the land over the normal life of the mortgage.

Home Improvement

The responses to this section of the questionnaire

were expected to provide some information as to the households' capabilities and willingness to cooperate in an aided self-help home improvement program. The greatest proportion made evasive responses, presumably either because the interviewee had not considered improving his dwelling or did not wish to disclose the real reason. Amongst the most common of specific reasons for not carrying out improvements is lack of resources (24%). Other reasons are that the household does not own the house; that it intends to move; that the occupants are incapable due to age or infirmity; or that they are satisfied. Each of these replies was given by about five percent of the respondents. Those who stated that they could not improve their houses due to lack of resources form about one-third of the households below an income of Eth.$50/month and about one-sixth of the households above this level.

Out of an adult population of 729 persons, 53 had building skills of one sort or another. It is interesting that in a society where many used to build their own houses there should be such a dearth of building skills. Only 1.6% of respondents said that manual aid would be available for home improvement. When there is so much under-employment in Addis Ababa, it is unlikely that this should be so. It may be that labor is not regarded as a resource by the respondents.

Cost of Building, Financing Procedures

Housing in Addis Ababa is basically of two kinds: one is the semi-permanent "chica" house, usually covered with iron sheets. This house type uses few manufactured materials, is very simple in form and structure, and only a nominal amount of skilled labor is necessary to put it up. It lends itself to rapid erection. As we have noted in previous sections, this is the most common type of house in the city.

The other type is the expensive Euro-American style house which uses considerable amounts of manufactured materials.

In conjunction with surveys I and II, fairly accurate cost studies of these two types of houses were made. The "chica" house was located in the Keranio region of the city (see map) approximately six kilometers from the center of town. The survey was carried out two months after the completion date. Even then there were signs of deterioration. Driving rain had washed off portions of the wall adjacent to the ground. The other type of house (hereafter called "standard" house for the sake of brevity) was located four kilometers from the center of town near the old airport in the Lidetta District. It was especially selected

to illustrate the lowest level of cost at which private enterprise constructs a house of minimum but adequate standards of quality, space and sanitary facilities on developed land suitably located with regard to community facilities.

Cost and Financing Method

The chica house had a total area of 56 square meters with three rooms: one bedroom, a living room, and a storage room. A small kitchen was housed in a detached building. This house was not accessible by car. The family drew water from a public tap 150 meters away. It had no electric light, and the annual rent of the land was Eth.$30. There was no specific agreement ruling on such matters as eviction, compensation, etc. The breakdown of costs was as follows:

Wall: eucalyptus poles, cross-bracing	$58.50
Three doors	52.00
Two windows (shutters only), 60x70 cm	14.00
Rope to tie poles and cross-bracing together	9.00
Millet straw for "chica" (mud) - nine donkey loads[31]	15.00
Hinges, fasteners for doors & windows	10.00
Foundation of stone masonry	30.00
Roofing - purlines and trusses (eucalyptus)	40.00
Roof covering - corrugated iron sheets	163.00
Labor - porters, mason, carpenter	115.00
	506.50
Contributed labor by neighbor friends - 20 man-days at $1.50/man day	30.00

(Continued)

[31]This item is sold by the "donkey load."

Labor costs of immediate family members - the owner, his wife, his uncle, and a brother. Total 40 days at $1.50/day	60.00
Lump sum for detached kitchen building	107.00
GRAND TOTAL	$703.50

Financing the construction

Compensation for a previous house demolished by the municipality in the course of its urban renewal program	$170.00
Proceeds from an "EKUB"[32]	400.00

Basically this fits the general pattern under which most houses are built. Note the relative importance of the roofing item. It represents 27% of the total costs. A house of this type would rent in the neighborhood of $12/month. This would mean that in a period of less than five years the building cost would be amortized. Note also the fact that the house is constructed on land which rents for $30 per year -- land that is not developed. Note also the fact that no facilities for human waste disposal are provided.

Costs and Financing Arrangements - The Standard House

The other house chosen to illustrate the lower limits of the capabilities of private enterprise

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[32]An ekub is a kind of credit union in which each member makes a periodic contribution and, in turn, each members receives the pot of funds collected from all. It is a kind of forced savings on a cooperative basis.

consisted of a two bedroom house with some forty-five square meters in area of brick wall construction with a living-dining room combination, Ethiopian kitchen with sink, flush toilet, and shower. Without land and including a contractor's customary overhead and profit, it was estimated that the cost was in the neighborhood of Eth.$5,200. It stood on a 200 m^2 plot of land, the sale value of which was estimated at $\$6/m^2$, or $1200 for the plot. The total price-equivalent to a sale price was about Eth.$6400. This house was situated about 3-4 kilometers outside the center of town. It was financed by a 7-1/2% loan from the States Commercial Bank. No down payment was made in this case, but the owner had to pledge satisfactory collateral up to twice the amount of the loan, a standard bank requirement. The maximum time period for amortizing the loan was five years. Such loans are taken mostly by the few who have sizeable assets in land and in cash -- not for the purpose of building and owning a house in which to live, but to construct one or more houses of a "villa" type costing $20,000-$40,000. They then rent these villas, primarily to foreign families, at rents so high that within three to five years the loan may be retired.

At the time of the survey, the house was rented for Eth.$200 per month. The monthly payments to the bank were Eth.$150. At this rate, the bank loan would be

retired in about three years.

Conclusion

In general it would appear that although the standard of housing is low and public health standards leave much to be desired conditions are, in most place, considerably ameliorated by the low density of buildings. Nevertheless, there are indications of physical conditions arising from congestion which could be very serious if they were allowed to occur on a large scale. The utility services of water and electricity could have been used extensively if they were less expensive, and the considerable dissatisfaction with the existing methods of human waste disposal suggest that a sewerage system would be favorably received. The replies obtained to questions relating to house improvements suggest that this is a topic which is not usually given much thought, but there are a sufficient number of positive replies to indicate that a housing improvement program might prove popular, at least with a selected class of owner-occupants.

Congestion could be avoided only if appropriate land policies were adopted by the municipality. Utility services, recreation facilities, a sewerage system, etc. are not exactly the sorts of development that lend themselves to implementation by the "self-help" method.

Appendix B

QUESTIONNAIRE FOR SURVEYS I AND II

የ ሕ ን ፃ ከ ሲ ጆ

BUILDING CENTRE, ADDIS ABABA

ጠቅላላ የቤት ጥናት ክፍል

HOUSING RESEARCH SECTION

ስለ ቤት ሁኔታ ጥናት

SURVEY OF HOUSING CONDITIONS

ምርመራው የተደረገበት ቀን
A. DATE OF INTERVIEW ______________________________

የመርማሪው ስም
NAME OF INTERVIEWER ______________________________

ምርመራው የተደረገበት /የተፈጸመበት/ወረዳ ግዛት
C. DISTRICT OF INTERVIEW ______________________________

የሀሳብ ሰጪው ቤተሰብ ደረጃ
D. FAMILY RANK OF HOUSEHOLD MEMBER INTERVIEWED ______________

ምርመራው የተፈጸመለት ቤተሰብ የመኖሪያ ካርታ ቁጥር
E. MAP NUMBER OF HOUSEHOLD INTERVIEWED ______________

መልስ ያልተገኘለት ጥያቄ ከሚከተሉት በአንደኛው ይሠራሉ
EVERY QUESTION NOT ANSWERED MUST BE COMPLETED WITH ONE OF THE FOLLOWING:

R/R መልሱ ለቷኸኸገ Reply refused.

N/K መልሱ ሳይታወቅ Reply not known.

Q/N አግባብ የሌለው ጥያቄ Question not applicable

የቤተሰቡ አስተዳዳሪ
Head of household = X

ሚስት
Wife = W

ወንድ ልጅ
Son = S

ቤት ልጅ
Daughter = D

አማች /ወንድ/
Son-in-law = SL

ምራት /ቤት/
Daughter-in-law = DL

የልጅ ልጅ ወንድ
Grandson = Gs

የልጅ ልጅ ቤት
Granddaughter = Gd

ባል
Husband = H

ወዳጅ
Friend = Fr

አሽከር /
Servant = Sr

ወንድ አያት
Grandfather = GF

ቤት አያት
Grandmother = GM

አያት አማት ወንድ
Grand Father-in-law = GFL

አያት አማት ቤት
Grand Mother-in-law = GML

ወላጅ አባት
Father = F

ወላጅ እናት
Mother = M

አማት ወንድ
Father-in-law = FL

አማት ቤት
Mother-in-law = ML

አጎት
Uncle = U

አክስት
Aunt = A

ወንድም
Brother = Br

እህት
Sister = Si

የወንድም ልጅ ወንድ
Nephew = Ne

የወንድም ልጅ ቤት
Niece = Ni

የአጎት /የአክስት ልጅ
Cousin = (C)

(Continued on page 3)

ሀ / አስተዳዳሪውን /አባወራውን /በማስቀደም የቤተሰቡን ቅደም ተከተል በመጠበቅ ሌሎችንም ለአባወራው በላቸው የተዛምዶ ሁኔታ መዝግቡ፡፡—	1	2	3	4	5	6	7	8	9	10
Persons Resident in the Household A. List household members, Head first, and other members by their relationship to the Head										
ለ / ፆታ / ተባ/ታይ ወይም አንስታይ B. Sex (m or f)										
ሐ / ዕድሜ C. Age										
መ / የትዳር ሁኔታ ብቸኛ፣ ፈት፣ ባለትዳር፣ መለያየት፣ ባለቤቱ የሞ ትበት D. Marital Status Single (s), Divorced (d), Married (m), Separated (sep), Widowed (wd)										
ሠ / የሥራ ሁኔታ ይሠራሉ ሥራ የላቸውም የቤት እናት /አመቤት / የግል ሥራ አላቸው ተማሪ ናቸው ሌላ E. Work Status Working (w), Student (st) Unemployed (ue), other (o), Keeping house (h), Selfemployed (se)										
ረ / የትምህርት ሁኔታ /የዕውቀት ደረጃ / የፈጸመው የትምህርት መጠረቻ ደረጃ፡ መገለሰቲ ት /ጢት F. Educational Status Last grade in school completed, priest sch (p)										
ሰ /ሃይማኖት የኢትዮጵያ የተዋህዶ ሃይማኖት ሌላ ክርስቲያን አሠላም ሌላ G. Religion Ethiopian Orthodox (e) Other Christian (oc) Moslem (m) Other (X)										

(Continued on page 4)

2. መኖሪያ ቤት አይነት

2. Residence:

አንድ ወጥ ሕንፃ /ነጠላ ቤት/
an individual building ☐ 1

መደዳ ቤት
a terrace house ☐ 2

የአንድ ቤተሰብ መኖሪያ አፓርትማ
part of an apartment building ☐ 3

ሌላ
other ☐ X

ይገለጽ
(Specify) _____

3. የቤቱ ዕድሜ

3. Age of house:

ቤቱ ያለው ዕድሜ
How old is this house? _____ Years.

በባለቤቱ የተሰጠው አይደለም
Check here if this figure was given by the person interviewed ☐ 1

በመያዣው ገምት የተሰጠው ርይደለም
Check here if this figure was an estimate of the interviewer ☐ 2

4. የቤቱ ሁኔታ

4. Condition of house:

	a ግርግዳ Wall Structure	ቀርግት Wall Finish	ጣራው Roof	
ብዙ መታደስ ያስፈልገዋል In need of major repair				1
ትንሽ መታደስና መቀባት ያስፈልገዋል In need of minor repair and/or painting				2
መታደስ አያስፈልገውም Not needing any repair				3

(Continued on page 5)

5. ከሁለት ዓመት ወዳህ የተደረገ መታደስ

5. Maintenance work in last 2 years:

አንዳችም መታደስ አልተደረገም None	0
ቅብ Painting	1
የግርግዳ መታደስ Repairs to wall	2
የጣራ መታደስ Repairs to roof	3
የወለል መታደስ Repairs to floor	4
ሌላ Other	X

ይግለጹ
(Specify) _____

6. የውጭ ግርግዳ ከምን ከንደተሠራ

6. External wall material:

ያልተቀባ ጭቃ Unpainted chica	1
የተቀባ ጭቃ Painted chica	2
በጨርቅ የተሸፈነ ጭቃ Cloth covered chica	3
ጡብ Brick	4
ድንጋይ Stone	5
ሆሎ ብሎክ Concrete hollow block	6
~~ትንሽት~~ Wood	7
ቀርቀሃ Woven bamboo	8
ሌላ Other ይግለጹ (Specify)	X

6a. ሀ / ቤቱ የድንጋይ ወይም የሸክላ ውህ ልክ አለው?

6a. Is there a stone, brick or concrete plinth at the base of the ~~external walls~~?

አለው Yes	1
የለም No	2

(Continued on page 6)

የጣሪያው ዓይነት

Roof material:

ሣር Thatched roof	1
የቆርቆሮ Sheet metal	2
ሌላ Other	X

ይግለጹ (Specify) _____

8. አጉበረ ከምን አንደተሠራ

8. Ceiling material:

አጉበር የለውም None	0
አቡጀዲ Abujidid (painted cloth)	1
ሌላ Other	X

ይግለጹ(Specify) _____

9. ወለል

9. Flooring:

አፈር Earth	1
እንጨት Wood	2
ድንጋይ Stone	3
ሌላ Other	X

ይግለጹ (Specify) _____

10. መሠረት

10. Foundation:

ድንጋይ Stone	1
በማእዘን ብቻ የተሠራ Timber set in the ground	2
ሌላ Other	X

ይግለጹ (Specify) _____

(Continued on page 7)

11. ቤቱ የተሠራቡት በታ የራስያ ነው

11. Do you own the land on which your house is built?

አያን Yes ☐ LO
አይደለም No ☐ 2

12. የራስ ከሆነ ለመረቱ ኪራይ በወር የሚከፍሉትን

12. If no, give monthly rent $ _____
ወይም በመረቱ ኪራይ ፈንታ ለባለቤቱ ያገለገሉትንደሆነ
or services in lieu _____

13. የሚኖሩበት ቤት የራስ ነውን

13. Do you own your house?

አያን Yes ☐ HO
አይደለም No ☐ 2

14. የራስ ከሆነ በወር ለቤቱ ኪራይ ም ን ያህል ይከፍላሉ

14. If no, give monthly rent $ _____
or services in lieu _____

15. ቤትያን ለመሥራት ም ን ያህል ገንዘብ እንደፈጀበያት ያውያሉ

15. Do you know the cost of building your house?
ከወቱ ጠቅላላ ወጪያ ም ን ያህል ነው
If yes, give total cost $ _____

አውያለሁ Yes ☐ 1
አላውቅም No ☐ N/K

16. የጭያ ቤት ሲሰሪ ረዱተው ያውያሉ

16. Have you helped to build a chica house?

አውያለሁ Yes ☐ 1
አላውቅም No ☐ 2

17. ረዱተው ከሆነ የሠሩትን ሥራ ይገለጹ

17. If yes, what work did you do? _____

18. ሸክላ ቤነ ለሠሪ ረዱተው ያውያሉ

18. Have you helped to build a brick building?

አውያለሁ Yes ☐ 1
አላውቅም No ☐ 2

19. ረዱተው ያውቱ እንደሆነ ም ን ዓይነት ሥራ ሠሩ

19. If yes, what work did you do? _____

20. ሌላ የቤነ ሥራ ልምዱ አለያትን?

20. Have you any other building experience?

አለኝ Yes ☐ 1
የለኝ No ☐ 2

(Continued on page 8)

21. ሰርተዋል ካለፉት የሥራ ዓይነት ይግለጹ

21. If yes, what work did you do? ______________________________

22. ቤተ ሰቦችዎ የሚረቡበት ጠቅላላ የቤቱ ስፋት በሜትር ይግለጹ

22. a. Total floor space used by this household only ____________ Square metres.

22. ለ/እንዚሁ ቤተሰቦች ከሌላ ቤተሰብ ጋር የሚጋሩት ክፍል አንዓለ ስፋትን በሜትር ስጥ

22. b. Total floor space shared with 1 or 2 other households ____________ Square metres.

23. የያንዳንዱ ክፍል አገልግሎት — Function of each room

	A	B	C
	ለቤተሰብ አገልግሎት ብቻ	ከሌሎች ቤተሰቦች ጋር የሚጋሩ	በአንዱ ክፍል ውስጥ የሚተኙ የሰዎች ቁጥር
Rooms	Used only by this Household	Shared with other Households	Number of persons sleeping in room
1ኛ 1st			
2ኛ 2nd			
3ኛ 3rd			
4ኛ 4th			
5ኛ 5th			

24. ምናልባት ክፍል ወይም ክፍሎች ከሌላ ቤተሰብ ጋር የሚጋሩ አንዓሉ የዚያን የቤተሰቡ ካርታ ቁጥር ስጥ

24. If a room/rooms are shared, give the other household's map number ______

25. ይህ ቤተሰብ ስንት የቤት እንስሶች አሉት

25. How many domestic animals does the household possess?

26.

	A	B	C	D	E
የቤት እንስሳት ዓይነት	ቁጥራቸው	ቤተሰቦቹ የሚኖሩበት ክፍል ውስጥ ይኖሩ እንደሆነ	የተለየ ክፍል	ከቤትውጭ ሆኖ በግቢው ውስጥ	ሌላ ቦታ ከግቢ ውጭ
Kind of Domestic Animal	Numbers	Household Room	Separate Shelter	Out of doors in household Compound	Other place outside the household Compound
የቀንድ ከብቶች Cattle					
ፈረስ Horses					
በግ Sheep					
ፍየል Goats					
አህያ Donkeys					
ዶሮ Chickens					
ውሻ Dogs					
ድመት Cats					
ሌላ Other (Specify)					

Continued on page 9)

27. ሌላ የወጭ ሰው ከብቶን ከዕርስያ ገቢ ውስጥ የሚያሰድር አለ?

27. Does anyone who is not a member of your household keep animals in your compound?

አለ Yes ☐ 1

የለም No ☐ 2

28. ካለ የከብቶን ዓይነት ይግለጹ

28. If yes, specify _____

29. የሽንት ቤት ዓይነት

29. System of human waste disposal:

ቦጭረሽ የለም None ☐ 0

ጉድጓድ አለ Pit latrine ☐ 2

አለ ከተባለ ጠያቂው ጉድጓዱን አይቶ አዙሀ ምልክት ማድረግ አለበት

(If yes, interviewer should insert check if he observes a pit in the compound) ☐ 2b

ቦውን የሚሄድ ሽንት ቤት Water closet ☐ 3

ከሆ ይህ ሽንት ቤት አቢት ውስጥ ነው If yes, is this inside your house? ☐ 3b

ሌላ Other ☐ X

ይግለጹ (Specify) _____

30. የቫሻ የሚያስወግዱበት ዘዴ

30. System of garbage disposal:

የለም None ☐ 0

ያያጥላሉ Burn ☐ 2

ጉድጓድ አለ Pit ☐ 3

ከሆ ጠያቂው ጉድጓዱን አይቶ አዙሀ ምልክት ማድረግ አለበት

(If yes, interviewer should insert check if he observes a pit in the compound) ☐ 3b

በማዘጋጃ ቤት ይወሰዳል Collection by Municipality? ☐ 4

ሌላ Other ☐ X

ይግለጹ (Specify) _____

(Continued on page 10)

31. ውኃ ከዳት ነው የሚያገኙት?

Where do you get water?

ሀ /በቤት ውስጥ ቧንቧ አለ	Private tap in the house	1
ለ /በግቢው ውስጥ ቧንቧ አለ	Tap in the compound?	2
ሐ /ዳቦር ውሃ አለ /የሕዝብ	Public tap outside the compound?	3
መ /የጉድጓድ ውኃ ገቢ ውስጥ አለ	Well in the compound?	4
ሠ /የጉድጓድ ውኃ ከግቢ ውጭ	Well outside the compound?	5
ረ /በቤራይ ያስቀዱ አንደሆነ	Bought at the doors?	6
ሰ /የጮፈስ ምንጭ ወይም ወንዝ	Stream or water course?	7
ቦታውን ይግለጹ	(Specify location) _____	

ሌላ ይግለጹ	Other (Specify) _____	X

32. ሰውሃ በወር ምን ያህል ያወጣሉ

How much do you spend monthly on water? $ _____.

33. አብዛኛውን ገዚ የሚጠቀሙበት መብራት ምንድነው?

What lighting system do you usually have in your house?

ምንም የለ	None	0
የሚነድ አሰት ብቻ	Open fire inside house?	1
ሻማ	Candles?	2
ጋዝ (ቱን)	"Gaz"	3
የኤሌትሪክ መብራት	Electricity?	4
ሌላ ይግለጹ	Other (Specify) _____	X

34. ለመብራት በወር ምን ያህል ይከፍላሉ?

How much do you spend monthly on lighting? $ _____.

35. ምግብ የሚያዘጋጁት የት ነው

Where do you cook food?

ቤንል የተለየ ወጥቤት ውስጥ ነው?	Separate private household kitchen?	1
የጋራ ወጥቤት ውስጥ	Separate shared kitchen?	2
መኖሪያ ቤነ ውስጥ ነው	Part of household room?	3
ሜዳ ላይ	Out of doors?	4
ምንብ ቤታቸው አይዘጋጁም	Do not cook food.	0

36. የበሰለ አህል ሆነ ጥሬ የሚያስቀምጡት የት ነው

36. Where do you store food? _____

37. ጠላ የሚበጭ-ቱት የት ነው

37. Where do you mix tella? _____

(Continued on page 11)

38. ዕቃ ሳሳ የወጥ ቤት ዕቃዎች የሚያጥቡት የት ነው ?

38. Where do you wash dishes and kitchen equipment? ______________

39. ልብስ የሚያጥቡት የት ነው ?

39. Where do you wash clothes? ______________

40. ልብስ የሚያሰጡት የት ነው ?

40. Where do you dry clothes? ______________

41. በርበሬ ጌሾ ብቅል እንጀራ እንዲሁም ሌላ ነገር የሚያደርቁት የት ነው ?

41. Where do you dry peppers, gesho leaves and barley (Bikile) for tella, ingera, etc.? ______________

42. የት ነው የምትታጠቡት ? Where do you bathe? ______________

43. ልጆችዎ የሚጫወቱት የት ነው ? Where do your children play?

ሀ / አጥር ግቢ ውስጥ	In your compound?	☐	1
ለ / መንገድ ላይ	In the street?	☐	2
ሐ / ሜዳ ላይ	On a piece of open land?	☐	3
መ / በዝግጁ ለጨዋታ በተሰናዳ ቦታ ላይ On a prepared or specially allocated playground?		☐	4

ከሆነ ቦታውን ይንገሩ If yes, give locality ______________

44. የት ነው የሚገበዩት ? Where do you do your shopping?

በሚከተለው ሠንጠረዥ ውስጥ እያንዳንዱ እቃ የሚገዛበትን ጊዜ አመልክት ይኸውም በየቀኑ በየሳምንቱ በየወሩ አልፎ አልፎ

Write in the block opposite each commodity & in the appropriate column the frequency of purchase, i.e., Daily (D), Weekly (W), Monthly (M), Infrequently (I)

	ኪዮስክ ሱቅ ቤት Kiosk	ጉልት Neighbourhood Market	መርካቶ Central Market	ፒያሳ Piazza	ሌላ ቦታ Elsewhere
	1	2	3	4	5
ጤፍ a. Teff					
አትክልት b. Vegetables					
ሥጋ c. Meat					
ማገዶ d. Fuel					
መጠጥ e. Drink					
ልብስ f. Clothing					
ሲጋራ g. Cigarettes					
h. ሌላ Other					

ይግለጹ (Specify) ______________

45. የቤተሰቡ የሥራ ዓይነትና ገቢ ምንድነው?

45. What are the occupations (if any) and incomes of the members of your household?

በተሰቦች	የሥራ ዓይነት	ተጣሪ	የወር ደሞዝ	ለላ ገቢ በገንዘብ መልክ ሆነ በለላ
Household Member's Code	Occupation	Employer	Monthly Income	Other Source of Income (Cash or Goods)
x				

ትብብርዎን በጣም እናመሰግናለን

Thank You!

ፕላን PLANS

Appendix C

EXTRACTS FROM CENSUS OF POPULATION

ADDIS ABABA, 1961

TABLE 3. AREA, RESIDENT AND de facto POPULATION OF ADDIS ABABA- SEPTEMBER 1961

District	(1) Area in Sq. Kms.	(2) Total Present on Census Night			(3) Total Resident Population			(4)=(3)÷(1) Density (Persons per Km2)	(5) Resident Population: Of the Private House-holds	Insti-tutions	Homeless
		Male	Female	Total	Male	Female	Total				
Arada	7.0	24,714	23,767	48,481	24,477	23,601	48,078	6,868	47,456	577	45
Gefersa	10.8	20,499	18,673	39,172	20,232	18,493	38,725	3,586	38,616	109	—
Gulele.....	7.8	19,533	19,426	38,959	19,341	19,225	38,566	4,944	38,393	173	—
Intoto	65.7	14,849	13,835	28,684	14,722	13,685	28,407	432	28,129	278	—
Mekakelegna ..	16.5	41,537	41,614	83,151	41,053	41,113	82,166	4,980	80,202	1,932	32
Yeka	35.8	9,127	9,071	18,198	8,967	8,936	17,903	500	17,786	92	25
Bole.....	23.4	22,167	21,493	43,660	22,024	21,331	43,355	1,853	42,862	476	17
Lideta	15.8	11,332	10,041	21,373	11,290	9,975	21,265	1,346	19,420	1,842	3
Keranio	19.0	8,138	7,269	15,407	8,088	7,241	15,329	807	13,766	1,563	—
Tekel Haimanot	16.2	58,284	53,143	111,427	57,398	52,536	109,934	6,786	108,386	1,485	63
Totals:	218.0	230,180	218,332	448,512	227,592	216,136	443,728	2,035	435,016	8,527	185
Of which=									(A.A. Average)		
Males				230,180			227,592		221,276	6,144	172
Females				218,332			216,136		213,740	2,383	13

Source: Muncipality of Addis Ababa's Report on Census of Population, 10-11 September, 1961.

TABLE 4. DISTRIBUTION OF POPULATION OF ADDIS ABABA BY AGE GROUP, SEX, LITERACY, AND RELIGION

Age group	Total Resident Population: Total	Male	Female	Literacy: Literate	Not Literate	Not Stated	Religion: Ethiopian Orthodox	Other Christian	Moslems	Other	Not Stated
0-4	61,176	31,340	29,836	—	61,176	—	53,373	1,383	5,728	257	435
5-9	45,839	22,446	23,393	12,792	31,740	1,307	39,441	1,364	4,561	222	251
10-14	41,843	21,143	20,700	25,800	15,541	502	35,785	1,091	4,681	154	132
15-19	41,964	22,388	19,576	20,018	21,633	313	34,755	987	5,994	98	130
20-24	45,307	22,590	22,717	17,265	27,850	192	38,883	923	5,294	109	98
25-29	50,725	25,039	25,686	32,196	59,064	294	80,685	1,837	8,460	398	174
30-34	40,829	20,980	19,849								
35-39	30,881	16,210	14,671	19,296	39,833	206	52,763	1,340	4,779	292	161
40-44	28,454	15,124	13,330								
45-49	16,781	9,286	7,459	8,925	21,738	108	27,075	1,281	2,166	182	67
50-54	13,990	7,283	6,707								
55-59	7,262	4,040	3,222	3,360	10,177	67	12,094	502	922	51	35
60-64	6,362	3,214	3,128								
65 and over ...	9,845	4,808	5,037	1,785	7,998	62	8,951	184	658	19	33
Not Stated	2,490	1,701	789	1,095	1,329	66	1,688	58	187	6	551
Total:.....	443,728	227,592	216,136	142,532	298,079	3,117	385,493	10,950	43,430	1,788	2,067
Of which:											
By Sex=											
Males 227,592				105,461	120,679	1,452	192,095	6,095	27,153	1,070	1,249
Females ..216,136				37,071	177,400	1,665	193,468	4,855	16,277	718	818
By Nationality=											
Ethiopians	430,907	220,013	210,894								
Foreigners	11,824	7,098	4,726								
Not Stated	997	481	516								

Source: Muncipality of Addis Ababa's Report on Census of Population, 10-11 September 1961.

TABLE 5. NUMBER OF HOUSEHOLDS BY SIZE OF HOUSEHOLD, AND AVERAGE SIZE OF HOUSEHOLD-BY DISTRICT IN ADDIS ABABA (As of September 10, 1961)

Size of Household	Arada	Gefersa	Gulele	Intoto	Meka-Kelegna	Yeka	Bole	Lideta	Keranio	Tekle-haymanot	Total
1	3,386	1,747	1,781	1,637	5,157	767	2,214	1,009	660	6,231	24,589
2	2,771	2,304	2,480	1,909	5,331	1,127	3,073	1,377	1,146	7,061	28,579
3	2,153	1,978	1,977	1,513	4,217	989	2,265	1,030	877	5,539	22,538
4	1,645	1,482	1,463	1,092	2,811	674	1,686	861	533	4,167	16,414
5	1,253	1,109	1,001	690	1,862	479	1,046	581	385	2,926	11,332
6	879	656	718	474	1,313	344	658	361	228	1,940	7,591
7	513	453	429	280	850	189	412	205	155	1,172	4,658
8	355	280	300	173	516	131	248	125	72	714	2,894
9	230	175	147	119	353	62	172	65	33	442	1,798
10	131	104	104	71	201	44	100	46	29	327	1,157
11	98	77	49	44	126	23	68	15	13	154	667
12	51	36	48	22	117	12	40	14	8	118	466
13	45	19	34	23	62	11	18	10	5	84	311
14	27	22	16	10	42	7	18	5	4	49	200
15	16	15	17	7	23	2	8	4	4	30	126
16	12	10	13	5	16	5	9	1	4	27	102
17	12	6	4	6	13	4	4	3	—	10	62
18	5	8	5	3	5	3	5	—	—	6	40
19	5	7	2	2	6	3	3	—	1	11	40
20 and over	25	12	15	22	32	11	14	1	—	38	170
Not Stated	2	3	—	2	6	3	—	2	1	2	21
Total No. of households	13,614	10,503	10,603	8,104	23,059	4,890	12,061	5,715	4,158	31,048	123,755
Total population in households ..	47,456	38,616	38,393	28,129	80,202	17,786	42,862	19,420	13,766	108,386	435,016
Average size of household.....	3.49	3.68	3.62	3.47	3.48	3.64	3.55	3.40	3.31	3.49	3.51

TABLE 6a. NUMBER OF HOUSEHOLDS BY CLASS OF CONSTRUCTION OF LIVING QUARTERS AND BY TENURE, ADDIS ABABA (As of September 10, 1961)

Class for construction of living quarters	Number According to Tenure				
	Owned	Rented	Other	Not Stated	Total
Stone walls, metal or concrete roof with foundation	696	3,233	1,434	21	5,384
Chica (mud on wood) walls, metal roof with foundation	12,534	32,318	2,876	165	47,891
Chica walls, metal roof, no foundation	9,623	37,718	4,325	191	51,857
Chica walls, thatched roof no foundation	4,609	5,997	1,526	33	12,165
Other including not stated	1,317	3,371	1,077	693	6,458
Total:.....	28,779	82,637	11,236	1,103	123,755

Source: Municipality of Addis Ababa's Report on Population Census, 1961.

DISTRICT, IN ADDIS ABABA. (As of September 10, 1961)

Class of construction of living quarters	Arada	Gefersa	Gulele	Intoto	Meka-Kelegna	Yeka	Bole	Lideta	Keranio	Tekle-haymanot	Addis Ababa
	Number of households with specified class of living quarters										
Stone walls, metal or concrete roof, with foundation	1,157	212	221	266	824	334	854	422	133	971	5,384
Chica walls, metal roof, with foundation	4,335	4,579	3,776	2,495	9,833	1,629	6,465	1,964	826	11,989	47,891
Chica walls, metal roof, no foundation	6,958	4,220	4,928	3,614	9,414	1,218	3,434	1,832	1,839	14,400	51,857
Chica walls, thatched roof, no foundation	486	1,059	1,256	1,318	1,748	1,269	700	1,195	1,200	1,934	12,165
Others, including not stated..	678	433	432	411	1,240	440	608	302	160	1,754	6,458
Total:	13,614	10,503	10,603	8,104	23,059	4,890	12,061	5,715	4,158	31,048	123,755

TABLE 6c. NUMBER OF HOUSEHOLDS BY TYPE OF TENURE OF LIVING QUARTERS, BY DISTRICT ADDIS ABABA. (As of September 10, 1961)

Type of Tenure	Arada	Gefersa	Gulele	Intoto	Meka-Kelegna	Yeka	Bole	Lideta	Keranio	Tekle-haymanot	Addis Ababa
	Number of households with specified type of tenure										
Owned	1,861	2,640	2,952	2,199	5,303	1,913	2,686	1,636	1,437	6,152	28,779
Rented	10,554	6,860	6,676	4,841	15,436	2,076	8,001	3,400	1,940	22,853	82,637
Other	1,079	931	873	1,000	2,077	865	1,289	632	757	1,733	11,256
Not stated	120	72	102	64	243	36	85	47	24	310	1,103
Total:	13,614	10,503	10,603	8,104	23,059	4,890	12,061	5,715	4,158	31,048	123,755

Source: Municipality of Addis Ababa's Population Census Report, 1961.

TABLE 7. NUMBER OF HOUSEHOLDS BY TYPE OF WATER SUPPLY, BY DISTRICT, IN ADDIS ABABA (As of September 10, 1961)

Type of water supply	Arada	Gefersa	Gulele	Intoto	Meka-Kelegna	Yeka	Bole	Lideta	Keranio	Tekle-haymanot	Addis Ababa
	Number of households with specified types of water supply										
Private piped	7,460	2,730	3,687	2,116	7,393	846	2,842	1,158	189	8,379	36,800
Public piped	3,995	5,021	4,764	3,228	10,610	1,749	7,986	1,803	1,945	14,050	55,151
Private well	257	295	294	107	519	35	45	16	29	1,565	3,162
Public well	856	921	602	426	1,658	86	239	19	57	4,032	8,896
Stream	50	936	759	1,499	880	1,677	299	1,174	1,604	463	9,341
Other	976	587	483	718	1,966	491	640	1,533	327	2,511	10,232
Not stated	20	13	14	10	33	6	10	12	7	48	173
Total:	13,614	10,503	10,603	8,104	23,059	4,890	12,061	5,715	4,158	31,048	123,755

TABLE 8. NUMBER OF HOUSEHOLDS WITH AND WITHOUT ELECTRICITY, BY DISTRICT, IN ADDIS ABABA (As of September 10, 1961)

Type of water supply	Arada	Gefersa	Gulele	Intoto	Meka-Kelegna	Yeka	Bole	Lideta	Keranio	Tekle-haymanot	Addis Ababa
	Number of households with and without electricity										
With electricity	10,204	5,830	5,853	4,583	14,509	1,499	7,121	2,878	970	18,521	71,968
Without electricity	3,345	4,632	4,694	3,481	8,395	3,370	4,888	2,794	3,173	12,335	51,107
Not stated	65	41	56	40	155	21	52	43	15	192	680
Total:	13,614	10,503	10,603	8,104	23,059	4,890	12,061	5,715	4,158	31,048	123,755

Appendix D

SUGGESTIONS FOR REGULATIONS FOR TEMPORARY HOUSING

(See page 171.)

Suggestions for Regulations for Temporary Housing

Section (B): Municipal Rules for Constructing New Buildings.

1. These regulations shall be known as the Regulations for Temporary Housing and shall form section (B) for the existing rules for Construction of New Buildings and shall apply only to areas declared by Negarit Gazetta Notice (or otherwise, e.g., marked on development plans or zoned in planning schemes) to be areas in which temporary housing may be built. Compliance with these regulations will be deemed to satisfy the requirements of the Municipal Rules for Construction of New Buildings in the case of single story houses and their ancillary buildings (also single story).

2. Each house shall consist of at least one habitable room in addition to kitchen, ablution and privy accomodation for the exclusive use of the occupants of the house: this accomodation may be provided in one or more buildings.

3. The areas of a habitable room shall be at least twenty square meters.

4. The height of the walls of a habitable room, kitchen, ablution room or privy accomodation shall be at least 3m 50 cm. The average height of a habitable room shall be at least 2m 50 cm.

5. Each habitable room shall be provided with a door opening, at least 0m 80cm wide by 2m 9cm high.

6. In addition to the door opening each habitable room

shall have natural ventilation to the open air. For this purpose the area which is open or which can be opened shall be at least one square meter: no part of this area shall be taken into account if it is less than 3m 0cm from the nearest part of the door opening.

7. The floor of every habitable room, kitchen, ablution or privy accomodation shall be at least 15cm higher than the level of the surrounding ground.

8. (a) There shall be a distance of at least three meters between the eaves of any two buildings, provided that for the purposes of this part of Regulations a wall or fence of which no exposed part is constructed of combustible materials shall not be deemed to be a building.

(b) No part of a building other than a wall or fence shall be less than fifty meters from a side boundary of the plots on which the building stands.

(c) A wording similar to 8(b) may be needed for the back boundary of the plot.

9. There shall be a distance of at least three meters between a habitable room or kitchen and a room containing privy accomodation other than waterborne sanitation.

10. The distance between a well and any pit latrine, cess pit or other excavation or container from which untreated or, in the opinion of the medical officer of health, inadequately treated sewage can enter the soil, shall be decided for each Temporary Housing Area by the medical officer of health.

11. Nothing in these Regulations shall prevent any person

from constructing a building which complies with all the requirements of the Main Building Regulations in an area in which temporary housing may be constructed.

NOTES:

Regulation (1): This implies that all buildings other than single story houses (and their ancillary buildings, walls and fences) must comply with the main Building Regulation.

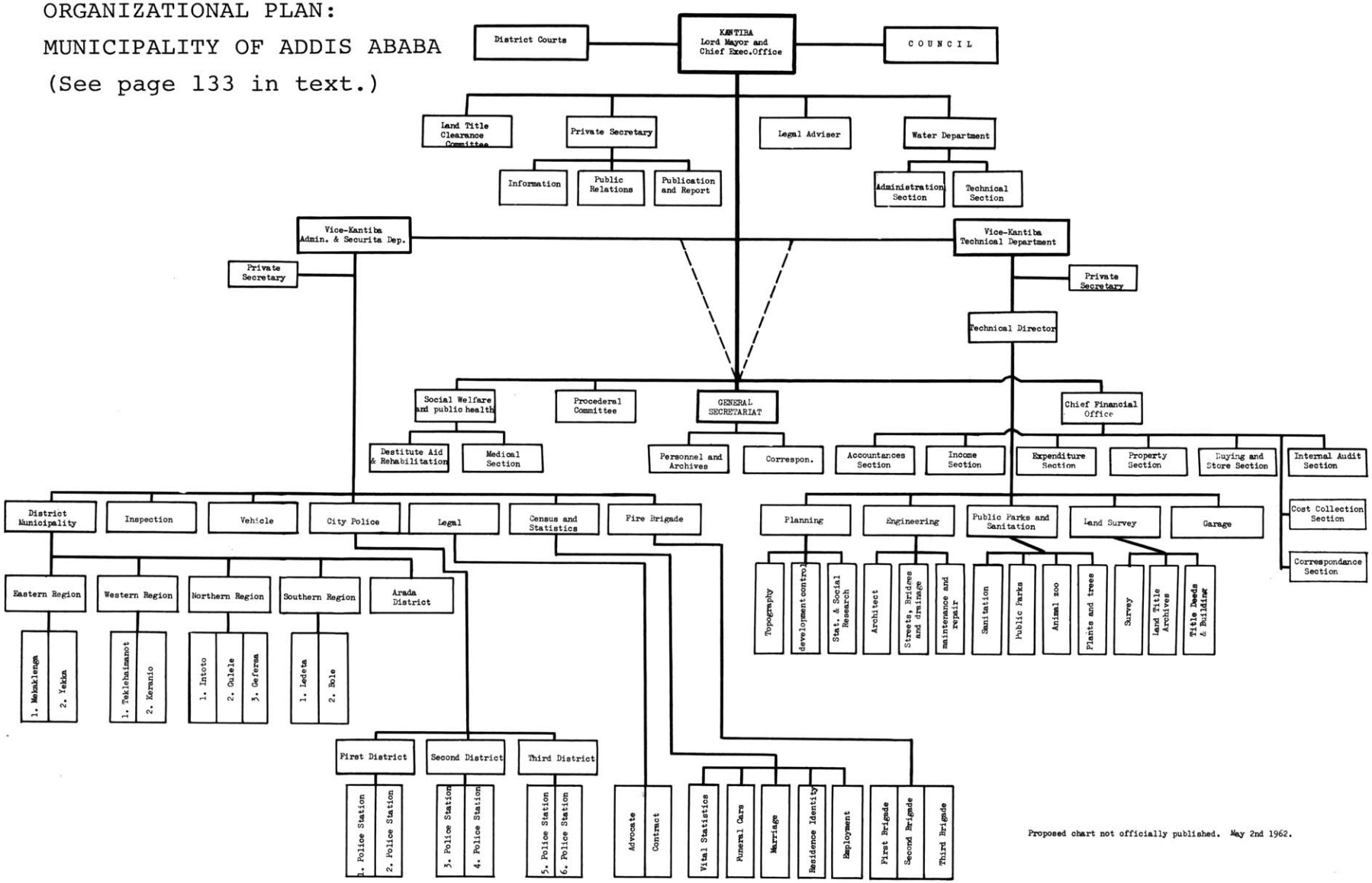
Regulation (B): The distance depends on various factors such as the type and slope of the strata and the depth of the wall. No general rule can be suggested.

Appendix E

ORGANIZATIONAL PLAN: MUNICIPALITY OF ADDIS ABABA

ORGANIZATIONAL PLAN:
MUNICIPALITY OF ADDIS ABABA

(See page 133 in text.)



Proposed chart not officially published. May 2nd 1962.

Appendix F

MUNICIPAL INCOMES

From; STATISTICAL ABSTRACT – ETHIOPIA 1965
CENTRAL STATISTICAL OFFICE
ADDIS ABABA

አዲስ አበባ የሚገኙትን የመንግሥትና፣ ወኪለ መሥሪያ ቤቶችና ድርጅቶችን የ1957 ዓ.ም የሚያዝያን ወር
የሠራተኞች ብዛትና የደመወዝ ልክ የሚያሳይ*

PERSONS EMPLOYED AND SALARIES PAID BY THE CENTRAL GOVERNMENT AND SELECTED PRIVATE FIRMS *
IN ADDIS ABABA IN APRIL 1965, BY LEVEL OF INCOME *

ሠንጠረዥ ቁ. 7 TABLE J. 7

የወር ደመወዝ አመዳደብ (በኢት/ብር)	የመንግሥት ሠራተኞች		ወኪለ መሥሪያ ቤቶችና ድርጅቶች		
	የሠራተኞች ብዛት	ጠቅላላ ደመወዝ (በኢት/ብር)	የሠራተኞች ብዛት	ጠቅላላ ደመወዝ (በኢት/ብር)	
ከ25 በታች	1,395	21,550	8	142	UNDER 25
25 - 50	3,925	153,275	1,380	56,813	25 - 50
50 - 75	1,704	99,033	973	60,165	50 - 75
75 - 100	725	60,082	656	56,342	75 - 100
100 - 150	1,553	184,067	1,499	181,737	100 - 150
150 - 200	1,301	216,995	921	161,056	150 - 200
200 - 250	1,083	228,330	694	155,618	200 - 250
250 - 300	795	209,030	728	186,343	250 - 300
300 - 350	625	196,175	687	218,536	300 - 350
350 - 400	342	123,756	436	163,265	350 - 400
400 - 450	276	112,505	318	134,190	400 - 450
450 - 500	270	127,791	232	109,553	450 - 500
500 - 600	767	386,715	364	198,126	500 - 600
600 - 700	256	162,871	175	112,499	600 - 700
700 - 800	185	135,212	78	58,195	700 - 800
800 - 900	107	91,350	64	54,319	800 - 900
900 - 1000	104	98,131	48	45,049	900 - 1000
1000 - 1500	177	179,896	90	124,084	1000 - 1500
1500ና ከዚያ በላይ	213	439,251	110	291,048	1500 AND OVER
ድምር	15,803	3,223,315	9,461	2,395,580	TOTAL
	NUMBER OF EMPLOYEES	PERSONAL EMOLUMENTS (E$)	NUMBER OF EMPLOYEES	PERSONAL EMOLUMENTS (E$)	INCOME GROUP (E$ PER MONTH)
	CENTRAL GOVERNMENT		AUTONOMOUS AUTHORITIES AND SELECTED PRIVATE FIRMS		

*ወረቧው ስለተገኘበትና ስለመገለጧው ገጽ 139 ተመልከት

*See over

The autonomous authorities and private firms included are;

Addis Ababa Commercial Bank,
Central Medical Stores,
Commercial Bank of Ethiopia,
Development Bank,
Investment Bank,
Electrical Light and Power Authority,
Ethiopian Airlines,
Imperial Highway Authority,
Telecommunications Board, and
Tobacco Monopoly.

The table is derived from Central Statistical Office calculations based on the payroll records of the Central Treasury, Ministry of Finance, and on the payroll records of private agencies.

MUNICIPAL INCOMES

I953 (ETHIOPIAN CALENDER)

I96I (GREGORIAN CALENDER)

Type	Budget	Actual
	$	$
Business Licensing	883,000	I,059,945
Petrol Tax	250,000	4I7,75I
Cattle,etc. Tax	70,000	I36,2I6
Property Rents	242,000	246,I63
Miscellaneous Sales	30,000	62,078
Land Survey Fees	I2,000	9,60I
Building Permits	I8,000	I7,332
Hygiene Fees	202,000	I9I,976
Vehicle Licensing	327,000	404,23I
Hire of Hearses	9,000	I0,056
Rental Value Tax	84,000	86,970
Ashura(x)	I50,000	I70,925
Title Deed Registration	30,000	22,I74
Contracts Registration	I5,500	I6,59I
Miscellaneous	I2,4I0	64,I97
	2,334,9I0	2,9I6,206
Land Tax I952 and I953	500,000	I953 Tax Not Levied By Council
Land Tax (I952 and earlier) -----		I7I,003
Imported Goods Tax (Direct)	400,000	552,306
Imported Goods Tax (Ministry of Interior)	800,000	NOTHING PAID BY MINISTRY
	$ 4,034,9I0	$ 3,639,5I5

(x) Ashura is tax collected whenever there is a sale of land. The Municipality receives 4 per cent of the land value.

From: City of Addis Abrba, Finance Department, Annual Report 20th November, I96I