

A GEOGRAPHICAL STUDY OF URBAN DEVELOPMENT

THE CASE OF JIMMA TOWN

**A THESIS PRESENTED TO
THE SCHOOL OF GRADUATE STUDIES
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**IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTERS OF
ARTS IN GEOGRAPHY**

BY HABTE GEBREMICHAEL

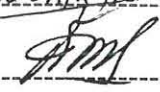
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COLLEGE OF SOCIAL SCIENCE

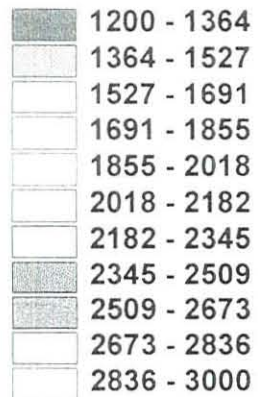
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JIMMA AND ITS SURROUNDING AREA

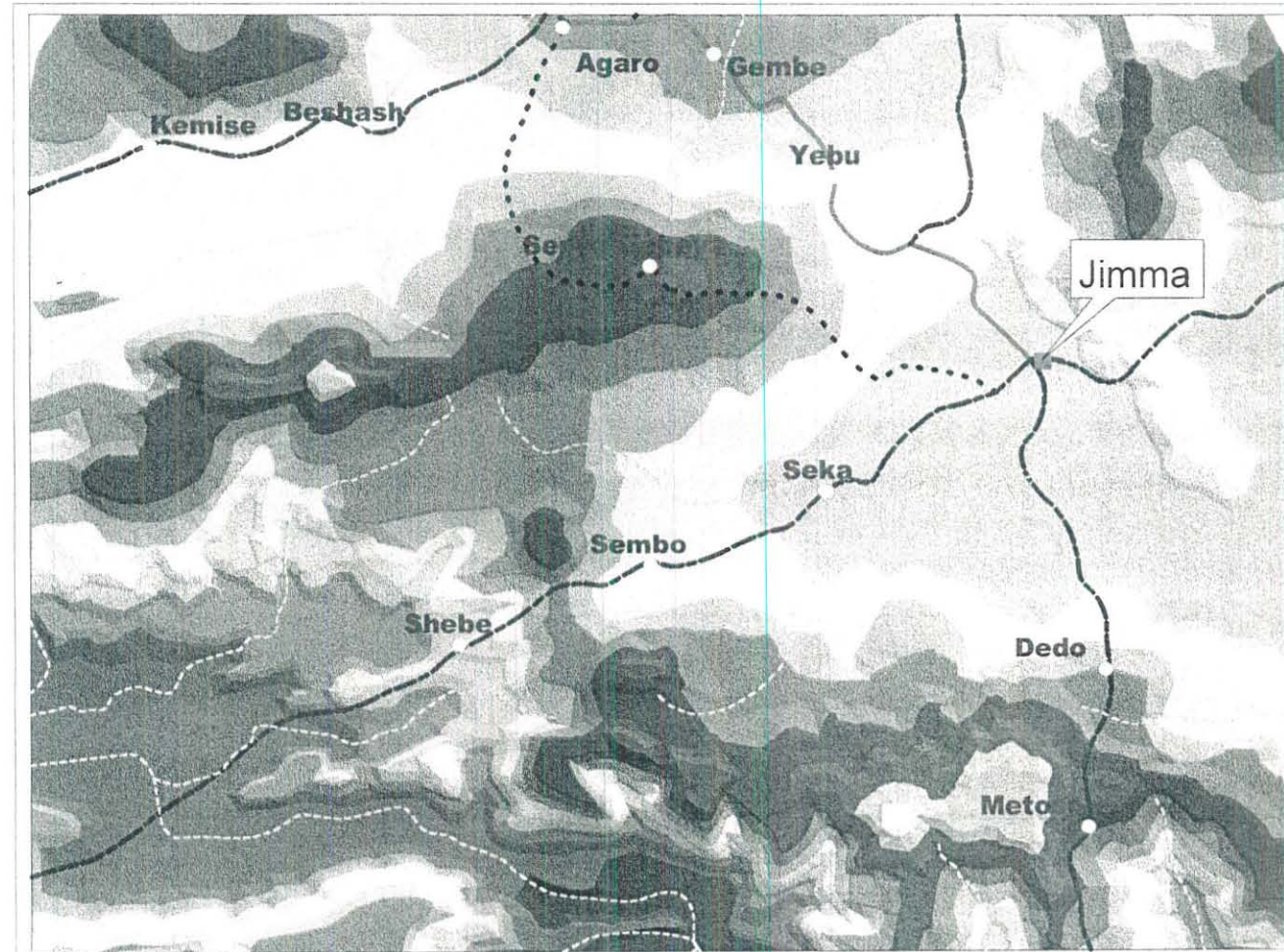
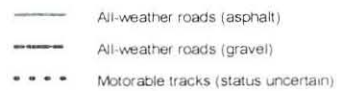
LEGEND

Elevation Range (m)



 Jimma Town
 Other Towns
 Streams

Roads



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The research would not have been finalized without the mutual cooperation of close friends and hierarchies of government and non-government institutions.

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ABSTRACT

Jimma is one of the oldest towns which rendered urban service for areas located in south-Western Ethiopia.

The early origin and the later development of the town benefited its strategic location, early discovery of coffee and participation in distant trade. It also depend on the wise management of its leaders who pacified the region and attracted more people with different views and wealth to the area.

The Italian plan to promote the town as the second "Rome" and the monarchical rule Jimma as "Yewubet" ketema accelerated it progress.

The town covers 4622.58 hectares of area. The population of the town projected for the year 2000 is 119510.

The study area is divided into three keftagnas which further clustered into 19 kebele units, though hazy with distinctively defined functional centers.

The objectives of the study was set to evaluate the level of its development by assessing the trends of the inter relationship between the growth of its population, economic, and, infrastructural foundations.

The present urban environment of the town is characterized by population pressure and fast expanding physical area.

The town lacks stable management due to unsustainable bureaucracy which is organized on poor staff profile, which in one way or another contributed to the town to posses poor revenue base.

The factors illustrated in combination compounded the problem and there by exaceberated the infrastructural foundation.

The problems are analyzed interms of administrative, demographic and economic effects on the infrastructural foundation of the town.

It has emphatically examined the sources of revenue, budget setting (allocation), and sector plan implementation. Therefore found out the existence of weak correlation in the first and stronger one in the later. It also surveyed the income variation of the population understudy, which also manifested in serious gap. High unemployment rate and the basic variables that contributed to sluggish economic development of the town were rooted to the current fall in coffee price.

In its conclusion the paper tried to suggest for alternate policy measures to ameliorate the prevalent poor economic and infrastructural foundation.

To mitigate the issues, it suggested for an inquiry of policy amendment for sustainable bureaucracy for the town administration and continuing education opportunity for the staff profile.

It also opinionated for institutional mechanism that can fully enforce collection and promote more buoyant revenue internally and policy guaranteed enough to attract external source of revenue for more and more business in the town.

For the time being the intensively implemented family planning exercises no doubt could stabilize the population growth, nevertheless for greater progress the town administration must seek ways to strengthen the productivity of the tertiary sector management (trade, transports). The town could best serve and benefit in this sector till the realization of industrial economy.

CHAPTER ONE

A GEOGRAPHICAL STUDY OF URBAN DEVELOPMENT

THE CASE OF JIMMA

1. INTRODUCTION

Background of the Study Area

Oral traditions and written documents justified, before the 16th Century, the area presently called Jimma and its surrounding were inhabited by agricultural people collectively known as the Sidamma. Jimma as monarchial kingdom emerged during the second decade of the 19th century as part of the Ghibe states, Mohammed Hussien (1990; p. 112) wrote:

Jimma proper was established by diplomatic and warrior king called Sanna. He was the son of Aba Magal. He won a decisive victory on the powerful Aba Dulas of Badi-group defeated and took over the Massera (palace) in the region of Hirmata and by 1830 the kingdom of Jimma Kaka was established, hence Sanna earned his immortal name of Jifar after his famous horse.

Hence forth Herbert S. Lewis (1965) wrote: "Jimma continued to grow in importance. During the Italian period, it became center of a vast fertile geographical area known as the "Galla Sidama" then it continued to function as the capital of Keffa province during the monarchial rule".

At present it is the capital of Jimma zone. According to the Walia transport enterprise report (2000) "It is 346 kms from Addis Ababa".

A. Astronomical Location

Topographic map of Jimma located the town between 07°39'N latitudinal and 36°50'E longitudinal extent. It is found in the South-western part of Addis Ababa.

B. Administrative Structure

Jimma has three Keftegnas (Highers), which are divided into 19 kebeles, where keftegna one has five, keftegna two, six, and keftegna three eight kebeles respectively.

C. Total Area

According to the technical department of the Works and Urban Development department of Jimma zone the total area covered by the town since 1997 was 4622.58 hectares or 46.23 square kilometers.

D. Population:

The 1994 Ethiopian population and Housing Census reported that the town has a total population of 88867 out of which 43874 are male and 44993 are female. It has 17078 housing units and 19,137 households.

E. Density of the Population

The man land relationship based on the 1994 census result referring to the residential area is 217 person per hectare (216749 persons/square km).

F. Physical Environment

F.1 Relief: Jimma is located in a depression. In the words of Herbert S. Lewis (1965), "It is rolling to hilly, grass, and, forest land," but much of this had

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been cleared away for farmland, and now is an urban landscape. With close opinion Dubale (1987) wrote, "It is hilly to plane land". It has hilly aspect in the north, east and west that gradually descent in a slope of concave structure towards the south.

F.2 Altitude: To many writers including Daniel Gamachu (1977) the elevation of the town varied between 1720 to 1740 meters above sea level. However, the National urban planning institute (1997) report indicated "the altitude of the town lies between 1720 meters at Jimma airport to 1900 meters at Kidus Giorgis Betekristian, which averages to 1810 m.a.s".

F.3 Climate: Sylvia Pankhurst (1957: 318) wrote:

The climate of Jimma is extra ordinary bland and general! It is veritable wonderland of loveliness. Its hills are clothed to their summit with crops and trees. Its soft air bears the scent of flowers. In the early pours of the morning the fields are drenched with refreshing dew.

Generally the town is located in the Weina-Dega zone. It is found that part of Ethiopia, which receives rainfall throughout the year. However, significant variations in amount of precipitation have been registered during the last decade.

Table 1. Distribution of Rainfall and Temperature Data (1981/82-1990/91)

YEARS		1981/82	1982/83	1983/84	1989/90	1990/91
RAINFALL		1627.00	1711.7	1347.0	1916.7	1713.2
TEMPERATURE	Max. T.	25.9	26.5	26.8	27.5	28.0
	Min. T.	11.5	11.6	11.2	12	12.6
	Mean. T.	18.7	19.1	19.0	19.8	20.3

Source: C.S.A. 1980 to 1990.

1.1 Statement of the Problem

The last two decades have shown a marked fall in the economic and infrastructural foundation of Jimma.

Though it had harmonious socio-economic, infrastructural development since 1936, the period of the Italian occupation, it started to decline in the early years of the 1970's, the time of the downfall of the monarchial rule.

The Derg era that followed the defunct monarchial rule perhaps marks the beginning of the sharp decline or the "Dark-ages" in the history of the development of the town.

Though the Derg has contributed to housing boom, by introducing mortgage loan and free distribution of land and founded the Jimma Health Science Institute, which is the present Jimma University and also constructed a Stadium, and beautiful passenger terminal. The measures it took to confiscate private property on one hand and the revenge measures that followed in youth-mass-massacre on the other hand left serious agony that pushed well to do families to evacuate the town abandoning their children and property.

The last period of the socialist (Derg) era also brought about restructuring of the administrative system. This in turn resulted in the loss of resourceful Awrajas such as Maji, Shewa-Gimira, Keffa, Kulo-Konta which were famous for their gold, fruits, coffee, spices, honey and livestock products respectively, ending in shrunken geographical area, curtailed resources and catering services entertained by the town. Currently it also emerged as a center of the former two awrajas, Jimma and Limu.

Despite the periodic reviews in its administrative status, the town persists to be the head quarter for capital generating enterprises for the whole of the south-western region of Ethiopia.

Unfortunately despite its leading role in the regional urban hierarchy, it failed to achieve the development in the infrastructure that is, sufficient enough to sustain its functional role or development either.

According to the results of the 1994 population and Housing Census; that the town's population is increasing at annual rate of 4.1 percent. It experiences a total fertility rate of 2.5 percent. The number of migrants welcomed in to the town is very high. Over 9 percent of the households share a single house. Those households living in private sector rented tenure accommodation account for 17 percent. Only 44 percent of the population are reported to have access to tap water. And 21 percent of the population is obliged to use traditional source of light mainly lantern, kerosene and others etc.

In addition to this, a feasible study made by the National Urban Planning Institute (1997), justified that "there is one referral hospital with 183 beds, over crowded and poorly equipped schools, and only two secondary schools with a large range of catchment area".

It was also noted by the Technical department of the municipality that the town possesses a total of 70.16 kilometers of internal road system. Out of this 19.42 kilometers roads are paved, 27.76 kilometers are made of graveled and 22.88 kilometers are made of earth.

This is the network over which the old city buses taxis and the horse drawn carts move in congested atmosphere. C.S.A (1994), report also disclosed "that the town is confronted by unemployment rate of 21.17%".

In brief the existing physical, socio-economic problems that characterize the town are:

- 1.1.1 Shrunk administrative space that contributed to the curtailed resource captured and narrowed services.
- 1.1.2 Population growing at an alarming rate induced by both natural increase and rural urban migration.
- 1.1.3 Crippling economic growth, declining commercial activities and consequent high rate of unemployment.
- 1.1.4 Crumbling building of the Italian (1936-1941) period due to lack of adequate maintenance service, increasing appearance of growing shanty settlements which are congested and polluted, expansion of squatter.
- 1.1.5 Poorly equipped Educational and Health facilities.
- 1.1.6 Deteriorated road pattern stuffed by street sides full of rubbish, open drains, which frequently are captured by heavy flood during the big rains, and an over all weak economy that has constrained development in infrastructure.

Currently many towns proliferated alarmingly, but Jimma has remained in an environment where DICK-Oloo (1965: p. 7) writes, "as one of the sleeping giants" in the country or is "a barely growing town". This could be as a result of improper (inappropriate) use of resources or misdirected financial resource due to lack of knowledge, or practical experience and so realistic appraisal of the conditions and needs of the people. This problem has further been elucidated by socio-economic profile of the Jimma Zone (1991: p. 158), which states:

Jimma, a town once with glorious economic features in the southwestern part of Ethiopia, presently could be stated as a center exhibiting a crippling socio-economic growth as compared to the development of other towns of the country, the town inspite of its economic potential

1.4 Nature of Data

The sources of data for the study are primary and secondary. The primary data will be obtained through a sample survey. The secondary data was collected from the Municipality of the town, Works and Urban Development Department, Department of Trade, Industry and Tourism, Department of Health Institutions, both governmental and private centers, Road Transport Authority, Hydro-Minerals and energy authority of the town, local educational offices; the Social and Economic Planning Department, and the C.S.A, reports whenever necessary.

This will be source of information pertinent to population parameters engaged in different economic sectors, revealing its income level, and source of revenue to the Municipality, educational level of the employees in the municipality, efforts made by the works and urban development branch office, in creating areas of employment opportunity and development initiatives and a multitude of commercial, industrial and recreational institutions available, and hence facilitating the needs of the people in the town, and the department of social and economic planning in its accord.

1.5 Methods of the Study

1.5.1 Sample Design

Currently Jimma has nineteen (19) Kebeles. Nine (9) representative Kebeles have been selected for the study. Six of these Kebeles are located west of the Aweytu River and three from the eastern quarter. The number of household in the nine (9) kebeles is 10663 out of which due to financial and time constraints a sample size of 574 households, which account for 3% of the total and 5.4% the sample household population considered for the study.

Table 2: Distribution of sample household population

Ser. No.	Higher	Kebeles	Total Population	Household Population	Sample H.H. Population
1	01	01	7327	1578	85
2		04	3333	718	39
3		05	4870	1048	56
4	02	01	4958	1068	57
5		05	4162	896	48
6		06	3348	721	39
7	03	04	8093	1743	94
8		06	5823	1254	68
9		07	7600	1636	88
	Total	09	49514	10663	574

Source: CSA population and housing and census result of 1994 adopted and developed by the researcher.

Equally three kebeles were selected from each keftegna and yet it is worth mentioning that keftegna one kebele 4, keftegna two-kebele 5 and keftegna three kebele 4 and 7 have peripheral location, the rest are located in the proximity of the center.

The distribution of the sample household population among the nine kebeles have been done through optimum proportionate allotment (allocation).

1.5.2 Methods of Data Analysis and Presentation

The methods of analysis for the objectives indicated earlier in this unit is presented below:

1. Maps will be used to show the succession in the development of the town (administrative, functional and built up) areas.
 - Physical Socio-economic physical factors conducive to the development of the town will be analyzed qualitatively.
 - G.K. Zipf formula will be applied to examine the rank size of the town among the towns in the zone.

2. Ratios, percentages, location quotient, will be computed to examine the pattern of spatial distribution, and interdependence of demographic features. Choropleth map will be used to show the spatial variation.
3. Percent values will be computed to evaluate the distribution of population among different sectors of the economy. Mean, standard deviation /coefficient of variation/ shall be calculated to assess the income level and variation.
4. Coefficient of correlation, multiple correlation and regression analysis conducted to evaluate; the degree of the relationship between independent variable budget and the dependent variable town plan.
5. Percent ratios shall be computed to explain the present status of the infrastructural developments.
6. Qualitative analysis of the results of the objective in sequence shall be used to define the prospective function of the town.

1.6 LIMITATION OF THE STUDY

The study has the following limitations.

1. It was found very difficult to contact officials at the Municipality due to the coincidence of the electoral period with the time of data collection and information request time.
2. Most of the offices had poorly organized documentary source.
3. In some cases release of information could be done with a chain of bureaucratic consultancy, which required a lot of sacrifice to follow proceedings in patience.

- 4 Time constraint, which resulted from the gap created between the time request, was made for research found and the time which it was released.
- 5 Many respondents were suspicious of the research purpose.

1.7 Significance of the Study

Jimma is one of the major towns in Ethiopia. It has many social problems. Evidently these problems are caused by the rapid population growth which places heavy burden on the already underdeveloped social services.

To alleviate these problems a timely research is necessary. This is one of the few works expected to generate useful ideas to the issue at hand. Infact it is hoped that it is believed that this research work will shed a considerable light on:

1. The foundation and pattern of the growth of the city
2. The major social and economic problems faced by the city.
3. The development strategies that need to be pursued in order to alleviate the main problems of the city.

1.8. Structure of the Thesis

This thesis is organized in six chapters. The first chapter attempts to define the study area and its problems, determine the objectives of the study and research methodology by which it has been achieved.

Chapter two reviewed the related and conceptual literature of the topic under study.

NUPI:	National Urban Planning Institute
STDS:	Sexually Transmitted Disease System
UDAS:	Urban Dwellers Associations
UN:	United Nations
UNICEF:	United Nations Children's Fund
USAID	United States Aid for International Development
WSSA:	Water Supply and Sewerage Authority

CHAPTER TWO

REVIEW OF THE LITERATURE

2.1 Over View

Urbanization is a process that involves the concentration of population on a space and it is a product of the shift made by man from dependence on agricultural activities to reliance on non-agricultural activities, it has its roots of development in Mesopotamia.

In the words of Mabogunge (1968: p. 33):

It is the process, whereby, human beings congregate in relatively large number at one particular spot on the earth's surface, and is a universal phenomena of considerable antiquity.

In an attempt to explain the associated factors that contributed its development J.H. John (1997: p. 2) noted:

The occasion under which it achieved success was benefiting agricultural productivity, precise management of the product and consequent concentration of human settlements that demanded administrative system and early start of rudimentary trade. The general trend, he saw was, as cities grew the positive factors behind the expansion altered in emphasis.

Henceforth, specialization of activities became popular and, this encouraged long distance trade as well as the control of money, which became much more of the cause of urban development.

To many related documents written by scholars in urban geography including Solomon Mulugeta (1979) there are three basic factors suggested for the early rise of urban centers. This included:

1. Surplus food to feed the class of specialists
2. Classes that can exercise some power and ensure peace to the specialist and the food producers.
3. Class of traders that facilitate the needs of the raw materials for the specialists.

In addition, Mabogunge (1968: p. 38) wrote, "specialization is the essence of urbanization, but, itself, it can not give rise to urban centers". Notably he further enriched the issue by stating:

Urbanization can, therefore, be seen as a process which seeks, through the maximum specialization to increase the out put of the goods and services in a community subjected only to the three conditions pointed out above.

Following the above expressions Harold Carter (1990: 19); summarizes that "urbanization is in this way seen as the product of increasing economic development and advancing technologies".

However, contemporary world concept of urbanization centers around the process in which an increasing proportion of a nations population lives in an urban setting. In this regard David Waugh (1990: p. 338) wrote:

There is not, however, any global agreement as to what number should constitute an urban area, but different countries have taken some population size as a factor to determine different urban settlement.

To start with, the United Nations have recommended "that countries consider all places with 2,500 inhabitants as urban".

In view of the foregoing ideas, Menbere Zenebe (1984: p.1) generalized in her discussion that,

The most widely used item is the numerical definition, though the actual figures varied from place to place and hence, the threshold population ranges between 200 inhabitants in Scandinavian countries to 30,000 in Japan.

R.Rama Chandran (1984: p.197) nourished the above state of affairs from his countries experience, following the census results of 1981 which defined urban area in the case of India as:

- (a) any place with municipality corporation, or containment or notified area*
- (b) any other place which satisfies the following-(i) a minimum population of 5,000 inhabitants (ii) 75 percent of the population engaged in non agriculture (iii) population density of at least 400 persons per square kilometers.*

2.2 Urban Development in Developing Countries of the World

This phase of development covers the spread of large cities in the tropical lands since the end of the Second World War. Emrys Jones (1966: p.35) wrote:

Urban development (growth) during the period was much faster than western European, however, the level of urbanization was much lower. It was 13 percent of the total population, which lived in cities of 20,000 in Asia, and in Africa the proportion is as low as 9 percent.

In fact, the expansion of cities in both Asia and Africa has not always been associated with development of an attractive urban employment.

However, the dominant foreseen factor is the rural migration. It is the result of the "push" caused by the economic situation of the countryside. It has not been the dynamic attractive environment of the town from which social change is diffused. Urban areas in this part of the world are "pool centers" and, hence, attracted migrants, typical of uneducated, and unskilled, that form a very poor stratum of the urban society. Most often these depend on casual work provided by the unrealistic cash income of the city, which has more appeal than the life of the subsistence farming. The basic reason of the above discrepancy can be enriched by what Shench, writes "but urbanization and industrialization do not match so closely, hand in hand as they did in western world during the 19th century, or the Industrial Revolution". Similarly, Nelson Anderson (1964) underlines the issue by saying "the twin challenges of African urban areas are over-urbanization and under industrialization". In greater simplicity M. Barke and G.O. Hare (1991: 235) found it that "urbanization in particular has not necessarily been associated with industrialization and rapid economic development" in this part of the world.

2.3 Urban Development in Ethiopia

The history of urbanization begins with the Axumite civilization. As regards this George Galperin (1981:89) wrote, "Ancient Axum, the present Parent State of modern Ethiopia, had well developed culture based on commerce and slave ownership". Historians too consistently pointed out that Axum town bustled with economic activities and had highly developed commercial facilities. Besides in Axum there were several ports such as Adulis (Zula).

The urban civilization of Axum failed and disappeared altogether during the medieval period due to the possible reason paraphrased by Prof. Mesfin Wolde Mariam (1972: p.185) as follows:

Gradually, however, the urban characteristics were pervaded by a rural outlook and consequently and practically all the achievements were lost, some centuries later, another type of urban civilization began in Lalibella which seemed to have been nipped in the bud.

Following the decline of the Axumite empire there were no fixed urban centers in the country for long time. This was the period, which many urban geographers claimed as the period of "political nomadism". This was expressed in the works of (Akalom 1966 and Horvath 1969) vividly as follows: "thus the tradition of roving and wondering capital prevailed in the country until Addis Ababa became the seat of the governments."

Nevertheless, the development in sequence was not considered or viewed negatively among contemporary scholars however regarded as a typical measure of decentralization to gain promising results in urban development.

In view of this, Alula Abate (1995: 277) wrote:

In a way the rise of regional chiefs helped to broaden the urban base, because it led to the proliferation of regional capital, though most of them were ephemeral and did not last beyond the life of their founders.

Early preliminary and consistent modern idea on urban settlement standard and hence, its development inquiry was achieved in the 1970's.

Following the above CODERSRIA (1995: 280) noted:

This was revealed by the year 1971 survey which introduced a minimum size criteria of 2000 inhabitants, as a result of which some satisfaction was welcomed and prevalent, inconsistencies and confusions partly were eliminated.

Emanating from the above state of affairs, the 1984 population and Housing Census result disclosed a pre-requisite of "2000 people living in concentrated settlement, but engaged in non agricultural activities be considered as urban".

Currently views from sociology, demography; geography and urban life are competing to define the discipline in their own system of approach. This system of approach in brief terms was pointed out by Emery Jones (1966: p.3), that, "the definition of a town or an urban seem to be all things to all men". And to Harold Carter (1990: 17): ... that urbanization is the predominant process in the spatial organization of the worlds population and it is this which makes its geographical study as imperative and perhaps puts the niceties of definitions into proper.

2.4 The Development of Jimma as an Urban Center

2.4.1 Jimma as a Kingdom

Before the 16th century it has been known that Jimma and its surrounding was inhabited by an agricultural people collectively known as the Sidama.

After the 16th century the area was occupied by the "Galla" (Oromos) people who eventually absorbed the Sidama people.

Thus the "Gallas" (Oromos) succeeded their life under Gada system of administration and collective nomadic economy. Sooner the Gada system was

abandoned and gave way to the formation of monarchial rule. This system of rule established five small states, out of which Jimma Kingdom was the strongest.

Jimma monarchy was the strongest fundamentally, because it had economically strategic location at an intersection point to the Red Sea route. It was a useful location which NUPI (1997) justified by stating, "it was an out let for lucrative commodities of the period (such as gold, slaves and ivory)".

The reign of Aba Jifar I (r. 1830-1854) helped Jimma to keep up its economic prosperity. The main factor behind this was the kings effort. He united several tribes of Jimma and reestablished a powerful kingdom at Jiren.

The reign of Aba Jifar II (r. 1878-1930) marks the next period of supermacy. The king pacified the region, controlled long distance trade. He linked the region to the northern part of Ethiopia, Somalia and the Red Sea. Therefore, Jimma gained economic dominance in the southwestern Ethiopia because it became the "entrepôt" of commercial activity in the region.

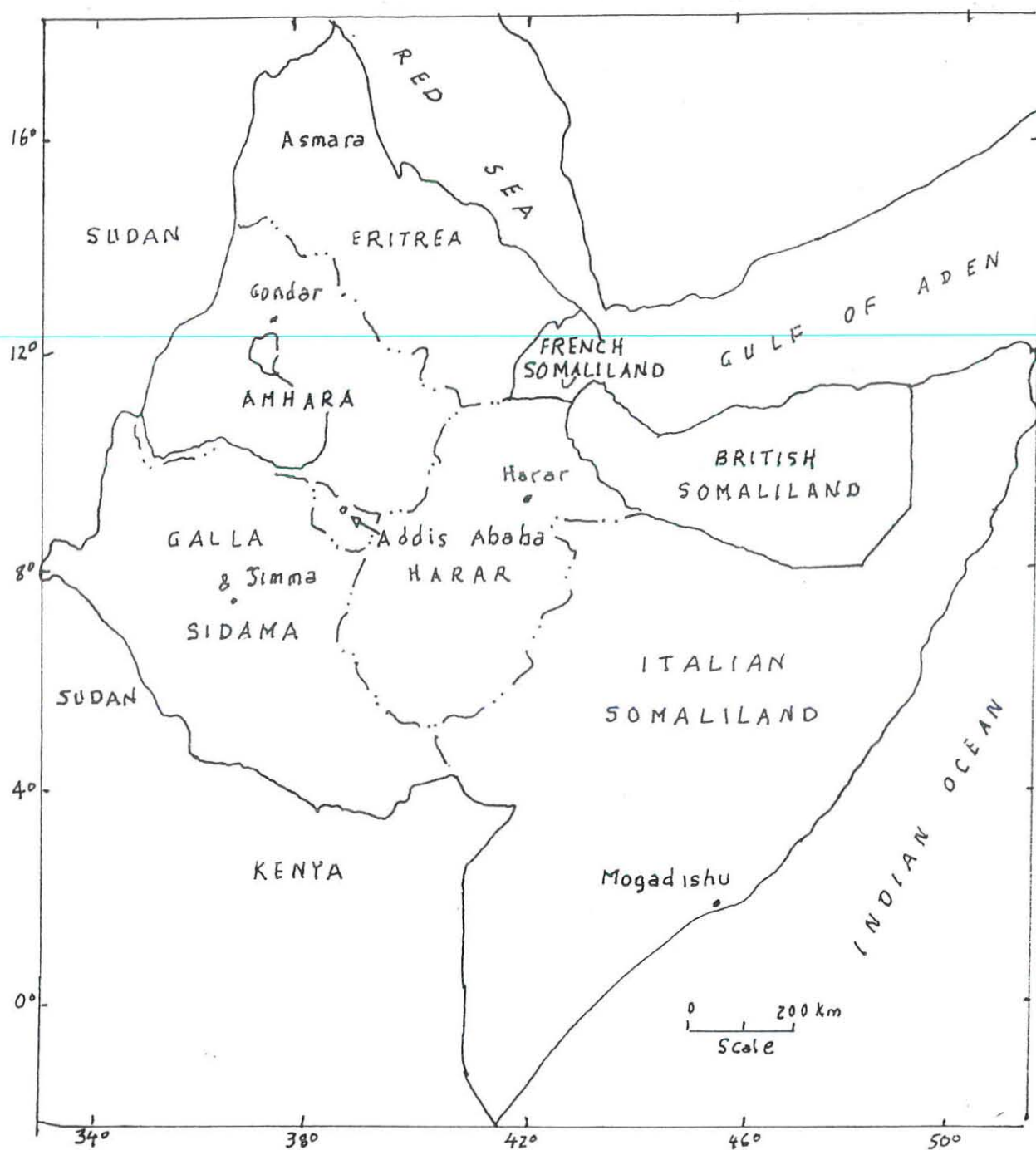
At this end Jimma had consistently developed internal administrative system, with properly clustered units, Jiren, Mendera, and Hermata, which were administrative, residential and commercial centers respectively.

2.4.2 Jimma during the Italian Period (The Foundation of Jimma Proper)

The period of the Italian occupation 1936-1941 is the landmark in the history of many urban centers in Ethiopia. Having controlled the territory of Ethiopia, the Italians reconstituted their empire known as the Italian East Africa (AFRICA, ORIENTALE ITALIANA).

The empire that formed the newly conquered Ethiopia had six major regional divisions: (Map 2)

The Italian Occupation 1936-1941



Italian East Africa, 1936-1941
 (adapted from Consociazione Turistica Italiana Guido dell' Africa orientale
 Italiana, Milan, 1938)

The higher parts of the town relatively are relatively densely populated, while the lower flat surfaces are vacant mainly due to their marshy nature.

General Characteristics of the Settlement Structure:

1. It is a grid pattern and has a dense consolidated urban fabric at the center.
2. Buildings in this part are on a strip, and are governed by sidewalk.
3. Peripheral locations are dominated by scattered or segregated individual plot developments.
4. In general the land use pattern of the city consists the following..

4.1 **Merkato:** Dominantly a commercial center

4.2 **Frenji Arada:** Administrative and commercial or business district.

4.3 Peripheral areas serve for residential, and maintenance service such as garages.

2.4.4.2 Previous Planning Efforts

The first standardized master plan of the town was prepared in 1967 by Italian consultants.

A detailed parcel plan was later drafted in 1980 by the Ministry of Urban Development and Housing (MUDH). This is said to have contributed significantly to the present shape of the town.

The above mentioned master plans are now outdated, and the present development mainly is intended to come up with some possible solutions to the existing planning problems and cater the necessary facilities demanded by the threshold population of the town.

The main activities undertaken by NUPI in 1994 has been to conduct a preliminary field survey, with a bid to critically assess the major urban planning problems in the town which consisted the following.

1. Visual observation of the town and its surrounding
2. Evaluate the merits and demerits of the previous plans
3. Identify the major natural and man made constraints
4. Check available suitable land that can be used for future expansion of the town
5. Make inventory of potential in fill areas within the town boundary
6. Discuss with the local authorities about matters regarding urban development
7. Update the existing base map of the town, for the present purpose.

2.4.4.5 Emphasis of the Current Plan

- Incorporated Jiren into the Municipality boundary
- Assessed and projected the population of the town based on the former years census result of annual growth rate, so as to pave the way to plan, various types of services, such as, housing units, school and health facility requirements of the planning period.
- Found out that Jimma hospital had 183 beds, and suggested, that given the recommendation made by the Ministry of Health the existing hospital facilities can serve upto the end of the planning period. Infact the plan has proposed the need to construct an additional hospital.

- It has pointed out the need for an additional senior secondary school that will function into two-shift systems, and the need for promoting the number of secondary schools at the end of the planning period by the year 2006.
- Estimated and figured out that the future demand for residential housing unit are 33,000.
- Estimated for the need for an additional area of 917.88 hectares of land. Thus 541.40 hectares were to be reclaimed from the infill quarters and the rest 376.4 hectares from expansion areas.
- ~~Proved the availability of potentially rich telephone capacity and, possible expansion of postal service, under a building to be erected in the near future.~~
- Thoroughly examined the prevalent traffic congestion and suggested the following to effectuate the communication trend between settlements on the opposite side of the Aweytu River.
 - Upgrade the bridge, on the river, and made it suitable for heavy traffic,
 - Construct double lane road between the Hirmata Commercial Bank and bus terminal.
 - Construct separate lane for Horse drawn Cart and reduce traffic congestion.
 - Maintain and up grade the existing deteriorated road system.
 - Alleviate the problem of the present power supply System, through rehabilitation and get rid of the recurrent, power interruptions.
 - Pointed out the following measures to reduce the sanitary problem of the town: Place metal tanks on reasonable site to exercise orderly waste disposal and get at least vacuum truck and dump containers. And also build additional toilets in the densely settled quarters with final strict measure to

control the dumping of wastes into the Aweytu River, get an organic fire engine.

2.4.4.6 Conceptual Framework

The development plan has generated sounding solution for the existing problem in the town, by adopting a multi dimensional urban space organization.

The proposed land use plan was directed at decentralizing the highly concentrated commercial and other activity centers, through the development of hierarchies of main and sub centers. Accordingly three urban sub-centers have been proposed; based on their relation to road network accessibility from any corner of the town.

2.4.4.6.1 The Proposed Centers

- 1.1 In view of the above, Mercato/Hirmata/ was recommended to continue as main center, the new EDDC site as sub center, and four community or neighbourhood centers, cited as Sar Sefer, Seto Sefer, Agip Sefer and South of St. Michael church.

Each of these centers have designated boundaries to serve; population within the catchment of the working distance and could be accommodated by low level facilities, so that community group may not go to the main center for daily shopping. Finally this measure was planned to minimize the problems of traffic flow and hence over crowding and congestion.

2.4.4.6.2 Boundary and Phasing of the Plan

Boundary

A well-defined boundary has been delineated, for controlled urbanization, promotion and growth.

Both natural and man-made features were used to define the proposed boundaries. There is no map for wider coverage. Therefore, the southern boundary line has not been shown; and deficiency was noted on this part of the report.

As a matter of fact, the entire course of the Kito river from source to mouth extending to Bonga road bridge down to the confluence point of Aweytu river, leading to the intake dam of the new water supply system shapes the southern boundary.

Phasing of the Plan

As indicated by the revised development phasing of the plan have been suggested to guide its implementation. The criteria's used to outline the proposed phasing plan include:

1. Proximity to infrastructural facilities and services
2. Land suitability - soil type, dry land etc.
3. Distance from the main activity centers
4. Phasing of the proposed water supply system.
5. Phasing of clay production sites.

It is also noted that the proposed sequence of implementation is subjected to change and may be practiced according to particular local condition.

Anyhow all efforts directed to its feasibility is what matters most, which may remind us of the words of Herbert Spencer in J.O. Wheeler/P.O. Muller (1986: 219), "life is the continuous adjustment of the internal relation to the external relationship".

CHAPTER THREE

THE ORIGIN AND DEVELOPMENT OF JIMMA

3.1 The Origin of Jimma

The historical foundation of many settlements had its origin at the top of hills. For long the discerned factors in this respect included, ease of defence, accessibility, and security from flood, availability of water, arable land, fuel wood and building materials respectively.

Conditioned by the above elements, the nucleus of Jimma is found on a top of a hill locally known as Jiren. Therefore as Entoto was to Addis Ababa, so was Jiren to Jimma.

Documentary sources of subsequent development justified Jimma in those days used to be identified by different functional centers such as Jiren, Mendera and Hirmata, which served as administrative, residential and commercial centers. It follows, while Jiren, Mendera and Hirmata were welcomed by explicit explanations, how the name Jimma came into use was vaguely understood. However the first form of explanation from unsophisticated view came from Dubale (1987) who claimed that Jimma derives its meaning from the word "Jimma" which is chat in Oromgna.

3.2 The Development of Jimma

Once established, any settlement is apt to grow. The development of the town was influenced by several factors.

3.2.2 Socio-Political Factors

Settlement in Jimma continued to progress benefiting from the careful managerial and wise political activities exercised by its leaders. From its early leaders Aba Jifar I (1830-1854) deserve the upper hand credit, and is remembered for his effective and harmonious administrations.

Among the efforts of Aba Jifar I the following are widely recalled. He united several tribes in the area and established a strong kingdom, and subsequently created the town do on (administrative, residential and commercial) center. In order to promote trade he constructed roads, which attracted immigrant population most of which were said to be itinerant merchants who brought with them new experience to the area. Infact a travelers description state that states "road making is Aba Jifars hobby". NUDPI (1997: p. 49)

Besides the kingdom of Jimma had a dominant political role in the south western Ethiopia. It is also to be noted, though the kingdom was persistently engaged in warfare for most part of its history, its peaceful submission to Minilik's army benefited it the most. The strategic measure indicated above welcomed an autonomous administration which enabled Jimma to emerge as socio-politically powerful, economically stable and strong kingdom among conflicting Ghibe states.

3.2.3 Economic Factors

3.2.3.1 The discovery and hence continued expansion of coffee production in the region served as the generative economic force in perpetuating the development of the town. Since this time coffee was exchanged both at local and international markets. It is reported that coffee was exported to the Sudan, Somalia, and Djibouti through Gambella and Shoa.

3.2.3.2 Increased participation of Jimma in Lucrative trade - The major commodities of the early lucrative trade were gold, ivory and slaves. This gave rise to the later exchange of variety of goods at Hirmata. Some how much is said about the popularity of slave trade. Accordingly NUPI (1997: 49) pointed out:

Althoug Hirmata was an exchange center for variety of commodities, it had been known for its slave market, which was located infront of the present municipality building, where there were ten to fifteen blocks of stones on which slaves were displayed for sale.

In close view, expressing the importance of the slave trade Jemal (2000: p.37) has stated that, "in the early 1930's Jimma was a jumping off point for slaves to be distributed"

The progress achieved in trade, in tandem welcomed more and more national and international merchants. This called for the establishment of an encampment center, to satisfy the shelter demands of the distant travelers. In connection too, Hirmata was developed as a loci of itinerant merchants, with qualitatively arranged market place. It was organized in European fashion that created more convenient environment to display goods for sale. Moreover a law was introduced to regulate trade.

During its years of autonomy had developed contacts with distant land as the following words of as socio-economic profile of Jimma (1991: 140) show

The kingdom had a diplomatic relationship with India, Egypt, Saudi Arabia, Madagascar, the Middle East and other African countries. It exported gold, coffee, honey, civet musk, ivory, hides and skin and imported weapons, ornaments, jewelry as well as industrial product.

Jimma therefore happened to cover and capture a wide range of areas and a goodflow of commodities. Thus it had for long been an exchange center for exportable and imported commodities, and is believed to have been an entrepôt of south western Ethiopia, another conducive environment which contributed to its development.

3.2.4 Administrative Units

Regardless of its regional influence, Jimma was known by its well-established internal administrative structure. Historically there were three functional units.

3.2.4.1 Jiren

It was the seat of the kingdom. It had been founded during the reign of Aba Jifar the I. Basically it was selected to be the seat of the ruler as a result of its strategic location to control Hirmata market. It also had suitable climate healthy environment and an attractive scenery.

3.2.4.2Mendera

Mendera was originally developed as a temporary settlement center, later it became to permanent residential quarter for long distance merchants, and their agents. The literal meaning of Mendera was an encampment site.

Mainly because the merchants flow from different directions, the established quarters were named according to their origin. Therefore they were identified as Wello Sefer (Mendera Wello), Gojjam Sefer (Mendera Gojjam), and Hindoch Sefer (Mendera Hindoch).

After the death of Aba Jifar the II, the importance of Jiren declined to a semi autonomous political entity. Mendera too began to wane and under Ras Teferi, and eventually became a small market center locally called "Kochi".

Community members shifted from the above localities to Hirmata, and began to engage in trade; and they helped a part for Hirmata to flourish and grow into a viable center.

The undergoing development continued and so attracted more and more settlers, Hirmata, evolved into a big market center with increased population and provision of more and more volume of goods for exchange. Finally Hirmata emerged as an important nucleus of the present day Jimma.

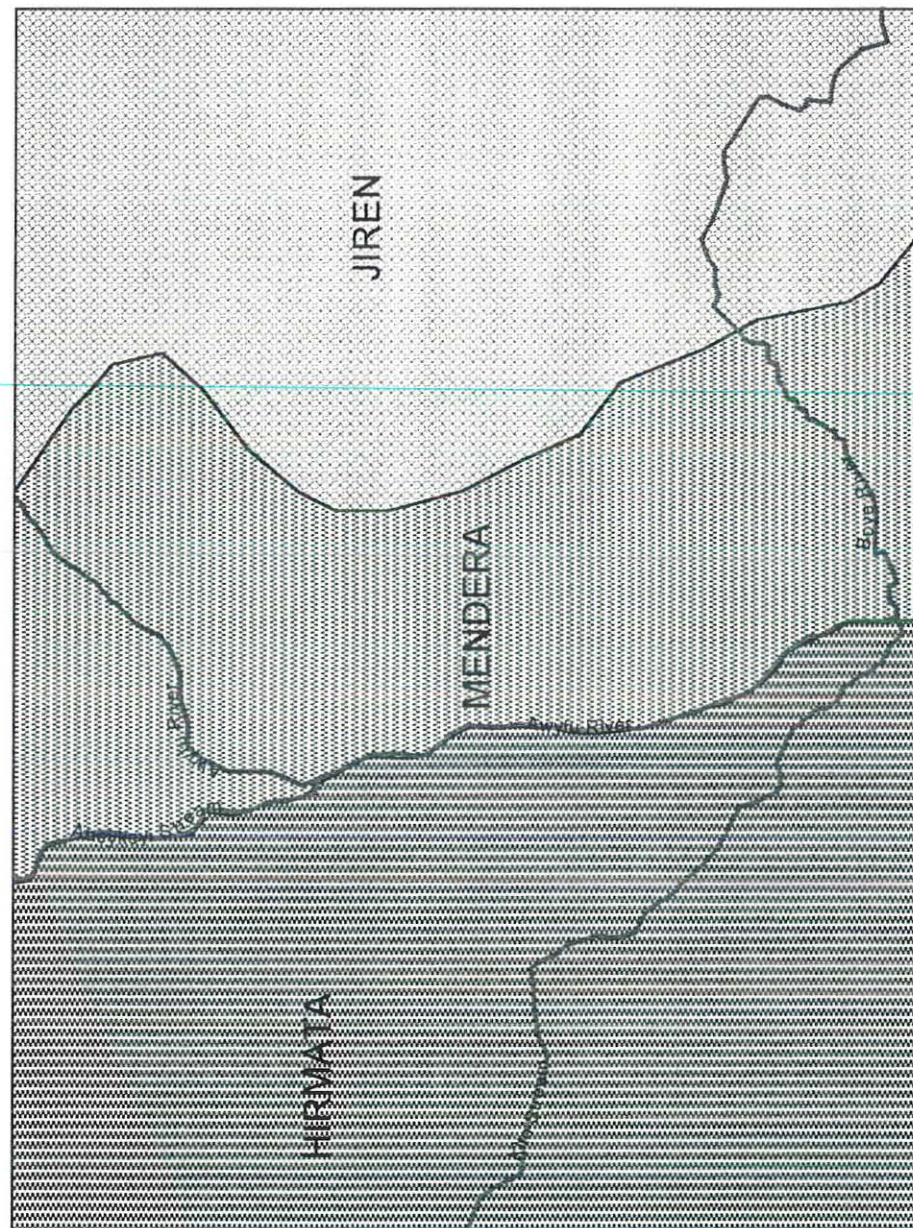
3.2.4.3 Hirmata

Established in the seventeenth century 'Hirmata' derives its meaning from an Oromgna term which can be translated as to "share". Historically was a center where booties (properties) appropriated during raiding campaigns were shared. Hirmata was a small market at its early stage and believed to have evolved into a notable size as a result of bartering trade. Hence had been promoted to loci of itinerant merchants, and prospered much during the reign of Aba Jifar the II.

The long distance merchants of Jimma both from national and international origin built their own offices and shops in the town. Then they began to supply lots of commodities for sales. The growing trades then lured foreigners such as the Arabs, Indians and Armenians into the town.

Hirmata market used to meet on Thursday, which now continue to meet on the same day. Volumes of local and foreign commodities such as ivory, gold, textiles, as well as slaves were displayed and sold in their respective space locally known as the 'Medebs'.

JIMMA: FUNCTION CENTERS BETWEEN 1830 - 1932



N

Scale 1: 50,000

3.2.5 Jimma During the Italian Period

The period of Italian occupation 1936-1941 marked an important event in the history of many urban centers in Ethiopia.

Subsequently controlling the territory of Ethiopia the Italian reconstituted their empire known as the Italian East Africa (Africa Orientale - Italiana).

The Empire which formed the newly conquered Ethiopia as shown on Map 2, had six major regions. Namely Tigre - Asmara, Amhara - Gonder, Galla - Sidama - Jimma, Shewa - Addis Ababa, Harar and Somali - Harar and Mogadishu, Somalie - Mogadishu proper.

3.2.5.1 Jimma Hirmata Mendera: was made by the Italians the capital of a vast and fertile region called "Galla-Sidama". This assisted Jimma to evolve as the most useful town in southwest Ethiopia. Unfortunately the Italian administration excluded Jiren for local rulers. However Hirmata guided by the first master plan became the main center of administration and commercial activities.

A. The Master Plan of 1937

It was drafted for Hirmata, based on the fascist policy of segregation. Following the above the town was divided into two quarters, the white and the Black Quarter.

A.1 The White Quarter

The master plan designated Hirmata as the white quarter. Thus the present Frenji - Arada, Shoa ber Mentina and parts of Mendera were enclosed to the quarter.

Notably the master plan achieved success in the construction of, the regional palace, the office of the civil and military tribunals, the municipality building, office and residential building for lower officers, modern hotels such as Ghion and Ras Mesfin Hotels (now called Ghibe and Gojeb), branch offices for Italian banks (Banco-De Roma and Banco De Italiana), postal and telephone services two cinema halls under the name of Ethiopia and Jimma, Stadium at Kito locality, internal roads linking residential quarter and regional roads that integrated the town with Addis Ababa, Air port on the western side of Hirmata (Kito locality), Aligned tap water and supplied power through an Italian company that generated electricity by desiel engine.

A.2 The Black Quarters

The master plan designated Kullo-ber, Serategna Sefer and Mariam Sefer as black quarter. These localities are known for their marshy surface as breeding ground for Malaria. Currently settlements in these areas especially in Serategna Sefer and Kulo ber have developed into slums. There is lack of access to treated water supply and one can see houses poorly connected to the electric grid. There is also earth road pattern.

A.3 Social Services

Italians build Islamic school at Mentina. They transferred the old Hirmata market to Kochi, where miscellaneous commodities were sold for the local community. They also put up market stalls at Hirmata in line with commodities sold. Hirmata was renamed as 'mercato-indigens', became a daily market and was the largest in the south western Ethiopia. The variety of commodities sold in the shops included food-stuff, such as grains, butter, spices, eggs, vegetables, on one hand, coffee, hides, skins, and textile fabrics on the other.

While the above master plan was in action, the Italians prepared a new master plan which is thought to relocate the main town Center East of Aweytu river. The new

designed master plan included; area for main government office, residential quarters for Italians, including the governors (Casa Fascio), exclusive market for the Italians (Mercato-nazion), stadium at Kito locality, parking lots for Italians and hospital, church and military camp.

The new Italian master plan couldn't be implemented, because sooner, they left the country as a whole.

As a matter of fact Jemal (2000) argues, "had these master plan been fully implemented, Menderas importance would probably have over shadowed Hirmatas predominance, and the shape of town could have been different".

3.2.6 Jimma During the Monarchial Rule, 1942-1974

After liberation the restored Ethiopian government made Jimma the capital of Keffa province in the late 1941. In the meantime the municipality of the town was established, details of which had been paraphrased by Jemal (2000: p.21) as follows.

After the withdrawal of the Italians in 1941, the Haile Selassie government issued series of decrees to re-instate and consolidate its power. To this effect it issued Decree No-1/1942 in regard to administrative regulations. Thus the country was divided into 14 provinces, 103 Awrajas and 105 woredas'. The emperor appointed, governor generals and Awraja governors, whose/duty or responsibility includes the administration of municipalities, approval of the assessment of taxes, fees, charges and budgets.

Hence the municipality introduced a new administrative system and divided the town into four sefers and had appointed sefer Shums. (Refer to Map 5)

The Shumamint had offices in their respective domain. The administrative units were identified as Bossa, Hirmata, and Jiren. Hirmata continued to function as an important sefer during the period under discussion. The administrative units

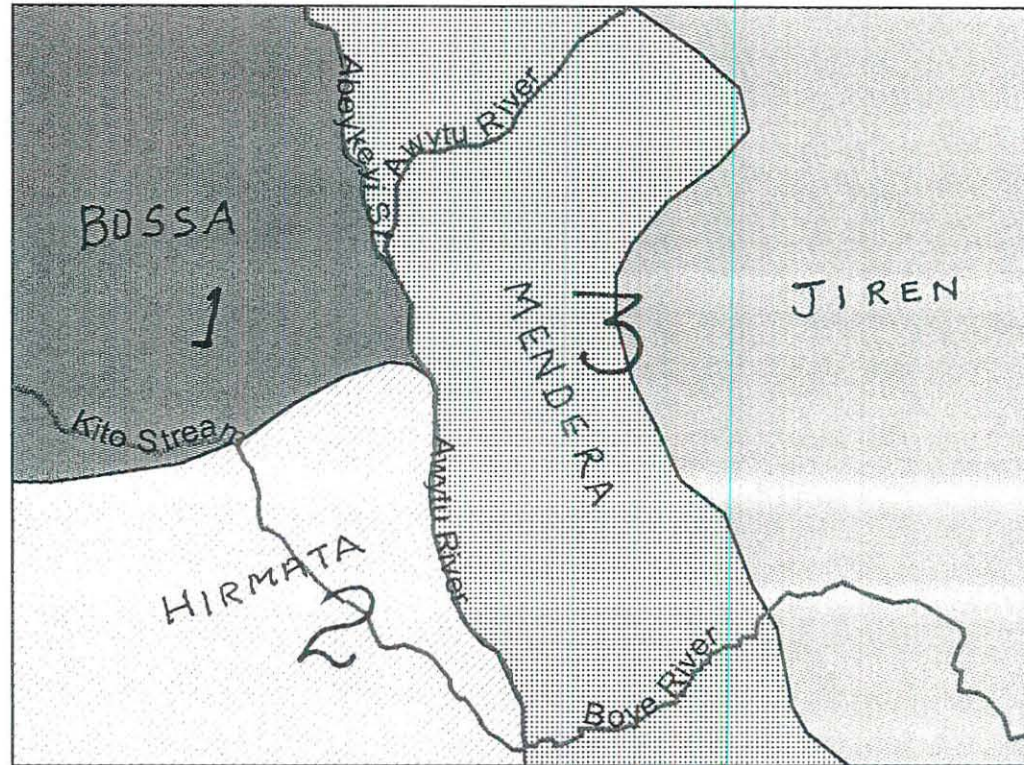
JIMMA FUNCTION CENTERS BETWEEN 1942 - 1974

LEGEND

-  BOSSA
-  HIRMATA
-  JIREN
-  MENDERA
-  RIVER SYSTEM



Scale 1: 50,000



facilitated regulation of property, collection of tax, and protect the sanitation of the town.

In 1945 another decree was issued, and acknowledged six towns-Addis Ababa, Gonder, Harar, Jimma, Dessie, Dire Dawa to be municipalities, other 99 towns, and township; which shows that Jimma was at least the 4th largest town in the country. Subsequently the town received a new master plan in 1967, which was functional up to the 1970's.

3.2.6.1 The Master Plan of 1967

It was prepared under the auspices of the Ministry of Interior. It had been envisaged to enhance the development of the town east of the Aweytu River, which specifically was directed to promote the development of lower Jiren, Mendera, and Bossa, therefore reduce the saturation of Hirmata. However, as justified by documentary sources the town had a well established and developed socio-economy during the period.

3.2.6.2 Suggested Plan of Actions by the Committee

- Up grade the road passing between offices and residential areas
- Link Jimma -Addis Ababa road via Kulo-Ber, Water-resources development department, and then Agip fuel distribution station.
- Integrate Agaro-Bonga road in the neighbour hood of the Jimma Airport at Kito locality.
- Introduce the present development of the town towards the hilly site or Jiren area.
- Renovate the road, maintain the shops and all other service buildings at the center of the town.
- Shift the Military camp to the neighbourhood of the Jimma Airport afar the Kito locality.

- Locate the main industrial zone along the major road sides of Jimma-Bonga, Jimma-Agaro and Jima-Addis Ababa. Similarly the site locations of coffee processing plants, livestock sales, Christian and Muslim cemetery.
- Allocated a total of 1630.20 hectares of land out of which 21.5 percent will be, utilized for residential sites.

3.2.6.3 The Success and Failures of the Master Plan

The Success of the Master Plan

1. The main road linking Jimma Addis Ababa, Bonga, Agaró was constructed through Shewa Ber via Agip.
2. The water supply problem of the town was alleviated.

The Failures of the Master plan

1. Muslim cemetery south of this road was not established and coffee-processing plant was not transferred to the zone of industry.
2. The transfer of the military camp in the neighbourhood of the Jimma Airport, on the right side.
3. Could not succeed in aligning the sewerage system.
4. Failed to control the rapidly increasing (expanding) squatter settlement.
5. Due to lack of awareness, and poverty of knowledge, master plans are violated.
6. Colony of buildings constructed by the Rental Housing Agency were done on land preserved for recreation and the stadium on land reserved for green area.

7. The master plan implementation was confronted by limited financial resources, lack of standardized technical expertise and, quality of construction materials, lack of general laws, protecting master plan issues, failure to promote awareness among the residents and failure to revise master plan at a given time interval.

Moreover the last years of the monarchial rule benefited much from the effective administrative practices, of the appointed governor general Dejazmatch Tsehayu Enku Selassie. He was a person with a naturally gifted planning wisdom and ways how to influence people. As a result succeeded in capturing the attention of the society and in collaboration achieved promising results that proliferated the town. At this juncture he managed to put the resources of the town into proper use and hence. He maintained the Italian build houses, repaired and renovated the internal road system in the town, established a public recreation center at the bank of Aweytu river. He also constructed a small dam along the course of the river, which altered the flow of the river into water falls. This maximized the beauty of the site's scenery that attracted and hence promoted the satisfaction of the beholders. Finally has Correctly developed the sewerage system of the town, built the Ghibe hall (public auditorium), maintained, expanded and renewed the regional palace, erected memorial monuments in the name of mother Ethiopia and the Emperor and delineated green area of the town.

The series of achievement captured by the town sooner was staggered by such events like the 1973 drought consequence and effects of the socialist revolution of the year 1974.

3.2.7 Jimma During the 1974-1991

The Derg era that followed the monarchial rule perhaps marks the beginning of the decline or the 'dark age' in the history of the town.

The provisional military Administration (The Derg) which took power in 1974 through its ideological and economic policies, was able to promote some measures of housing construction through mortgage loan, and free distribution of land, and constructed an international standard stadium, and high quality passenger terminal, and founded the Jimma Health Science Institute the present university of Jimma. However, its confiscation of private property, and its offensive measure that brought about the mass-massacre of the youth, left a hammering blow on the town. Infact following these events, lots of well to do families left the town and fled to places like Addis Ababa and some even left the country. As a result the town faced a serious decline in its economy.

3.2.7.1 Administrative Units of 1974-1991

Jimmas administrative status as a provincial capital continued until it was made the center of the Illubabor region in 1987.

The military regime introduced a new urban administrative structure in 1975 by issuing the first legislation No. 47/1975 which:

- nationalized all urban land and extra houses.
- replaced the ministry of interior by the Ministry of Urban Development and Housing, which took over the supervisory role of the municipalities
- formed the central urban dwellers association (UDAS) to take over the responsibility of administering urban centers'.
- The UDAS also were empowered to collect charges, taxes, fees, and rents in their jurisdiction.
- Chartered urban centers were authorized by proclamation No. 206/1981 to levy and collect tax, and rentals subjected to approval by the council of ministers.

- Non chartered urban centers could only prepare and submit land rent, house tax, and service charges to the minister, except Addis Ababa all the urban centers could only prepare and submit the rate to the minister.

The administrative structure introduced by the Derg divided the town into three keftegnas and 27 kebeles which finally were reduced to 20 kebeles.

Table 3A. Kefteгна and Kebele Units of the Derg Era

Administrative Unite	Designated	No. of Kebeles
Bossa	Kefteгна One	7
Hirmata	Kefteгна Two	6
Mendera	Kefteгна Three	7
Jiren	Continued excluded	
Total		20

Source: Municipality of Jimma - 2000.

3.2.8 Jimma Since 1991 Up to Date

The EPRDF government, with accession to power made the town the capital of Jimma zone. Henceforth it has been designated with woreda status.

Apart from other woredas it has long established municipal administrative system; which is lead by city council elected over a term of years.

Since EPRDF, the Municipality administration has made the Keble as the sub administrative unit. Moreover, it has made expansion in area and included the former seat of the traditional kingdom, Jiren into its boundary, which emerged as one of the Kebeles. At present there are 19 Kebeles.

The Kebeles are multifunctional administrative hierarchies, with major concern of political and economic issues.

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Table 3B. Kefteгна and Kebele Units

Administrative Units	Designated Unit	No. of Kebeles
Bossa	Kefteгна One	5
Hirmata	Kefteгна Two	6
Mendera	Kefteгна Three	8
Total		19

Source: Municipality of Jimma - 2001.

3.2.8.1 The Municipality

It was established in 1942 with the issuance of decree No. 1/1942. Its activity ever since has been to levy taxes, thereby maintain, and, keep up the development of the town.

Eventhough the city council has the direct responsibility, the municipality is jointly managed in line with the Works and Urban Development Department of the zone. The later is concerned with technical assistance, follow up of the courses of development based on conventional plan, construction on suggested design, and administer public houses.

However much effort has not been made to achieve promising results in capturing financial and technical resource and, capacity building sectors, and expansion of revenue bases.

A summary of income review indicated that the town still is persistence to depend on local source of revenue which is utilized by the municipality to generate the necessary infrastructural facilities and social amenities.

3.2.8.2 Sources of Municipal Revenue

The financial requirement for the municipality are met from local sources only.
(Appendix 3)

1. **Taxes:** Revenues collected through business, market place, livestock sales urban land rent, house rent, and other various taxes. In 1992/2000 this part contributed Birr 1.47 million or 40.68 percent of the total revenue.
2. **Service Charges:** Revenue Collected by loading and unloading, sanitation, technical slaughter, contract agreement, land permit services; contributed Birr 1.71million or 47.26 percent of the total revenue in the year under consideration.
3. **Sales and Rent of municipal assets/properties:** Revenue received from sales of assets, gravels, hollow stones, rent of houses verendas auditorium, account for Birr 7.6 million or 2.12 percent.
4. **Miscellaneous:** include revenues collected through commission, charges, over due (arrears) payments, from A.A.RH. Interests from uncovered rent fees, account for Birr 3.6 million or 9.94% of the total revenue.

Though the city council members are elected, the rest of the human resource requirement is satisfied through permanent and contract employment.

Generally there is structural organization to satisfy the expertise required to effectuate managerial functions and each section has its head based on educational qualification.

Table 3C. Distribution of Expertise of Jimma Municipality

Educational qualification	Expertise		Total	Percent/Total
	Male	Female		
BA/BSc	2	-	2	1.5
12+2/Diploma	9	3	12	9.4
12 grade complete/Technical Ac.	21	26	47	36.7
Grade 9-11 complete	1	6	7	5.5
Grade 1-8 complete	34	26	60	46.9
Total	67	61	128	100

Source: Municipality of Jimma - 2001.

Table 3E. Revenue Planned and Collected for the years 1993-2000.

Year	Planned Revenue	Actual Collected Revenue	%
1993	2348,665	1,231,311.02	52.42
1994	2,665,000	2,303,399.27	86.43
1995	3,660,000	2,306,545.07	63.02
1996	4,162,151.39	4,188,701.69	100.63
1997	4,205,985	4,304,035.50	102.33
1998	5,067,693	2,246,233.14	44.32
1999	5,249,500	3,803,043.51	72.45
2000	5,395,000	2,431,691.23	45.07

Source: Municipality of Jimma 2001.

Estimated percent values from table 3E have shown the following results.

1. Only the two years 1996 and 1997 saw the collection of revenue exceeding the suggested plans of those years.
2. It also can be said that 1994 and 1999 were better off.
3. Though the years 1993 and 1995 revenues receipts on the average nearly were to normal average, the year 1998 and 2000 had revenue's collected blow average, mainly because of lack of strong management to enforce taxes. The town also went persistently under slow economic developments, due to failures in coffee market. Therefore it can be generalized that there were seriously retarding or delaying factors such as individuals financial capacity to cover their taxation fee, generally prevailing poor economic conditions, lack of effective management.

In view of this below is summary of revenue organized to compute correlation values.

Table 3.F Computed Correlation Values of Municipality Planned Budget and Realized (1993-2000)

Year	Planned Revenue x	Actual Revenue y	x-x	y-y	X ²	Y ²	(x-x)(y-y)	xy	yc
1993	2348	1231	1745.875	-1620.5	5513104	1515361	2829190.438	2890388	2086.804
1994	2665	2303	-1428.875	-548.5	7102225	5303809	783737.9375	6137495	2225.65
1995	3660	2306	-433.675	-545.5	13395600	5317636	236678.8125	8439960	2661.46
1996	4162	4188	68.125	1336.5	17322244	17539344	91049.0625	17430456	2881.336
1997	4205	4304	1111.25	1452.5	17682025	18524416	161409.0625	18098320	2899.559
1998	5067	2,246	973.125	-605.5	25674489	5044516	-589227.1875	11380482	3277.726
1999	5249	3803	1155.125	951.5	27552001	144682809	10199101.438	19961947	3357.442
2000	5395	2,431	1301.125	-420.5	29106025	5909761	-547123.0625	13115245	3421.39
Total	32751	22812			143347713	73617652	4064816.502	97454293	22811.637

$$\bar{x} = 4093.875 \quad \bar{y} = 2951.5$$

Source: Municipality of Jimma Town 2001.

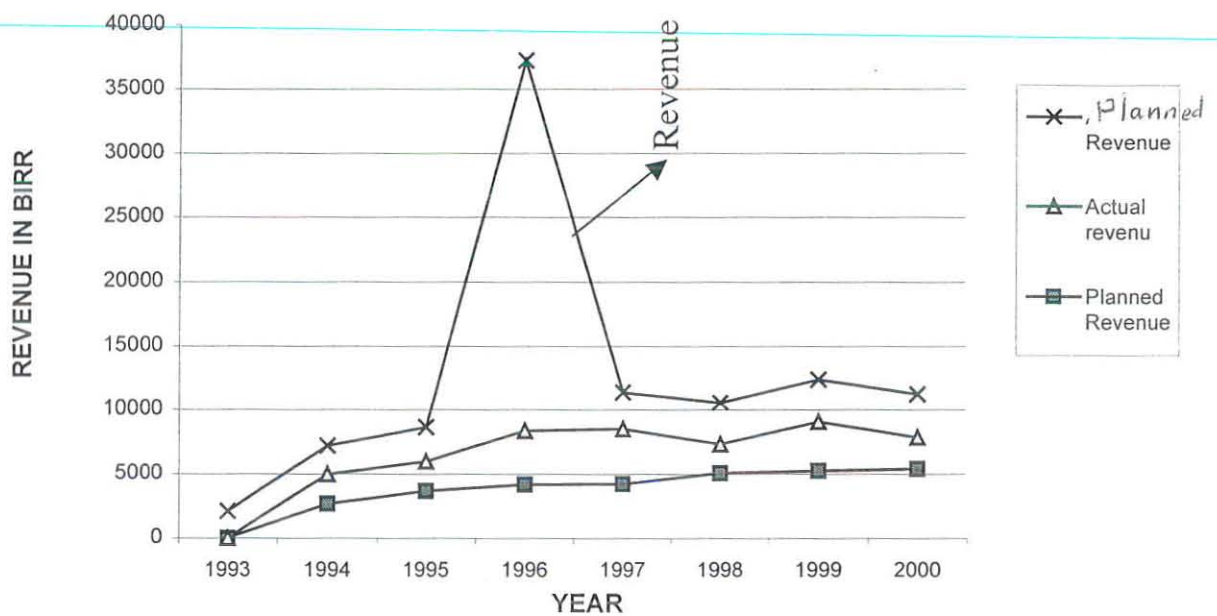


Fig - 1

$$r = \frac{\sum(x-x)(y-y)}{n(\delta x \cdot \delta y)}$$

$$r = \frac{4064816.52}{8(1076.406814 \times 1034.96821)}$$

$$r = 0.456087861$$

Table 3.F. Shows computed correlation (r) results. It was an insignificant correlation, where $r=0.466$ between planned revenue and actually collected revenue over the years between 1993 and 2000. Its achievement was only 46.6% less than 50 percent coverage.

3.2.8.4 Planing Financial Resources

Financial Resource Allocation and Execution (Budgeting) Jemal (2000:28) wrote:“All municipal revenue are aimed at financing various programs and activities, this constitutes the expenditure side of municipal finance.”

Financial resources are planned to achieve goals directed to socio-economic and infrastructural development. Therefore, budgeting process is an important tool to realize effectiveness of objectives.

Planning or budgeting of the municipal finance resource is under taken by budget committee drawn from the bureaus of the Works and Urban Development of the Zone, municipality's council inspection, finance and budget, as well as the land administration section.

The prepared budget is presented to the executive committee of the municipality; and thereby some major or minor modifications are made. The budget proposal is sent to the Works and Urban Development Department of the zone final approval and is hence put to practical use.

3.2.8.5 Execution of the Budget

The proposed budget is utilized for the development of different sectors. The major areas include building and construction, maintenance, and cleaning vehicle and garage, sanitation recreation as well as office utilities.

Table 3.G Computed Correlation Values of Municipality Planned Sector Budget and Implementation (1993 - 2000)

Year	Planned Sector Budget X	Implemented Sector Budget y	x-x	(y-y)	(x-x)(x-y)X ²	x ²	y ²	xy	yc
1993	783	741	1643.125	-473.25	777608.906	613089	549081	58203	544.71
1994	783	732	1643.125	482.25	792397.031	613089	535824	5731156	544.71
1995	905	306	152.125	-908.25	1381561.781	819025	93636	276930	594.43
1996	1.195	627	-1231.13	-587.25	722978.156	1420825	393129	749265	712.59
1997	2.938	2423	511.875	1208.75	618728.906	8631844	5870929	7118774	1422.83
1998	3.138	311	711.875	-903.25	-643001.093	9847044	96721	975918	1504.32
1999	4.797	2523	2370.875	1308.75	3102882.656	23011209	6365529	12102831	2180.33
2000	4.870	2051	2443.875	836.75	2044912.406	23716980	4206601	9988370	2210.07
Total	19409	9714			8798131.2	68680225	18111450	32365447	9713.99
x	2426.125 *y=1214.25								

Source: Municipality of Jimma Town 2001.

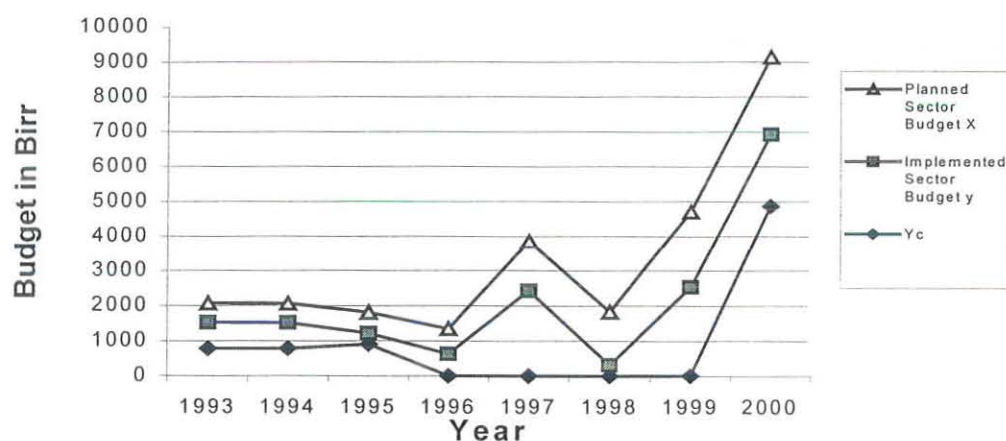


Fig - 2

$$r = \frac{\sum(x - \bar{x})(y - \bar{y})}{n(\delta x - \bar{x}.\delta y)}$$

$$r = \frac{8798131.2}{8(1642.8468 \times 888.5539)}$$

$$r = 0.753384$$

3.3 Rank Size of Jimma

Rank size is a measure of importance. It is economic rather than sociological theory of settlement structure. Though the predecessor of the principle was Felix Auerbach (1913), its development and popularization is associated with George K-Zipf (1941) in his publication entitled "National unity and diversity". It was adapted to regional, and capital city, however used here to examine its relevance to urban settlements at micro-regional level.

G.K. Zipf postulated that the relationship between size and the number of settlements could be expressed in the following mathematical formula

$$Pr = \frac{P_1}{r^q}$$

Where

Pr = population of the ranking city

P₁ = population of the first ranking city

q = the exponent in the rank size.

In the course of the discussion G.K. Zipf generalized that population of the cities /town/ would by definition decline with their rank and a degree of correlation may be expected between population of the settlement and their rank in the system. To David Waugh (1990) the rule states "that the size of the settlements is inversely proportional to their rank". The assumption is having ranked the settlements in descending order the population of the second ranking town will be half of the size of the largest town.

R. Ramma Chandran (1994) looking into the issue closely examined the Indian case, and pointed out that it certainly emanated from the question of settlement structure. He critically underlined "why there are few large size settlements and more number of smaller sizes". Berry and Garison (1958) saw it as "the general location of

urban places". They have no doubt about the empirical regularities that exist in the rank size. But to them "the casual explanations are not clear".

However, there were a number of suggestions, explaining the conceptual ingredients, Stewart (1947) was one who found out, that "the relative size and the number of towns in different functional classes vary according to the level of economic development".

Harold Carter (1994:20) perhaps could be considered as one who vigorously explained that concept; in that:

A town is distinguished by its role as a commercial place for a tributary area. The country side needs a focal point to which its produce can be sent for export and from which its needs can be distributed. This general role is represented in the towns by such features as shops, banks, offices, identification of such features will indicate urban character in different size and volume.

Shench further fertilizes the concept by saying such centers are "points, from which cash crops tie the rural family to the urban center, where they sell their produce and buy manufactured goods". Barke and O.Hare (1991) in part generalized their view that, "such towns posses economies of scale, serving the needs of the population in the region".

This analysis goes in line with the demand of labour by the center to effectuate the provision of services such as that of health, education, agricultural advisory, marketing facilities which notably increase with commercial performance and administrative function.

3.3.1 The Case of Jimma

For many reasons, Jimma possess an established central function, so deserves the top rank size. It was the capital of a vast fertile region, and later continued as a

provincial capital and hence a zonal center. Today it serves as the hub of transport in the south-west, and is the nucleus of capital generating enterprise in that part of the country such as Telecommunication corporation Electric Light and Power Corporation, ... etc. It possesses comparatively larger market oriented economy and therefore domain of goods and services.

Moreover its population size is by far larger than the size of any one of the most important towns of the region.

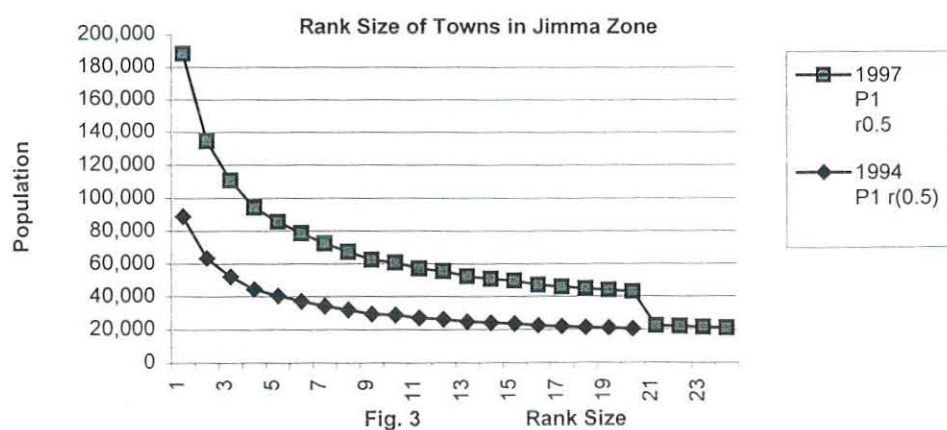
Following the conceptual framework by G. K. Zipf the Rank Size of the town was computed. It was by employing the above postulated formula. The researcher has utilized the assumed value of the exponential constant 'q' limited at 0.5. Therefore, estimated the preceding values by making use of the population data's of 1994 census result and 1997 projected population figures.

Though there are 29 towns in the zone, only 20 of these during the 1994 census year and 23 during the 1997 projected population year; were considered because these could satisfy the minimum threshold population requirement of greater than or equal to 2000 inhabitants set by the Ministry of Works and Urban Development for an urban center.

Table 3I. Rank Size of Towns in Jimma Zone

No.	r^q $q=0.5$	Towns	1994 Population	1994 $\frac{P_1}{r(0.5)}$	1997 Population	1997 $\frac{P_1}{r^{0.5}}$
1		Jimma	88,867	88,867	99,501	99,501
2		Agaro	23,246	63,476	26,028	71,072
3		Genet	6,729	52,274	7,534	58,583
4		Asendabo	5,241	44,433	5,868	49,750
5		Deneba	5,134	40,394	5,749	45,227
6		Teba	4,485	37,028	5,024	41,458
7		Ghembe	4,285	34,178	4,798	38,269
8		Sheki	4,315	31,738	4,831	35,536
9		Seka	4,076	29,322	4,564	33,167
10		Shebe	4,076	28,666	4,564	32,097
11		Sekoru	3,624	26,929	4,057	30,151
12		Serbo	3,398	26,137	3,804	29,265
13		Choche	3,271	24,685	3,662	27,639
14		Yebu	3,059	24,018	3,425	26,892
15		Limu-Shay	2,906	23,386	3,254	26,184
16		Chira	2,390	22,216	2,676	24,875
17		Gatira	2,318	21,674	2,595	24,268
18		Babo	2,304	21,158	2,584	23,690
19		Ambuye	2,104	20,666	2,356	23,139
20		Nada	2,008	20,197	2,248	22,613
21		Sigmo	1,952	19,748	2,185	22,111
22		Atnago	1,903	19,318	2,130	21,630
23		Seka	1,497	18,907	2,266	21,170
24		Beshasha	1,467	18,513	1,651	20,729
25		Dimtu	1,302	17,773	1,458	19,900
26		Kumbi	1,251	17,424	1,407	19,510
27		Dusta	1,225	17,089	1,381	19,134
28		Natri	997	16,767	1,222	18,773
29		Cheriko	925	16,456	1,041	18,426

Source: Adopted by the researcher from Census Population of 1994 and Project Population of 1997 by C.S.A.



The utmost conceptual ingredient that explain the innate tenants of the foundation of the "rank size rule" does not deviate much from central place function such as

- administration and policy dissemination
- facilitate health, education, transport, security services.
- Collect and distribute domain of goods, so satisfy the market needs of people in a region.
- Disseminate, diffuse new ideas, principles package technology etc.

Thus the genetic cause of the relationship observed in the principle though couldn't receive a precise explanation, it simply lies between the influential needs or demands of a center and its region interchangeably; acting as centrifugal and centripetal forces. Generalizing the concept Mekete (1990: p.62) briefly explained,

That the causes of primacy (Rank Size) have not yet been determined clearly, ... It is now commonly accepted that city size distributions and urban primacy result from complex influences involving many historical, economic political and physical factors.

CHAPTER FOUR

URBAN LAND USE /STRUCTURE OF THE TOWN/

4.1 Introduction:

In an urban setting land is used for different purposes. The settlement pattern thereby is an organization of different structures, which is the possible result of its functions.

The major functional units revealed fall under three main types, residential, economic and service sectors. As a matter of the established functions, a town's landscape have undergone a gradual process of development from a nucleus or several nuclei outwards covering a vast area.

In their explanation of the urban land use or the structure, through their proposed model (Burgers 1925, Ullman and Harris 1945) coined the general pattern of the urban growth and stated, "through time there will be an outward growth or expansion of the city or the town and socio-economic groupings of its inhabitants until they merge as one urban center".

Infact each of these functions simultaneously developed and yet could have dominated and changed from one to another, through gradual decline in gradient, thereby without any distinctive magnitude or boundary. Following this issue Mabogunje (1968) had to argue, that "there is no zonal homogeneity" among urban structures as were designated by its early predecessors. Thus while exhausting the Nigerian case he wrote:-

... the existing situations presented by cities in underdeveloped countries have not given rise to any formal theory of city growth and structure to explain the actual reality of the third world urban structure at large, and to the concerned the basic factor to its failure was the lack of competition for land bidding.

However David Waugh (1990: p.338) claimed, about the development of the prototype in the less developed countries, referring to the case of Brazilian type and hence pointed out:-

Generally in the third world urban areas which have grown rapidly, only in the last few decades, have different structures from other settlements in the developed countries. Yet despite some observed similarities between the most third world cities few attempts have been made to produce models to explain them.

Eventhen, was a little practical truth, when viewed associated to the pace of industrial development.

4.2 Urban - Land Use In Jimma

As series of attempts were made to subdivide the town in different land use categories during the reign of Aba Jifar the I. It received greater attention and detailed classification during the Italian occupation, owing to the early use of drafted master plan for the town. The option of the master plan has already been to exercise a rudimentary control over the development of the town.

Since then the town has land proposed for different functions that continued to grow congested than in sprawl expansion. Generally the town has the following classification of urban land use.

4.2.1. The Commercial Inner Area /Mercato/

It is locally identified by the term Hirmata. It had been renamed Mercato Indigenous during the Italian period.

Hirmata had strongly developed functional linkage, and therefore is characterized by maximum threshold population and a large range of goods, public administration and office quarters, large departments or chains of stores, entertainment

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corners, great pedestrian traffic, high intensity of land use and a substantial range of business activities.

The inner commercial area is highly centralized; currently it is confronted by congestion and street vending.

This highly congregated part of the town lacks the necessary space for social activities such as play grounds and back yard space to dispose waste material.

4.2.2 The Residential Area

In an urban environment the momentous explanatory factor to decide residential site is accessibility, which in broad terms is conceptualized to bear the minimum possible distance traveled to; primary and secondary school catchment area, shopping from the center or the periphery, place of work and scenic beauty, and proximity to sub-urban transport termin etc.

Thus accessibility as a general principle was conceived to decrease from the center to the periphery. In emphasis Mc Bride (1991) pointed out, that "maximum accessibility is thought to occur at the urban center, since this is the focus of routes and the point at which average communication cost are the least".

Pertaining to the above trend among low income groups in a society accessibility is accounted from the point of view of transport to work and property occupied in much low cost as in house rent.

In response to pursued advantages, the settlement pattern of Jimma town is in grid structure, and has a compacted frame work at the center, buildings here are in strips, which according to NUPI (1997) are "covered with walkways and arcades".

Residential quarters extending towards the outskirts though followed the existing main roads as in Mendera, Bossa, via Jimma hospital, current development has contributed to the emergence of over crowded houses.

Most of the houses in this quarter are in attached fabric, and very few in isolated stand.

Generally the quality of houses reveal a range of diversity and vary from a high standard to the poor archaic ones.

The peripheries of the town have very few good houses of the better off inhabitants, who moved to get rid of congestion and pollution at the center of the town. In association are the squatter colonies, developed by migrants from rural areas who have succeeded to live in shanty settlements which are lacking the necessary amenities. Nevertheless the respective groups live peacefully together in a well-guarded community.

4.2.3 Other Land Uses

Service sectors such as education, health, administrative institutions are located in combination with commercial activities around Frenji Arada, Mendera and lower Jiren.

Moreover most of the miscellaneous processing plants such as coffee, wood works, maintenance and metal works are situated along the road to Addis Ababa and to the SNNPR. The Christian cemetery at the church yards and Muslim on their conventional site form the second order of other land use.

4.2.4 Vacant Space

With in the Municipal boundary there are substantial areas of by swamps and water logged surfaces. These form a vast vacant space where cattle are grazed. The 1994 urban land survey by NUPI included the Military camp under special land use.

Since recently both swamps and water logged surfaces are shrinking owing to the use of the land for legal and squatter settlements.

4.2.5 Details of the Urban Land Use

The spatial survey conducted for the town of Jimma in 1994 was directed to proposing a parcel plan of urban land use to meet the growing demand of the present and the future population of the town. The survey based its activities on the former planning activities.

Table 4A. Details of Surveyed Land Under use in 1994

No.	Type of Land	Area in Hectares	Percent of the total	Built-up Area	Percent of the total
1	Residential	410.00	20.01	4.10	34.90
2	Commercial	28.30	1.38	28.30	2.40
3	Service	191.00	9.32	191.00	16.26
4	Administration	46.70	2.28	46.70	3.98
5	Manufacturing & storage	44.90	2.19	44.90	3.82
6	Recreational	12.90	0.60	12.90	1.09
7	Agricultural	124.00	6.05	-	-
8	Forest	112.60	5.49	-	-
9	Transportation	170.00	8.30	170.00	1447.00
10	Vacant	563.00	27.49	64.60	-
11	Special Function	138.60	6.76	206.00	5.50
12	Main roads	206.00	10.6	-	17.54
Total		2048.00	100	1174.40	100

Source: NUPI 1994 - Urban Land Survey for the Development of Jimma Town.

As shown in the table (4A) the parcel plan estimate classified a total of 1,174.40 hectares or 57.3 percent of the total area as built up area.

According to Cox-Kevin (1978:57) a built up area is:-

an environment which can be divided conceptually into fixed capital and consumption fund. He related to the production and use of built up environment, which consisted the totality of physical structures, houses, roads, factories offices, sewerage system, parks cultural institutions, educational facilities and so on...

He explained the idea of build up area, not as a mere residential area alone but is prime generalization of an over all infrastructural foundation.

It also presumably classified a total area of 873 hectares of land as vacant space which consisted of agricultural, forest and swamp land.

4.2.6 Proposed Land Use

The urban land survey of 1994 examined the availability of suitable land from the existing boundary area. Thus it identified 541.40 hectares of land from infill areas. As a result, the town administration was welcomed to encourage a compacted physical development for the town. In addition a 376.48 hectares of land was added to overcome the growing demand of the population.

Table 4B. Land Allocated for Different Use

No.	Land Use	Area in Hectares
1	Residential	271.20
2	Service	67.93
3	Recreational	43.37
4	Administrative	15.06
5	Manufacturing & storage	80.38
6	Commercial	56.02
7	Reserve area	376.48
8	Agricultural	7.44
Total		917.88

Source: NUPI Report on the Development plan of Jimma Town.

N.B. From the total 917.88 hectares, 541.40 hectare is from infill while the remaining 376.48 hectare is from expansion.

Following, the above and consequently assessing and projecting the population of the town the study has suggested an additional 2196.10 hectares of land for the town's future use. This promotes the town boundary to 4622.58 ha/46.23 sq.kms/area.

Table 4C. Urban Land Use as of 1997 in Jimma

No.	Type of Land Use	Existing Land Use Surveyed in 1994	Surveyed & proposed land for future use since 1997/ha	Total Urban land in use as 1997/ha	Percent increase
1	Residential	410.00	681.20	1091.20	23.60
2	Commercial	28.30	84.32	112.62	2.40
3	Service	191.00	256.97	447.97	9.70
4	Administration	46.70	61.76	108.46	2.40
5	Manufacturing &	44.90	125.28	170.18	3.90
6	Storage	12.90	56.27	69.17	1.50
7	Recreation	124.00	132.30	256.30	5.50
8	Agriculture	112.60	-	112.60	2.40
9	Forests	170.00	170.00	340.00	7.40
10	Transportation	563	179.00	742.00	16.00
11	Vacant (reserve land)	138.60	-	138.60	3.00
12	Special function	206.00	449.00	655.00	14.00
13	Main Road	-	-	376.48	8.20
	Additional land from expansion				
Total		2048	2196.10	4620.58	100

Source: NUPI Report on the Development plan of Jimma adopted and computed by the researchers.

In view of the above generalization the physical area of the town has expanded almost twice as much of the former area of the town.

Table 4D. Trends in the Physical Expansion of Jimma

Year	Area/ha	Percent of Increase
1960-1980	1750	-
1994	2048	15
1997 to date	4620.58	56

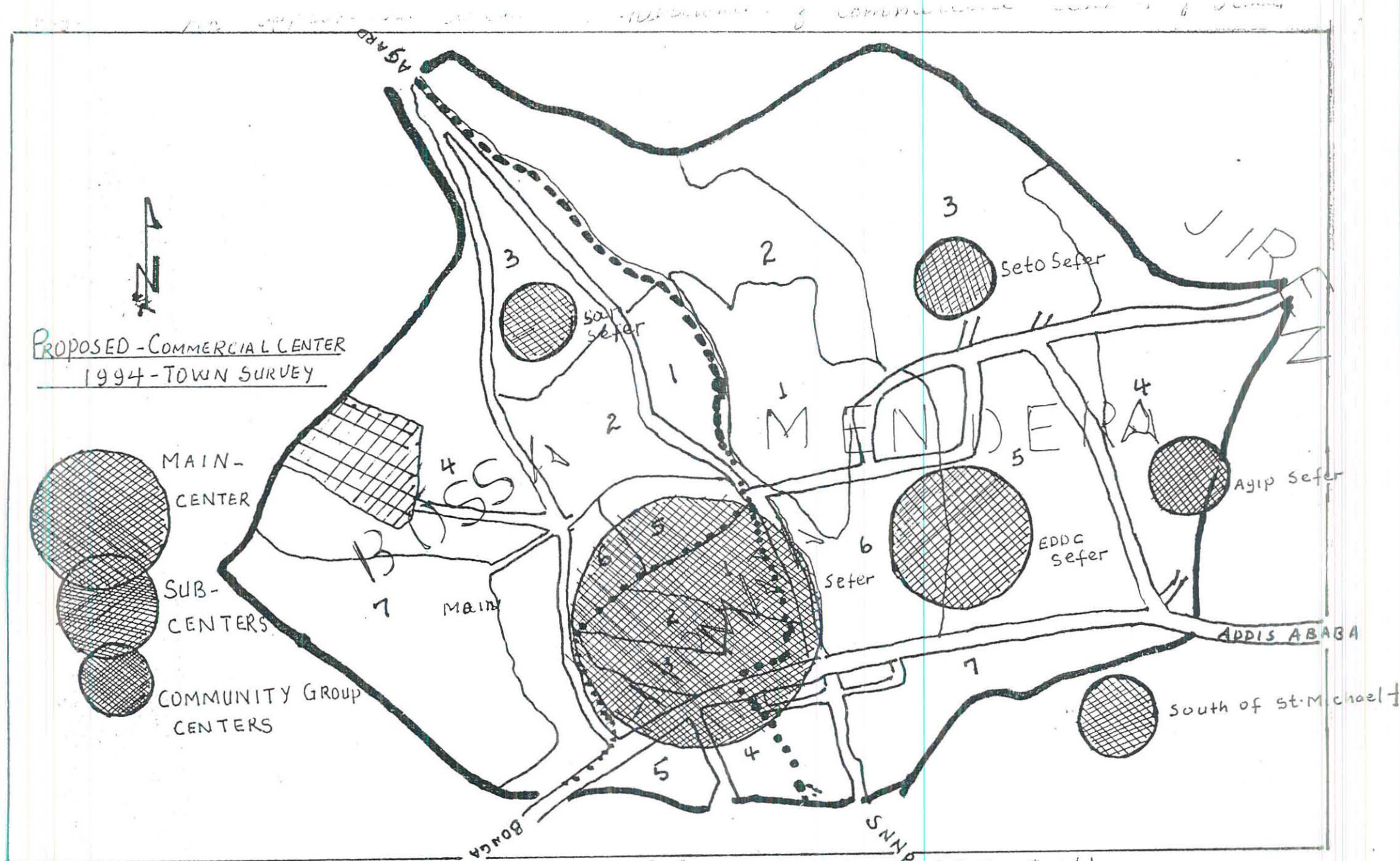
Source: Socio-Economic profile of Jimma, Survey of the Development plan for Jimma town, computed by the researcher.

As indicated in the table the town has undergone fast expansion, which took place within a short period of time.

4.2.7 Factors that Influence the Physical Expansion of the town

The basic factor accelerating the physical expansion of the town, is the growth of the town's population, which is taking place at an alarming rate. Therefore it has contributed to:

1. Increased need to construct residential houses
2. The need to construct institutions so as to expand social services, education, health, both in lower and higher scales of development
3. Growing awareness to locate processing plants, maintenance and service activities at the out-skirts of the town.
4. Construction of churches mosques by diverging religious groups .
5. Emergence of new ideas among individuals to locate their basic activities such as dairy farms at the outskirts of the town.
6. Intention of some business firms notably soft drinks distributors, pharmecor, Banks to relocate at the outskirts of the town in prospect for open space.
7. Desire of individuals to locate restaurants, lodges close to the outgoing transport routes to capture more and more market from the population in daily move.



Sources: - Municipality of Jimma, Technical Service Division (2000 - 2001)
MAP-8 - Adopted and developed by the researcher.
Fig 66/L

4.2.9.3 The Community Sub-Group Centers

These were cited from four apart localities.

4.2.9.3.1 SAR-SEFER:

Located to serve the population enclosed between the road leading from Jimma to Agaro, Agaro to Bonga and Jimma Hotel road.

4.2.9.3.2 SETO SEFER

Located at the junction of the two roads between police-self help residential scheme and Setto-Mosque.

4.2.9.3.3 AGIP SEFER

Situated beyond the Agip fuel service station, and the junction road running between Balambaras Mecha Hotel, Mulu-Wengel Church and the road leading to Jimma University on the side of Jimma Hospital.

4.2.9.3.4 SOUTH OF ST. MICHEAL CHURCH

Proposed to serve the future residential area along the by pass road from Addis Ababa and Dedo Woreda.

CHAPTER FIVE

5.1 DEMOGRAPHIC CHARACTERISTICS

To William Peterson (1972: p. 342) demography is defined in narrow and broad terms.

The narrowest sense is that of formal demography, which is concerned with the distribution, structure and change of population. A broader meaning of demography includes ethnic, social and economic characteristics. It is a multi-disciplinary field of study and has three main components explaining change in the size of population namely fertility, mortality and migration.

Demography as scientific study of population is very important. This is because population size is directly related to the supply and demand of basic needs of man such as food, shelter, clothing, and health plus educational facilities.

Generally is a discipline concerned with the realization of the actual number of people, and hence, one that attempts to optimize the balance between human and natural resources.

Therefore, deal with the proper appraisal of the needs, of the people allocation of the available resources, wise management and utilization, and therefore satisfaction of its needs.

5.1.1 Population Growth and its Distribution

5.1.1.1 Population Growth

The growth of population in urban areas of the third world wrote, Dickenson et al (1985), "is precipitated by high rates of natural increase and large inflow of migrants."

For most part the town of Jimma serving as the socio-economic center for the south-western part of Ethiopia attracted a good deal of migrant population.

In consequence, the population of the town has grown in the following trend during the last 35 years.

Table 5A. Trends of Population Growth of Jimma

Year	Population	Difference In Years	Percent Increase	Annual Rate Of Increase
1965	29,420	-	-	-
1973	50,000	8	70.00	8.80
1974	52,420	1	47.00	4.80
1975	52,110	1	-0.59	-0.59
1980	60,333	5	15.80	3.16
1984	60,194	4	-0.23	-0.06
1988	70,911	4	17.80	4.50
1994	88,867	6	25.30	4.20
1999	113,735	5	28.20	5.64
2000	119,510	2	5.10	2.50

Source: C.S.O. 1965-1975 - Estimated Population
C.S.A. 1984-1993 - Census Population
C.S.A. 1998-200 - Projected Population of the Town

In the late 1960's the population of the town has grown at an alarming rate, and almost doubled itself within eight years. Thereby increased from 29,420 in 1965 to 50,000 in 1973, estimated to have been 70 percent growth.

The annual rate of increase had been 8.8 percent, highest among the years under consideration.

However the obstinate political events of 1975 and effects of droughts over the year 1984 arrested the growth of population in the town. In response to the problems above; many people also left the town in an attempt to secure their life in 1975, while in 1984 the events of mass death in the were on the scene aggravated by severe draught and starvation.

In connection too there were couple of years with alarming growth rate 1973 (8.8%) and 1998 (7%) and a drop in annual growth rate in 1975 (-0.59%) and 1984 (-0.6%).

Since the 1984, there has been relative stabilization in social and climatic hazards which encouraged gradual rise in the growth of the population.

5.1.1.2 Spatial Distribution of Population

The arrangement of population in space at a given time is a basic factor to understand its relationship to all other features to which it is intimately connected. In line with this, Dubale (1987: p.28) wrote:

The distribution pattern of population does not merely reveal man's preference and aversion in his occupancy, but is an eloquent expression of the synthesis of geographic phenomena operating in the area. Thus the regional disparities in the distribution to be understood in the context of physical environment type of economy, cultural patterns and past history of the area.

Therefore, explanatory factors relevant to the distribution of population in the town included size, density, age-sex composition, ethnic grouping, religious groups, and occupational structure.

In most cases population is not evenly distributed. Jimma with 19 Kebele administrative units is characterized by an even distribution of population.

Tabl 5B. Distribution of Population in Different Kebeles of Jimma

Higher/ Kebele	Population	Total Hectares	Density of Pop. Per ha.	Location Quotient *	Remark
H1K1	7327	.0064	11,44843	0.08	23,855
H1K3	4750	.0314	1,51273	0.05	
H1K4	3333	.021	1,58714	0.04	
H1K5	4870	.0048	10,146833	0.06	
H1K7	3575	.0284	1,25880	0.04	
H2K1	4958	.0024	20,65833	0.06	
H2K2	3641	.0017	21,41764	0.04	
H2K3	3441	.0009	38,2333	0.04	
H2K4	2978	.0055	5,41454	0.03	22,528
H2K5	4162	.0075	5,54933	0.05	
H2K6	3348	.002	16,74000	0.04	
H3K1	3430	.007	4,90000	0.04	
H3K2	5216	.03	1,73866	0.06	
H3K3	6311	.031	2,03580	0.07	
H3K4	8093	.05	1,61860	0.09	
H3K5	3762	.016	2,35125	0.04	
H3K6	5823	.007	8,31857	0.07	42,484
H3K7	7600	.017	4,47058	0.09	
H3K8	2249	.01923	116952	0.23	
Total	88,867	4622.58	19	1.02	

Source: C.S.A. Population and Housing Census Result of 1994. Adopted and Estimated by the Researcher.

As shown in table 5B, most Kebeles of Jimma have high crude density of population.

The table shows a great disparity in crude density ranging from 125880 persons per square hectare in keftegna 1 Keble 7, to 38,2333 persons per hectare in Keftegn 2 Kebele 3, mainly due to variation in the influencing factors suggested in the first part of this chapter.

* App -4

Nevertheless, the estimated values of 'Location Quotient' smartly explained that most Kebeles in Keftegnas 1 and 2 fall under medium deficiency, while close to normal distribution characteristics have been verified in Kefteegna three and respective Kebeles.

Table 5C. Distribution of Population According to Computed Values of Location-Quotient for Different Kebeles of Jimma

Characteristics of Distribution	No. of Kebele	Percent of the total
Medium deficiency	11	58
Slight deficiency	6	32
Normal distribution	2	10
Total	19	100

Source: 1994 P.H.C Result, Adopted and Estimated by the Researcher.

5.1.2 Age and Sex Composition

5.1.2.1 Age Composition

UN (1967) recommendation defined age as "the estimated or calculated interval of time between the date of birth and census, expressed in completed solar years".

Age composition, therefore defines a given population in categories and explicitly evaluate the balance of their interdependence.

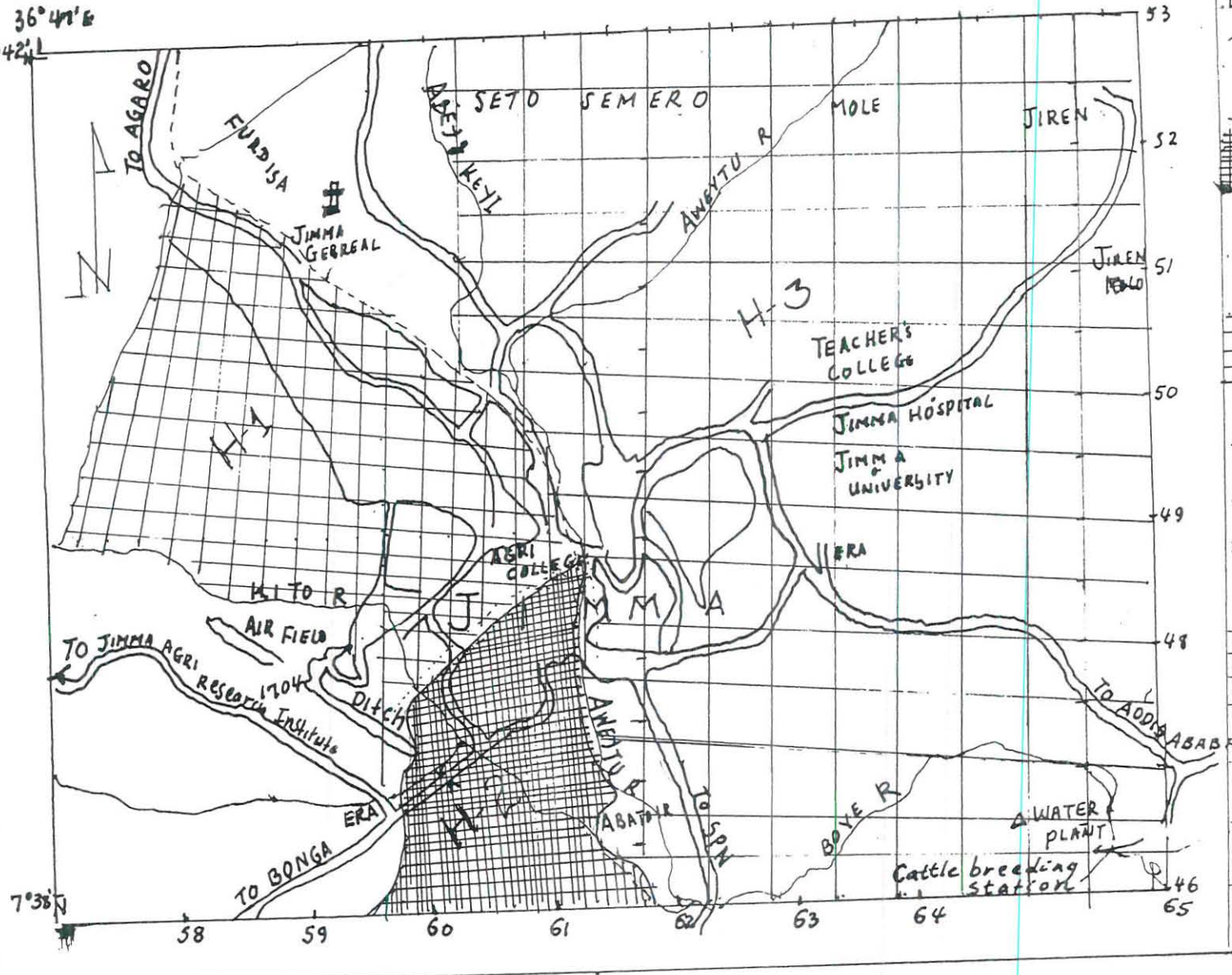
From this point of view the household survey conducted for 9 sample kebeles in the town shows that 12.5 percent of the household heads are aged 60 and above years, 71.3 percent between age groups of 31-59 years, and 16.2 percent below 30 years of age

ETHIOPIA 1:50000

36°53'E

36°41'E

7°42'N



LEGEND

~ TOWN BOUNDARY

--- KEFTEGNA BOUNDARY

KEFTEGNA'S WITH POPULATION DENSITY OF OVER 11,264 PERSONS PER SQ. KM.

KEFTEGNAS WITH POPULATION DENSITY OF OVER 2,593 PERSONS PER SQ. KM.

≈ MAIN ROADS OF TOWN

H = HIGHER (KEFTEGNAS)

KEFTEGNA'S WITH POPULATION DENSITY OF OVER 1,264 PERSONS PER SQ. KMS.

Date of compilation 1980.

MAP

POPULATION DENSITY OF THREE KEFTEGNAS (Traced from topographic map of Jimma by the researcher)

70/1

5.1.3 Dependency Rate.

Gebre Selassie (2000) wrote, " all persons in the so called working age do not actually participate in economic activities and all persons outside this age are not dependent."

Infact it appears very difficult to form a clear demarcation between the groups for clear evaluation especially in our Society.

Table 5F. Sex-composition and Dependency Rate

All Ages	Both Sexes	Male	Female	Sex Ratio	Dependency ratio
All ages	88,867	43,874	44,993	98:100	67:100
0-14	322,039	15,760	16,279	97:100	
15-59	42,985	26,246	26,739	98:100	
60 & above	3,843	18,681	1975	95:100	

Source: C.S.A - 1994 Population and Housing Census for Jimma.

Though computed values for sex ratio are much closer to normality, the over all dependency rate is much lowered, accounting for 67:100.

5.1.4 Marital Status

Marriage is a vocational link between man and women Marriage binds the couples with the responsibility of rearing children. It is a very common and almost universal demographic phenomena children.

There has been no custom in Jimma, which determine minimum the age at marriage. However, many couples join in wedlock with puberty, satisfaction in educational training, and economic self-sufficiency.

Table 5G. Distribution of Households in Marital Status

Marital Status	No. of Households	Percent of the Total
Single	64	11.1
Married	322	56.1
Divorced	62	10.8
Widowed	126	22.
Total	574	100

Source: Sample Household Survey of 9 Kebele Jimma - 2001.

As shown in Table 5G, the single, divorced, and the widowed together formed 43.9% of the respondents while the married comprised the majority accounting for 56.1 percent of the total consideration

5.1.5 Ethnic and Mother Tongue Composition

According to C.S.A (1984), ethnic identity of a person is traced through his/her tribal origin". Clarke (1976) on his part debates, that "man is a single species, on one hand, and all type of human beings can interbreed". Thereby he opens the agenda in search for a minimum single criterion that can define the term in precision. He writes the view in such a way that:-

racial convergence is exceeding its divergence, and the differences are becoming blurred, instead census usually distinguishes between ethnic groups based often on a combination of biological and cultural criteria including language and religion.

At present owing to concepts used in census principles, we distinguish over twenty ethnic groups in Jimma. A summary of the distribution of the major ethnic groups of the city are indicated as in the following Table, 5H

Table 5H. Ethnic Composition of Jimma

Ethnic Geoup	No. of Households	Percent of the Total
Amhara	161	28.1
Oromo	144	25.1
Keffa	62	10.8
Dawro	96	16.7
Yem	25	4.4
Tigrai	17	2.9
Gurage	56	9.8
Welaita	10	1.7
Others	3	0.5
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma 2001

For Similar purpose the mother tongue of children has been assessed and therefore has the following results:

Table 5I. Distribution of children according to mother tongue

Mother tongue	No. of Households	Percent of the Total
Amharigna	460	80.1
Oromgna	73	12.7
Kefigna	9	1.6
Dawrigna	8	1.4
Yemsa	-	-
Tigrigna	14	2.4
Guragna	6	1.1
Welaitgna	4	0.7
Others	-	-
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma 2001

The number of surpassed that of any other ethnic group in the town. The Ormos followed the Amharas closely in this regard. How ever as table 5I shows, the over whelming majority of the children of the surveyed house holds declared that Amaharic was their mother tongue. This is most likely the reflection of Amharic as a medium of communication in the town.

5.1.6 Religious Composition

Information regarding religious affiliations of every member of the household was surveyed during the 1984 and 1994 population and housing census. The result was 40.6% Christians, 49.3% Muslim, 10.1% followers of other religion followers, and in the later case 66.04% were Christians, 33.25% Muslim, and 0.71% belonged to other and traditional religion. The results of our sample are shown in Table 5J.

The present household survey also has indicated the following figures.

Table 5J. Religious Composition-of Households

Religious-Group	No of house holds	No. of the total
Orthodox	366	64
Protestant	66	12
Catholic	19	3
Muslim	116	20
Others	7	1
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma 2001.

Christianity as a whole has more members accounting for over 79% followed by Muslim religion groups, which account for 20 percent, while others were only 1%. Regardless this heterogeneity in religion however, the people of Jimma are used to living together in appreciable harmony.

However heterogeneous are the cultural issues, less is the distress felt, among the religions groups.

5.1.7 Migration

Migration is the movement of people across a specific boundary, in the case of Jimma most migrant come from rural areas. It is caused by the general disparity in the level of the development between the urban and rural areas.

To J. Hawk (1990) Migration is regarded as an adjustment mechanism, which directs the spatial economy of a state of equilibrium. At the individual level acting as a vehicle of social mobility, "city ward migration was meant access to training for high income and employment".

Migration has been a prominent feature for Jimma. Thus during the 1984 about 50.1% were migrants and 49.9% residents. According to the 1994 census non-migrant out numbered migrant group, and accounted for 53% of the total population.

The present household survey is nearly typical of the 1984 census result. Thus 67 percent of the households were born out of Jimma, while 33 percent were found born in Jimma.

Table 5K. Distribution of Household According to Residential Status

Born	Household No.	Percent
In Jimma	187	33
Out of Jimma	387	67
Total	574	100

Source: Sample Household Survey of 9 Kebeles in Jimma 2001.

Jimma town attracted more and more migrant population whenever it benefited from lucrative trade in coffee, which opened opportunities to capture cash income during harvesting period. Other less influencing factors to population migration other than trade in coffee include employment opportunities in casual activities, educational

Institutions in secondary and tertiary level training, relative better amenities and facilities available in the town, and prevalence of natural and social insecurities in rural areas, such as drop on coffee yields and ethnic conflict.

5.1.8 Occupational Distribution

In a given society people of working age will be engaged in different activities. This could be based on their profession or work specialization developed either through formal training or informal skill developed through work experience. As a result they are classified into various occupational group. The occupational status can be distinguished as an employer, employee wage earner or unemployed.

Occupational status is a good indicator of the level of socio-economic development of a society a basis on which one can easily predict the living standard of a society or else the dominant economic sector.

According to the sample survey out of the total households 484 (84.3%) were engaged in the tertiary economic sector, 70 (12.2%) in the secondary sector and 20 (3.5%) in the primary sector.

The results of their work status indicated that 207 (36.1%) were government employee, 167 (29.3%) self-employed, 98 (17%) categorized as others, 81 (14.1%) private business owner and 21 (3.5%) as employers.

The distribution of the surveyed household with reference to the nature of employment has shown that a total of 303 (52.8%) were permanently employed, 171 (29.8%) casually employed, 80 (13.9) temporary employed, 20 (3.5%) employed on contract basis.

The average monthly income assessed for the sample population has resulted in levels of great disparity.

Hence those household members with the least median monthly income of Birr 178, accounted for 48.4% of the total sample population. This was followed by median income groups of Birr 375, Birr 625 Birr 851 and Birr 1076 with their respective percent values of 22.5%, 14.6%, 9.6% and 4.9%. The computed values of coefficient of variation resulted in that income varied at the rate of 56.58 percent.

Table 5.L Coefficient of variation computed for different income groups

Income Levels	Median Income x	x-x	No. of H.H. f	fx ²	(x-x) ²	f(x-x) ²
105-250	178	-443	278	-123154	196249	54557222
251-500	376	-245	129	-31605	60025	7743225
501-750	626	5	84	420	25	2100
751-950	851	230	55	12650	52900	2909500
951-1200	1076	455	28	12740	190825	5544700
Total	3105		574	-128949		70756747
Mean	621.4					

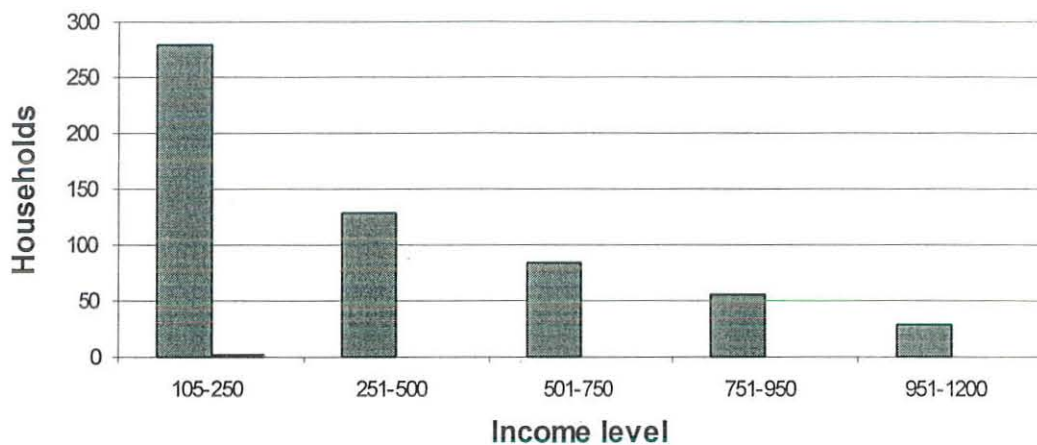


Fig. 4

$$\begin{aligned}
 c.v &= \frac{\delta x}{m} \times 100 \\
 c.V &= \frac{351.417478}{621} \times 100 \\
 &= 56.58\%
 \end{aligned}$$

However "many towns in the third world are growing quickly but they frequently lack the economic and financial justification for their size" (Clarke 1981).

Table 5I'. Distribution of Registered Unemployment of Jimma - 2001.

Educational Level	1998 Registered	Employed	1999 Registered	Employed	2000 Registered	Employed
Illiterate	-	-	-	-	5	-
1-6	202	22(10%)	126	19(15%)	88	3(3.4%)
7-8	186	4(2.15%)	74	-	116	3(2.58%)
9-12	616	20(3.3)	800	5(0.63)	664	7(1.05)
Vocation/Tech.	125	10(8%)	84	-	33	1(3)
Non-Graduate	-	-	-	-	1	1
Graduate	-	-	-	-	12	9(75)
Total	1129	56(4.90%)	1084	24(2.2%)	919	24(2.6)

Source: Labour and Social Affairs Department Jimma Zone.

Examination of the table revealed that in each year very few component accounting for 4.9%, 2.2% and 2.6% in the respective years of 1998, 1999 and 2000 were employed. Unemployment is wide spread and in the absolute sense unavoidable problem in the history of the town.

In view of this Engida (1986: .3) pointed out that "Jimma has grown steadily in its inhabitants since the 1940's however employment still calls for organization, as more than 58% of the adult residents are unemployed" in the formal sector. Even more worse is the present situation that in the above registered data for three years course unemployment continue pending above 95%.

5.1.9 Population Growth

Change in population size occurs as a result of birth, death and migration. In line with the above NUPI (1997) reviewed:

The dynamic change in size, and, structure of the population arises from an increase or fall in fertility, mortality and migration or combination of the three known as the components of population change.

The population of the town has grown progressively as a result of relative high rate of fertility and migration.

Fertility:- is the actual reproductive performance in a population. It is affected by age at marriage, family planning, economic development and status of women in a society.

It is measured by crude birth rate general fertility rate, age specific fertility rate, of which the last measure was most significant in this study.

Table 5M. Estimates of total fertility rate

Age of Women	1984				1994			
	No. of Women	No. of Births	ASFR	%	No. of Women	No. of Births	ASFR	%
15-19	4403	151	0.034	34.5	7786	169	0.022	22
20-24	2170	322	0.1483	148.0	4995	446	0.089	89
25-29	1924	401	0.2084	208	3883	586	0.151	151
30-34	1945	375	0.1928	193	2583	344	0.133	133
35-39	2100	312	0.1486	148.6	2875	161	0.056	56
40-44	1038	73	0.0763	76.3	1560	52	0.033	33
45-49	784	25	0.0319	31.9	1203	10	0.008	8
Total	14364	1659	0.8386		24885	1768	0.4920	492
TER			4.17				2.46	

Source: C.S.A 1984 and 1994 Population and Housing Census Result adopted and estimated by the Researcher, 2001.

As illustrated in table 5M.

- The total number of women increased at the rate 73% between the census years. The total fertility rate continued to increase between age groups of 20-39 in 1984 and peaked among age groups 25-39 in 1994, in connection too, total number of births increased at the rate of 10.7 percent. However total fertility rate declined by 41 percent during the 1994 census.
- Total fertility rate drastically has fallen from 4.17 percent during the 1984 to 2.46 percent in 1994 census year. This was a below average achievement by envisaged by the National population policy during the planning period.

More recently, Jimma has been experiencing high rate of population growth mainly through natural increase rather than through immigration rate.

5.1.10 Family Planning Practices

Family planning policies are implemented jointly by government institutions and three well established non-government organizations.

The government institutions are Jimma hospital, Jimma Health Center, Jimma Mother and Children's Clinic.

The Non-government institutions include:

1. The family Guidance Association of Ethiopia:-

It was established in 1966, believed to have started with the modest beginning in the implementation of the policy.

At present FGAE has seven branch offices, one of which, the southwestern branch is located in Jimma. The branch office has an extensive catchment areas in the region.

According to Ato Dereje: the key strategies of FGAE, which are sponsored by the branch offices, as envisaged in the transformation are:

1. Ensuring sexual reproductive health rights for the youth.
2. Ensuring active participation of the youth in meeting their sexual and reproductive health needs and rights.
3. Maintaining a qualitative and sustainable reproductive and sexual health program.

In the year 2000 FGAE embarked on a five-year transformation process, which implies shift of emphasis to holistic sexual reproductive health framework, or shift of emphasis to youth and redefinition of adult clientele as its secondary ones.

2. DKT-ETHIOPIA-INTERNATIONAL

DKT- is the acronym for the Dhendra- K-Tyagi the Indian pioneer who devoted most of his life to the early Indian family planning program. This Non-governmental organization came to action to fight against AIDS and strengthen the family health program. General objectives of DKT are social marketing, with the aim of increasing the accessibility and affordability of the package technology and reduce transmission of HIV/AIDS and other STDs through the diffusion of condom service.

Fund Source: USAID, GTZ, Indian and Japanese Fund Source.

3. Marie stops

Carries clinic based family planning policy implementation, health care for children aged 1-5 and for females in all age groups.

Fund Source:- Marie stops - British foundation for African Countries.

Process of FP Execution by the NGOs:

1. Provide Packard service - pills, condom, foam-table, IUD (loop) and injection service.
2. Provide information, education and communication

3. Provide pregnancy test, referral case service. In conclusion given the intensive implementation of the new Anti- natalist program, it has been possible to reduce the total fertility at a drastic rate. That is the total fertility rate of 4.17% recorded in 1984 has fallen to 2.46% during the 1984 PHC. Barbara (1997) had a slogan that "Family planning saves lives". Abiding, too UNICEF report (1992) echoed "Family planning could bring more benefits to more people at less cost than any other single technology available to human race".

Therefore, there are two alternate choices, to man kind, in this part of the country either making use of technological innovation and human resource extensively, for mass production, or the contraceptive technology so as to breed the least number of people with their alternate capacity building.

5.2 THE ECONOMIC BASE OF THE TOWN

Many towns are identified according to their dominant economic function. As a result there are commercial, manufacturing, transport and financial or even mining towns.

This shows that towns in general are likely to specialize in the production of material goods, or provision of services for other areas.

Thus specialization implies, the development of a sector of an economy in a particular form with surplus product, which could be sold over a given territory, to make the area more viable.

Such towns are ought to serve the territory beyond their boundary and thereby bring money into their domain.

Wheeler and Muller (1986: p.44) discussing on economic specialization of urban regions distinguished between: the basic and non basic economic activities as follows:

Basic Economic Activity: produces goods and services in the urban area, but sell them beyond the city boundary. The export of these goods and services bring income into the city and provide the basis for the urban viability and growth. The more a city can produce and export the more income it can attract.

Non-basic economic activity produce's goods and services for the city itself, no export involved, income captured, but exchanged within the urban unit.

The long economic history of Jimma is characterized by its dependence on coffee as its basic product, through the marketability of which the town flourished and declined with any adverse effect that followed.

5.2.1 TRADE

Trade results from the surplus produced in a region. Jimma as center bounded by resourceful regions and opportunities has emerged as a town of commerce. As such it employs passengers and freight.

A favorable position as a gateway for passengers, and freight from Addis Ababa to Bonga, Mizan Teferi, Tepi, Gambella, and Agaro, Bedelle, Metu, Nekemt, etc.

Dickens et al (1995) recognized "Gate way cities as route ways through which goods and people pass between centers of production, distribution, exchange and consumption".

Jimma possesses an excellent geographical location for the issue under consideration.

Primary data on the number of commercial establishment couldn't be used, instead secondary data were gathered from the zonal internal revenue office, Trade, Industry, and Tourism department, and the town municipality.

In this connection it is also to be noted that, due to the prevalent slow economic development and lack of keen supervisory performance by the concerned departments, the operational reliability of some of the establishments is vaguely understood.

Table 5.N Distribution of Commercial Establishments in Jimma

S.N.	Type of Establishment	Size
1	Hotels	786
2	Textiles/Shoes	213
3	Grains	67
4	Whole Sales	152
5	Retail Sales	1259
6	Trade in Coffee	68
7	Construction Materials	10
	Total	2555

Source: Internal Revenue Office - Jimma Zone 2001.

At present the commercial activities in the town are operating in a sluggish environment. The sole retarding factor in this regard has a strong link with the international fall in the price of coffee. The economy of the town, which is highly regulated by the profitability of coffee markets, has been encountered by reasons, which were reviewed, by Ato Awel as:

Jimma zone is the main producer of coffee and the majority of the people directly or indirectly depend on coffee for their livelihood. Therefore the decline in the over all economy and the commercial activities in the town have strong relationship with the failure in the marketability of coffee.

In connection he suggested the following points for justification:t.

1. Some of the famous traders failed to pay back their bank loan.
2. Investment in different spheres has declined

3. There has been serious lack of demand for agricultural and industrial products.
4. There has been extremely high competition among business firms, which resulted in serious bankruptcy, forced some members engaged in the sector to evacuate and a few others to resist.

A more vivid explanation of the current situation in the town can be enriched from the words of Dickens et. al (1995), that, "if disposable income of an urban population is low, few business will be found, but if income rises more and more business will be attracted".

5.2.2 MANUFACTURING INDUSTRIES

Bale (1981) pointed out that, "manufacturing industries involve the conversion of raw materials or assembly of parts to form finished or semi finished products".

Manufacturing industries were better known in the past than the present history of the town.

However referring to conceptual frame work developed to classify manufacturing industries by (Sutcliffes 1971 and Bale 1981), one can say that the town is not without the industrial base.

Accordingly Sutcliffes model of industrialization (1971) suggested four stages of development, 1) Traditional craft industries, 2) Processing primary products, 3) Import substitutions, 4) Manufacturing capital goods and ... John Bale (1981) who recognized 27 main groups of industries or 27 MOHs, and so have summarized then into four main groups (Appendix 5).

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In view of the above, though the conceptual frame work illustrated by Bale is more relevant throughout, only two cases of Sutcliffe were found appropriate to the existing industrial structure of the town.

Classification of Manufacturing Industries

1. **Traditional Craft Industries:** Includes weaving black smith, carving (woodwork), leather work, etc. according to Bale (1981) were classified as primary industries.
2. **Processing Primary products or secondary Industries:-** These group of manufacturing industries suggested by the both writers of (1971) and 1981) are closely associated. So under this category we find such industries as processing edible oil, soap manufacture, brick production, metal work, Jewellery, bakery, cleaning of coffee and sofa works.
3. **Tertiary Industries:-** Fall under MOHs(20-27) conceptual frame work, suggested by Bale (1981). From empirical point of view, it could be said that the town is dominated by the group of industries, and therefore consist of service industries that are market oriented.
4. **Quaternary Industries:-** to Bale (1981) are those industries which are concerned with the provision of information and expertise. Here are universities, research establishments according to which the town has a university and a well-established agricultural research Institute.

According to informants at the Trade, Industry and Tourism office of Jimma zone, following the traditional classification of manufacturing industries, the dominant simple industries in the town are food, wood, and metal works.

Basic studies undertaken by the office both at zonal and regional level indicate the availability of potentially rich resource to develop, textiles, leather works, metallic and non-metallic industries. Nevertheless the present industrial development in the town has the following picture.

Table 5.O Distribution of Establishments

Industrial Establishments	Size	Size of Employment
Edible oil	2	8
Wood/saw mills	23	89
Metal work	24	133
Bakery	11	33
Coffee Processing	7	43
Grain Mills	20	44
Maintenance	17	170
Brick Manufacture	44	132

Source: Internal Revenue Office - Jimma Zone 2001.

Trade, Industry and Tourism - Jimma Zone 2001.

5.2.2.1 FUTURE INDUSTRIAL DEVELOPMENT

Jimma has bright future in the development of Manufacturing Industries.

Project profile draft for small-scale industrial development for Oromya Region has suggested the possibility of establishing 70 industries in the town. The future potential development have been recommended considering the availability of the following factors:-

1. The strategic location of the town:-

Ato Awel manager of Trade, Industry and Tourism pointed out, that its strategic location is manifested in as transport center for eight (8) administrative zones found in Oromya and southern peoples region. Therefore will be supported by large actual and potential population that can provide sufficient labour power, the most prommising purchasing power for industrial products, enabling it evolve as a big transport and market center.

2. **Availability of relatively advanced physical infrastructure:-**

Provision of Hydro-electric power in both actual and potential source, highly developed and efficient communication system which has advanced micro-wave telephone system with much higher board capacity, accessibility to both government and private financial institutions such as banks and insurance companies and sufficient water supply.

Thus the project profile concluded the effectiveness in the feasibility based on the recommended factors; such as resource potential, market potential, linkage effect, labour (employment) potential and possibilities in capturing capital for investment and expected, profitable financial returns. Moreover the study has pointed out and recommended physical sites in that following the direction of the wind smokeless industries to be located in the East and S-East of the town and those with smoke in the northwestern part or in the neighbourhood of St. Gebreal Church.

5.2.3 Hotels and Tourism

Jimma the traditional center of coffee marketing and long established hub of transport, focal point for capital generating enterprises in the southwestern Ethiopia, is an administrative capital with extensive market areas located in Oromya and southern people's region. Given this locational merits:

1. There is a daily movement of a large number of people engaged in different social and economic affairs across the town.
2. The administration organizes conferences, seminars, symposiums, and exhibitions and attract more and more inflow of people.
3. Large number of patients are referred to Jimma hospital

4. Jimma's historic position also paved the way for the flow of large number of people for vacation, visits and educational research.

The sum total effect of the flow justifies potential demand for hotels, restaurants, pensions, and purchase of cultural goods, and locally produced commodities, on one hand and entertainment in recreation sites, on the other.

It therefore calls for the provision of cater and entertainment services, which could further result in the inflow of large sums of money. Hence needs effective, management of the already existing numerous hotels, and promotion of the tourist sites such as the:

1. Man made culturally oriented Aba Jifar Palace with its cultural artifacts.
2. Naturally endowed Boye river bank site with its scenic beauty.

Informant at the Department of Trade, Industry and Tourism of Jimma zone ... pointed out, concerning the issues in tourism industry, the possibilities in the development, were broad, however so little is understood about the sector. The infrastructure that can support the industry poorly developed. Above all it has not yet received direct management. It is ruled by two masters, the promoter i.e the Trade, Industry and Tourism Department and the manager, Information and Cultural center of the zone.

5.3 PHYSICAL INFRASTRUCTURE

SOCIAL INFRASTRUCTURE

A literal meaning given for the term infrastructure by Webster's Dictionary (1979) is "a substructure or underlying foundation, especially the basic economic, social facilities and installations of a community or state". However, among scholars in the discipline, Homier (1972:15) writes "that infrastructure is part of the capital

stock of an economy, it is an investment of investments", which he quoted from Johchismen (1966) and expressed it as:

to lie between three main groups, material, institutional and personal infrastructure, according to which the material type includes all installations, equipment of an economy that can be used in the field of energy provision, transport communication and building etc. The institutional forms the set of norms and procedures and the personal ones include the number and qualities of people, their educational qualifications and various functions in the economy.

5.3.1 EDUCATION

Barke and O'Hare (1992: p.52) disclosed that:

Education is lubricant of development. There is a growing realization that education enhances investment in every aspect of development effort, agricultural productivity, decline in family size took place with increasing educational level.

The educational service rendered in the town range from kindergarten to a university. It is remarkable that there are 29 kindergartens 39 elementary schools, in the town out of these, kindergartens, (38%), of the elementary schools (5.4%), and Secondary Schools (20%) found in Jimma.

However most of the educational institutions except those owned by non governmental organization are poorly in facilitated, where books are even luxury. Most of these are practically over crowded.

Table 5.P. Distribution of Schools Teachers and Student Enrolment of Jimma Town.

No.	Type of School	No. of Establishment	No. of Class room	Students			Teachers			Students Teachers Ratio	Students Class Ratio
				Male	Female	Total	Male	Female	Total		
1	Kindergartner	11	31	806	795	1601	-	31	31	1.52	1.52
2	1-8	21	380	1177	12186	23960	426	383	809	1.32	1.63
3	9-12	2	50	4184	2702	7886	192	21	213	1.37	1.158

Source: Kersa Woreda Educational Office 2001.

With reference to the table SP it is to be noted; that male students exceeded female students in the kindergarten In the secondary schools, student-teacher ratio is almost normally distributed, If one we assume, the function of schools according to shift system student classroom ratio is tight only in the secondary schools.

Table 5.Q. Distribution, of Educational Institutions opinionated by the sample household population.

Opinion	No. of Households	Percent of the total
Sufficient	85	14.8
Insufficient	181	31.5
Poorly-Sufficient	194	33.9
Extremely low	114	19.9
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma 2001.

Therefore, the educational facilities accordingly are merely satisfactory. This has resulted from coupled problems, especially in response to economic recession, with the indication of falling enrolment rate and increasing rate of dropouts.

- In relation to this the especially hit are the poorest children particularly the girls.

5.3.2 HEALTH

Ill health is an obstacle to economic and social development. It imposes economic cost, even becomes a burden on a community. It impairs people's ability to concentrate, learn, and the availability and productivity of labour.

5.3.2.1 MORBIDITY AND ITS FACTORS

The town of Jimma with humid and hot climate is suitable for the wide spread breeding of mosquitoes and bacteria's. The causes, which lie at the root of health problem, are:

1. Wide spread vector borne diseases:

Prominent of this is malaria. A preliminary report made by Malaria eradication sector of Jimma for the year 1999/2000 indicated that 9114 patients, were examined at the station. Among these patients 1878 (20%) were reported positive.

In the year 2000-2001 treated patients totaled 7048 and 2249 (31.9%) were found positive. Relatively there was relapse of malaria Later on

Table 5.R. Distribution of Malaria patients Examined at Jimma Sector 2001.

Ser. No.	Year	Total Patients examined	Positive Result	Percent of the Total	Negative Results	ercent Total	Total Percent
1	1999/2000	9114	1878	20.00	7336	80.00	100
2	2000/2001	7048	2249	31.90	4799	68.10	100
Total		16162	4127	25.00	12135	75.00	100

Source: Jimma town Malaria Sector Office 2001.

Similar report at Jimma Health Center disclosed the following:-

Table 5.S Distribution of Patients Examined at Jimma Health Center

Month	Code 42.6 Hook and Tapew ...	Code 87 Respiratory Case	Code (74) Eye Case	Total
Sept.	239	125	24	388
Oct.	269	98	89	465
Nov.	198	71	22	291
Dec.	353	214	214	781
Jan.	480	127	127	734
Feb.	276	180	180	636
March	298	272	168	738
April	338	169	141	648
May	334	181	116	631
June	287	204	99	590
July	198	190	76	464
Aug.	180	161	60	401
Total	3450(51)	1992(29.4)	325(19.6%)	6767(100%)

Source: Jimma Health Center 2000-2001

There were 6767 patients who visited the health center. Among these 3450 (51%) had hook worm and tape worm cases, 1992(29.4%) respiratory cases, and 1325 (19.6 %) eye cases respectively, the basic cause of which is attached to poor environmental and sanitary problems.

5.3.2.2 Health facilities:

Table SI show s a summary of medical personnel and health facilities in Jmma.

Table 5.T Distribution of Health Personnel and facilities in Jimma town 2001.

Health Institutions	o. of Beds	No. Medical Director	Nurses	Sani- tarian	Health Asst.	Pharmacy Technician	X-ray Technician	Lab. Technician	Health Officer	Dark- room Technic
Hospital	227	13	51	2	74	5	9	9	1	1
Jimma H. Clinic	7	8	2	-	5	-	2	4	-	2
Jimma Health C	3	1	9	3	15	-	-	2	1	-
Jimma McH	4	-	5	-	9	6	-	1	-	-
Total	241	22	67	5	103	11	11	16	2	3

Source: Jimma Hospital, Jimma Health center, Jimma McH, & Jimma Higher Clinic 2001.

Generally there is shortage of health facilities and medical personnel ratio computed for the projected population of 2000, Where there is one medical doctor for 5433 persons in the town, due to two basic reasons; population of the town is growing fast and the health service rendered has not been confined to the town's population.

Table 5.U. Distribution of Health institution - 2001

Ser. No.	Establishment	Government	Private	Total
1	Hospital	1	-	1
2	Health Center	1	-	1
3	High Clinic	1	1	2
4	Medium Clinic	-	1	1
5	Pharmacies	1	5	6
6	Drug Store	1	1	2
7	Rural Drug Venders	-	9	9
8	Whole Sale-Drug	1	1	2
	Total	6	18	24

Source: Public Health Department of Jimma Zone 2001.

Table 5.V. Distribution of Medical Personnel to the Projected Population of Jimma 2001

No.	Medical personnel	Total	Projected population	Ratio
1.	M/Doctors	22	119,510	1:5432
2	Nurses	67	119,510	1:1784
3	Sanitarians	5	119,510	1:23902
4	Health off. & Asst.	105	119,510	1:1138
5	Pharmacy Tech.	5	119,510	1:23902
6	X-ray graphers	11	119,510	1:1086
7	Lab Tech	16	119,510	1:7469
8	Dark Room Tech	1	119,510	1:119510

Source: Jimma zone public health Dept C.S.A. Projected population for 2000 adopted and computed by the researcher

5.3.3. Recreation

There are few entertainment centers within and the sub-urbs of Jimma. Aba Jifar Palace with its historical relics forms the prominent attraction center. Boye River

bank endowed with its beautiful scenery, Jimma stadium and Kito football field are best sites, which provide entertainment for the youth.

Aweyту Public Park provides recreation for people retiring from the daily routine work.

5.4. HOUSING

Housing forms the basic needs and satisfies the shelter requirement of man. It is built from different materials. The materials used in the construction depend on the financial capacity of the individual in need. These determine the quality of the houses.

Accordingly NUPI (1997) claimed, "the type of material used in the construction of houses can give some insight about the quality of the houses".

In urban areas like that of Jimma people are less concerned in building their houses due to many reasons. Notable of these reasons is lack of financial resources. They are engaged in different tenure system to satisfy their housing need. Accordingly population and housing census result of 1994 for instance came out with 40.50% owner occupied, 28.8% rented from kebele, 2.8% from housing agency, 1.1% from other organizations, 17.1% from private owners, 0.4% paying difference in rent, and 9.3 % free from rent.

On account of the housing tenure, the house hold survey conducted for 9 sample kebles of Jimma town has shown that 57% of the housing units are rented and 43% owner occupied.

Table 5.W. Distribution of Houses According to Type of Ownership

Type of ownership	No. Of houses	Percent of the total
Owner occupied	247	43
Rented from kebele and organization	327	57
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma 2001

Table 5.X. Distribution of Houses According to Tenure System

Ownership	No. Of House	Percent of the total
Kebele	255	52.3
Rent free	140	28.7
Housing Organization	54	11.0
Rented from private	39	8
Total	488	100

Source: Household survey of 9 Sample Kebles of Jimma Town 2001.

Kebele ownership has the lion's share in the number of rented houses, 52.3%, followed by rent free groups accounting for 28.7%, the other less significant customers are housing organization, and private awners

Table 5.Y. Distribution of Houses According to no. of Rooms

No. of rooms	No. of houses	Percents
1	108	22.1
2	100	20.5
3	122	25.0
4	74	15.2
5	55	11.3
6	29	5.3

Source: Household Survey of 9 Kebeles of Jimma - 2001.

As shown in Table 5y lower the room number, the more are the housing units and vice-versa, as the number of rooms' increase fewer became the housing units.

Table 5.Z. Distribution of Houses According to Rent Paid

Rent in Birr	No. Of house	
1-20	224	46
21-40	171	35
41-60	27	5.5
61-80	25	5.1
81-100	14	2.9
101-120	1	0.2
121-140	2	0.4
141-160	4	0.8
161-180	20	4
Total	488	100

Source: Household Survey of a Sample Kebeles of Jimma Town - 2001.

76.8 % of the kitchen are used for cooking purpose and 23.2% of the kitchen are used for cooking and living purpose.

5.5. Water supply

The Italian established reservoir locally known as the Kidus Gebreal sefer supply has been in long years of service. During the reign of Emperor Haileselassie I the city received supplementary supply from keto Bore Hole. Nevertheless, the town had to suffer from acute shortage of clean water supply for many years. Since 1980's an alternate and sustainable system of supply has been thought under Gilgel Ghibe projects, and its construction was completed in the late 1990. The new project started to function in 1994 having captured the Gilgel Ghibe River through wear system. It is an extensive plant.

The treatment plant is fitted with low and high lift engines that number four. The lifting engines are reported to have capacity of producing 184m^3 of water per hour. According to Ato Abdu, one of the engines is reserved for emergency. Accordingly the average daily production of water amounts to 3000m^3 .

Table 5B'. Source of Water Supply

No.	Source	Capacity Per day
1	Boye plant	3000m^3
2	Kito-Bore hole	-
3	Stadium Bore hole	-
4	Public fountain (27)	-

Source: Jimma Town WASSA Office - 2001.

Customership:

The house hold survey conducted for 9 sample kebeles of Jimma town identified and estimated that 39.9% of the household have their water supply from private meters, 23% from their neighbours, 18.5%

from shared meter, 13.8% from public fountain, 3.3% from protected well, and 1.5% from unprotected well.

Table 5C'. Distribution of house holds according to source of water

Source of Water	No. of House Holds	Percent of the Total
Own meter	229	39.9
Shared Meter	106	18.5
Other house	132	23.0
Public fountain	79	13.8
Protected well	19	3.3
Unprotected well	9	1.5
Total	574	100

Source: Sample Household Survey of 9 Sample Kebeles of Jimma Town - 2001.

According to the town WASSA Office upto the end of January 2001, there were 4095 registered customers. There are also groups of households benefiting the public fountain supply. There are 50 households that receive water supply from each public fountains.

Table 5D'. Distribution of Customers

Type of Customers	No.	Approximated Family size	Total
Own meter	4095	5	20475
Public Fountain 28	28x50=1400	5	7000
Grand Total	5495	5	27476

Source: Jimma WASSA Office - 2001.

From the table 5D' it has been known that 27,475 people have direct access to tap water supply. If equated to the projected population of the town, which is 119510, for the year 2000 this will mean only 23% of the population the rest of 77% is obliged to use from shared meters, or else from unlikely source.

5.6 Power (Electric Service) Supply

The source of electric power for Jimma town is the Melka-Wakena H.E.P national grid. According to the informant at EELPC branch office of Jimma, totally 132 KVA or 105.6 KWH power is received by the sub-station.

From the sub station power is stepped down to transformers. In view of this, the present installation has 65 transformers each with different power generating capacity.

Table 5E'. Distribution of Power Transformers

Power Line	No. of Transformer	Percent of The Total
City Line	22	33.9
Agriculture College line	11	16.9
Hydro-line	5	7.7
Hospital line	27	41.5
Total	65	100

Source: Jimma Town EELPC Office - 2001.

So far the maximum power ever produced was at the capacity of 15 KVA or 12 KWH/4mgh, and the daily consumption has not exceeded 6 KWHs or 2 mgh.

By 2001 the total number of clients is 9296. Out of these 210 were government Organization 55 non-government Organization and 9031 individual house holds.

According to the household survey 351 (61.1%) customers used their own meter, 215 (37.5%) shared meter, 1 (0.2%) used lantern, 7 (1.2%) used kerosene as a source of light.

Table 5F'. Distribution of Households According to Source of Electric Light

Source of Electric Power	No. of Household	Percent of The Total
Own electric meter	351	61.1
Shared electric meter	215	37.5
Use Lantern	1	0.2
Use Kerosene	7	1.2
Total	574	100

Source: Household Survey of 9 Sample Kebeles of Jimma Town - 2001.

Larger proportion of the population has access to the provision of electric light, however, though minority there are some who live in an environment of polarity - using lanterns and kerosene - traditional source of light.

5.7 TRANSPORTATION

Faulk (1990) defined transport as "process which involve a variety of skills. Transport is the means by which commodities and people are moved from one place to another' (Michael Barke 1986).

Many economists believe that transport is the single most factors in development. To Adler (1987) transport infrastructure is usually a pre-requisite, though by no means, a guarantee of economic growth

As to Barke and O. Hare (1992: 156), "the existence of effective transport system may be viewed both as an indicator and initiator of development".

Moreover without an effective transport system, exchange cannot take place, and to them, "it is exchange of commodities people and their ideas that allows an economy to grow".

Transport improves accessibility and changes the relative location of places and phenomena. In view of this Mekonen (1986: 1) has to say that " transportation has

intervened into the tyranny of distance overtime" is a major agent of geographic change.

Jimma is the center of transport for the whole southwestern Ethiopia. Roads radiate into all directions and link the town with Addis Ababa, Bonga, Mizan Teferi, Aman, Teppa and Jimma, Agaro, Bedelle, Metu, Gore, Gmbella and Nekemt. Accordingly Mekonen (1986: .112) wrote "The early discovery and trade in coffee and perhaps the evolution of the Ethiopian road network in radial pattern contributed to the emergence of Jimma as the center of S.W. Ethiopia".

5.7.1 MODES OF TRANSPORT

The main mode of transport in Jimma is road. It was noted by the technical department of the town that it possesses 70.16 kms of internal road system. Out of this 19.42 kms are asphalted, 27.76 kms are made of gravel and 22.98 kms an unpaved.

The density of the road in the town is,

$$\begin{aligned}\text{Road density} &= \frac{\text{Length of Road}}{\text{Total area}} \\ &= \frac{206}{4622.58} \\ &= 0.045 \text{ hectares per unit area}\end{aligned}$$

There is need of investing maximum effort in the rehabilitation and hence promotion of the existing road system, through renovation and rehabilitation because the Italian build roads have already deteriorated.

5.7.2 TRANSPORT SERVICES

1. Inter Urban Road Transport

Jimma as the center of transport in the southwestern part of Ethiopia, daily receives daily a minimum of 12 (twelve) maximum cross-country buses reaching the passenger terminal.

AIR TRANSPORTATION

Jimma has domestic airport. According to NUPI (1997) 'the run way has 2 kms length and 45 meters width'. It is an asphalt concrete strip. It cannot however be used by large planes like the big jets, which need bigger landing strips of at least 2.5 kms.

5.7.2.1 Intra Urban Transportation

HORSE DRAWN CARTS: is the most useful means of transport in the town. It has become the most accessible source of employment opportunity for the youth after completing grade twelve. It is also used to carry people and goods between peripheral areas of the town. By the year 2001 the number of horse drawn carts in Jimma totaled 370.

TAXI CAB:

There are 179 cabs in the town. Most of these cabs are mini buses with 12 or 16 seats. Jimma today is again becoming the most populous town. In view of this, considering the last projected population size of the year 2000, which was 119,510 people, the number of cabs is not adequate. Given the vastness of the built up area and rather the small number of private cars and city bus, the number of cabs is not as large as it looks. It is an insufficient provision, because the ratio of a taxicab falls close to 666 people.

CITY BUS:

The city bus service began in 1975 Eth.c. Since recently its service has been extended to the near-by woreda towns not exceeding 25 kilometers. This included such towns as Yebu, Seka, Serbo, and Sheiki. The city bus Service is most often interrupted by engine failures because the buses are old having been in long service in Addis Ababa. Prior to being brought to Jimma.

Table 5G'. Distribution of Vehicles in Jimma

Type of Vehicle Ownership	No. of Vehicles
Private car	217
Taxi cab	179
Government car	704
Trucks	403
Public Transport	640
Motor Bicycle	385
Horse Drawn Carts	379
Total	2907

Source: Jimma Zone Transport Authority Office - 2001.

Nevertheless the sample household survey has different view. Hence, among respondents 38.2% suggested that transport facility and its service are adequate, 52.9% inadequate, 4.7% low and 4.2% almost nill etc.

In close examination the respondents have the following opinions concerning the current transport cost. About 63.5% reported that they were extremely high. Those reporting they were medium accounted 24.4%, and 6.3% reported that they were low, while 5.8% said it was extremely low. Jimma at present is located at a suitable geographical center. It is serving as a break of bulk point for passengers, agricultural and industrial products. It is becoming, even more an attractive gateway city. It has the most potential linkage effect. Therefore it needs to generate all the necessary infrastructural inquiries such as lodging services and entertainment services.

However with the present undertaking, it is pending around what Lopez (1966) suggested: "Pirenne was satisfied with cross road symbol and that was not enough".

5.7.3 Communications

Channels through which ideas, feelings and other messages are conveyed generally are termed communications. Gotmann (1983) claimed

that the notion includes the potential opened up for communication among people, for transmission of messages, and for gathering storage and even analysis of information by modern tools produced as a result of advances in electronics, and all that may be ensured in terms of both hard ware and soft ware.

The most common communication channels that fall under physical infrastructure are Telephone and postal services.

5.7.3.1 Telephone Service

Jimma town has access to the latest telephone service in the country. The number of clients has increased from time to time. It is developing dramatically by swift propulsion. As a result new multi story buildings are being erected, more and more cable lines are laid. Since last August 2000 the Branch Corporation has promoted it's a board capacity to 8000.

Table 5H'. Distribution of Telephone Clients Jimma Town - 2001

Year	Private	Government	Total	Percent of The Total
1988	671	765	1,436	-
1989	654	763	1,417	-1.3
1990	635	748	1,419	-0.1
1991	658	782	1,440	1.5
1992	1,264	720	1,984	37.9
1993	1,821	724	2,545	39.0
1994	1,929	760	2,689	5.8
2000	2,417	497	2,974	10.6
2001	3,885	850	4,735	37.2

Source: Telecommunication-Corporation Southwestern Regional Office-2001

Though the installation charge has now increased by 67 percent which went from Birr 115 to 347 Birr, in due course demand has not declined.

Postal Services

There is a regional post office in Jimma; two district offices located at Hirmata and Jiren-quarters, the main services rendered by the offices include, selling postal money coupons, pay postal money, exchange postal stamp and sell, and, distribute newspapers and magazines. The post office renders both domestic and international communication services.

In an attempt to promote accessibility to postal service, it has fixed 12 postal containers following areas of agglomerated settlements in the inner and outskirts of the town.

5.8 UNEMPLOYMENT

Unemployed person is one who require family support, his or her spouse must provide basic income Preston (1990: 177).

Ghose (1990) said that "Developing countries are confronted with a challenge of employment creation which is quite unprecedented in history". Ross (1994: 66) too, estimated" that about 20% of the all the Third World urban dwellers are unemployed, although it is impossible to be precise, as accurate statistics are unavailable.

Though intangible many people attach the present size of unemployment to the pace of out migration from agriculture. Nevertheless registered data source justify that major of these categories have technical and educational qualification. Therefore less is known about the unemployed rural or illiterate.

Infact due to underlying customary practices, registered unemployment depends on voluntarily basis as a result of which Beaujeu Garnier (1966) explains, "neither

unemployment nor under employment is easy to measure, to her, both of these are serious social melodies, which need urgent solution".

However "many towns in the third world are growing quickly but they frequently lack the economic and financial justification for their size" (Clarke 1981).

Table 5I'. Distribution of Registered Unemployment of Jimma - 2001.

Educational Level	1998 Registered	Employed	1999 Registered	Employed	2000 Registered	Employed
Illiterate	-	-	-	-	5	-
1-6	202	22(10%)	126	19(15%)	88	3(3.4%)
7-8	186	4(2.15%)	74	-	116	3(2.58%)
9-12	616	20(3.3)	800	5(0.63)	664	7(1.05)
Vocation/Tech.	125	10(8%)	84	-	33	1(3)
Non-Graduate	-	-	-	-	1	1
Graduate	-	-	-	-	12	9(75)
Total	1129	56(4.90%)	1084	24(2.2%)	919	24(2.6)

Source: Labour and Social Affairs Department Jimma Zone.

Examination of the table revealed that in each year very few component accounting for 4.9%, 2.2% and 2.6% in the respective years of 1998, 1999 and 2000 were employed. Unemployment is wide spread and in the absolute sense unavoidable problem in the history of the town.

In view of this Engida (1986: .3) pointed out that "Jimma has grown steadily in its inhabitants since the 1940's however employment still calls for organization, as more than 58% of the adult residents are unemployed" in the formal sector. Even more worse is the present situation that in the above registered data for three years course unemployment continue pending above 95%.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

The principal objectives this study was to examine the over all pattern of development of the city of Jimma. Accordingly major emphasis was laid on the assessment of the variables that influenced the origin, physical expansion, change in demographic features, level of economic development and status of infrastructure in the town.

6.1. Conclusions

The present chapter attempts to review the major findings of the study and highlights their policy implication.

1. The origin and development of the town has been influenced by the interplay of physical, social and economic variables.
 - 1.1 Physically it had strategic location providing best defense post, healthy environment, fertile soil, water and building materials.
 - 1.2 Socially the effective administrative system that pacified the region as a result of effort made to unify several tribes around and formed a strong kingdom. Subsequently this rule has succeeded in linking the region with the Red Sea; and hence controlled long distance trade through which it had attracted migrant population with diverse views, experience, and all sorts of resource potential to the progress of the town.
 - 1.3 Economically the towns development rests on the early discovery of coffee as a cash crop and its export specialization, plus, the continued participation of the town in lucrative trade, (Gold, Ivory, slaves) etc. The central place role it has played since the 1800, functioning as an entrepôt for goods (NUPI-1997); a jumping off point for slaves (Jemal 2001), the hub of transport in the South Western Ethiopia (Mekonen 1987), break of bulk

point, and gate way city, are all the major factors that contributed to the foundation and growth of the town.

Further more the Italian attempt to make it 'Second Roma' and the name given to the city under Haileselassie I as "Jimma Yewubet ketema" have helped considerably to accelerate the development of the town.

- 1.4 An Analytic conclusion drawn based on the Rank-size rule, resulted in making the town to possess a predominant position among standard towns in the zone. i.e. those towns with threshold population of 2,000 and above in the zone. It possesses 47% of the urban population in the zone.
- 1.5 Ever since olden days the town had well established functional centers, divided into administrative, residential, and commercial quarters.

The town's physical area expanded since the 1960's and has increased from 1750 hectare to 2048 hectares by 1994 to 4622.58 hectares in the year 2000.

Though the town initially developed in "Spiders Web" pattern, has failed to satisfy the growing needs of its society, especially as regards the development in basic infrastructure.

The basic factor that worsened the problem is the limited financial resource available to develop the town; the root cause of which was, a weak system of revenue collection and complete lack of government subsidies.

- 1.6 The present physical expansion influenced planners to develop hierarchies of centers, accessible to communities in their respective localities, put as main sub, and neighborhood centers.

- 1.7 Analytic conclusion drawn to examine the relationship between planned and actually collected revenue over the period of eight years through computed correlation has resulted in (r) values of 0.466, indicating poor performance in revenue collection. In other words the municipality performed merely a below 50 percent achievement over the years under consideration.

The actually collected revenues, however were poor, the correlation analysis made to evaluate similar achievements between planned and implemented sector budget, the result has indicated the existence of strong physical relationship. The resultant achievement indicated by (r) was 0.75 or 75 percent successful. Much encouraging result than the case for revenue collected.

2. The population of the town has grown very fast in 1970's. It had moderate growth in the 1980's and has shown a declining trend since the 1994 population and housing census of the country.
 - 2.1 The related findings have also shown the decline in total fertility rate which was 4.17%, computed from the census results of 1984 to 2.46%, during the 1994 population and housing census.
 - 2.2. The annual rate of increase which was 4.2% in 1994, went down to 2.5% during the projected population of the year 2000.
 - 2.3. The population of the town has an uneven distribution. Computed values of arithmetic density have shown that most kebeles are densely populated. The figures varied from 125880 persons per hectares in Kefetegna 1 Kebele 7 to 38,2333 person per hectares in Kefetegna 2 Kebele 3.

However the estimated values of location quotient, brilliantly explained that most kebeles in Kefetegna one and Kefetegna two, fall under medium deficiency, while those in Kefetegna three have normal distribution.

- 1.4. The sample household survey conducted by the study has evaluated the demographic characteristics of the town and has shown, that (53.8%) the household have family sizes of 1 to 5, (41.5%) 6 to 10 above 10 family members accounting for 4.7%.
- 2.5. 39 percent of the households are headed by husbands and 32 percent by wives, and 29 percent by others. The assessment made on the sex composition indicated that 68 percent are male, and 32 percent are female.
- 2.6. The group of the sample population categorized below 30 years of age accounted for 16.2 percent, and between 31-60 years of age for 71.1 percent, while those above 60 years of age totaled 12.5 percent.
- 2.7. The majority of the households is in wed lock comprising 61 percent, divorced 10.8 percent, widowed 22 percent, and single 11 percent. The estimated dependency burden is 67 to 100.
- 2.8. The household heads born outside Jimma accounted for 67 percent and those in Jimma for 33 percent.
- 2.9. Among Ethnic groups 28 percent are Amharas, 25 percent Oromos, and the rest comprise 46.8 percent.
- 2.10. Children whose mother tongue is Amharic accounted for 80.1 percent, Oromgna 12.7 percent, and the rest 7.2 percent.
- 2.11. Among religious groups Christians accounted for 79 percent, Muslims 20 percent and the rest, for 1 percent.

- 2.12 In their educational status 29.8 percent of the household heads could read and write 32.6 percent completed elementary and junior schooling, 34.1 percent completed secondary school, and the rest comprised 3.5 percent of the sample house hold population.
- 2.13 The household distribution according to occupation revealed that 85.3 percent are engaged in tertiary sector, 12.2 percent in secondary and 3.5 percent in the primary sector.

The summary analysis on their work status too explained, 36.1 percent as government employees, 29.3 percent as self employed, and 34.6 percent as employed by other organizations.

It is also noted, among the household members that account 52.8 percent have permanent employment, 29.8 percent are casually employed, 13.9 percent employed on temporary basis while 3.5 percent were employed on continued basis.

Overview of the household income source indicated that is 36.1% are government employed and 52.8 percent have permanent employment.

The household category into income group resulted that 48.4% of them have median income of Birr 176, and coefficient of variation computed indicated that income varied at 56.58 percent.

- 2.14. Larger proportion of the households live in rented house, the greater part of which belonging to kebele administration with cheap rent. The houses never received maintenance service. The tenants had no future vision to settle their housing problem. Nonetheless they have better access to amenities and therefore 95.2 percent can get tap water supply, and 98.6 percent are serviced by electric light.

- 2.15 The educational institution in the town except those owned by the NGOs, have inadequate facilities and also are over crowded. Though they function in shift system the student classroom ratio for example in the secondary schools, is 1:158. There is also heavy burden on the health institutions that have small number of trained personnel. The medical institutions as a whole possess 241 beds.
- 2.16 The health problem in the town is aggravated by improper waste disposal practices and poor sanitation facilities.
-
- 2.17 The town has 70.16 kms of all types of road; and accordingly the ratio of road coverage to total area is 1:0.045. Moreover these roads have deteriorated, surface calling an urgent need for renovation.
- 2.18 The town has large population has poor provision of intra-urban transport, with extremely high transport cost charged.
- 2.19 The over all weak infrastructural base persisting in the town is a contribution of limited generative capacity of the municipality owing to the unsustainable bureaucracy in leadership, poor educational profile of its employees, and over reliance on local revenue.
- 2.20 The slow economic development in the town has been strongly linked with failure in the productivity, and the marketability of coffee at all levels.
- 2.21 The frequently changing municipal leadership or lack of sustainable bureaucracy to manage properly the development projects and the absence of clearly defined policy for attracting investors have all resulted in slowing down the growth of the city.

2.22 Continuously increasing registered unemployment with only few indications of secured job opportunity.

6.2 Recommendation

Urban development is the expansion of urban economic function, which is measured in terms of employment opportunities and development in urban social and physical infrastructure. It is seen as a product of increasing economic development and advancing technology, both of which are intimately associated.

The once economically prosperous Jimma town, except for the matters of its population, is one of the slow developing towns in the country. The findings have shown that it is confronted with crowded population, aggravated environmental problem and uncontrolled physical expansion. Therefore to ameliorate and mitigate the problems of the town the following recommendations are given.

1. Introduce a strong and viable policy that can provide a sustainable, bureaucracy, and an opportunity in continuing education to promote the qualification of the employees at the municipality, to inspire the realistic appraisal of the conditions and the needs of the people.
2. Create an institutional mechanism (*modus operandi*) that can fully enforce the collection and promotion of more buoyant revenue internally and policy guaranteeing enough to attract external source of revenue for more and more business into the town.
3. Incorporate clearly defined policy regarding the implementation of family planning programs to support the performance of the concerned agents on matters of population growth.
4. Introduce strong regional development programs, with the provision of financial, technical assistance to back up self generated employment schemes to minimize the rampant unemployment rate.

5. Develop policies that encourage public awareness and voluntarily participation of the community at large in the process of environmental protection and sanitary control of the city and urgently implement the suggested measures by NUPI (1997) to reduce the sanitary problems in the town.
 6. Promote the productivity and market ability of coffee through modern processing for much greater profitable revenue source, to attract more and more business into the city.
 7. Develop strategies that will change the occupational structure of the town from commercial complexes to the Industrial sector.
-
8. Introduce policies that improve transparency of investment and regulate public sectors in urban infrastructure including the housing sector, and promote self-help schemes in housing as well as in sanitary services.
 9. In the course of the study there were questions raised and that needs further investigation by other writers, of these questions the ones that require serious investigation include the following.
 1. Why was Jimma reduced to a zonal capital?
 2. Why is the city an able to attract meaningful investment?
 3. How does the lease policy affect the urban housing situation?
 4. What is the role of urban informal sector in providing employment opportunities?
 5. Why are there more international investors in anti-natalist policy, while there are non in the economic and the infrastructure sectors?

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APENDIX I

RESEARCH QUESTIONNAIRE

FROM A

The objectives of this questionnaire are to obtain relevant information and data to study the development of the town.

This information will be used to prepare a master thesis required for the (M.A. Degree) at Addis Ababa University Department of Geography.

In view of the above, the study will focus on the providing problems in the town that will ultimately lead to the recommendation of possible solutions.

Therefore it is believed that the success of this study depends mainly on your cooperation to provide reliable data.

Household Schedule

To be completed b Household Heads

Date of Interview

Respondent No.

N.B. Use 'X' for your Alternative opinion in the box.

01. Household record form

HOUSEHOLD ADDRESS			FAMILY SIZE																	
Higher	Kebele	House No.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16		

02. Head of the household was born in

1. Jimma ☐ 2. Outside Jimma ☐

03. Relationship of the household head

1. Husband ☐ 2. Wife ☐ 3. Children ☐ 4. Others ☐

04. Age in years

1. Above 60 ☐ 2. 31-60 ☐ 3. Below 30 ☐

05. Sex

1. Male ☐ 2. Female ☐

06. Marital Status

1. Single ☐ 2. Married ☐ 3. Divorced ☐ 4. Widowed ☐

07. Religion

1. Orthodox ☐ 2. Protestant ☐ 3. Catholic ☐

4. Muslem ☐ 5. Others ☐

08. Ethnicity

1. Amhara ☐ 2. Oromo ☐ 3. Keffa ☐ 4. Dowro ☐

5. Yem ☐ 6. Tigre ☐ 7. Gurage ☐ 8. Welaita ☐

09. Mother tongue of children

1. Amhargna ☐ 2. Oromgna ☐ 3. Kefigna ☐ 4. Dawrgna ☐
5. Yemsagna ☐ 6. Tigrgna ☐ 7. Gurghigna ☐ 8. Welaitgna ☐ 9. Other ☐

10. Educational Status of the household head:

1. Illiterate ☐ 2. Read and write ☐ 3. Primary level ☐
4. Junior ☐ 5. Secondary school ☐ 6. 12 + Higher Education ☐

11. Occupation

1. Primary (Farming, husbandry) ☐
2. Secondary (Manufacturing, construction) ☐
3. Tertrary (Education, Administration, Trade, Health, Transport Banketc) ☐

12. Work status:

1. Employer ☐ 2. Government employee ☐
3. Employee in private Organization ☐ 4. Self employed ☐ 5. Others ☐

13. Nature of Employment:

1. Permanent ☐ 2. Temporary ☐ 3. Casual ☐

14. Monthly income:

1. Birr 105-250 ☐ 2. Birr 251-500 ☐ 3. Birr 501-750 ☐
4. Birr 751-950 ☐ 5. Birr 951-1200 ☐ 6. Birr 1201 and above ☐

15. The household:

1. Owns the house ☐ 2. Rents the house ☐ 3. Other ☐

16. If rented belongs to:

1. Rental housing Organization ☐ 2. Kebele ☐
3. Free of charge (Kebele & No. 1) ☐ 4. Individual/private/ ☐
5. Other-Organization ☐

17. How many rooms does the house you live in have:

1. One ☐ 2. Two ☐ 3. Three ☐ 4. Four ☐

18. If rented how much do you pay for the house per month:

1. 1-20 ☐ 2. 21-40 ☐ 3. 41-60 ☐ 4. 61-80 ☐ 5. 81-100 ☐

6. 101-120 ☐ 7. 121-140 ☐ 8. 141-160 ☐ 9. 160-180 ☐

10. 181-200 and above

19. The amount you pay for the house you live in is:

1. Too much ☐ 2. Reasonable ☐ 3. Small ☐ 4. Others ☐

20. How often do you receive maintenance to the house you live in?

1. Every year ☐ 2. Every two years ☐

3. Never at all ☐ 4. Is crumbling ☐

21. Is the house you live in adequate for the family's need?

1. Yes ☐ 2. No ☐

22. If No is your answer to question number 21, What is your future plan:

1. Rent another house ☐ 2. Build a new house ☐

3. Move to other place ☐ 4. Not decided ☐

23. The house you live in has both kitchen and toilet

1. yes ☐ 2. No ☐

24. The Kitchen is used for:

1. Yes ☐ 2. No ☐

FORM - B

MUNICIPALITY SCHEDULE

N.B. Thank you, before for your cooperation and brief answers

I. MAYOR'S OFFICE

1. When was the municipality of the town established? And on what basis?

7. How do you allocate and utilize the Municipality Budget allocated and utilized in (000) Birr

S/N	Area of Budget Allocated	1994/95		1995/96		1996/97		1997/98		1998/99		1999/200	
		Alloca ted	Utilize d	Alloca ted	Utilize d	Alloca ted	Utilize d	Alloca ted	Utiliz ed	Alloca ted	Utilize d	Alloca ted	Utilize d
1.	Road												
2.	Housing												
3.	Health												
4.	Education												
5.	Lightening												
6.	Recreation												
7.	Sanitation												

8. How is the distribution of expertise among different structures of the municipality's organization

Department/Office _____

S/N	Educational Status	Total	Job Description	Remark
1.	BA./B.Sc and above			
2.	Advanced Diploma-technical			
3.	Advance Diploma Commercial			
4.	Grade 12 complete Technical			
5.	Grade 12 Complete Commerce			
6.	Grade 12 complete Academic			
7.	Elementary School Complete			

Land Administration and Technical Service department.

9. What has been the built up area in the following consecutive years/

9.1 1960-1974 _____ hectares

9.2 1974-1994 _____ hectares

9.3. 1994-2000 _____ hectares

10. How many kilometers of internal road system does the town possess?

10.1. Asphalted _____ kms (kilometers)

10.2 Gravel _____ kms (kilometers)

10.3 Earth road _____ kms (kilometers)

11. What are the basic factors that contributed to the sanitary problems of the town?

12. Would you please fill in the table indicated below?

S/ N	Transport Facilities	No. Of seats	Total
1.	Horse Drawn carts	-	
2.	Taxi CAB	4	
3.	Taxi CAB	12	
4.	Taxi CAB	16	
5.	City Bus		

FORM - C

WORKS AND URBAN DEVELOPMENT DEPARTMENT SCHEDULE

N.B. Thank you for your cooperation and Brief Answers

1. What are the basic activities (duties) of the office.
2. Do you create job opportunities if so what are the achievements so far?
3. Do you have quarters planned for Industrial development? If so what are the foreseen potentials to select those sites.
4. In your opinion what are the factors that delayed the engagement of Non-governmental organizations to invest their financial and technical resources in Jimma?
5. How efficient have you been in your opinion what prime measures must be implemented to develop a single dominant economic sector in the town.
6. If further options _____

FORM - D

TRADE INDUSTRY AND TOURISM DEPARTMENT SCHEDULE

1. What are the main causes of the present slow commercial activities in the town?
2. What are the responses of the population directly engaged in the sector; Resist, evacuate or has any other reaction?
3. How many Industrial establishments are there and what is the size of the employment?

Table 3A-Number of Industrial Establishments

S/ N	Establishment	Total	Size of Employment	Remark
1.	Food/oil-mills			
2.	Textile			
3.	Wood/saw mills			
4.	Metals work			
5.	Chemical/Detergents			
6.	Coffee processing			
7.	Grain-Mills			
8.	Maintenance			
9.	Brick manufacture			

3.1. What is the future plans to industrial development in the town?

3.2. What are the potential possibilities?

4. Please indicate the number of establishments among the following commercial institutions

S/N	Establishment	Size
1.	hotels	
2.	Textiles/Shoes	
3.	Grains	
4.	Whole Sales	
5.	Retail Sales	
6.	Trade in Coffee	
7.	Construction materials	

5. Have you ever been concerned with the informal sector of the trade?

1. Yes

2. No.

5.1. If yes how far is its growth

5.2. How relevant and useful is it with general existing situation?

6. How much visible has been the development of Tourism in the town?

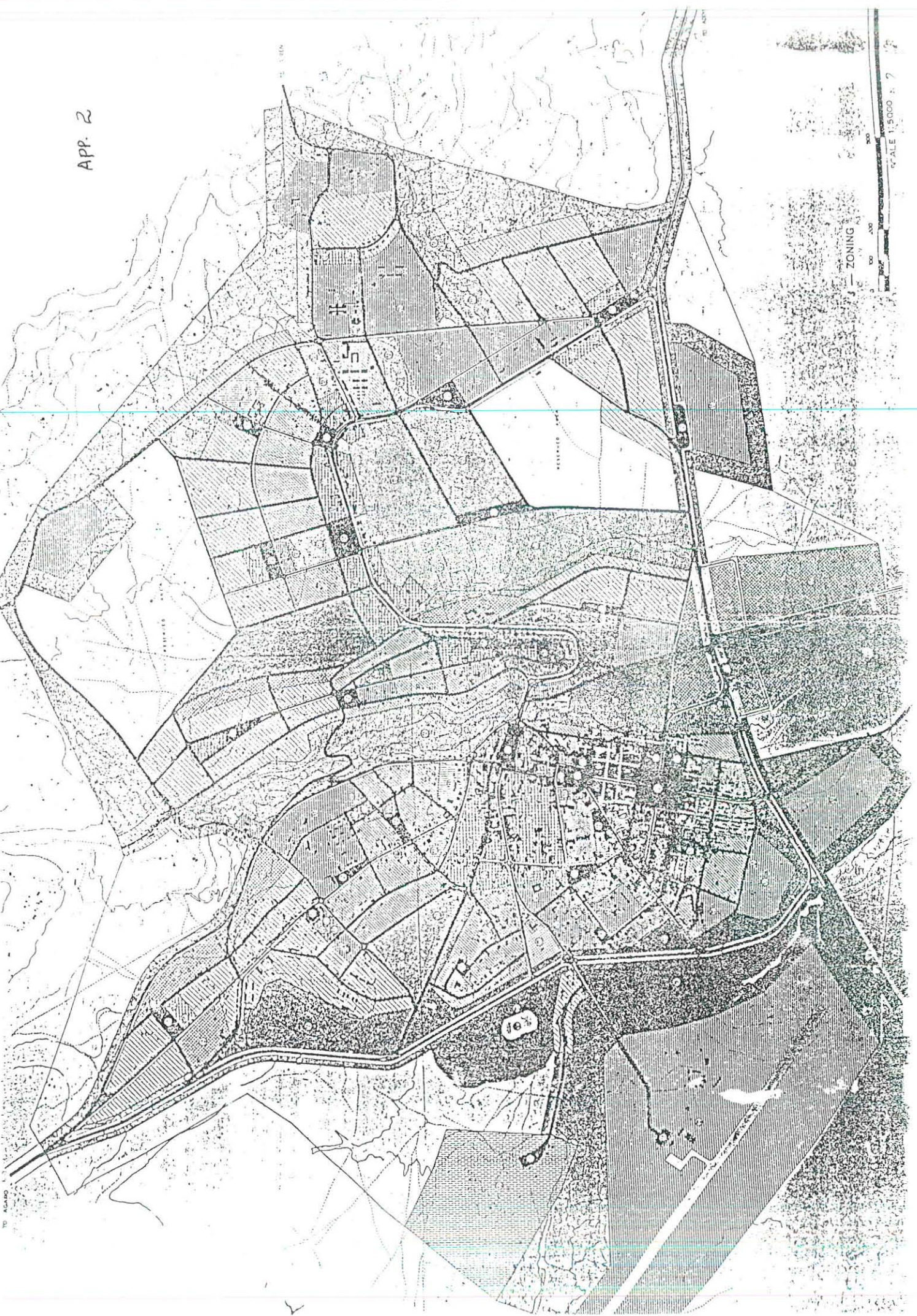
7. What are the sites of:

7.1 Man - made cultural features

7.2. Naturally endowed features

8. General opinion

APP. 2



ZONING

SCALE 1:5000

Appendix: 3 Sources of Revenues (in 000 BIRR)

	Sources	94/95			95/96			96/97			97/98			98/99		
		Plan	Actual	%	Plan	Actual	%	plan	Actual	%	Plan	Actual	%	plan	Actual	%
A Taxes																
1	Business taxes	900	682	76	990	1339*	135	1040	852	82	1040	195	19	1029	436.4	42
2	Market place tax	60	27.5	46	66	30.7	47	69.5	35	50	69.3	2.2	3	70	29.5	42
3	Live stock tax	25	4.3	17	27.5	6.7	24	22.9	6.4	28	28.9	0.4	1	25	-	-
4	Urban land rent	200	59.7	30	210	188	90	220.5	*322.3	146	231.5	167.2	72	300	278.2	92.7
5	Building tax	150	37.3	25	151.9	*215.1	142	159.5	146	92	167.4	130.8	78	200	202.9	101.4
6	Various taxes	400	19.9	5	440	28	6	462	30.5	7	40	9.6	24	30	9.2	30.6
Total		1735	830.7	48	1885.4	1807.5	96	1974.4	1392.2	71	1577.1	505.2	32	1664.5	956.2	57.4
B Service charges																
7	Loading and unloading charge	700	739*	106	756.9	*788.1	104	800	1078.7	135	880	**3513	40	880	304	34.5
8	Sanitation fees	100	30.9	31	120	80	67	120	29.9	24	80	9.4	12	80	16.2	20
9	Technical service	120	132	110	169	83.1	49	84	110.9	132	200	110.3	53	210	82.2	39
10	Slaughter service	250	98.2	39	262	199.9	76	275.1	223.4	81	275	140	51	290	185.2	63.8
11	Contract agreement	100	*258.3	258	284.1	*395.4	139	40	*524.2	1310	310	367.9	119	320	192.6	60
12	Land permit	20	-	-	21	164	32	200	139	70	250	-	-	250	191.1	76
Total		1345	1258.4	94	1670.5	1710.5	102	1585.7	2106.1	133	1995	978.9	49	2085	971.5	46.5
C From municipal properties																
13	Property rent	50	21.7	43	52.5	28.6	54	55.1	43.3	79	55.1	2	4	30	12.7	42
14	Sales of assets	150	64	43	127.8	3.4	3	165.6	145.6	88	520	1	0.2	10	4.7	47
15	House rent	160	107.2	67	168	126.4	75	176.4	512.9	291	708.8	194.6	27	720	248.1	34
16	Gravel Sales	60	21.2	35	63	12	19	66.2	-	-	70	-	-	120	-	-
Total		3600	2659.9	74	4356	418.7	96	4140.6	4303.5	104	5058.2	17022	34	4734.5	21049	46.3
D Miscellaneous																
17	From AAHR*	70	19.8	28	73.5	28.3	39	77.2	30.7	40	32.2	-	-	35	-	-
18	Miscellaneous	30	*334.6	1115	315	*471	150	40	*72.7	182	100	20.5	21	70	1.7	2.4
Total		3600	2659.9	74	4356	4187.7	96	4140.6	4303.5	104	5058.2	1702.2	34	4734	2104.9	46.3

Source: The municipality of Jimma, Finance and budget department.

* Above plan

** The period when 'kella' checkpoints were lifted

* AAHR = Agency for the Administration of rental Houses

APPENDIX 4

LOCATION QUOTIENT = $\frac{\text{Local Population}}{\text{Regional Population}}$

Location Quotient	Characteristics
0.0 - 0.2	High deficiency
0.3 - 0.5	Medium deficiency
0.6 - 0.8	Slight deficiency
0.9 - 1.1	Normal distribution
1.2 - 2.0	Slight Excess
2.1 - 5.0	Medium Excess
7.5 →	High Excess

Appendix 5: Bale 1981 - Regional analysis by Main Order Heading of the Standard Industrial Classification.

Thousands

Industry (Standard Industrial Classification 1968)	ECONOMIC PLANNING				REGIONS				Wales	Scotland	Great Britain
	South East	East Anglia	South West	West Midlands	East Midlands	Yorks. and Humberside	North West	North			
1 Agriculture, forestry, fishing	86.5	46.7	37.8	25.3	28.4	29.0	14.0	19.8	12.1	58.7	358.4
2 Mining and quarrying	15.6	2.5	14.7	31.2	80.4	92.9	22.0	70.0	51.0	42.5	422.9
3 Food, drink and tobacco	219.6	43.1	70.2	75.5	50.3	88.3	135.1	43.8	22.8	113.9	862.6
4 Coal and petroleum products	21.9			1.3	3.2	7.3	9.7	3.7	8.1	3.5	59.1
5 Chemicals and allied industries	154.7	12.6	12.7	22.0	19.5	36.9	114.6	56.4	17.7	29.6	476.6
6 Metal manufacture	49.3	3.7	8.2	143.3	45.1	104.4	34.4	51.4	88.2	48.7	576.1
7 Mechanical engineering	337.9	30.4	68.4	154.1	103.6	113.3	153.6	74.8	32.8	107.2	1176.0
8 Instrument engineering	84.7	5.5	14.0	8.5	5.0	5.7	10.5	3.6	3.6	19.5	160.0
9 Electrical engineering	380.3	26.3	35.0	118.8	36.1	30.4	131.3	57.8	31.2	52.4	898.0
10 Shipbuilding and marine engineering	49.2	4.3	18.0	1.4	1.5	8.0	31.0	38.5	1.7	46.7	200.3
11 Vehicles	230.7	18.6	62.5	218.0	54.3	45.5	123.1	14.0	26.1	39.0	832.8
12 Metal goods not elsewhere specified	158.9	5.4	16.1	211.9	27.9	83.5	60.8	15.0	24.9	31.3	635.7
13 Textiles	30.9	3.8	14.6	31.7	116.2	141.2	170.6	23.7	20.5	80.8	633.9
14 Leather, leather goods, leather fur	16.9	1.2	3.5	5.0	4.9	5.7	8.6	2.5	1.6	3.7	53.6
15 Clothing and footwear	120.3	13.1	25.5	22.4	70.3	58.9	81.9	36.5	17.5	35.1	481.2
16 Bricks, pottery, glass, cement, etc.	78.6	7.9	10.4	76.7	23.2	36.0	46.9	19.9	11.5	24.3	335.5
17 Timber, furniture, etc.	116.0	10.6	18.9	22.5	19.8	29.3	35.0	13.7	9.5	27.1	302.2
18 Paper, printing and publishing	297.6	17.9	39.1	33.5	27.8	37.4	87.3	20.2	14.0	55.8	630.7
19 Other manufacturing industries	129.2	10.2	18.9	55.4	19.6	17.4	52.0	14.0	20.3	17.3	354.4
20 Construction	408.9	44.2	89.6	115.8	77.3	116.9	150.4	101.4	77.6	184.0	1366.1
21 Gas, electricity and water	127.5	11.4	26.7	35.4	23.4	34.0	45.7	20.9	21.5	31.0	377.6
22 Transport and communication	677.2	42.9	85.4	106.6	69.0	121.3	215.9	74.1	65.2	146.7	1604.3
23 Distributive trades	1001.6	70.9	169.7	207.0	150.2	221.7	330.1	148.1	95.4	253.3	2648.1
24 Insurance, banking, finance and business service	574.3	17.6	39.1	56.7	33.8	52.5	96.3	28.4	20.1	67.9	986.6
25 Professional and scientific services	1042.7	89.8	195.3	257.6	153.1	241.0	357.4	160.8	130.6	294.2	2972.7
26 Miscellaneous services	723.4	57.4	143.1	137.0	86.8	319.0	202.2	108.5	76.7	174.7	1848.8
27 Public administration and defence	605.9	38.9	103.8	98.6	66.9	90.1	151.9	82.7	63.9	133.4	1445.6

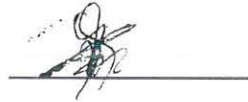
DECLARATION

I, the undersigned, declare that this thesis in my original work has not been presented for a degree in any other university, and that all sources of material used for the thesis have been duly acknowledged.

NAME

HABTE GEBRE MICHAEL

SIGNATURE



CONFIRMATION BY THE ADVISOR

NAME MEKETE BELACHEW

SIGNATURE  DATE JULY 6/2001

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