

TITLE

COMMUNITY INVOLVEMENT IN COMMUNITY HEALTH

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SERVICE

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by

Mathewos Wakbulcho

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M D

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Thesis submitted as partial fulfillment of the requirements  
for the degree of Master of Sciences.

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February, 1988

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ADDIS ABABA, Ethiopia

DECLARATION

I, the undersigned, declare that this thesis is my work and that all sources of material used for this thesis have been duly acknowledged.

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Date of submission: February 25, 1988  
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COMMUNITY INVOLVEMENT

IN

COMMUNITY HEALTH SERVICE

A STUDY IN AN URBAN AND A RURAL DISTRICT

OF ETHIOPIA

## ACKNOWLEDGEMENTS

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Mathewos Wakhulcho, M.D.

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## LISTS OF ABBREVIATIONS

CHS	Community Health Service
CHAs	Community Health Agents
CHWs	Community Health Workers
CHC	Community Health Committee
EPI	Expanded Program of Immunization
HP	Health Post
MOH	Ministry of Health
NDR	National Democratic Revolutionary Program
NGOs	Non-Government Organizations
NHDN	National Health Development Network- Ethiopia
ONCCP	Office of National Committee for Central Planning
P/A	Peasants Association
PDRE	People's Democratic Republic of Ethiopia
PHC	Primary Health Care
TBAs	Trained Traditional Birth Attendants
UDA	Urban Dwellers Association
UN	United Nations
UNICEF	United Nations Children's Fund
UNRISD	United Nations Research Institute for Social Development
WHO	World Health Organization

## S U M M A R Y

Nine hundred households from thirty separate communities were surveyed in one urban district, Ketena 5 in the city of Addis Ababa, and one rural district, Chebo-Gurege, to assess community involvement in decision-making, planning and implementation of seven specific community health activities. The health activities selected were recruitment and support of CHAs and TBAs, construction of a health post, construction of latrine and refuse pits, immunization program activity and provision of safe water supply. The study communities were also assessed with respect to the availability of community health services by looking at the activity of CHAs and TBAs and the existence of a health post and activity of the local health committee, while the rate of immunization coverage in the under two year olds and pregnant women was also determined.

In all three areas of community involvement i.e decision-making, implementation and planning, rural communities scored higher than urban communities, with the exception of environmental activities where urban communities were slightly more involved than rural communities in implementation but not in the decision-making and planning aspects.

Lower community involvement in urban areas was associated

with lower activity in their community health services and in some cases almost a total lack of such community health services, whereas rural communities had a higher level of activity and existence of community health services. However, despite a lower level of community involvement and lower activity in the community health services, urban communities had moderately high levels of immunization coverage in the under two year olds, suggesting that immunization coverage can be achieved despite the recorded weakness in such areas. The close association of community involvement and activity in the community health services does seem to be at least partly responsible for the relatively high levels of immunization coverage obtained there and may indicate the greater importance of such features in rural life.

Study of the fifteen rural communities in more detail revealed gradations of CHS activity, community involvement and immunization coverage. Comparisons of areas of high, moderate and low coverage supported the overall conclusions and in addition revealed some other interesting features.

The fact that a distance of less than 5 kms to the nearest conventional health unit appeared to exert a negative effect on the activity of community health services, proved to be a feature of rural as well as urban communities.

The different level of involvement of the rural and urban community in CHS could be related to the variations in demographic, socio-economic and structure of local organizations noted between the two communities. In rural communities, most of the heads of households were older, male dominated, full employed, homogeneous with respect to culture and ethnicity as well as urgent need of health service, with strong organization of peasant associations, producers cooperatives and villagization schemes.

Urban heads of households were, on the otherhand, characterized by younger age, single marital status, more female heads, relatively high unemployment, greater heterogeneity in ethnicity and culture and loose local organization and coordination in health development as well as greater accessibility to conventional health units.

In both rural and urban communities, they still would prefer external support of their health service, particularly from the government, indicating a need for strengthening PHC managements and enhanced community education about the benefits of self reliance in health, as in other matters. In general, a surprising appreciation and acceptance of community health workers was expressed with the largest number of complaints being directed towards the inadequate numbers of them available and their inability to treat a wider range of health problems.

# COMMUNITY INVOLVEMENT IN COMMUNITY HEALTH SERVICE

## CHAPTER I

### INTRODUCTION

In 1975 a UNICEF/WHO study showed that less than 20% of the rural population in most developing countries receive basic health care on a regular basis (1). During this same period in Ethiopia, less than 20% of the population had access to health service (2). Community involvement is widely recognized as one of the most important strategies needed to ensure the extension of essential health care to the masses (3). Although this principle is globally acknowledged, there is little agreement on what the term means and it is interpreted in widely varying ways. Reasons why it is needed, who should participate, in what they should participate and how, are still being debated. Participation has been misinterpreted as the mobilization of the people's resources such as money, labor and materials, for government-planned and controlled programs. Such contributions from the people are usually desirable, but they are only one aspect of participation (4).

True community participation is a process through which the people gain greater control over the social, political, economic, and environmental factors that influence their

health. By acquiring appropriate knowledge, skills, organizational capacities and a heightened sense of individual and collective responsibility, low-income communities can achieve remarkable improvements in health status through their efforts.(5)

The Community must participate, not just in implementation, but in every stage of the health program. (6)

- in situation analysis
- in defining the main health problems (planning)
- in setting priorities for the program (decision making)
- in implementing activities
- in monitoring and evaluating the results.

In other words, community involvement is active involvement of people living together in some form of social organization and cohesion in the planning, operation and control of PHC using local, national, and other resources (7).

The term involvement as used here means the highest form of participation. The definition developed at the 1978 conference on PHC held at Alma-Ata elaborated on what constitutes community involvement as being a process by which individuals and families assume responsibility for their own health and welfare and for that of their community and develop the capacity to contribute to the community's development. Through involvement they come to know their own situation better and are motivated to solve their common

problems. This enables them to become masters of their own development instead of passive beneficiaries of development aid. They, therefore, need to realize that they are not obliged to accept conventional solutions that are unsuitable to them. They have to acquire the capacity to appraise a situation, weigh the various possibilities and estimate what their own contribution can be. While the community must be willing to learn, the health system is responsible for explaining and advising and for providing clear information about the favorable and adverse consequences of the interventions being proposed, as well as their relative costs(7)

The term involvement is preferable to participation because it implies a deeper and more personal identification of members of the community with PHC (8). Community involvement has been advocated for various reasons. White has described ten reasons as follows:

- (1) more will be accomplished
- (2) services can be provided at lower cost
- (3) participation has intrinsic value for participants
- (4) it can be a catalyst for development efforts
- (5) it leads to a sense of responsibility for projects
- (6) it guarantees that a felt need is involved
- (7) it ensures things are done the right way
- (8) it makes use of indigenous knowledge and expertise
- (9) freedom from dependence on professionals
- (10) conscientization of people results (9).

The question as to who should participate in community health development has been intensely discussed. In general, it is agreed that the socio-economic condition of the community determines the extent of community involvement. The level of control of communities on the political, social and economic system will then affect their mode of participation (10).

Many of the early health strategies directed at improving health for the majority of the world's population have had minimal impact because they failed to actively involve communities in their health affairs. Adoption of PHC has hoped to correct this by emphasizing community involvement(11).

In developing countries, where millions of people are without basic health care, government effort alone can not ensure that people will be able to lead a healthy, socially productive lives, and increased and more effective efforts are needed to involve the communities. Through active involvement in delivery, maintenance and utilization of health services it is hoped that equity in distribution of the health services can be realized as well (12).

Analysis of past health development in Ethiopia reveals that most attempts to improve the health status of the people have been confined to the health sector alone. Where the community has been involved, participation has usually been confined to implementation alone and rarely included participation in planning and decision making. Recent

attempts have been made to alter this in Ethiopia and to involve communities in planning and decision making as well as implementation (13).

To improve their low health service coverage people in Ethiopia have been encouraged to high levels of community participation in the hope that their active involvement would accelerate the availability and coverage of basic health services (13). However, despite this well-intentioned attempt to increase coverage and availability of health services, no studies are available that evaluate the effectiveness of involving communities or assess factors associated with effectiveness of such strategies. Indeed few studies are available in the world literature to document the positive effect of community participation on health status and fewer still attempt to measure the level or type of involvement needed for a positive effect on basic health parameters despite the widespread acceptance of such views.

Ethiopia currently has a strong central commitment to community involvement through mass organizations in such national programs as the literacy campaign, villagization and collective farms, as well as in health. Health policy in Ethiopia since 1976 has placed emphasis on promotion of self-reliance and community involvement, in particular emphasizing rural health services and disease prevention and control (14). Yet despite the emphasis placed on

community participation and its obvious importance little is known about how it can most effectively be achieved or which strategies work best in rural or urban settings.

This study was undertaken to look at community participation in rural and urban communities in Ethiopia, to see how such participation was related to the health services available in the community, and to see whether such participation and activity resulted in better coverage in one of the main health programs offered by the community health service, that of immunization.

#### Objectives of the study

The general objective of the study was to look at the relationship between community participation, available community health services and rates of health service coverage in immunization in rural and urban communities and to see what relationships exist between them.

#### Specific Objectives:

1. To differentiate levels of involvement of communities in the planning, decision-making and implementation phases of community health service activities.
2. To determine availability of health service within the community using the presence of a health post, activity of the community health agent and the activity of the community health committee as guides.

3. To assess the community health service utilization using specific parameters of immunization coverage.
4. To compare aspects and relationships between community participation, health service activity and health care coverage in rural and urban areas.

## CHAPTER II

## STATE OF KNOWLEDGE

The concept of community involvement as an integral part of community development has ancient roots. How a community organized itself for development was of interest to Plato. He argued that grass-root participation was necessary to sustain development in a community. Aristotle in his *Politic* mentions the necessity of involving the individual in decisions that affect his life. This he noted leads to motivation of individuals in activities aimed at their social betterment (15).

With the progress of medical science in the last century, much attention was given to modern technology without due concern to social and environmental conditions. This approach led to provision of a high level of medical care to a limited number of individuals while the majority received little or no health care. Since such medical service was individual-centered, community participation received little attention. This in turn led to the belief that health was solely in the hands of medical professionals. Thus the idea that health is a community affair, was not a popular notion at this stage (16).

In the middle of this century it was realized that health improvements would not be achieved solely through the efforts of health professionals. A joint study by

WHO/UNICEF in 1975 identified community participation as one of the key factors in successful health programs in countries as diverse as China, Cuba, Indonesia, India, Guatemala, Bangladesh and Nigeria (17). Such studies provided the working documents for the Alma-Ata conference on Primary Health Care of 1978 which appealed to member states to adopt the strategy of community participation after due consideration of the prevailing socio-economic and cultural conditions in each country.

The United Nations Research Institute for Social Development (UNRISD) was initiated in 1979 to provide participatory research. Their findings have indicated that the involvement of communities in identification of problems encourages them to identify felt needs and seek appropriate solutions (18).

From these and other experiences the concept of community participation was formalized in a strategy for providing basic health services and has been adopted by the UN General Assembly (18).

The literature contains descriptive articles about aspects of community involvement but no methods have been agreed upon for measurement of either the extent or effectiveness of such involvement. Experiences of community health service programs in the Philippines (19) and Ecuador (20) have revealed unsatisfactory involvement of both the

community and health workers. In other reports from Senegal (21), Cuba and China, the community and health workers were actively involved in supporting and coordinating community health service (22).

Studies in the Americas and the Caribbean have also attempted qualitative measurement of type or area of involvement of communities in provision of health service. Communities were assessed in three areas of planning, execution (implementation) and evaluation and given a subjective score of moderate, minimal or no community involvement. Participation in evaluation in this study was found particularly difficult to assess (23).

Criteria for quantitative assessment of community participation in health programs was discussed and a theoretical formula proposed for measurement by Agudelo in Colombia in 1985. Using this approach, he found that the method detected changes in two communities that occurred during a one year period. Although the findings described suggest that the method is quite sensitive, validity and reliability would require more studies especially further field trials (24).

The People's Democratic Republic of Ethiopia is a country with a multitude of nationalities and great diversity of cultures and customs. Traditionally there are many expressions of community participation in Ethiopia such as

"edir" for mourning ceremony, "ekub" for saving money and "mehaber" for various social self-help as occurs in construction of a house.

Since the revolution in 1974, community associations, organized as Urban Dwellers Associations in urban areas and Peasant Associations in rural areas, have been formed throughout the country. Their functions are political and social including education and health development, guidance of the masses and economic development. They choose local development priorities and raise local development funds. The government sees the other mass organizations for youth, women, professionals and trade union associations as a key resource for assisting the Urban Dwellers and Peasants Associations in developing their community health services. Specific health programs in Ethiopia such as the malaria control program have had community involvement with up to 90.7% of the local people involved in spraying operations in certain sites in 1985 (25).

Attempts to measure community involvement have been made by Agudelo using planning, control (decision-making), execution (implementation) and evaluation. Particular difficulties were encountered in his study in measuring evaluation and no quantitative measurement was done (26).

Somewhat more information is available in the literature regarding community health service although most of it also

is of a descriptive nature. It is usually defined as the part of the national health service delivery system at the most peripheral level where it interfaces with the community and includes all elements of primary health care. The specifics differ from country to country and obviously influence the services available and coverage. Community health services in Ethiopia include all eight elements of Primary Health Care.

The community health service has been planned to be staffed by a Community Health Agent (CHA) and a trained Traditional Birth Attendant (TBA). One CHA and one TBA are to be assigned for every 1000 people. They are meant to be coordinated and supported through the guidance of the health committee and work both in and out of the health post established near the kebele office. A small revolving fund is to be supplied by the community for purchase supplies, basic drugs, etc. (26). Ethiopia has been particularly active in providing such community health workers and training them for their duties. There are 9,644 community or kebele health service units established in residential area in urban and rural. While a total of 9,516 CHAs and 7,957 TBAs have been selected and trained as of September 1987 (27).

Training of the CHAs and TBAs in Ethiopia has been going on for over ten years with increased activity in the past four years. TBAs are trained for competence in identification of

high risk pregnancies, provision of antenatal and postnatal care and safe delivery practices. CHAs receive three months training in environmental sanitation, health education, community mobilization, prevention of disease and treatment of simple common diseases (28).

Both TBAs and CHAs are selected by their community, although the degree of involvement in the selection may vary with some workers being selected only by community leaders without involving the communities.(28)

TBAs are remunerated in kind or cash in both urban and rural by their clients. The CHAs are rewarded by the contribution of labor for their farming in rural areas. In urban areas such as Addis Ababa, they are municipal employees and paid a salary monthly. As a result of being paid employees in the urban setting, CHAs in Addis Ababa have become clerical workers and few of them spend even minimal time in health activities.

A study in three region of Ethiopia (1981), by Hailu Meche et al, on training and use of Community Health Agents, showed an attrition rate of 38%. Factors implicated in the drop-out included poor involvement of the community during recruitment and training, lack of technical supervision and poor support of the Community Health Agents in the field (29). Similar findings were also noted in the PHC Review in Ethiopia, 1985/86. The review concluded from interviews

with trained Traditional Birth Attendants that 85% of them has problems of remuneration and replenishing of delivery kits (30).

## CHAPTER III

### METHODS AND MATERIALS

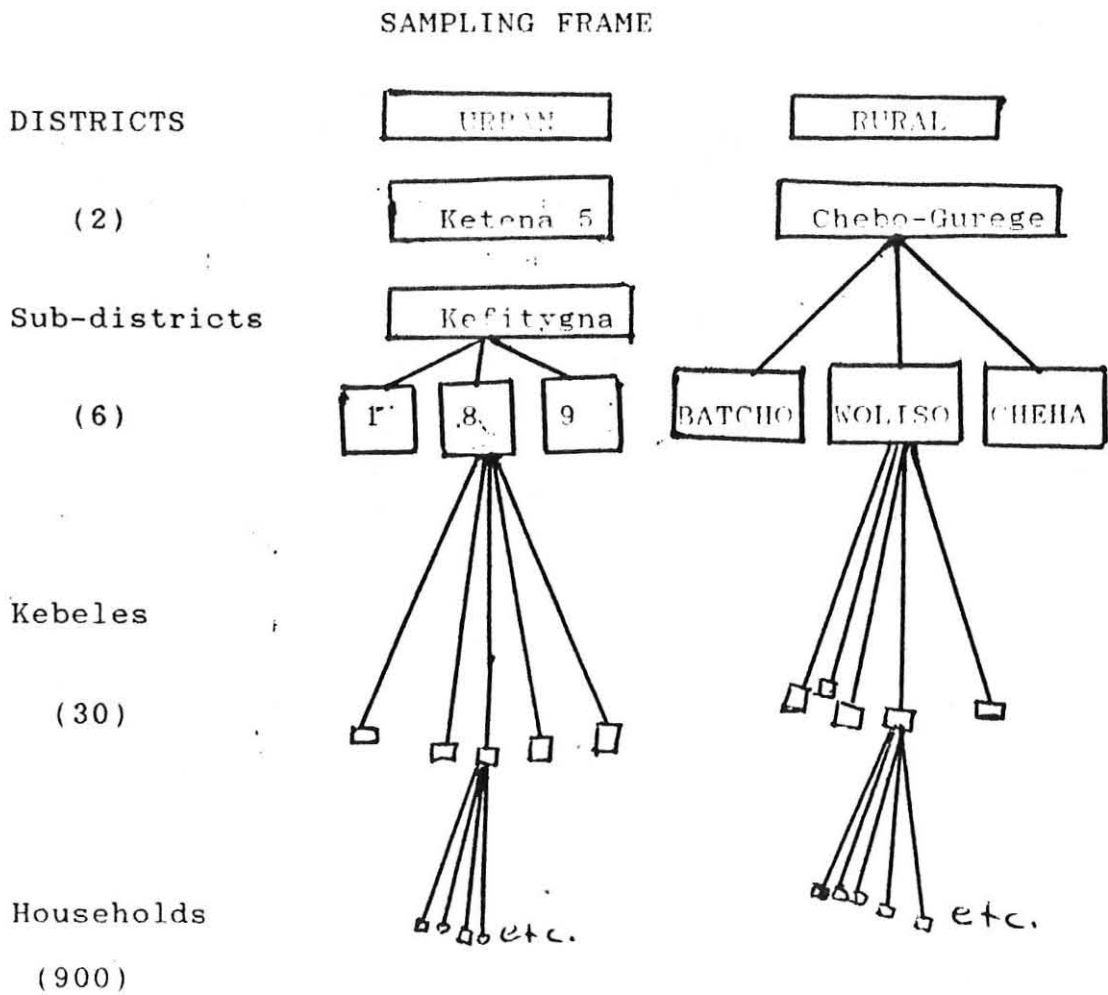
#### 1. STUDY POPULATION

One urban and one rural district were selected for study based on the existence of well established community health services, accessibility of the area and representativeness of the area as an urban or rural setting, respectively. The urban district selected was Ketena 5 in the city of Addis Ababa where the principal investigator was the district health manager and had detailed knowledge of the health workers and their activities. The rural district was Chebo-Gurege in Western Shoa region about 80 kms south west of Addis Ababa. Chebo-Gurege was selected randomly from the eleven districts in Shoa region. Detailed background information on Ketena 5 and Chebo Gurege is provided in Annex II.

#### 2. SAMPLE DESIGN

Households for inclusion in the study were selected by multi-stage and simple random sampling procedures. Three sub-districts were chosen from both the urban and rural districts selected for the study, by pulling names from a hat. Five kebeles were identified, again by random sampling, in each of the selected sub-districts from

those kebeles in the sub-district which had established community health services. Thirty five of the one hundred and twenty kebeles in the three sub-districts had established community health services. Thirty households were selected randomly from each study kebele. Houses had been given house numbers during the past year, rural homes during immunization program activities and urban homes by the UDAs. The summary of the sampling frame is as follows:



A total of 900 households were included giving 20-25% coverage of the kebeles in the districts with community health services. This represented 5-10% of the total population in the two districts. Equal numbers of households (450) were included from both urban and rural areas. Questionnaires were completed for all households selected.

### 3. DATA COLLECTION

Questionnaires on availability of community health services (Part I), immunization coverage, community involvement and demographic data (Part II) and an instruction manual for interviewers were prepared.

The questions were translated into Amharic and pre-tested in two areas adjacent to the study kabeles. The pre-test included 50 households. As a result of the pre-test it was found that the rural community called the health post a kebele clinic so the questions were reworded with this change and finalized for the main study.

Interviewers with a minimum of grade 12 education, who had previously participated in the literacy campaign and/or the national census of 1984 were used. Nine and five interviewers were recruited and trained for the rural and urban areas respectively. Four sanitarians were also trained and assigned as field supervisors, one in the urban and three in the rural area, to assist the

principal investigator in supervision and coordination of the interviewers.

### 3.1 Community Involvement

Community involvement was measured in the three areas of planning, implementation and decision making. Community involvement in CHS occurs in other areas but for this study these three were selected for measurement. They were defined broadly as follows:

a) Planning - involvement in the process of identifying the need for the service either through discussing it with others or participating in meetings held to notify the community of the need for the service.

b) Decision making - involvement in deciding place, time and strategy for implementation of the activities either through attendance at meetings, or by consenting to decisions reached by others.

c) Implementation - participation in activities by supply of material, money or labor for actual work.

The 900 heads of households were interviewed to determine their involvement in planning, decision making and implementation for seven specific community health service activities. The specific health activities were selected on the basis of their importance to the

community, on the basis of being one of the essential activities in PHC and on their ease of measurement. The seven activities included provision of immunization sessions, recruitment and support of CHAs and TBAs, construction of health posts, latrines and refuse pits and provision of a safe and adequate water supply. (Annex III).

The involvement of each head of household was determined on an all-or-none basis, using a nominal scale of one or zero in each of the three areas of planning, implementation and decision-making for each activity. The % involvement for both rural and urban districts in each of the three areas was calculated for seven activities. Overall involvement for each activity was calculated by subtracting those who were not involved in any of the three areas from 100% and therefore indicated those involved in at least one aspect of any activity. The percentage participation in specifically immunization activity was used for comparison and was as well determined separately for each village in the rural area for comparison with immunization services obtained, community services available and distance from conventional health unit among villages.

### 3.2 Community Health Service Availability

To quantify the availability of basic community health service in this study, a scoring system was devised for the three important aspects selected after review of the Ethiopian system. The three aspects selected were the activity of the CHAs and TBAs, the activity of the Health Committee and the construction of a health post. A scoring system was used for rating activity of the workers and the committee. Observation on site was used to assess construction of the health post.

Field supervisors and interviewers collected background information from each kebele on the level of activity of the community health committee, community health agent and traditional birth attendant, as well as presence of a health post and distance of a conventional health unit from the village. At the same time, they introduced the interviewer to the community leaders, permission was obtained and the household survey organized.

Active Community Health Agents were defined as those who carry out two out of the three following activities:

1. Assists with immunization programmes, treats minor ailments, provides ORS, etc.
2. Acts as secretary to a functional health committee.
3. Reports on CHS activities monthly to kebele office and supervising health units.

Active TBAs were considered as those who carry out two of the three following activities:

1. Delivered a baby within the last month at home.
2. Reports monthly on delivery activities to Women's Association and supervising health units.
3. Was a member of health committee and attended meeting in past month.

Active Health Committees were those that did 3 out of 5 of the following activities:

1. Scheduled and held meeting in past month.
2. Organized CHS activities, such as cleaning campaign, spring protection, immunization, etc. in last month.
3. Reported monthly on activities to sub-district health committee.
4. Organized payment for CHWs in kind or cash.
5. Ensured community participation in CHS activities.

### 3.3 Immunization Coverage

Health service coverage for the areas was assessed using the following immunization coverage indicators:

- i) % of children under 2 years with complete immunization.  
(Complete immunization included BCG, 3 DPT&P and measles immunization.)
- ii) % of children under 2 years who had BCG scar.
- iii) % of women who were pregnant at the time of the survey who had received one tetanus toxoid shot.

iv) % of women who were pregnant at the time of the survey who had received both tetanus toxoid shots.

The overall rates for each of the four indicators was calculated for the rural and the urban areas. Village by village breakdown of immunization indicators was later done for the rural area to determine if rural coverage could be correlated with level of community involvement. For comparison, each of the villages was rated as low, medium or high level of immunization coverage based on the following criteria:

Low : Complete immunization 0-24% and BCG coverage 0-49% of children under two years.

Medium: Complete immunization 25-40% and BCG 50-70% of children under two years.

High: Complete immunization >40% and BCG >70% of children under two years.

Tetanus coverage rates were not included in assessing overall coverage as the number of pregnant women in the study villages were very few.

## CHAPTER IV

## RESULTS

## 1. DESCRIPTION OF SURVEY HOUSEHOLDS

Descriptive data of the rural and urban households as well as information on community involvement in community health services was collected and analyzed from 450 households in Ketena 5, city of Addis Ababa (urban) and 450 households in Hebo-Gurege in Western Shoa (rural) by interviewing the heads of households. All selected heads of households were interviewed so there were no non-responders.

In the rural area the age of heads of households ranged from 15-64 years, with the most frequent age being between 60-64 years. Few rural females were heads of households, with the ratio of male to female heads being 13.5 : 1 (Table 1). All except six heads of household (1.3%) had been or were married. The literacy rate of rural heads of households was 72.2% (Table 2). The ethnicity of the rural community was 60.2% Oromo and 34% Gurege. All were farmers. The family income was assessed using the number of oxen owned. 28.9% of rural families owned one ox and 22.9% owned none. More than four oxen were owned by 8.2% of families (Table 4). Equating oxen owned with monthly income is difficult but ownership of one oxen was estimated to be roughly

equivalent to a monthly income of fifty to one hundred Birr. There were 52 pregnant mothers and 212 children under two years old in the 150 rural families included in the survey.

In the urban area, the age of the heads of households ranged from 20-64 years with the commonest age group being that of 35-39 years, more than 30 years younger than the rural community. Many more females were heads of households with the ratio of male to female being 2.2 : 1. As in the rural community, few (2.2%) of the heads of households had never been married. The literacy rate of the urban heads of household was higher than rural with 90.7% being literate. The main ethnic group were Amara (54%), with Oromo (18%), Gurege (11.8%) and Tigrie (8.9%) being present in fewer numbers. Occupations included government employees (40%) and private employee (40%), while 20% were without permanent employment. The reported average monthly income for half the families (51%) was less than 100 Birr per month. An income greater than 300 Birr was reported by 16% of the families (Table 3). There were 21 pregnant mothers and 107 children under two years in the 450 urban families covered by the survey.

In general the rural heads of households were older in age with males predominating. The urban heads of

households had more formal schooling but a higher unemployment rate. For both groups reported family income was low. Ethnicity was different in the two groups with more than 50% of the urban dwellers being Amara and smaller numbers being Oromo or Gurege. The rural population had a negligible number of Amaras with a majority of Oromos and Gurege.

## 2. ASSESSMENT OF COMMUNITY INVOLVEMENT

Involvement of the heads of households in provision of community health service was determined in the three broad categories of implementation, decision-making and planning for seven specific community health service activities in rural areas. For the urban areas as there were no health posts, only six activities were used.

In the rural area, 38% of the participants were involved during the planning phase, while 40% of them were involved in decision-making and 64% in the implementation of immunization activities. Overall 75% of the heads of households were involved in at least one of the three areas of involvement. The level of involvement of rural people in recruitment and support of TBAs and CHAs was also high with 44% and 58% involved in planning, 59% and 61% in decision-making and 59% and 74% in actual support of TBAs and CHAs respectively. Somewhat less participation was noted in provision of

health posts and latrines with little variation across the three areas of involvement. Levels of involvement in provision of refuse pits and safe water was also low ranging from 11% to 29%.

In the urban district, 12% of the heads of households participated in the planning, 15% in decision-making and 22% in implementation process of provision of immunization sessions. Total participants in immunization activities were 28% of those surveyed. Community involvement in recruitment and support of CHWs in urban areas was very low with only 5% and 9% of the heads of households involved in decisions regarding recruitment of the TBAs and CHAs respectively. No health posts were established so involvement in health post creation was uniformly zero. Surprisingly, the level of involvement of the community in latrine building, waste management and provision of safe water was high but only with regard to implementation, ranging from 60% to 68%. Otherwise, except in the planning phase of latrine construction, the involvement of urban dwellers was low in planning and decision-making for environmental activities (Table 5). While the urban community was more involved in implementation of environmental activities than the rural community, the rural community was more involved in planning and decision-making of such activities.

The specific breakdown of participation in the three areas for each of the seven activities for the rural area (six for urban) revealed that involvement of the rural heads of households was 2 to 3 times higher than that of urban heads in planning and decision-making. Rural rates of involvement in implementation were also higher except for environmental activities as already noted.

### 3. ASSESSMENT OF COMMUNITY HEALTH ACTIVITIES

#### 3.1 Activity of Health Committee

In the rural area all fifteen study villages had selected health committees. 11 (73%) of the 15 were considered active. In the urban area only five (33%) of 15 Urban Dwellers Associations (UDAs) health committees were considered active, although all fifteen UDAs had selected a health committee.

#### 3.2 Construction of a Health Post

67% (10 out of 15) of the rural villages had built health posts. None of the UDAs had built a health post. Reasons given for the lack of a health post in the five rural villages were that they were not advised that a health post should be built (75/150 householders or 50%); that they were not aware about health posts (40/150 or 27 %) and/or that they felt that a

unit had established health posts, whereas 4 of the 6 kebeles within 10-15 kms radius of such units had built posts.

In general, health post establishment was associated with active health committees and active CHAs and was highest in villages greater than 5 kms radius from a conventional health unit.

### 3.3 Activity of Community Health Workers

60% of (9/15) of the CHAs and 67% (10/15) of TBAs were judged to be active in the rural area while only 20% (3/15) of CHAs and 60% (6/10) of TBAs were considered to be active in the urban area. 8 of 9 (89%) active CHAs in the rural area were found where there were active health committees. Two of the three active urban CHAs were associated with active health committees.

In the rural area, one of the three CHAs (33%) within a 5 kms radius of a health unit were active and two out of six (33%) of those within a 10-15 kms radius were active, whereas four of six (67%) of those in the 5-10 km radius were active. In the urban area, all communities were within 5 kms but only 3 of the 15 CHAs (20%) were active in community health services.

In the rural area the level of activity of community health committees and CHAs exceeds that of the urban

area, reaching anywhere from 200-300% higher. Both establishment of a health post and activity of CHAs were better within 5-10 kms of a conventional health unit and lower when the unit was very close (5 kms) or very far (10 kms).

Heads of households were interviewed about various aspects of support and maintenance of CHAs. The majority felt that the government should be responsible for support and maintenance of CHAs. A minority of respondents proposed that support should be provided by community organizations and a few suggested collection of fees from clients and use of volunteer workers (Table 6).

In Chebo-Gurege, 89% (399) of the households had received services rendered by CHAs on one or more occasions during the two weeks prior to the survey. The services consisted of the following: health education, home visit, treatment of minor ailments and injury, ORS distribution, etc. 63% (251/399) of families who received service rendered by CHAs were satisfied with the care provided. Of those families who received care and were not satisfied the following reasons were given: 25% (37/148) felt there were not enough CHAs to provide effective care. 55% (82/148) complained that CHAs had inadequate knowledge of local health problems. 20% (30/148) did not feel qualified to comment on a given service.

In Ketena 5 those interviewed commented that the CHAs were not providing health care but did facilitate the immunization sessions, cleaning campaign, etc. The community tended to view urban CHAs as general service workers rather than as a health service providers.

#### 4. ASSESSMENT OF HEALTH SERVICE COVERAGE

In rural areas, vaccination coverage was complete in 44.3% (94/212) of children under two years. Specific ages of the children was not determined so it was not possible to say how many of the children under two years of age were eligible for complete vaccination (i.e. greater than nine months old) so the actual coverage rate of eligibles would be considerably higher. A BCG vaccination scar was found on 67% (143/212). 24% or 11/46 of the women pregnant at the time of the survey had received both tetanus toxoid immunizations while 50% or 23/46 of them had received one tetanus toxoid shot. No attempt was made to determine the gestation of pregnancy, however the 50% level was felt to reflect those using antenatal services who would be immunized by the time of delivery.

In urban study families, complete vaccination coverage was 42%, while BCG coverage was 77.6%. 33% (7/21) of the pregnant women had received both tetanus toxoid

shots and 76% (16/21) received at least one dose of tetanus toxoid.

5. INTER-RELATIONSHIP OF COMMUNITY INVOLVEMENT,  
COMMUNITY HEALTH SERVICE AVAILABILITY AND IMMUNIZATION

Despite the uniformly low level of CHS availability in the urban area (i.e 3/15 active CHAS, 5/15 active community health committee and no health posts built) and the relatively low community involvement of 28% in immunization activities, compared to that in the rural district with 75% involvement, overall coverage by the immunization program was almost equal in both areas. Complete vaccine coverage for children under two years was 42% (45/107) for urban and 44% (94/212) for rural. BCG coverage was 78% (83/107) in the urban and 67% (143/212) in the rural area. Immunization coverage of urban pregnant mothers with TT1 was 76% (16/21) and with TT2 was 33% (7/21). For rural pregnant mothers TT1 was 50% (23/46) and TT2 was 24% (11/46) (Table 7).

Good immunization coverage in the urban setting seems to have occurred despite low levels of community involvement and the lack of a functioning CHS. It was decided, therefore, to look separately at community involvement and health service functioning in each of the 15 rural communities in the search for factors related to better coverage.

High immunization service coverage was found in seven of the fifteen rural villages. All were characterized by a high level of community involvement in provision of immunization, 6 of the 7 had active community health committees and 5 of the 7 had active CHA and TBAS. 4 of the 7 had built health posts. One of the 3 kebeles with high immunization coverage but no health post was located with 5 kms radius of conventional health unit.

Villages with a moderate level of immunization coverage were three. Two of the three villages had good community involvement, active health committees, active CHA and TBA and a health post. The other village with a moderate level of coverage had relatively low community involvement, with an inactive CHA, and no health post, but an active community health committee suggesting that an active community health committee may be an important ingredient. They had achieved coverage in 32% of those under 2 years. A related feature in this kebele was very active out-reach from the health center covering the area even though it was more than 10 kms distance from a unit on a dry-weather road.

Low immunization coverage was found in five of the study villages of Chebo-Gurege. Four of the five had health posts, the only village without a health post was close to a conventional health unit. 3 of the 5 had inactive CHAs, inactive health committee and poor community

involvement (Table 8). The other two villages had active CHAS and active health committees with rather high community involvement of 43% and 80%. In these two communities it was noted that they had irregular outreach from the closest health units which were 8 and 12 kms distant on poor, dry weather roads. One of the communities had as well experienced an epidemic of injection abscesses as a result of immunizations and people now refused to bring their children for immunization.

Specific analysis of CHS coverage in families where the heads of households actively participating in immunization provision revealed that in the rural area 85% of the children vaccinated were in families who participated in planning & decision making while 48% were from those involved in implementation phases of immunization services. Only 15% of the rural beneficiaries of the immunization program came from families who did not participate in one of the three aspects of community involvement ( Figure 1).

Table 1- Distribution of Head of Households by Age and Sex in Urban & Rural Areas, 1987

Age	URBAN			RURAL		
	Male	Female	Total	Male	Female	Total
15-19	-	-	-	1	-	1
20-24	2	2	4	8	-	8
25-29	16	9	25	16	2	18
30-34	32	15	47	31	1	32
35-39	56	21	77	56	6	62
40-44	60	15	75	65	9	74
45-49	48	18	66	61	3	64
50-54	23	21	44	48	3	51
55-59	9	11	20	38	1	39
60-64	44	28	72	95	6	101
Total	310	140	450	419	31	450
Percent	68.9	31.1		93.1	6.9	

Table 2. Level of Education of Urban and Rural Heads of Households, 1987

Level of Education	Urban		Rural	
	No.	%	No.	%
Illiterate	42	9.2	125	27.8
Literate	128	28.1	208	48.9
Grade 1-6	124	27.6	89	19.8
Grade 7-9	42	9.3	16	3.6
Grade 10-12	62	13.8	-	-
Grade 12+	52	11.6	-	-
Total	450		450	

Table 3. Average Monthly Income (in Birr)  
of Urban Heads of Households, 1987.

Category of Average Monthly income, in Birr	Number of heads of households	
	No.	%
Less than 50	147	32.7
15 - 99	83	18.4
100 - 199	90	20
200 - 299	57	12.7
300 and above	73	16.7
	450	100

Table 4. Heads of Households  
With Number of Oxen Owned, 1987

Number of Oxen	Number of Oxen in Rural Households	
	No.	%
None	103	22.9
One	130	28.9
Two	152	33.8
Three	28	6.2
Four and above	37	8.2
	450	100

Table 5. Amount of Involvement of the heads of households in planning Decision making & Implementation of seven CHS activities in Urban and Rural, 1987.

Specific Community health service activities	Areas (type) of Involvement of the participants															
	U R B A N								R U R A L							
	% Partici- pants		Implem- entation		Decision making		Planning		% Partici- pants		Implem- entation		Decision making		Planning	
1. Immunization	125	28%	100	22%	68	15%	53	12%	337	75%	286	64%	180	40%	169	38%
2. Community Health Agents recruitment and support	41	9%	-	-	41	9%	-	-	350	78%	334	74%	275	61%	259	58%
3. Traind Traditional Birth Attendants recruitment and support	22	5%	-	-	22	5%	-	-	288	64%	265	59%	265	59%	200	44%
4. Health Post Construction	-		-		-		-		221	49%	188	42%	175	39%	172	38%
5. Latrine Construction	229	66%	271	60%	95	21%	186	41%	213	47%	186	41%	200	44%	200	44%
5. Refuse Pits Construction	350	78%	308	68%	48	11%	45	10%	110	24%	50	11%	100	22%	80	18%
7. Adequate and Safe Water Supply	312	69%	292	65%	37	8%	30	7%	145	32%	130	29%	125	28%	120	27%

Table 6. Suggested Responsible Body for Support  
of CHAs by Heads of Households  
in Chebo-Gurega and Ketena 5, 1987.

Considered Responsible For CHW Support	Chebo-Gurege	Ketena 5
Clients on Service	7 (1.6%)	10 (2.2%)
Community	46 (10.2%)	74 (16.4%)
Government	386 (85.8%)	347 (77.6%)
Volunteers	11 (2.4%)	3 (.7%)
Others	-	14 (3.1%)

Table 7. The Relation of Immunization coverage, Community Involvement in Immunization, CHS Availability & Distance from Health units in Urban & Rural District, 1987.

	Community Involvement in Immunization				Immunization coverage						CHS Availability			Distance from health unit in kms		
	Implementation	Decision making	Planning	% of Participants	FCG	Complete 3 DPT & measles		TT1	TT2	Health Post	CHA	TEA	Health Committee	5	5-10	10-15
Urban	36%	15%	12%	28%	<u>83</u> 78% 107	<u>45</u> 42% 107	16 -- 21	76%	<u>71</u> 33% 21	0	3/15	6/15	5/15	15	-	-
Rural	64%	40%	38%	75%	<u>143</u> 67% 212	<u>94</u> 44% 212	<u>23</u> 46	50%	<u>11</u> 24% 46	<u>10</u> 15	9/15	10/15	11/15	3	6	6

Table 8.

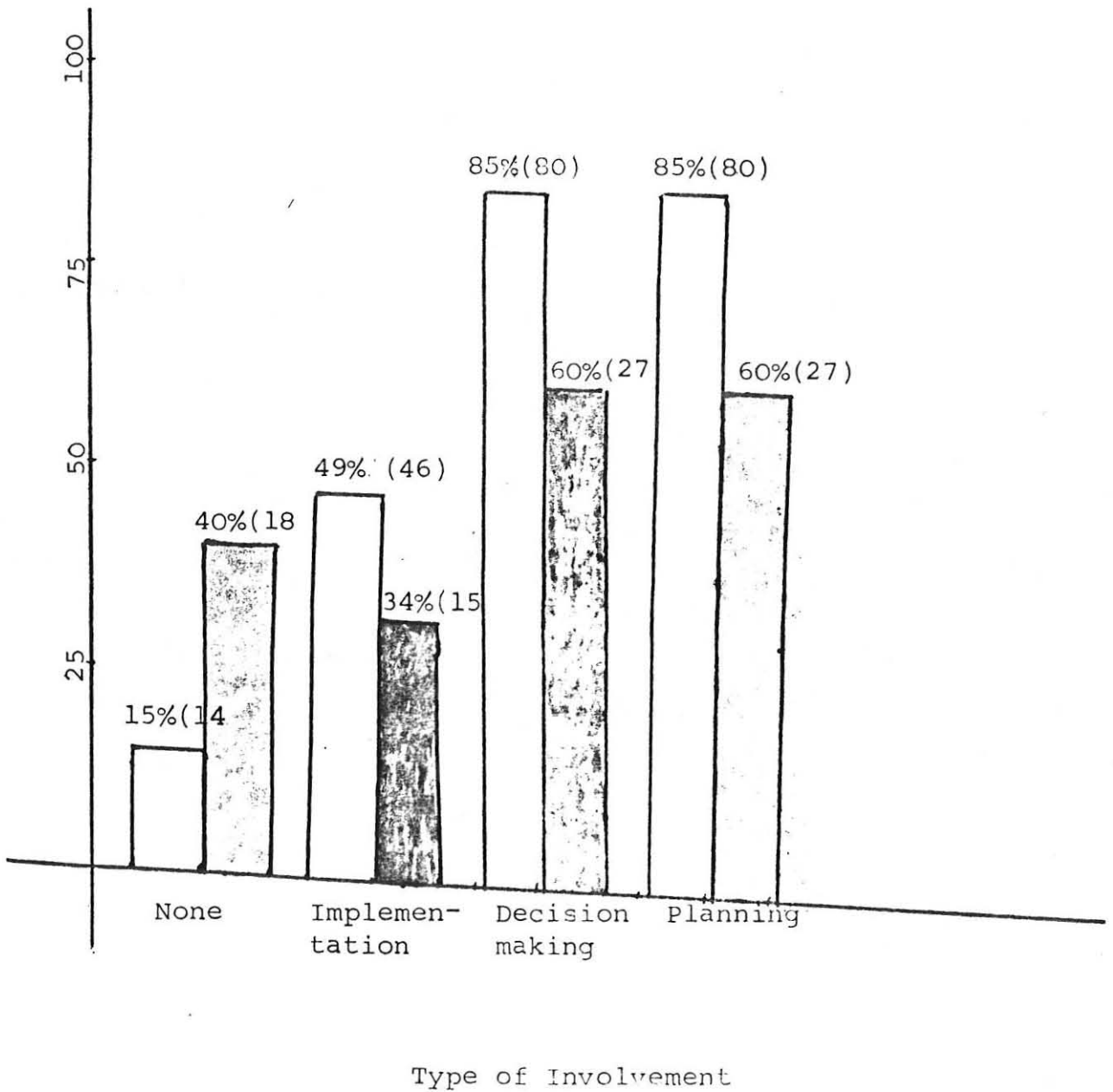
The Relation of Immunization coverage, Community Involvement in Immunization, level of activity of health committee and CHWs, presence of health posts, and distance of conventional health units by the fifteen villages of Chebc-Gurege, 1987.

Villages	Total Percent of Community involvement in immunization	Immunization service coverage				Availability of CHS				Distance of villages from health unit in kms.			Remark Level of Immunization coverage
		Complete	BCG	TT <sub>1</sub>	TT <sub>2</sub>	health committee	CHA	TBA	Health post	5	5-10	10-15	
Soyum	7%	0%	43%	67%	0%	-	-	-	-	+			Low
Chircha Kora	0%	0%	10%	33%	0%	-	-	-	+			+	
Warden	50%	5%	36%	67%	0%	-	-	+	+			+	
Gurura Adis Alem	43%	0%	30%	100%	0%	+	+	+	+			+	
Aejersa Koje	80%	23%	31%	50%	0%	+	+	+	+			+	
CISA I	63%	38%	63%	50%	0%	+	+	+	+	+			Moderate
Awash Buna	93%	31%	94%	100%	0%	+	+	+	+			+	
Gote Gudeta	53%	32%	58%	50%	25%	+	-	-	-			+	
Batu Soyuma	67%	45%	73%	40%	20%	-	+	-	-			+	High
CISA II	73%	43%	57%	100%	100%	+	+	+	+			+	
Koremia	77%	44%	72%	75%	75%	+	+	+	+			+	
Kobo	90%	55%	86%	25%	25%	+	+	-	+			+	
Obiosela	100%	63%	88%	25%	0%	+	-	+	-	+			
Fodo Gora	67%	54%	77%	40%	40%	+	-	+	+			+	
Bauchachi	67%	60%	87%	100%	100%	+	+	+	-			+	

Figure 1. Family Involvement in the Provision of Immunization among children under 2 years immunized in Urban & Rural, 1987.

percentage of families with immunized children involved in provision of services

key  
 □ Rural n=94  
 ▨ Urban n=45



## CHAPTER V

## DISCUSSION

Community involvement was highest in rural areas, both overall measurement in the three areas of planning, decision-making and implementation and for each of the seven specific community health activities measured. Only in environmental health activities i.e. building latrines, provision of safe water supply and solid waste management were urban residents more involved than their rural counterparts and then only in the implementation process. Even here however, rural residents were more involved in planning and decision making of environmental health activities, although they lagged behind in actual construction of latrines, refuse pits and in provision of safe water.

The differences in community involvement between these two rural and urban areas were statistically significant ( $p < .001$ ) for planning, decision-making and implementation with the exception, as noted of environmental health. Such differences could be a result of the differences noted in socio-economic and local organization characteristics of the two communities. The rural community was characterized by older age of household heads, male dominance in headship, full employment status, active villagization and producers cooperatives, as well as more homogeneity in

ethnicity and culture. Such features would facilitate communication and enhanced community involvement. Rural communities had as well less access to conventional health units than urban communities which may also enhance and encourage increased involvement in health issues in order to improve accessibility to health services.

Urban community involvement may be hampered by the relatively high unemployment status, female dominance /single headship, younger age of family heads, loose local organizational structure and cultural and ethnic heterogeneity that were observed. Greater access to conventional health units may also mean that a strong felt need for community health services is not developed or acted on in the urban area.

The high level of urban community involvement in implementation of environmental health activities in the urban area appears to be related to the more urgent need for such services in urban communities and probably represents less self-motivated volunteer activity than a required commitment of labour to community projects.

The use of different interviewers for the urban and rural surveys could have influenced the results obtained in the two sites. Nonetheless the simplicity of the scoring system and objectivity of criteria used in the

questionnaires were such that interviews alone are unlikely to have created such great differences. Amharic was used as a working language for all interviewers and respondents. Although for many rural people it was not their first language, all could understand it.

Case studies in the Americas, the Caribbean (33) and in Africa (34,35), have indicated that developing a system for effective involvement in health service is not an isolated event but occurs more readily when it is part of overall community development. This is consistent with our findings of increased community involvement in rural Ethiopia where overall community development is proceeding more rapidly than in urban areas. Here the strong organizational structure created for solving priority needs and common interests enhances involvement in planning, decision-making and implementation, which in turn stimulates activity in and utilization of the community health service. Other studies have shown that increased involvement of the community can be influenced by sex and age, with mothers and older heads of households tending to be more involved (36). In this study, older males as family heads in rural areas were associated with high community involvement but specific participation of women's assessment in health activities was not done.

The rate of employment, income, level of education and

others social indicators were commented on in the literature as affecting the area of community involvement in local priority health need (37). These findings have been supported in this study.

In spite of low community involvement in health service and poor accessibility of CHS (inactivity of community health committees and CHWs and the absence of health posts) in the urban area, fairly high coverage in immunization was achieved. This suggests that formal community involvement and an active CHS are not as important in urban areas as in rural areas. The proximity of conventional health units and existence of active immunization coordinators in urban areas may de-emphasize the role of CHAs in immunization programs and allow campaigns to succeed despite the inactivity of local community health committees and CHAs. As well and perhaps more important in the high rates achieved in urban areas, specific and selective immunization campaigns have been responsible for high coverage although they do this without stimulating strong community involvement or basic CHS infrastructure. The poor development of CHS observed in communities proximal of conventional health unit in the urban area was also noted in the rural area. Ten of the 15 kebeles in the urban area had not developed CHS and two of the three villages within a radius of 5 kms of a conventional health unit in the rural area had inactive CHAs and no health post.

In general, a high level of rural community involvement in CHS activities coincides with an active health committee, active CHWs and health post establishment. Active community health committees appeared where there were active CHAs and TRAS in both rural and urban areas. Also, the activity of CHWs increased at 5 to 10 kms distance from conventional health units. The highest percentage of health posts were found more than 5 to 10 kms from health units.

Studies in Nigeria (38), and Kenya (39) noted that active health committees and active CHWs were developed and function most effectively when they emerged from community initiatives and/or community involvement in the planning, decision-making and implementation process. Our findings are consistent with this, suggesting that active health committees may be crucial to support and guide CHWs, particularly when conventional health units are more than 5 km distant.

Analysis of the 15 rural villages separately, allows one to look in further detail at the association between community involvement, health service availability and coverage, as not all villages showed a uniformly high community involvement, high coverage and greater accessibility. When villages were separated into groups of high, moderate, and low immunization coverage, it was noted that high community

involvement and availability of CHS predicted high immunization coverage while low community involvement and less access to CHS was a predictor of low immunization coverage. However a number of exceptions to this general rule proved informative.

In places with moderate to high immunization coverage, usually both community health committees and CHWs were active. However 9 out of the 10 villages which had completed immunization coverage of greater than 30% of the children under 2 years old had an active community health committee. Greater than 30% coverage in the children under two years of age was used as high coverage because only those older than nine months were eligible. (i.e. the actual coverage would have been closer to 50 or 60 % if the denominator or children between nine months and two years had been used or alternately if completion for age had been considered.) The one village without an active community health committee had an active CHA and regular outreach from the nearest health unit. Three of the ten had inactive CHAs, which it seemed had been compensated for by active health committees and good outreach from a health unit (2 villages) or proximity to health unit ( 1 village). Of the five villages with low coverage (i.e complete immunization coverage of children under 2 years old was less than than 30%), three had no community health

committee inactive CHAs. Two of the five with poor coverage proved to be exceptions as they had active health committees and active CHAs and good community involvement but still had low coverage. In looking for explanations, it was noted that one had a poor road more than 10-15 kms from a conventional health unit, the other had active outreach service but people refused to bring their children as a result of past experiences with injection abscesses after vaccination in the village.

Distance alone was not always associated with poor immunization coverage, as two of villages with high immunization coverage were 10-15 kms from a conventional health unit and only two of the 5 with low immunization coverage were 10-15 kms. The most important fact appeared to be whether the nearest health unit had an active outreach service. Indeed, immunization service is one of the health services that seems to have an absolute requirement for integration with conventional health services.

Although community involvement and active CHWs may be important for utilizing available health service, they are of little assistance if the trained health workers do not make themselves available or/coordinate such services and resources which are concentrated in conventional health units. Factors such as poor roads and distance may also

influence outreach activity from conventional health units. Although this was not studied in detail in this study, many such factors can be overcome when health workers are motivated. For instance bicycles were used where there was no car and high rates were achieved in villages 10-15 kms from health units on bad roads when health workers were highly motivated even if transport was not easily accessible.

Experience from the Philippines showed that immunization service coverage rose from 44% to 96% in children under two years after initiation of community involvement in health service (40,41). In our cross-sectional study, such temporal trends could not be measured, but it was found that participation of individual families was associated with high immunization coverage. i.e the majority of the children immunized were from families involved in provision of immunization session with few of those immunized coming from non-participating families.

Interestingly, more than half of the surveyed families in the rural area were satisfied by the service rendered by CHAs, with more than one quarter of those dissatisfied stating that the need was for more CHAs and one half of those dissatisfied requesting that CHAs be trained to be more knowledgeable on local health needs.

In urban areas, the CHAs were unknown to the community as

communities were not involved in decisions about their recruitment and support. CHAs were considered to be clerical, municipal employees. The majority of the community members consider health service provision to be in the hands of government which reflect failure of PHC management and a need for further education of the community and even perhaps reorganization of CHS.

## CHAPTER VI

## CONCLUSION.

Community involvement in CHS is higher in rural communities particularly in the planning and decision making process. Urban communities were overall less involved in CHS activities such as in recruitment and support of CHWs, establishment of health posts, and immunization activities with the exception of a high level of involvement in implementation of environmental health activities.

High community involvement in health service was related to a high level of functioning of CHS as evidenced by active community health committees, active CHWs and establishment of health posts in rural areas. High community involvement was also associated with achievement of a high level of immunization coverage in a community. A strong correlation was noted at the personal level with vaccination coverage of children under two years of age, highest in those families who had been involved in planning and decision-making of immunization sessions. However while functional community health services were associated with high community involvement, they were not alone sufficient to ensure high immunization coverage. Factors that were equally important were the level of active immunization out-reach service from conventional health units without which even high community involvement could

not achieve good immunization coverage. This was not dependent on distance from the conventional health unit or condition of road, since high immunization coverage was achieved in some areas 10-15 kms from a conventional health unit and low coverage occurred in villages closest to a health unit. It appears to depend more on regularity of out-reach service and factors affecting it such as motivation of the health workers.

High immunization coverage in urban areas, despite a lack of community involvement and active community health services was achieved through the activities of EPI coordinators and repeated immunization campaigns despite a lack of sufficient community involvement and without functioning CHS, indicating that CHS and community involvement were not as important in achieving the high coverage in urban as in rural.

This dependence on conventional health workers and their outreach services for full realization of community involvement inputs may be more marked for a service such as immunization. It is of the utmost importance that expectations of potential service coverage created by mobilizing and empowering communities and volunteer health workers are met with an active response by conventional health services and health workers.

In both urban and rural districts, it was noted that the proximity of conventional health units appears to suppress the activity of CHWs and that such proximity has negatively influenced the establishment of health posts. This was seen in both in rural villages less than 5 kms from a health unit and in the urban kebeles, all of which lie within 5 kms of a conventional health unit.

#### RECOMMENDATIONS

1. Encourage communities and make them aware through existing mass organizations of the importance of involving themselves in the planning, decision-making and implementation of CHS activities, as a means to accelerate health service coverage.
2. Strengthen community health committees by involving the community more, recognizing them as a CHS coordinators in the kebeles and assisting them in sustaining CHW activity and high service coverage.
3. Upgrade rural CHWs regularly to permit them to cope with local health needs.
4. Continue to establish health posts in villages greater than 5 kms radius from conventional health units and link them up with those units.
5. Evaluate further how CHS can best be provided to those

people living within 5 km vicinity of a health unit, particularly those in the urban area.

6. Organize the health service system such that it encourages community involvement in CHS, supports CHW activity and assists regular community health activities through regular, dependable outreach service.

7. Promote self-reliance of communities in providing their own CHS, by encouraging and supporting community-initiated activity through government and NGO channels.

8. Further study is recommended to investigate the role of community involvement in CHS and its relationship to activity within the CHS.

## CHAPTER VIII

## ANNEXES

## ANNEX I - GLOSSARY

1. Basic health service- consists of a network of institutions run by the government which provide certain indispensable medical care and preventive services to individuals without involving the community in the provision of the service.
2. Community- a group of people living in the same geographic area with some degree of common interests and interactions.
3. Community development- is the process by which the efforts of the people themselves are united with those of government authorities to improve the economic, social and cultural conditions of communities to integrate these communities in to the life of the nation, and to enable them to contribute fully to national progress (UN Department of Economic and Social Affairs, 1971)
4. Health system- is a complex of interrelated elements that contribute to health in homes, educational institutions, work places, public places, and communities, as well as in the physical and psychological environment and the health and related sectors. In Ethiopia the health service organized in six levels.

1. Community (Kebele) health service
  2. Health Stations
  3. Health Center
  4. Medium or rural hospital
  5. Regional hospital
  6. Central referral/teaching/hospital
5. Health Development - is the process of continuous progressive improvement of the health status of a population.

## ANNEX II

## BACKGROUND INFORMATION ON STUDY DISTRICTS

1. CHEBO AND GURAGE DISTRICT IN WESTERN SHOAGeography and administration

Chebo and Gurage district is selected randomly from 11 districts of Shoa administrative region. It is located in southwestern part of the region: Ghion 120 kms. from Addis Ababa is the capital town of the district. The boundaries are:

- North = Menagesha Awraja/district
- West = Jibat and Mecha Awraja
- East = Hykoch and Butajera Awraja
- South = Kambat and Hadiya Awraja
- South-west = Kaffa Region

The district is divided into 13 Woredas/sub-districts and into three zones by altitude. The southern part are lowlands (Kola) Most of the residents are Gurages with some re-settlers from Wollo and Kambata. The middle part of the district has a temperate climate (Woynadega) and residents are Oromos and Gurages. In the northern are highlanders (Dega) and are mostly Oromos.

The district is fertile with few exceptional areas, streams, springs, and rivers are scattered all over the district.

The villagization programme has been successfully implemented in most of sub-districts with exception of the Guregian's sub-districts (Cheha, Enmour ...) the others Bache, Woliso, Goro, ..... are villagized and organized into co-operative producers.

### Populations

The total district population was 1,265,714 according to 1979 E.C. district administrator reports.

### Education

There are 251 schools of which 4 are secondary, 32 are junior secondary schools and 215 are elementary schools. The 17<sup>th</sup>. round literacy campaign was held. Literacy rate has not yet been officially released.

### Communications

In major sub-district towns there are telecommunication and postal service and all weather roads from Addis Ababa passes through Tullu Bolo, Woliso Wolkeyte, Endiber and Hosana. Others have dry weather roads. Electric light service is 24 hours in Woliso and Wolkeyte and others use small generators for electricity for limited hours during the evenings.

### Health Service

There are 23 clinics, with at least two or more health assistants and one Health Center at Ghion which coordinates the health activities of the district and staffed by 7 nurses, 2 sanitarians and others (43 in number). There is one non-government organization hospital, Attat in Cheha subdistrict and one health center with ophthalmological unit in Goro, at Welkeyte.

### Community Health Services

In the district development committee, the health coordinator is included in social and economic sub-committee and also in villiagization coordinating committee.

According to the Ghion health center reports, since 1972 E.C. the following community health workers were trained in each subdistricts. There were 76 community health service units in the district.

Table 9. Distribution of CHWs and health posts by sub-districts, in Chebo-Gurage, 1987.

No.	Sub-district	Trained CHWs		Health posts establishment
		CHAs	TBAs	
1.	Woliso	12	?	3
2.	Bacho	12	?	6
3.	Tole	10	?	8
4.	Illu	12	?	2
5.	Wonich	10	?	6
6.	Goro	15	?	9
7.	Ameya	22	?	21
8.	Dewo	12	?	6
9.	Checha	15	13	15
10.	Eze and Wellela	6	1	-
11.	Enmour	8	1	-
12.	Gumer	7	?	-
13.	Kohar	7	?	-
Total				76

The number of farmers association in the selected three subdistricts were 126.

Woliso	=	42
Bacho	=	44
Checha	=	40

Some of the Farmers Associations (Table 1) have Trained TBAs, CHAs and health posts. The major morbidity and mortality statistics of the ATTAT hospital showed communicable diseases. Infant mortality and others health status indicators are unknown.

## 2. Ketena 5 in the City of Addis Ababa

### Geography and Administration

Ketena 5 is one of the five ketenas (districts) of Addis Ababa located in the Northwestern part of the city on the most highland part about 3000 meters above sea level. Boundaries of the ketena are:

East	=	ketena 4
North	=	Entoto/Farmers Association
Southwest	=	ketena 1

Area of the ketena is about 30 square kilometers. Ketena 5 is divided into 5 kefitygnas (sub-districts), namely kefitygna 1, 7, 8, 9 and 10 and 57 Urban Dwellers Associations.

### Socio-economic features of the ketena 5

Ketena 5 has a population of 255,527 according to the ketena 5 health service coordination census of May 1987. There were 46 schools of which 4 are high schools and 4 kindergartens. The literacy rate for the ketena was 90%.

The health services of the ketena are theoretically organized from grass-root level - community health service (57 in number) to the national referral hospital. There are two referral hospitals (St. Paul's and Ras Desta), no health center, but there are 3 Ministry of Health clinics (Tuberculosis training and demonstration center, Gulele and Gefersa MCH/FP clinics), and also there are 2 NGOs, 2 city councils, 13 others government sector and 2 private clinics in the ketena. There are 8 drug vendors shops.

There are no functional health posts in the ketena. The health manpower analysis showed there 339 (1:300 population ratio) health professional, 57 CHAs, 24 trained TBAs and more than 200 health animators.

The environmental sanitation facilities proper excreta disposal system (latrine) provide access to 70% of the ketena's family. Public latrine are 3 in kefitygna 1, others one each except kefitygna 8. Water supply are piped to 92% of the families the rest utilize river, well, and streams which are mostly in kefitygna 8 and 10. Only 51% of the family use municipal facility for solid waste disposal. The rest of the families dispose refuse in to rivers, open fields and some in dug hole for another purposes.

The major morbidity and mortality pattern of the ketena showed communicable diseases. The infant mortality rate was low (37. per 1000 live-birth) when compared to that of national figure (144 per 1000).

More information is available for ketena 5, in the 1987 health profile

Figure 2.

MAP OF ETHIOPIA

with feature of administrative regions

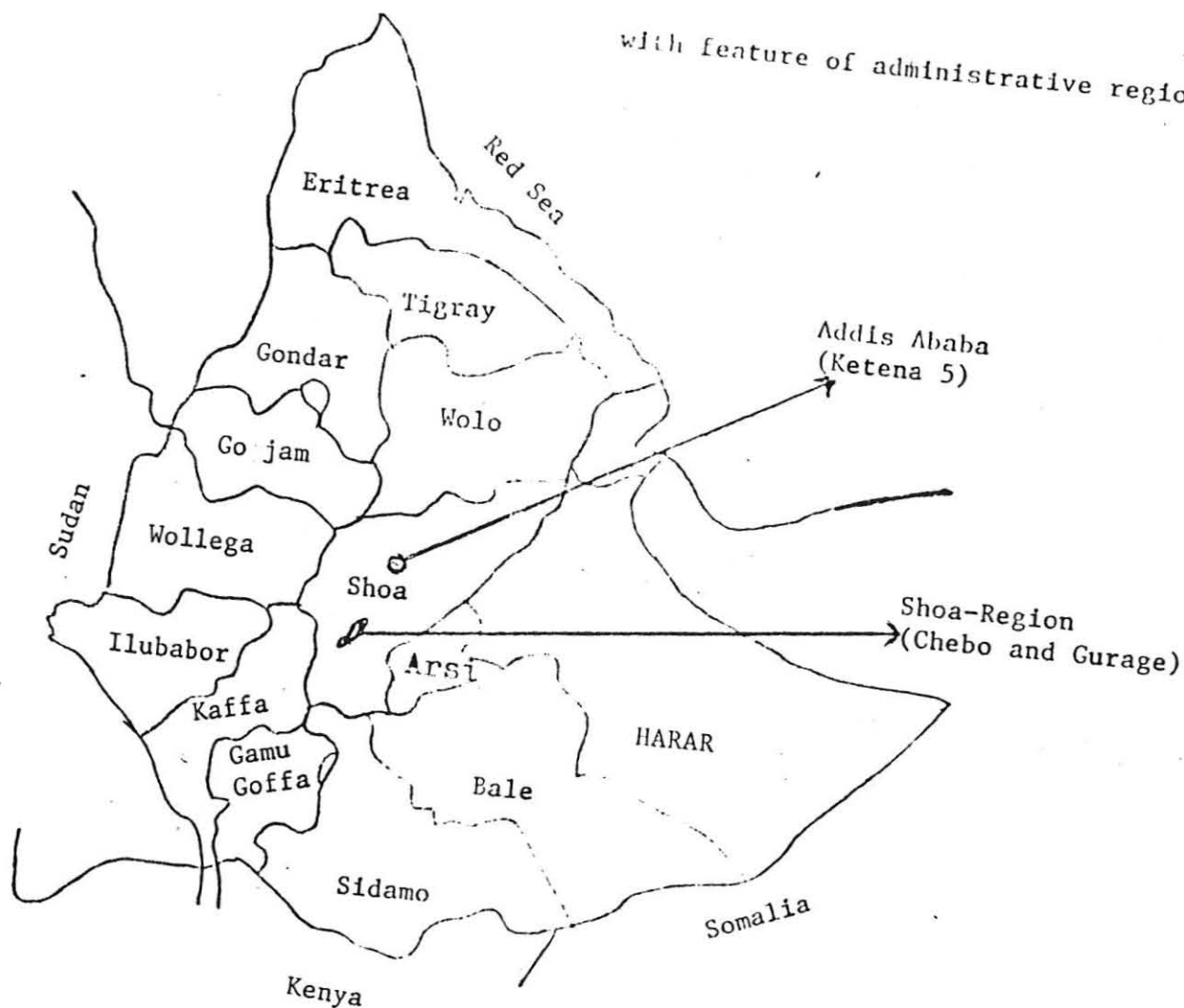


Figure 3.

MAP OF CHEPO-CUPAGE DISTRICT

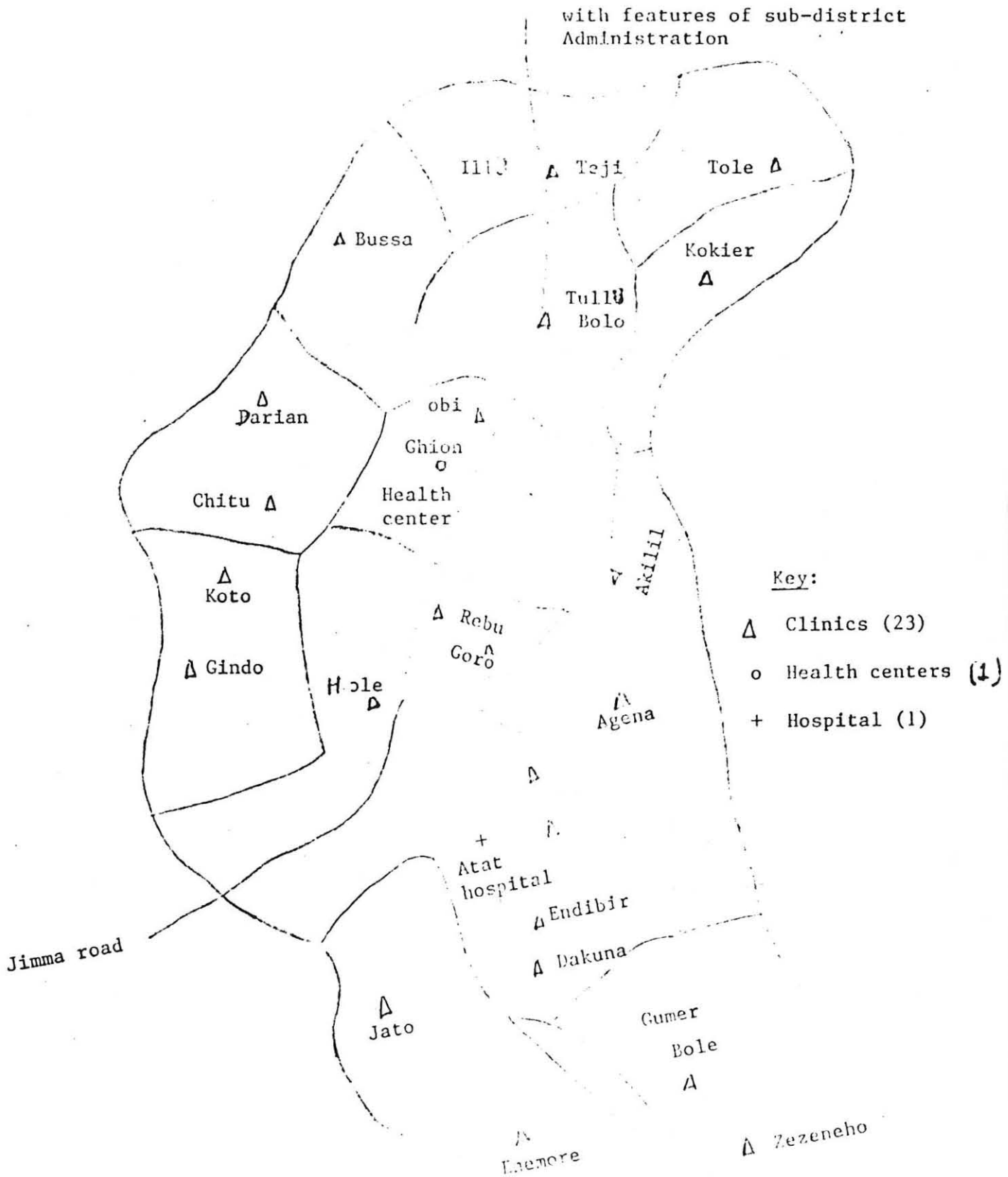
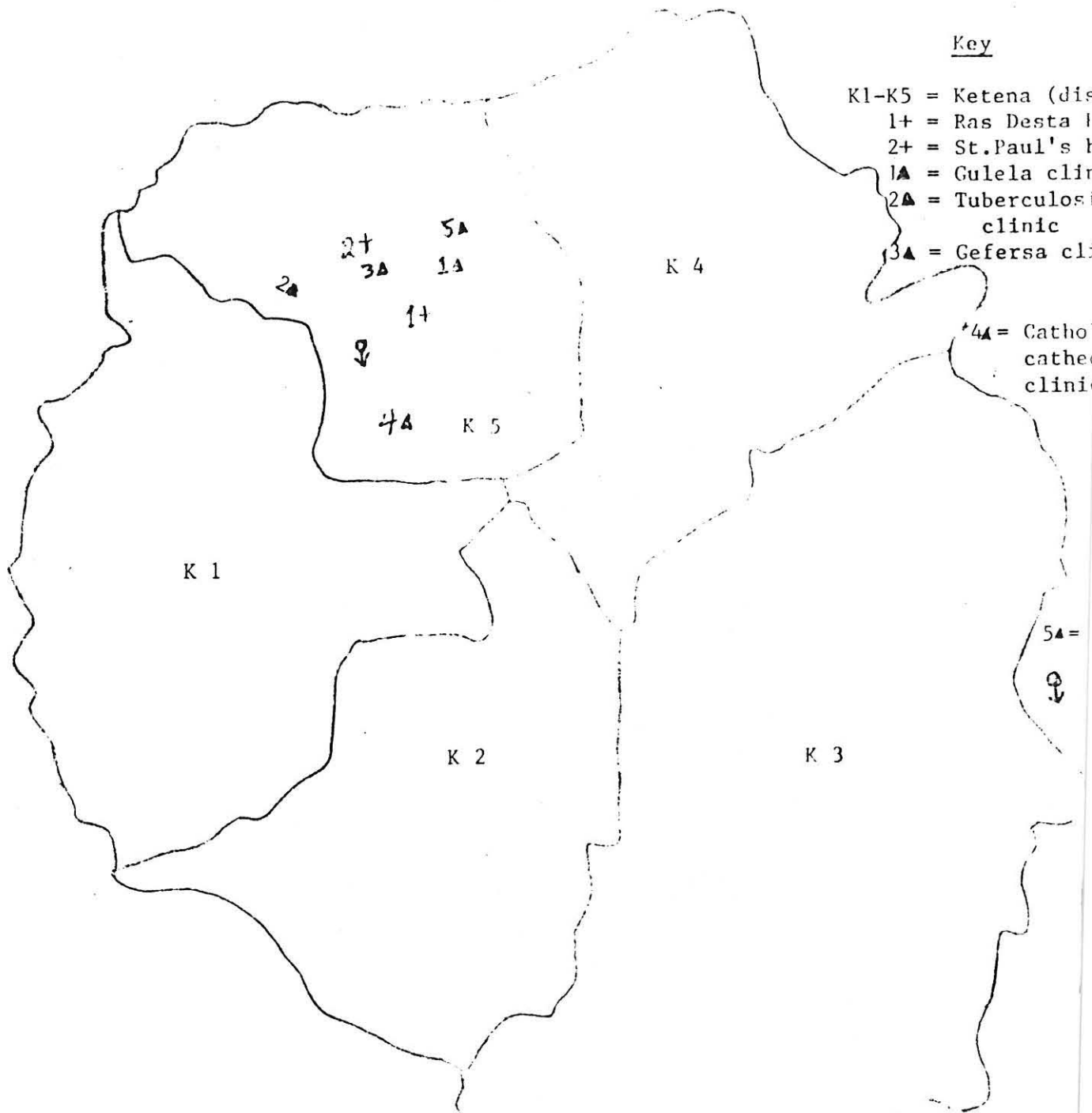


Figure 4.

MAP OF ADDIS ABABA REGION

with feature of administrative districts (ketena)



## ANNEX III - INSTRUCTION FOR INTERVIEWEERS &amp; QUESTIONNAIRES

Instruction for Interviewees

You are requested to participate actively in the process of training and exercise, (mock) on methods of interviewing and also asking question on any doubt concerning the clarity of the method of interviewing. Every interviewer must take part in pre-testing and simultaneously testing his methods of interviewing and the questionnaires.

Pre-Survey Activities

Using part I questionnaires the interviewers and supervisor must visit the concerned Kebeles of the urban and rural districts to collect the baseline information on community health and also make pre-test on population adjacent to the study area.

Random sampling method was used to select the study Kebeles and population from the selected sub-districts of the two districts. This was done with the field supervisor (sanitarians) and the students. The supervisor interviewed the leaders by using the part I questionnaires and the others interviewed the heads of households according to the selected house number using part II of the questionnaires. Reference period: questionnaires on provision of CHS activities referred to a year and for service utilization referred to two weeks prior to the survey.

### Introducing yourself-to the respondents

Approach the respondents politely and explain the aim of interview by using the following format ( if you are asked for official paper show them).

" I came here to ask you about information on your level of involvement in community (Kebele) health service activities, whose aim is to improve the service for you and other members of your community. Therefore, your collaboration in giving the right information is helpful."

### Respondents:

Interview only the selected heads of households if not present, give appointment date for the next visit.

### Filling questionnaires

All questionnaires must be asked and filled out in the space provided. Mark 'x' in the appropriate boxes. Address, demographic, and other socio-economic data of the respondents must be written clearly.



A CHA is declared active if he/she performs any two of the following activities

1. Assists with immunization programmes, treating minor ailments, providing ORS, etc.
2. Acts as secretary to functional health committee.
3. Reports on community health services activities monthly to kebele and supervising health units.

A TBA is declared active if she performs any two of the following activities

1. Delivered a baby with in last month at home.
2. Reported monthly on delivery activities to Women's Association and supervising health units.
3. Was a member of health committee and attended meeting in past month.
4. Number of health posts established \_\_\_\_\_
5. Distance of conventional health unit from the kebele CHS unit:

\_\_\_\_\_ less than 5 kms.  
 \_\_\_\_\_ 5 - 10 kms.  
 \_\_\_\_\_ 10 - 15 kms.  
 \_\_\_\_\_ 16 - 20 kms.  
 \_\_\_\_\_ Above 20 kms.

## Questionnaire Part II

Questionnaire prepared for the study on community involvement in community health service. Questions to be answered by head of household.

Name of the Interviewer \_\_\_\_\_ Date \_\_\_\_\_

1. Name of the interviewee \_\_\_\_\_

2. Sex \_\_\_\_\_

3. Age \_\_\_\_\_

4. Immunization target group of the family

Number of pregnant women \_\_\_\_\_

Number of under two year children \_\_\_\_\_

5. Educational level: \_\_\_\_\_ 0. Illiterate  
 \_\_\_\_\_ 1. Literate  
 \_\_\_\_\_ 2. Grade 1-6  
 \_\_\_\_\_ 3. Grade 7-8  
 \_\_\_\_\_ 4. Grade 9-12  
 \_\_\_\_\_ 5. Grade 12

6. Address

<u>Urban</u> House Number _____	<u>Rural</u> House Number _____
Kebele _____	Kebele _____
Kefitygna _____	Wereda _____
Ketena _____	Araja _____
Kifle-Hager _____	Kifle-Hager _____

7. Marital status: \_\_\_\_\_ 1. Ever married  
 \_\_\_\_\_ 2. Never married

8. Ethnic group: \_\_\_\_\_ 1. Oromo  
 \_\_\_\_\_ 2. Gurege  
 \_\_\_\_\_ 3. Amara  
 \_\_\_\_\_ 4. Tigre  
 \_\_\_\_\_ 5. others \_\_\_\_\_ (mention)

9. Occupational status: \_\_\_\_\_ 1. Farmer  
 \_\_\_\_\_ 2. Merchant  
 \_\_\_\_\_ 3. Governmental employee  
 \_\_\_\_\_ 4. Private employee  
 \_\_\_\_\_ 5. Unemployed

10. Family's average monthly income in birr
- | Urban |                    | Rural |                   |
|-------|--------------------|-------|-------------------|
| _____ | 1. less than 50    | _____ | 1. No ox          |
| _____ | 2. 50 - 99         | _____ | 2. One ox         |
| _____ | 3. 100 -199        | _____ | 3. 2 oxen         |
| _____ | 4. 200 -299        | _____ | 4. 3 oxen         |
| _____ | 5. 3000 -and above | _____ | 5. 4 or more oxen |

Questionnaires on health development activities. (Community Health Service infrastructure).

11. Do you have a health post? (Kebele-Clinic)
- \_\_\_\_\_ 0. No \_\_\_\_\_ 1. Yes
12. If question number 11 is no, Why ?
- \_\_\_\_\_ 1. Not informed to construct
- \_\_\_\_\_ 2. Other health units are preferred
- \_\_\_\_\_ 3. Others \_\_\_\_\_ (mention)
13. Are there community health workers(CHA & TBA) in kebele?
- |     |           |          |
|-----|-----------|----------|
| CHA | _____ Yes | _____ No |
| TBA | _____ Yes | _____ No |
14. Who do you think should pay in cash or in kind to CHWs?
- \_\_\_\_\_ 1. Clients on service
- \_\_\_\_\_ 2. Community
- \_\_\_\_\_ 3. Government
- \_\_\_\_\_ 4. Free (volunteer)
- \_\_\_\_\_ 5. Others (mention) \_\_\_\_\_
15. Did you or your family received any service from CHA within last two weeks?
- \_\_\_\_\_ 0. No \_\_\_\_\_ 1. Yes If yes mention: \_\_\_\_\_
16. Do you think the services rendered by CHAs in satisfactory? \_\_\_\_\_ 0. No \_\_\_\_\_ 1. Yes
17. If question number 16 is no, why ?
- \_\_\_\_\_ 1. Shortage of manpower
- \_\_\_\_\_ 2. Non-functional CHW
- \_\_\_\_\_ 3. No technical know-how
- \_\_\_\_\_ 4. Others \_\_\_\_\_ (mention)
19. What was your involvement in the vaccination program?
- \_\_\_\_\_ A. None
- \_\_\_\_\_ 1. Not requested \_\_\_\_\_ 2. Beyond our ability
- \_\_\_\_\_ 3. Not considered important \_\_\_\_\_ 4. Others \_\_\_\_\_
- \_\_\_\_\_ B. Yes, if yes to what extent \_\_\_\_\_

## 1. Planning

- a. Identified the need of vaccination service and discussed with community.
- b. Participated in meeting held, to notify the implementation of vaccination programmes.

## 2. Decision-making

- a. Participated in deciding time and place of vaccination programme.

- b. Consented, on decisions reached by leaders

## 3. Implementation/support the programme

- a. Agitation/take children (pregnant woman) to vaccination site.
- b. Supporting the organizing CHWs.
- c. Organizing or building a shelter for vaccination outreach site.

20. Was there a member of the family vaccinated?

\_\_\_ Yes      \_\_\_ No

If yes, show immunization card, and check for BCG scar, and cross mark the vaccines received from the card.

<u>Antigen</u>	<u>No.of vaccinated</u>	Number
BCG	DPT 1	TT 1 _____
OPV 1	2	TT 2 _____
2	3	
3	Measles	

18. To what extent (level) was your involvement in the following area of CHS activities.

	Activities	
	1. CHA	2. Trained TSA
<p>A. None</p> <p>1. Not requested</p> <p>2. Beyond our ability</p> <p>3. Not considered important</p> <p>4. Others _____</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>B. Yes, if yes to what level ..... ?</p> <p>1. Planning</p> <p style="padding-left: 40px;">a. Identifying the need of the service and discussed with community on recruitment</p> <p style="padding-left: 40px;">b. Participated in meeting held, to notify the recruitment</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. Decision making</p> <p style="padding-left: 20px;">a. Participated in deciding the criteria for the recruitment</p> <p style="padding-left: 20px;">b. Consented, on decision reached by the leaders</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3. Implementation-Support during Training and on job</p> <p style="padding-left: 20px;">a in kind</p> <p style="padding-left: 20px;">b. in cash</p> <p style="padding-left: 20px;">c. labour work/Farming/</p> <p style="padding-left: 20px;">d. Skilled work</p>	<input type="checkbox"/>	<input type="checkbox"/>

## Part II

-----

To what extent ( level) was your involvement in the following area of CHS activities

Type of community involvement	(3)Health Post	(4)Latrine.	(5)Solid waste disposal	(6) Water supply
A. None 1. Not requested 2. Beyond our ability 3. Not considered important 4. Others _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Yes if yes to what extent ? 1. Planning a. identifying the need of the activity, & discussed with community on strategy of implementation b. consented, on decisions reached by leaders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Decision making a. Participated in deciding time, place and strategy of implementing the activity b. Consented, on decisions reached by leaders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Implementation/Construction work by a. Material supply b. Contribution money c. labor work d. skilled work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## CHAPTER VIII

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