

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**HEALTH COMMUNICATION IN ETHIOPIA
A CASE STUDY OF TACKLING *TRACHOMA*
IN THE AMHARA REGION**

FELESETA KASSAYE

**AUGUST 2006
ADDIS ABABA**

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IN THE AMHARA REGION**

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FELESETA KASSAYE

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**BY:
FELESETA KASSAYE**

Approved by the Examining Board

Chairman, Department Graduate
Committee

Signature

Internal Advisor

Signature

External Examiner

Signature

Internal Examiner

Signature

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List of Acronyms

BBCWST	BBC World Service Trust
CDC	Center for Disease Control and Prevention
CSA	Central Statistical Authority
Ethiopia-UNCED	UN Emergencies United for Ethiopia
FGD	Focus group discussion
FMOH	Federal Ministry of Health
GET 2020	Global Elimination of Blinding Trachoma by the year 2020
IDI	International Development Enterprises
IEC	Information, Education and Communication
ITI	International Trachoma initiative
MOH	Ministry of Health
NCPB	National Committee on Prevention of Blindness
NGO	Non-Governmental Organization
NPPB	National Program for the Prevention of Blindness
RHB	Regional Health Bureau
SAFE	Surgery, Antibiotics, Face Cleansing & Environmental Improvement
TCP	Trachoma Control Program
TF/TI	Trachomatous inflammation-Follicular/Intense
TIME	The Trachoma Initiative in Monitoring and Evaluation
TT	Trachomatous Tricriasis
UNAIDS	Joint United Nations Program on HIV/AIDS
UN-EUE	UN Emergencies Unit for Ethiopia
USAID	United States Agency for International Development
WHB	Woreda Health Bureau
WHO	World Health Organization

Abstract

The problem of trachoma is massive in Ethiopia. The national blindness prevalence is estimated to be 1.25% and more than 900,000 people are believed to be blind. Disease transmission occurs primarily between children and the women who care for them. (Carter Center 2005, p.1). One reason aggravating the situation is poor health communication (Health Education Center 2005, p.8). This study was designed to assess the health communication strategies used in tackling trachoma and their appropriateness in the Amhara Region (West Gojam Zone, Yilmanadensa Woreda). Other than secondary data, the research was used both qualitative and quantitative methods so that the data support each other. The quantitative method followed procedures of selecting four Kebeles from the Woreda for their accessibility and using a systematic random sampling to distinguish 396 adult respondents from those Kebeles. Additionally, 8 target community members and 10 experts as well as 16 in-school children of 7 - 11 years of age were interviewed. In addition, two focus group discussions and personal observation were employed. Finally, appropriate quantitative and qualitative research methodologies were used to analyze the data. This study took place between April and July 2006.

The entire community is Orthodox Christian and religious leaders were the most influencing parties. Coffee gathering, church, fetching water and firewood and meeting were found to be useful indigenous media. Concerning the trachoma program, it used mass media, IEC materials and interpersonal communication methods. Effort was also made to reach different audience groups separately. However, there seemed to be a wide gap between development communicators and beneficiaries. Message inconsistency, inefficient and inadequate communicators and discord with local culture were among the various failures observed in the communication strategy. Therefore, following the social marketing theory-prior study on media habit, needs, culture and worldview of the audience as well as community and professional input should be given due emphasis in the design of trachoma communication strategy to the specific community. Besides addressing other environmental and structural problems is found to be equally important. This study was conducted only in four rural Kebeles, it is impossible to reach generalization. For this reason, further study is recommended.

CHAPTER ONE

I. INTRODUCTION

This introductory chapter gives insights into the study. It sets up the background of the study and presents problem statement. It also provides purposes of the study and significance of the research.

1.1 Background and Problem Statement

Sanitation is enforced both in spiritual and secular views. The Holy Bible says it is obligatory for human beings to keep hygienic. In its biblical sense, the potential of personal hygiene goes beyond external cleanliness to the extent of internal purity-holiness.

He who is to be cleansed shall wash his clothes, shave off all his hair, and wash himself in water, that he may be clean. After that he shall come into the camp,...He shall wash his clothes and wash his body in water, and he shall be clean (Holy Bible 1973, Lev. 14: 8-9).

Further to add, the same Book accentuates the importance of environmental sanitation.

You shall have a place outside the camp, where you may go out; and you shall have an implement among your equipment, and when you sit down outside, you shall dig with it and turn and cover your refuse. For the LORD your God walks in the midst of your camp, to deliver you and give your enemies over to you; therefore your camp shall be holy, that He may see no unclean thing among you, and turn away from you (Holy Bible 1985, Deut. 23:9 – 14).

Albeit, with a total disregard of the rule, it is a common phenomenon for mankind to suffer from consequences of insanitary. Many have lost their eyesight for it and still more are on their way. It is estimated that 45 million of the population of the world is blind and 135 million lives with low vision (WHO Undated, p.3).

International Center for Eye Health declares that all in all, developing countries bear 90% of the total world blindness problem (ICEH 2004, p.34). Of the different causes of blindness, trachoma contributes a considerable share to this number. Around the world, trachoma blinds 6 million people. In addition, it risks about 540 million (Carter Center 2005, p.5). Geographically, Trachoma resides in the poorest and deprived parts of Africa, Asia, the Middle East, Latin America and Australia. On top of that, women and children are more vulnerable to the disease.

To come to our case, Ethiopia is known to have the leading blindness rate in the world (ORBIS 2006, 1 screen). Additionally, trachoma is assumed to be a major public health problem of the nation. Nearly, 937,500 blindness cases in total occur countrywide and 30% of which is blind from trachoma (Carter Center 2005, p.5).

Blindness can be described in terms of inordinate economic and social problems. The annual economic cost to global burden of blindness is about \$28 billion (WHO Undated, p.5). Added to that, visually impaired people face “reduced social integration, unequal rights, and lack of access to health, education and employment opportunities” (ICEH 2004, p.39). Regrettably however, some of the blindness cases are said to be avoidable. For instance, about 40 percent and 35 percent of the total blindness in Ethiopia considered as treatable and preventable respectively (Blind Hope 2005, 3 screens). For all these reasons, trachoma, the main infectious cause of blindness in the glob, deserves a considerable concern; a concern that centralizes women and children-the foremost victims.

Despite its magnitude, the efforts to prevent and control trachoma have been unsatisfactory. A foreword by former U.S. President, Jimmy Carter confirms the same. “There is no excuse for the unnecessary suffering caused by blinding trachoma. While we cannot eradicate this devastating disease, we have the tools to eliminate the more serious complications of trachoma,

such as blindness” (Emerson et al. 2006, p.iv). Aggravating the problem are health behavior related factors, resources, socio-economic, demographic and environmental aspects (Health Education Center 2004, p.4). Thus, there needs to be a multi-faceted strategy to turn the trend around.

Recently, the World Health Organization (WHO) has set a global target entitled GET 2020 - global elimination of blinding trachoma by the year 2020. Thereupon, different nations have committed themselves with implementing a strategy, SAFE, recommended by the same organization (West 2003, 9 lines). Individual components of SAFE are described as “Surgery to correct trichiasis—the immediate precursor to blindness, Antibiotics to treat active disease—azithromycin or 1% tetracycline eye ointment, Facial cleanliness to reduce transmission, and Environmental improvement to affect the determinants of vulnerability” (ICEH 2004, p.50). Its distinctive characters are:

SAFE is an innovative, community-based approach designed to fight trachoma by treating infection and reversing its damage, thereby increasing the availability of health care in endemic areas while addressing the underlying medical, behavioral and environmental causes of the disease (Ibid).

Nevertheless, effective SAFE strategy especially in its last two components has found to be challenging because it requires a thorough deal with attitudes, beliefs and behaviors (Ibid). Here comes the importance of health communication. According to Center for Disease Control and Prevention (CDC), the potential of health communication to inform individuals and community with health related matters and influence them accordingly is undeniable (CDC Undated, p.2).

Regardless of its importance, it seems, development stakeholders have given little or no attention to health communication. In short, up to now, unsatisfactory health communication

activities around trachoma have been widely revealed in Ethiopia. It is rather characterized by poor planning and ineffective implementation. It is also known for its failure to consider local cultures for the most part (Health Education Center 2004, p.8). By the same token, "Communication materials and methods generally used in Ethiopia have several limitations for the majority of 85 percent of rural population" (Yusuf 1994, p.1). As shown in the above quote, the majority of Ethiopia's population lives in rural areas where health and social services are usually minimal. It is believed that this situation has partly paved the way to aggravated trachoma prevalence in the nation. Hence, this project focuses on rural, remote and isolated communities.

Of the nine regional states in Ethiopia, the Amhara National Regional state, the focus of this research, is the second highly populated (total population of 16.3 million) in the nation. Though there is a paucity of information on the magnitude of trachoma in this region, blindness has been a tragic fact of life for about 203,750 people (Health Education Center 2004, p.11). More and more, women and pre-school children constitute the lion share of the vulnerable community. This fact aroused interest of the researcher to review health communication activities undertaken by the trachoma control campaign (TCP) in the area so far. More specifically, the project focuses on four selected Kebeles found in one Woreda called Yilmanadensa. This Woreda is found in the West Gojam Zone of the region.

1.2 Purpose of the Study

The main purpose of this study is to make an assessment on the health communication strategy used in tackling trachoma in the Amhara Region. The main question that this research wants to answer is:

- ❖ What are the health communication strategies used, and are they appropriate to tackle trachoma in the study area?

In light of this general question, the specific questions to be assessed in this study are:

1. What are indigenous media of the study community? What are the most credible sources of information?
2. What are the communication approaches employed by the trachoma communication campaign in the study area? Is there any differential approach adopted for men, women and children?
3. What types of trachoma messages are disseminated by the communication intervention?
4. Is there any harmony between the trachoma communication activity and the local culture?
5. What is the level of trachoma awareness and behavior change among the study group?

1.3 Significance of the Study

Good health is a priceless asset to human beings; and the prominent role that communication plays has pushed effective health communication to a new level of importance. In line with this, this project attempts to create awareness on the health communication scheme in the country. In addition, the study presents a review of communication systems and tools used for trachoma in the Amhara Region, West Gojam Zone. Based on this, the researcher hopes that the project becomes a useful instrument for development stakeholders interested in tackling trachoma disease in the study area. The research can also serve as a springboard for those who want to make a further study on health communication especially on trachoma control and prevention in the study site.

CHAPTER TWO

II. REVIEW OF LITERATURE

This chapter brings to focus ideals and claims in the realm of health communication, more specifically, on trachoma communications that are culled from earlier studies and literature.

2.1 Trachoma and its Magnitude

Trachoma, a disease caused by repeated infection of the eyelids with the bacteria *Chlamydia trachomatis*, has known to the world as far back as 3500 years (Miller et al 2004, p.751). At one time, every nation suffered illness caused by trachoma. Strangely enough, however, in many cases it is no longer true. The declination of its prevalence can be attributed to effort made especially in the 1950's and 60s. More specifically, developed countries were able to eliminate it with social and economic improvement as well as with growing awareness on the importance of personal and environmental hygiene. As a result of these changes, attention to trachoma problem started to decline (Cook 2003, p.1).

Currently, 55 countries are considered as trachoma endemic areas and they are found in Africa, the Middle East, Asia and some parts of Latin America and Australia. All in all, this disease has affected more than 100 million people at various degrees (Emerson et al. 2006, p.4). Active trachoma is very common among pre-school children, usually between 1-6 years (Wondu et al. 2005, p.3). What's more? It has a devastating consequence on women's lives: adult women's exposure is three times greater than adult men for the former have close contacts with children, who are the main sources of

infection, than the latter (Carter Center 2005, p.4). Plus, “three out of four blind women in endemic areas lost their sight to trachoma” (Ibid).

Apart from its pain and misery, trachoma poses different psychological, social and economical problems. The terrible consequences of trachoma are explained in this way.

Blind people in the developing world often lead lives of dependence and despair. Visual impairment may afflict not only the elderly, but also people in the prime years of life. In that case, they may be unable to work or provide for their families. Not only individuals but also communities suffer the economic effects of blindness (International Eye Missions 2005, p.1).

Disability from blindness has different facets. First, it affects people's productivity and makes them dependent on others. This negatively impacts on the economic aspect. Secondly, it resulted in weaken social relationship as blind people mostly compose an isolated segment of a community. Third, there is a vivid psychological problem created on the sufferers in connection to blindness (Carter Center 2005, p.2).

When we see its burden on women, those who suffer from trichiasis (often around the age of 35) will not be good enough to handle the usual housework like cooking and collecting firewood. This is because, their eyes can't stand smoky fires and bright sun. As a result of this, they became burden. If they are not lucky enough to be looked after by their own children, they are likely to face punishments like divorce and sent back to their families (Ibid).

Studies confirmed that poor facial cleanliness, shortage of water, presence of high fly densities and lack of latrines are suitable conditions for the disease (Wondu et al. 2005,

p.2). In explaining the different routes of trachoma transmission, Emerson et al. (2006, p.5) summarizes it “eye-seeking flies, hand-to-eye touching, mothers’ shawls, towels, bed sheets, and pillows”

Crucial to trachoma control and prevention is availability of water. The minimum international standard set for water consumption (drinking and sanitation only) per capita per day ranges from 20 to 40 liters. This figure might go up from 27 to 200 l if cooking and bathing are considered. But several countries have failed to meet this standard (JHSPH, 1998). More specifically, rural population usually has low water consumption per capita per day. One more factor to be pointed out in relation to poor hygienic practices and low domestic water consumption is distance to primary water source.

It has been found in many contexts that water consumption hardly changes with the distance to water source, within a range of 100m to about 1km. Beyond 1 km, water consumption falls off and when water is piped to the yard or into the house, consumption can more than double. The time taken to collect water can be used as a proxy for distance and 30 minutes is considered to be approximately equivalent to 1 km distance (Edwards and Todd 2004, p. 41).

After a considerable inattention, recently, however, there shows a revival of interest on the issue-trachoma. This can be explained by a goal set by WHO which targets to eliminate trachoma by the year 2020 (GET 2002). In addition, the mentioned resolution is followed by the SAFE strategy for orderly implementation.

2.2 SAFE – Proven Strategy to Eliminate Trachoma

Initially designed by WHO, SAFE strategy is recommended worldwide on a fight against trachoma. As it is already mentioned in the introduction part of this paper, SAFE is interpreted as Surgery, Antibiotic treatment, Facial cleanliness, and Environmental improvement. Basically, it is an integration of both a short-term and long-term interventions that are believed to be important to realize a successful trachoma program or to achieve the aim of GET 2020 (Emerson et al. 2006, p.5).

The first two components of this strategy, S and A are said to be the medical components and endeavor to address the immediate risk of blindness. Hence, they are known as short-term interventions. The rest two elements rather have a long-term effect. Unless these F and E components are properly performed, sustainable trachoma elimination might not be possible after reversing the in-turned eyelashes or antibiotic treatment. By their very nature, these last two components require behavior change programs at individual, community, inter-sectoral and political decision-makers levels (Ibid).

Then, what do we mean by behavior change? Before talking about behavior change or behavioral change communication, first let's have a thorough look on communication itself.

2.3 Development Communication

Until now, there is no a universally accepted definition for communication. In the words of Balan and Rayudu, "Communication is a constant social interaction between an individual and the society for the mutual satisfaction of their needs" (1994, p.102). Anew, Dictionary of Encyclopaedia Encarta (2004) defines communication as "The process of sharing ideas, information and messages with others in a particular time and place." The common ground for these two definitions seems the idea that communication is an on-going process that centralizes sharing of ideas between two or more groups.

Of the different forms of communication, development communication is the first to be mentioned. It stems back to the post-war period and focuses on communication strategies and principles to be applied in the developing world. This idea is confirmed by the following quote.

Development communication has its origins in post-war international aid programs to countries in Latin America, Asia and Africa that were struggling with poverty, illiteracy, poor health and lack of economic, political and social infrastructures (Waisbord 2006, p.1).

As stated above, development communication deals with health related issues among others. With this in mind, now let's see the scheme of health communication.

2.3.1 Health Communication

There are varied definitions of health communication. According to Center for Disease Control and Prevention CDC, health communication is "the study and use of

communication strategies to inform and influence individual and community decisions that enhance health" (Undated, p.2). By referring Ratzan (1994), the same source again notes that within the academic community, health communication is often viewed as "the art and technique of informing, influencing and motivating individual, institutional, and public audiences about important health issues. Its scope includes disease prevention, health promotion, health care policy, and business, as well as enhancement of the quality of life and health of individuals within the community." Also, Clift and Freimuth (1995, p.199) attest that "Health communication, like health education, is an approach which attempts to change a set of behaviors in a large-scale target audience regarding a specific problem in a predefined period of time". While spotlighting basic characteristics of health campaigns, Backer and Rogers (1993, p.1-2), by citing Rogers and Storey (1988) indicate health communication has a considerable role to play in health communication campaigns. In sum, the above-mentioned ideas point out health communication is an activity intended to improve the health behavior of a given community.

2.3.2 Components of Health Communication

As it is illustrated by CDC (Undated, p.2), audience, message, source and channel are cardinal elements of a health communication activity. Audience refers to the public targeted in the campaign. A health communication program requires greater understanding of the public to be addressed. Message wise, it should be put into a form that is positive and easily understandable by the audience. In an attempt to magnify the role of the message component in health communication CDC (Undated, p.1) by citing Freimuth says, "An effectively crafted and disseminated prevention message is the key control measure and potentially increases the effectiveness of the message and

improves public health.” Source, as a component of health communication, stands for communicators employed to deliver the message. As much as possible the source for a specific health message should satisfy credibility by the intended public. The other component, the channel, is described as means of transmitting a message. Usually, employing multi-channels is suggested to insure wider accessibility (Ibid).

2.3.3 Methods of Communication

Becker as cited by CDC emphasizes the role of communication methods in promoting the health status of a nation by saying the following.

Communication methods are used to create and increase public awareness of a disease; educate the public about a disease, its causes, and treatment; change a person's or group's attitudes about a disease; change individual behavior to prevent and control; advocate for policy changes in favor of disease prevention and control; and create social norms that favor healthful living (Undated, p.2).

In addition, employing multiple methods can help to close gaps that can be created otherwise (West 2003, p.5). The forthcoming discussion dwells on the different communication methods that are common in health communication activity.

Interpersonal communication

Brook (1971, p.145) defines this concept as “Interpersonal communication occurs when two or more persons are involved in an interaction that allows all participants to send overt verbal messages. Conversations, interviews, committee meetings, and group discussions are examples of interpersonal communication situation”. It confirms that such method provides equal opportunity for every participant to be a speaker as well as

a listener. This method is likely to be useful in situations where we want to have audiences' committed response (Agricultural Communication in Education 2000, p.74).

Interpersonal communication can be seen in two different ways.

Communicating Using Groups

In many areas, it is common for local health workers to provide health education for people who come to receive treatment at health centers/clinics. Schools, women's unions and market places can also serve as excellent targets to provide health information. In addition, interpersonal communication methods like stories, songs, and dance serve useful instruments to help smoothly absorb the intended message. So far, countries like Morocco, Nepal and Vietnam have achieved success in trachoma program using these methods (ICEH 2004, p.58).

One-to-one Communication

One-to-one communication is also assumed to be useful in implementing the SAFE strategy. This method is even more appropriate to reach individuals with trichiasis. A case of Vietnam is a good example here.

In Vietnam,...actions groups visit each person identified with trichiasis, encourage them to have surgery, and help to make the arrangements to facilitate this. The program decided not to use radio messages about trichiasis surgery because many sufferers do not identify themselves as having this condition and would probably not 'tune in' to such mass communication (ICEH 2004, p.58).

In sum, the above mentioned interpersonal communication methods seem useful tools especially when dealing with rural people like most trachoma endemic communities.

IEC Materials

It includes flip chart, playing cards, storybooks and stickers among others. Posters can also be included in this category. IEC materials were well utilized by BBC World Service Trust (BBCWST) trachoma program in Ethiopia.

BBC...designed and produced IEC materials as part of the multi-media campaign to promote positive behavior. It helps to reach those who have no access for radio, video film and to strengthen messages transmitted through both media. It also helps to get across messages that were not covered in other media for several reasons (BBCWST 2003, p.7).

From this we can learn that IEC materials are useful communication tools.

Mass Media

Mass media approach is assumed to be appropriate to send messages promptly and broadly (Agricultural Communication in Education 2000, p. 75). Mass media have been widely used in health promotion campaign such as trachoma. "Mass media (posters, television, radio, films and videos) are popular means of transmitting simple 'nuggets' of information to raise awareness about trachoma" (ICEH 2004, p.58). In this regard, the past effort of the BBCWST to broadcast trachoma messages using radio and video can be a good example (Edwards et al. 2004, p.49). Likewise, printed fabric (clothes) and posters have been used to serve similar purposes in Niger, Nepal and some other countries (ICEH, 2004, p.58).

However, mass media that are assumed to be important channels to disseminate health information are found to be inefficient to reach trachoma victims who in most cases situate in remote and deprived areas (Ibid).

Traditional Media

It is an approach of using street theater, traveling film shows, narration and dances to convey development messages. This method would be much of successful mechanism of communication to bring behavior change (USAID 2002, p.12). The major points to be mentioned as strengths of this media are employing local jargon and slang, presenting messages and situations in familiar context, ability to be self-sustaining at low or no cost as well as the potential to involve the community with their local talent (Emerson et al. 2006 p.37).

Indicating limitations of traditional media, it reaches relatively small group, may not be available when needed, requires investment in training and support, may have difficulty broaching highly sensitive issues and may be difficult to guarantee and monitor accuracy (Ibid).

2.3.4 Concepts of Effective Communication

Ideally, the role of communication is to impart information to people effectively (Agricultural Communication in Education 2000, p.65). Then, what are the factors that make a certain communication activity effective? “Effective communication is a two-way, turn taking activity, requiring participation from both parties. It is used to share ideas and knowledge, establish identity, give instructions, ask questions and express feelings” (ICEH 2004, p.38).

Scholars like Ramachandran and Dharmalingam (1976, p.199-100) say, the effectiveness of any communication activity should be seen from the very goal set at the initial. For example, if the desired outcome of the communication campaign is behavior change, then the evaluation should be to check whether the desired behavior change is realized or not.

2.3.5 Behavior Change Communication (BCC)

Of the various definitions of BCC, the following is one given by USAID.

an interactive process with communities (as integrated with an over all program) to develop tailored messages and approaches using a variety of communication channels to develop positive behaviors; promote and sustain individual, community and societal behavior change; and maintain appropriate behaviors (USAID, 2002: 5).

Wondwossen (2004, p.1) explains the role of behavior change in this way. “Behavior change plays a pivotal role in promotion health programs and prevention health problems”. In other words, imparting information is not all about BCC; instead, to bring about behavior change is considered as a top priority. In its wider sense, the role of BCC can be seen as, recurrent delivery of messages that focus on a specific behavior through multiple channels to realize knowledge advancement; stimulate community dialogue; promote essential attitude change; reduce stigma and discrimination; create a demand for information and services; advocate; promote services for prevention, care and support; and improve skills and sense of self-efficacy (Ibid).

The Process of BCC

There is no a specific sequence that can be regarded as a road to behavior change. "When changing behavior, the individual, community, or institution goes through a serious of steps-sometimes moving forward, sometimes moving backward, and sometimes skipping steps" (USAID 2002, p. 7). In any case, the usual steps that people go through in connection to behavior change are:unaware, aware, knowledgeable, ready to change, trial change of behavior and adoption of new behavior (Ibid).

BCC and Trachoma

Likewise, trachoma programs, as they usually are intended to result in behavior change, require prior understanding of the culture and tradition of the focusing community. "So while research shows that behaviors such as hand and face washing can prevent trachoma, simply prescribing these behaviors is not likely to lead to long-term behavior change if the situation, culture, and available resources are not also taken into consideration" (Ibid).

2.4 Communication in Trachoma Programs

It is evident that health communicators need to give much attention to the communication aspect of their campaign if they are to succeed. Cook (2003, p.6) while pointing out important things to be considered to eliminate trachoma suggests that trachoma elimination initiative must be organized around national program, applied research and communications and advocacy. He further emphasized on the importance of the third component, communication and advocacy by saying trachoma elimination can only be ensured by establishing enough knowledge of the disease among the audience through communication.

There are about five points that are identified by TIME group as prominent components for effective trachoma control communication (Marcia et.al 2004, p.57).

1. Develop health education activities in harmony with local culture.
2. Match communication messages and methods to target audiences.
3. Train and support locally based communicators.
4. Ensure consistency in SAFE messages and services.
5. Monitor and evaluate health promotion efforts.

2.4.1 Harmony with Local Culture

Trachoma control communication needs to be integrated with local cultures and social norms so that efforts can easily get acceptance by the intended public. This can be done in a number of ways. To mention some, development communicators have to talk about their plans and get consent with community leaders. The other is, holding discussion with communities in familiar places such as churches and clubs. Still another means could be assigning appropriate communicators to deliver messages. For example, addressing women through the Women's Union specially assigning women communicators to reach women audiences. All these are believed to maximize community's involvement (Ibid).

2.4.2 Matching to Target Audience Needs

In order to enable effective communication, health related messages and methods should appeal to the specific audience. In a sense, the nature of the targeted group must be well-considered before designing a message or choosing a method to transfer the message. This can be explained as audience segmentation. For example, gender

and age are among the usual segments to be taken into account in such a condition. In a like fashion, communication media such as mass communication, communicating with targeted groups, one-to-one communication and others are examined and employed according to their appropriateness (ICEH 2004, p.57-58).

2.4.3 Locally Based Communicators

It is usually advisable to use local people to communicate trachoma information than aliens. Because by using similar language and appropriate approach, local people can easily win the acceptance of their community than strangers. But still they should be well-trained, motivated and armed with all the necessary promotion materials otherwise they lose their fruitfulness (Ibid).

2.4.4 Consistency in SAFE Messages

Effective trachoma communication involves giving equal emphasis to all SAFE components, creating a visible link among elements of the SAFE strategy and coordinating the different activities of trachoma program among others. By doing so, it will be easy to achieve both the long-term and short-term objectives.

2.4.5 Evaluation of Promotion Efforts

Monitoring and evaluating are important aspects of a health promotion campaign. Monitoring involves recording of progress and evaluating refers to judging the program in accordance to its objectives (Ibid). These two activities can help to augment the involvement of policy makers, to show fundraisers that the money is spend properly and also to empower communities by indicating the good things achieved (Emerson et al. 2006, p.38).

2.5 Barriers to Effective Trachoma Communication

Trachoma may not appear as a serious disease in its present endemic areas, had there not been failure by the community to understand the source, modes of transmission and cure of the disease. “the challenge for sustainable control is for people who are at risk of blindness from trachoma to understand the link between good hygiene, good sanitation, and improved living conditions for their children and being spared the misery of trichiasis as adults” (Emerson et al. 2006, p.2).

Though the key to prevent and control trachoma seems effective communication, the nature of trachoma endemic areas has challenged communication somehow. “Those producing eye health information from an international base face the challenge of finding out what eye health workers in specific locations need to know, the communication medium that best suits them, and to what extent materials can be developed or adapted locally” (ICEH 2004, p.34).

2.6 Common Theories and Models of Health Communication

These are some of the common theories and models of health communication that can be applied to trachoma programs.

2.6.1 Diffusion of Innovations

Diffusion of innovations is one of the known modernization theories that emphasizes changes at the community level. Modernization theory suggests the problem of culture, which remains intact because of the information gap in Third Worlds, can only be cured with the introduction of the Western model of development (Waisbord 2006, p.2).

The main variables of the diffusion model are innovation, communication, social system and time. It highly regards the use of mass media, to the extent, modernization merely equals with consumption of media products (Ibid). Wondwossen, mentioning Rogers (1962 and 1983) states "People's exposure to a new idea, which takes place within a social network or through the media, will determine the rate at which various people adopt a new behavior" (2004, p.18). Rogers, as cited by Waisbord endeavors to explain the different stages that individuals need to pass in the process of diffusion of innovations "awareness, knowledge and interest, decision, trial, and adoption/rejection" (2006, p.4). He further categorized the world population into early adopters and laggards based on their tendency to accept and the length of time they take to adopt innovations. He even added that most of the Third World nation belongs to the laggard category (Ibid). Critics argue this method emphasizes on persuasion (Servaes, 1999, p.77).

2.6.2 Participatory Model

The participatory model advocates equal participation of individuals and/or each and every part of the society in development projects. In addition, communication agents are nothing other than facilitators. Moreover, the model emphasizes on cultural identity of the target community. The other important thing in participatory model of communication is participatory evaluation or research. The theory insists local health workers should find out the problem in a local area and the communication medium and message that can best suit the situation. (Servaes 1991, p.88-93).

There are two main approaches of participatory model.

- A. The Dialogical Pedagogy of Paulo Freire: Refers to group dialogue and action. Here, electronic and print media are disregarded. This theory insists on instant change (Servaes 1999, p.78).

- B. UNESCO'S Language about Self-management, Access & Participation: Implies high-level participation of the public through public media. In this system, feedback mechanisms are also recognized. Unlike Freire's theory, this discourse supports gradual progression – like holding back self-management for some time in the future (Servaes 1999,p.79).

Indicating its limitations it is argued that it won't be workable to deal with short-term effects, it disregards the importance of mass media and community involvement might not be needed all the time (Waisbord 2006, p.18). VISION 2020 suggests this approach to actualize its goal among others (ICEH 2004, p.52).

2.6.3 Social Marketing Theory

Another known theory in the realm of development communication is the social marketing theory. Waisbord, by quoting Kotler and Zaltman gives the following as a standard definition for social marketing theory. "it is the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving consideration of product planning, pricing, communication, distribution, and market research" (2006, p.7). Social marketing differs from commercial marketing in that, the former is engaged on selling ideas, attitudes and behaviors where as the latter sells products (Emerson et al. 2006, p.32).

The social marketing approach encompasses all individual, social, structural and environmental factors. According to this theory, much attention should be placed on behavior change than creating awareness or changing attitude (Simons-Morton, et al 1995, p.370). “Social marketing’s focus on behavior change, understanding of communication as persuasion (“transmission of information”), and top-down approach to instrument change suggested an affinity with modernization and diffusion of innovation theories” (Waisbord 2006, p.6).

Basically, social marketing underlines on voluntary exchanges of resources between or among individuals, groups and organizations. Rooted in commercial marketing, social marketing involves market segmentation and researches. “Lessons learned from social marketing stress the importance of understanding the intended audiences and designing strategies based on their wants and needs rather than what good health practice directs that they should do” (Wondwossen 2004, p.24). The four pillars of customer-oriented strategy are interpreted as price, product, promotion and place (ibid).

Price: what the consumer must give up in order to receive the program’s benefits (these costs may be intangible [e.g., changes in beliefs or habits] or tangible [e.g., money, time or travel])

Product: what the program is trying to change within the intended audience and what the audience stands to gain.

Promotion: How the exchange is communicated (e.g., appeals used)

Place: what channels the program uses to reach the intended audience (e.g., mass media, community interpersonal)

Emerson et al. (2006, p.32-39) discussed the four fundamental steps to be followed in order to apply a social marketing campaign.

1. Research: this stage helps to find out about the knowledge, behavior, dreams, and media habits of the target group. By doing so, new ideas (PRODUCTS) could be placed in concord with the local culture or belief system. Using part or all of the methods can do this: personal knowledge as well existing information collected by others, structured questionnaire and key informant interview or discussion with the intended public.
2. Message Development and Pre-testing: at this stage themes and messages that can take hold of the attention/interest of the target public will be developed based on the results of the research and pre-tested for their effectiveness.
3. Materials Development and Pre-testing: this step consists of choosing appropriate channels of communication (PLACE), developing specific communication supporting materials and pre-testing the materials. Normally the theory suggests mass media and interpersonal communication.
4. Campaign Delivery and Evaluation: this is the final step of the campaign wherein delivery of materials (PROMOTION) and evaluation of the overall outcome: behavior change (PRICE) of the campaign will be made.

Critics argue that social marketing prioritizes goal over means, maneuvers people's behavior, insists on top-down approach, focuses on individuals instead of groups and of non-participatory nature (Waisbord Undated, p. 6-11).

2.7 Communicating Trachoma through Social Marketing

Different studies confirmed that certain attitudes and behaviors placed the study population at risk of getting infected with trachoma. Then, there is no doubt that the risk behaviors need to be addressed. This can be realized with the help of behavior change communication. As it was mentioned in the literature review part of this paper, BCC centralizes developing and sustaining new behavior that can go against the risk factors (USAID 2002, p.9). Consecutively, behavior-centered communication approach seems a workable option to tackle trachoma. Focusing on behavior change, social marketing theory proved to be effective in trachoma control programs (the SAFE strategy) with other nations. “A social marketing campaign can serve as a tremendous support to all F and E trachoma control interventions. It can raise the profile of the entire SAFE program and should be integrated into all planning, implementation, and evaluation activities” (Emerson et al. 2006, p.32). The case of IDE’s trachoma program in Vietnam is a good example for the effectiveness of social marketing theory (Ibid).

This research also suggests the social marketing theory as the best approach to deal with the problem of trachoma because the issue is likely to involve various factors-civil, organizational, policy and economic ones.

2.8 Trachoma Control Program in Ethiopia

In Ethiopia, blinding trachoma is viewed as a public health problem by the government. Studies have capitalized that trachoma is a major problem of the nation and any effort in relation to improving Ethiopians health status should take trachoma problem into consideration.

Any health program intervention should be based on audience analysis and needs of the audience can be met satisfactorily. Thus, health education, from any source, should focus on HIV/AIDS, reproductive health, tuberculosis, trachoma, environmental and personal hygiene and immunization which are the needs of the audiences (Community Health Department 2003, p.vi-vii).

To this end, National Committee for the Prevention of Blindness (NCPB) that is accountable for the Federal Ministry of Health was launched. Trachoma is the concern of this committee among others. The country has been implemented the WHO SAFE strategy since 2001. Consequently, there exists a national task force for trachoma program in which MOH, WHO, UNICEF and others are members. On top of that, a five years strategic plan for trachoma and other diseases is ready for use.

Notwithstanding the above-mentioned efforts, trachoma problem hasn't shown a considerable change for a number of reasons. One reason could be in connection to water and sanitation facilities. "Water supply and sanitation facilities in Ethiopia are generally inadequate, especially in rural areas, and this situation contributes significantly to the high incidence of many communicable diseases...such as trachoma" (Kloos and Zein, 1993, p.179). UN-EUE mentioning Ethiopia-UNCED, contends that "The average per capita water consumption is around 20 liters per day, falling to as low as 6 liters a day in areas where water has to be carried, often by women, considerable distance" (UN-EUE 1995, p.1)

Additionally, the number of latrines available for the population is assumed to be unsatisfactory. "Assuming one latrine per household, Boydell estimated a shortfall of 9 million latrines for the whole country on the basis of the 42 million population in 1984"

(Kloos and Zein, 1993:183). Consequently, many people especially the rural community uses open fields to defecating (Ibid).

The other reason is ineffective communication strategies employed “In general the impact of interventions undertaken so far is considered to have been too low due to poor communication processes and systems” (Health Education Center 2004, p.6).

Though it is undeniably critical, the achievement of effective communication has never been easy. Realizing its crucial value to curb health related problems of the nation, the MOH has designed a health communication strategy, but development communicators involved in the health sector have overlooked it regardless. In any case, the various efforts employed to tackle trachoma in the nation seem to bring about insignificant change.

Under this chapter, theoretical framework on health communication especially on trachoma control communication has been outlined. Next, the existing trachoma control program in the Amhara Region of Ethiopia will be looked at in the light of the essence discussed above.

CHAPTER THREE

III. RESEARCH METHODOLOGY

This chapter contains the procedures utilized to meet the objective of assessing the type of communication strategies used in tackling trachoma and their appropriateness to the study area. It includes the description of the research method, the instruments, the respondents, the procedures used in gathering the data and the statistical treatment utilized in analyzing the data collected.

3.1 Study Design

The research was conducted from April 2006 to July 2006. It involved both qualitative and quantitative methods so that the data complement each other. The finding was to assess health communication strategies employed and their appropriateness in tackling trachoma. The study was designed around one Zone (West Gojam) in rural Ethiopia.

3.2 Study Area

The West Gojam Zone is located in Amhara National Regional State and divided into ten Woredas from which only three of them (Bahir Dar Zuria, Yilmanadensa and Jabi Tehnan) have been reached with trachoma control and prevention program. Anew, of the three mentioned Woredas, Yilmanadensa is found to be the most densely populated one. As a matter of fact, Yilmanadensa has the largest population size from all Woredas of the Amhara Region that have received trachoma prevention measures. Consequently, there exhibited a considerable trachoma problem in the area (Carter Center 2005, p.22).

Hence, the study was carried out in the community of Yilmanadensa Woreda where trachoma is endemic and the SAFE strategy has been implemented. Report of the Central Statistics Agency (CSA 2005, p.2) declares that the Woreda is 611km from the capital, Addis Ababa and consists of 49 Kebeles. Its total population is estimated to 345,846. In this Woreda, the majority of the population lives under rural conditions with agriculture as their main form of subsistence. The area is not easily accessible, and there is minimal infrastructure like roads, health facilities, schools, etc. (Lundquist and Jenkins 1997, p.3).

After deciding the Woreda, only four rural Kebeles of it were selected to carry out the research. Assuming that urban dwellers' knowledge about trachoma is better than those of rural communities, the latter were selected as study target. The following is the name of the selected Kebeles and their corresponding population size as well as number of household.

Number of Households and Population by Kebele

Name of Kebele	Population No.	No. of Household
Geregera	9883	1,976
Gonje	8834	1,815
Killilt	9723	1,998
Kore	10,476	2,095

All the four Kebeles have similar health service coverage. Each Kebele has a health station, which deliver primary eye care activity that is supported by the Carter Center Ethiopia since 2004. Activities include antibiotic distribution (tetracycline eye ointment, zithromax), environmental improvement, and improving face washing. There is only one health center in the main town of the Woreda, Adet, which is responsible in handling lid surgery cases for the entire population of the area (Carter Center 2005, p.10-11).

Overall, there are 4 health workers who are trained to perform lid surgery. In addition, training was given for volunteers (353), health workers (79), community leaders (196) and teachers (92). Moreover, there are trachoma control program coordinators at Zonal and Woreda level (Ibid).

3.3 Study Population

The source population was the entire community of Yilmanadensa Woreda. The study population was all households and schools from the selected Kebeles and the study subjects were adult household members (mostly women) and in school children of grade 1 – 4 (especially ≥ 11 years). The adult should be a person over the age of 15, who normally has caring role within the household.

3.4 Sample Size

The sample size for the quantitative method was calculated using the two-proportion formula. Sample size (n) was determined based on single population proportion (p). The following formula was employed.

$$n = \left(\frac{Z\alpha}{2} \right)^2 \frac{p(1-p)}{d^2}$$

Where **n** is sample size, **P** is the proportion of people who have the desired behavior change with respect to trachoma, and **d** is the margin of error (WHO, 1991).

The following assumptions were used. Since local datum for the value of P was not available, it was taken to be 50% (P=0.5) to allow maximum sample size. Allowing 5 % for expected margin of error (d) and with 95% confidence level ($Z\alpha_2 = 1.96$), and 10%

contingency for non-response, the required sample size n will be 384. This number is equivalent to one percent of the population of the study source. Effort was made to end up with heterogeneous (with respondents from a diverse range of age and social class) and large sample size. In an attempt to maximize confidence on the representation of the sample, additional 16 questionnaires were prepared and so a total of 400 questionnaires were distributed. With four exceptions all individuals responded to all questions without agitation and finally the researcher end up with 396 (297 and 99 responded by women and men respectively) useful questionnaires.

3.5 Sampling Technique

This study used multistage sampling technique. Once, the Woreda was selected by judgment, only four rural Kebeles of the said Woreda were selected for their accessibility. List of Kebeles was available in the Woreda office.

Then, a systematic random sampling method was employed to get respondents from each Kebele. For this, house number of every household was taken from the Woreda office.

As women and children are more vulnerable to trachoma than men (women are three times at risk than men), the larger part of the respondents should be women. Therefore, in each Kebele, 75 women and 25 men were approached. To explain it further, in each Kebele, 100 questionnaires were treated by reaching the men respondents (25 of them) first and the rest (75 women) later. In case eligible respondent of the household was not available at the time of visit, the next household made substitution.

Plus, availability sampling was employed to get one blind person (blind from trachoma) from each Kebele. Consequently, 3 women and 1 man (from Kililt) were interviewed. In summary, a total of 400 households were interviewed via the head of the household or the housewife with the intention of eliciting information about socio-demographic information, water access, personal and environmental hygiene, knowledge attitude and practice toward prevention and control of trachoma, mass media & culture.

Other than this, random sampling was used to conduct key-informant interview with eight community members who are assumed to be good representative of the study group and also knowledgeable of the area. Additionally, ten interviewees who are currently involving in the trachoma control program were approached to get expertise view.

Simple random sampling technique was used to select in-school children for interview. From four different schools found in four different Kebeles, students of grade 1 – 4 were asked by taking one representative from each class. A total of 16 children (8 boys and 8 girls) who are between 7 and 11 years were interviewed. The questions zeroed in on trachoma communication used at schools. More specifically, knowledge, attitude and practice of the children as well as message and media they have been reached with were focused.

3.6 Instrument

Primary to instrumentation was descriptive survey of available literature including reference books, research papers on the topic, encyclopedias, different publications and electronic materials that served as a framework to the research.

Then, qualitative data collection, key-informant interviews, was conducted with two community members (one man and one woman), one community leader, one health worker and one religious leader from the area.

This was followed by a quantitative data collection using a close-ended questionnaire to be complementary to the qualitative information. The questionnaire was developed on the basis of the qualitative data and also adapted questions and modeled some from other researches.

To ensure that the questionnaire was unbiased and well-formulated, pre-testing was done on 30 randomly chosen households in rural community, Mosebo Kebele, in the same Woreda. The final questionnaire was therefore typed to include some suggestions offered from pretest. Corrections include linguistic matters, excluding questions that were found to be far apart from their scope of understanding like questions related to visual communication media and adding some open-ended questions for clarification. In addition, questions concerning efficiency of individual development stakeholders (organizations) like the Carter Center were totally excluded because most of the beneficiaries were found to be unaware of the presence of those organizations behind the trachoma control effort. They only assumed it was the government by itself who did everything.

Prior to the interview, two days training on how to collect the data using questionnaire was given to recruited enumerators, who were high school graduates and residing in the main town of the Woreda.

The questionnaire was first written in English then translated to Amharic and back to English to check the consistency of information before using it for data collection.

Before starting the interview the purpose of the study was explained to the head of the household (husband or housewife) and all subjects (heads of households either the husband or wife) were asked for their verbal consent to be interviewed.

The question concerning daily water consumption of the household did not evoke reliable responses. Normally, for religious reasons, the target community did not fetch water on the Sabbath (Saturday and Sunday) and on days assigned to St. Mary, St. Michael, St. Gabriel and the Lord. Hence, all the respondents excluded these days of the month from their answer.

Likewise, responses on face washing and bathing faced problem of unreliability. Almost all the community is aware of the importance of daily face washing and at least a weekly bathing. They also feel that failure to comply with this convention could be taken as obsolete. Hence, effort was made by most of the respondents to cover their actual face washing and bathing practice.

Parallel with the quantitative data collection, qualitative data were gathered as well. In-depth interview were made with three community members, one religious leader, two teachers, one health worker, two development workers, one women union's representative and one journalist. Interview was also conducted with 16 school children (Grade 1 – 4). Besides, two focus group discussions (FGDs), composing one homogeneous and one heterogeneous subject were conducted during this period. The homogeneous one composed of nine women from the four Kebeles (two from each

Kebele and one representative of the Woreda Women's Affairs Bureau). The second group consisted of ten people (one religious leader, one NGO worker, one community leaders, two teachers, three trachoma victims, and two development workers). Both FGDs were conducted at a market place of the main town of the Woreda, after the hectic environment of the market is settled. Health workers from different Kebeles selected the participants.

With the intention of enriching the data with different views, those people who were approached in one data gathering method were not incorporated in another method. As well, this research benefited from direct observation to confirm the presence and arrangement of latrine in schools & the presence of posters in schools, health posts and health center. Added to that, communication materials used to impart different trachoma information to the target community were reviewed. All these make the base for the final qualitative data gathered through in-depth interview with one Woreda health bureau official and one NGO worker.

3.7 Analysis

Analysis was made based on appropriate quantitative and qualitative research methodologies. Quantitative data were entered into the computer using SPSS software program. Coding and analyzing of data were carried out using this software package. In addition, the qualitative information (interviews and FGDs) was analyzed in a way to support the result of the quantitative data. Moreover, the observations and illustrations of health education materials were organized and presented as appropriate.

3.8 Scope and Limitations of the Study

The SAFE strategy is composed of four different pillars. The first two parts (S and A) are medical components, which are meant to address short-term problem of the disease. Whereas the F and E are intended to bring long-term influence. Besides, it is for these last two components that communication intervention is required for the most part. Hence, the study was confined to health communication efforts designed to address the last two components of the SAFE strategy.

The study is confined to one Woreda called Yilmanadensa, which is situated in the West Gojam Zone of the Amhara region. Presently, Yilmanadensa has 49 Kebeles. Incorporating all of them in the study was impossible. Since, the researcher was obliged to focus on four Kebeles for their accessibility.

It would have been a good resource for the study if up-to-date prevalence rate of trachoma in the study area were obtained. However, the researcher learned that study is only under way in this regard.

Other than time and up-to-date reference material constraints, barriers such as the unwillingness of some informants to speak their mind for one reason or another or share their experience had been a serious setback while undertaking this study.

3.9 Operational Definitions

Health communication: The art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community.

Communication Strategy: involves the plan and implementation of messages, methods, approaches and tools in health communication campaigns.

Trachoma: is a contagious eye disease caused by a form of *Chlamydia trachomatis* bacteria. It affects conjunctiva (membrane of the eyeball and lids) and cornea, the window of the eye. Symptoms of conjunctivitis develop and the disease may last for years. It may lead to blindness (Cumberland and Todd 2002, p.8).

Tackle: try to deal with a problem in order to combat its happening or increasing.

Region: an administrative state, regions constitute the federal government.

Zone: the government structure below the region. A zone incorporates several Woredas.

Woreda (District): The government structure above the Kebele and/or peasant association. The lowest level ministry in the government office structure.

Kebele: Low-level government structures, headed by elected leaders. They are common in urban areas, but also present in some rural settings. In rural areas, Woredas are generally divided first into peasant associations and then into Kebeles (villages).

Household: The collection of individual who live in one house.

CHAPTER FOUR

IV. FINDINGS

Various theoretical discussions related to health communication and trachoma disease have been made in previous chapters. This chapter presents the results of the study. The data under discussion in this chapter was gathered via interview, questionnaire, focus group discussion and observation.

4.1 Quantitative Data

4.1.1 Socio-demographic Characteristics of the Respondents

Sex of Respondents

Overall, 75% of the respondents were females and 25% men thinking of the fact that women are three times at risk to trachoma than men. Therefore, in this study, the M:F ratio of respondents can be described as 1:4. The forthcoming table demonstrates respondents' distribution by sex, age and education.

Table 1: Respondents Categorized by Age and Education Group

Variables		Sex			
Age Group		M	F	T	%
	<20	3	15	18	4.5
	20-29	29	84	113	28.5
	30-39	33	101	134	33.8
	40-49	12	56	78	19.7
	50-59	1	18	19	4.8
	>60	10	24	34	8.6
Education					
	Illiterate	38	222	260	65.7
	Read and write	18	8	26	6.6
	Grade 1-4	14	26	40	10
	Grade 5-8	20	22	42	10.6
	Grade 9-12	6	14	20	5.1
	Above high school	2	6	8	2

Age of Respondents

Age of respondents ranged from 15-74. The minimum age 15 can be explained in terms of the normal age of Amhara girls' to get married i.e. 14 (Lundquist, R. & Jenkins, 1997). Approximately 33.8% of the respondents were between the ages of 30-39, 28.5% between the ages of 20–29 and 19.7% between 40-49. The rest 13.4% and 4.5% distributed for respondents of ≥ 50 years and < 20 years respectively (See Table 1).

Education

Table 1 also depicts that the large portion of the respondents, 65.7% were illiterate with a further 6.6% only able to read and write. 20.6% of the respondents had attended grade 1–8, 5.1% achieved a grade between 9 and 12 and only 2% of the respondents were educated beyond high school level. This shows that the survey was made in a community of low educational standard.

Occupation

The main occupation of the population (71%) was farming. The rest can be explained as, 14.6% merchants, 4.3% priests, 4% students, 2.8% housewives, 2.5% government workers and 0.8% daily laborers. This highlights the fact that the community visited was a rural farming community.

Monthly Income

Of the total response rate (392) for the question concerning monthly income, 21.2% of the households failed to estimate the amount that the household earned per month. From the given responses, however, monthly income ranged from ETB 1 - 500. The

largest number of households (60.5%) earned a monthly income of between ETB 1 and 100. 12.2% claimed that they earned from ETB 101 to 200 and 6.1% of the respondents found to earn within the range of ETB 201 - 500. This confirmed that the study target is of very low economic status.

Number of Family

The large proportion of the household (53%) consisted of 1 – 5 members. The second largest number (6 – 8 members) accounted for 41% and only 6% of the households reported for more than 10 members (May not be fully reliable figures for rural communities do not like to disclose the exact number of their children).

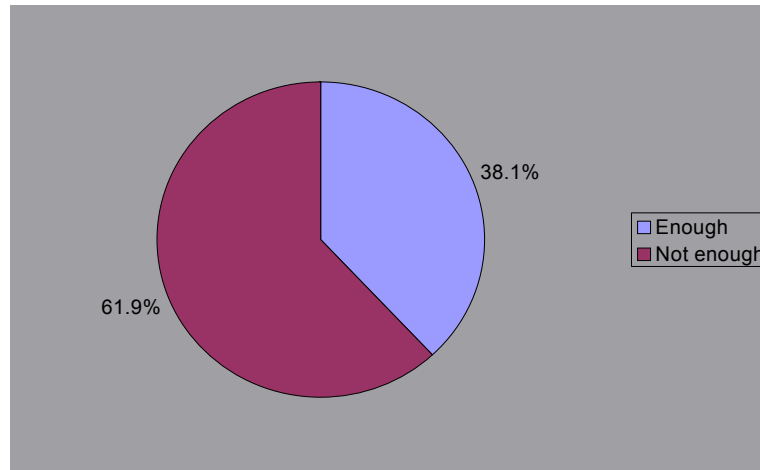
Religion and Ethnicity

All study participants at household level were of Amhara descent and all households identified themselves as Orthodox Christians. This can be affirmed by a number of literatures, “One can quite safely say that all Amhara are Christians” (Ethiopianet 2005, 1 screen).

4.1.2 Water and other Sanitation Facilities

Water shortage has been identified as a major issue with trachoma prevalence. The following figure demonstrates water supply in the study area.

Figure 1: Accessibility of Water



The survey indicated that out of the total number of respondents approached, 151(38.1%) said there was enough water access in their area and the remaining 245 (61.9%) maintained the opposite.

Overall, 60.9% of the households collected water mainly from the river and 46.7% used the stream. Households who used protected and unprotected well reported as 51% and 3.8% respectively. Only a small proportion of the respondents (1%) indicated that they used pond as water source. It was also showed that that 27.8% of the study group had access to piped water. The reason for >100% response rate for this question was that most households tend to use multiple water sources.

In this study it was seen that approximately a fourth of households were beyond 1 km (at lease 30 minutes away) from their primary water source. Of all the households surveyed, 45.4% can reach their main water source within 16–30 minutes and 29.5% within 5-15 minutes. Only 0.5% of the respondents were found within the distance of less than 5 minutes from their water source.

Concerning frequency of fetching water, approximately 84% of the respondents said that they collected more than once a day, 11% reported for fetching only once a day and the remaining 5% was covered by those who fetched once in two or more days. In terms of prevention of trachoma, it is the volume of water consumed not the quality that matters. In the survey undertaken the amount of water consumption per capita per day was calculated as follows.

Number of household members = 2,156
 Number of sample households = 396
 Average number of household member = 5.44

Total amount of water consumed by households per day = 14,703 liter
 Number of household = 396
 Average amount of water per household per day = 37.13 liter

$$\begin{aligned} \text{Average amount of water/capita/day} &= \frac{\text{Average amount of water consumed}}{\text{Average number of household member}} \\ \text{(in liter)} &= \frac{\text{per household per day}}{\text{Average number of household member}} \\ \text{Average amount of} &= \frac{37.13}{5.44} = \underline{\underline{6.82 \text{ liter}^*}} \\ \text{water/capita/day} & \end{aligned}$$

The result, 6.82 liter per capita per day showed very low water consumption by households.

* Given that the amount is likely to decrease on Saturdays and Sundays as well as St. Mary's, St. Michael, St. Gerbil and the Lord's days.

Household Facilities

39.8% households stated that they had 2 rooms, 25.1% reported for 3 rooms, 17.8% reported for 4 rooms and 15.7% for a single room. The rest 1.5% was distributed evenly (0.5%) among 5, 6 and 7 rooms per household. This revealed a sort of overcrowded living condition. Besides, the majority of the respondents (55.6%) didn't have kitchen or an extra house to be used for cooking and 44.4% represent the opposite.

Keeping Animals in Living House

Out of the 396 households, those who kept their livestock in the house during nights represented 252 (63.6%) and those who had a separate shelter made a total of 144 (36.4%). This practice of residing livestock in the house with the family during night times indicated a favorable condition for trachoma transmission.

4.1.3 Indigenous Sources of Information

Respondents were asked for their indigenous information sources and the majority gave multiple responses. As a result, the total number of response obtained for this question exceeded the number of sample respondents. Consequently, coffee gathering got the highest rate 254 (64.3%), church 203 (51.3%), fetching water and collecting firewood 188 (47.5%), meeting 185 (46.7%), market place 76 (19.2%), communal labor 75 (19%), feast 62(15.7%) and *Areke* room 37 (9.3%).

Again responses concerning the most credible sources of information were not mutually exclusive. Church or religious leaders have got the highest response rate (86.6%). Respected people of the community other than religious leaders obtained 77.8%, development workers (74.2%), Kebele (64.9%), educated people (59.1%), school (50.3%), women's union/youth's association (34.3%), radio (28.8%) and print media (16.2%).

4.1.4 Trachoma Communication Approaches

Respondents were likely to get trachoma information from multiple sources. That is why, the number of response under the question concerning source of trachoma information exceeded the total number of respondents (396). Approximately 24% of the response

rate showed that they hadn't heard or noticed any information about trachoma in one-year time.

Those respondents who heard about eye disease (76%), were asked for their source of information and their response was not mutually exclusive for they can get the information from more than one source. 1% of the respondents were not sure of the source. The majority (55.6%) got the information from health workers, 39.1% from neighbors/friends, 28.1% from radio, 19.9% from IEC materials, and 12.1% from meeting. Only 8.6% said from religious leaders (this may represent messages distributed by health workers at church gatherings).

The magazine prepared by the Woreda mainly to inform women and posters and flipcharts that were used by respective Kebele health posts were collected and shown to the respondents

Table 2: Respondents Recognized IEC Materials Categorized by Sex

Sex	IEC Materials							
	Poster/Flipchart				Magazine			
	Yes		NO		Yes		No	
	N	%	N	%	N	%	N	%
Male	29	7.3	69	17.4	24	6	74	18.7
Female	62	15.6	236	59.6	58	14.6	240	60.7

The above table depicts that very small number of respondents could recognize the materials. From the total 396 householders, 91 were able to recognize the posters and flipcharts and 82 the magazine.

Problem was observed on frequency of communication between development stakeholders and beneficiaries. In connection to this, 40.7% said they heard the

message occasionally and 38.9% reported once. Those who heard regularly took the rest 20.5%. Again the time that trachoma session was held seemed to be inconvenient for the majority (71%) of the sample population. Here, there was no X^2 difference among men and women.

One communication method used by TCP was radio (mass media communication). So attempt was made to see the radio listening habit of respondents. 57.8% adult respondents reported that they didn't have a radio and the rest 41.95 claimed to have a radio transistor. It appears that relatively balanced proportions of men and women listened to the radio whereas more men than women reported listening to the radio in a social setting, with friends, relatives and neighbors.

4.1.5 Trachoma Messages

To ascertain which health messages were received most, respondents were asked if they recalled eye disease messages that they heard or seen. The following table gives the summary.

Table 3: Trachoma Messages Recalled by Respondents

Message	N	%
Wash face	132	33.3%
Not share cloths to wipe faces	46	11.6%
Use latrine for defecation	76	19.2%
Use farm area away from house for defecation	22	5.6%
Burn or burry rubbish	86	21.7%
Keep animal away from house	16	4%
Keep area around house clean	111	28%
Talk to health worker about eye problem/trachoma	52	13.1%
Use tetracycline/antibiotic for eye problem	50	12.6%
Get surgery for trichiasis/turned in eyelid	30	7.8%
Eye problems/trachoma can be prevented	51	12.9%
Trachoma is transmittable	14	3.5%
Don't know	26	6.7%

**responses not mutually exclusive*

As depicted in table 6, the main message recalled by respondents was the importance of face washing (33.3%). Other messages recalled relatively frequently were the importance of keeping areas around house clean (28%), the importance of burning and burying domestic and environmental waste (21.7%) and using latrines (19.2%).

Quality of messages: clarity, credibility, consistency, usefulness and interestingness were presented to respondents for rating and then message quality score was calculated using a comparative scale. The following two tables demonstrate outcomes by sex and educational level within a score range of –2 to 6 and median of 3.

Table 4: Message Quality Categorized by Sex

Sex	Message Efficiency Score	
	High	Low
Male	46	52
Female	132	166
Total	178	218

As can be seen from table 3, sex wise, most trachoma messages have got a positive score i.e. high and medium level.

Table 5: Message Quality Categorized by Education

Educational Level	Message Efficiency Score	
	High	Low
Illiterate	98	162
Read and write	8	18
Grade 1- 8	49	33
High school and above	23	5
Total	178	218

Again unfavorable result was obtained when competing message quality score with different educational level of respondents.

Table 6: Chi-Square Test Results of Message Quality Score by Sex and Education

Practice	Pearson Chi-Square Value	DF	Asymp. Sig. (2-sided)	P<0.05
Sex	11.394	8	NS	
Educational level	78.616	24	.000	

Chi-square for message quality score was competed by sex and educational level as well and the former didn't show any significant statistical difference while the later showed a significant difference of $X^2=78.616$.

4.1.6 Harmony Between Trachoma Communication and the Local Culture

Important Values in the Amhara Culture

With no exception, all respondents believed that God is the creator. They were also asked to prioritize a list of things that were believed to be of value in the culture (The list was based on the insight obtained from pretest results).

Table 7: Ranking of the Most Important Things in the Amhara Culture

Variables	Rank
Religion	1 st
Children	2 nd
Health	3 rd
Land	4 th

Here, religion got the highest proportion (42.5%) and children got the next higher number (22.3%). The number of response reported for health (13.4%) and land (9.7) were also considerable.

Around 88% of the households responded that the current trachoma communication in their area matched with their culture. So those who found the trachoma intervention contradicting with the culture were rather less (12%).

4.1.7 Awareness and Behavioral Change

Awareness Level

Households were asked whether they had heard of trachoma or not. 89.6% of the response rate disclosed that they had heard of it, 5.8% said they had never heard and the remaining 4.6% were not sure of it. Added to that, in 72.5% of the cases, sample households responded that trachoma was a major public health problem in the area whereas 17.8% were not sure whether it was a major health problem or not and 9.7% reported that trachoma was not a public health problem in the area.

Table 8: Causes of Trachoma

Causes*	N	%
Injury/accident	85	21.6%
Dirty surroundings	95	24.1%
Poor personal hygiene	141	35.6%
Insects	34	8.6%
Inherited from parents or grandparents	15	3.8%
Contagion from a blind person	2	0.5%
Curse	138	35%
Poverty	18	4.6%
Malnutrition	10	2.5%
Old age	188	47.5%
Dust	116	29.3%
Smoking	33.5	8.5%
Infection/disease	70	17.7%
Don't know	33.5	8.5%

*responses not mutually exclusive

As can be see from table 7, responses obtained concerning causes of trachoma seem unsatisfactory in that old age (47.5%), cursed (35%) and dust (29.3%), which have

nothing to do with the disease, were provided with high response rate. Poor personal hygiene was almost equally considered (35.6) to curse.

Table 9: Symptoms of Trachoma

Symptoms*	N	%
Red eyes	114	28.7
Itching	305	77%
In turned eyelashes	32	8.1%
Tears	185	46.7%
Discharge (not tears)	119	30.1%
Pain	54	13.6%
Loss of sight	69	17.4%
Visual Impairment	7	1.7%
Swelling	50	12.6%
Don't know	60	15.1%

*responses not mutually exclusive

The above table indicates the majority of the heads of households failed to relate blindness, visual impairment and in turned eyelashes with trachoma. The most frequent response for the symptoms of trachoma was itching (77%).

Table 10: Preventative Measures for Trachoma

Preventative Measures	N	%
Daily face washing	96	26.7%
Keep home and surroundings clean	61	17.0%
Keep flies away	44	12.3%
Not sharing cloth to wipe eyes/faces	28	7.8%
Pray/holy water	120	33.4%
Improved diet	8	2.2%
Don't know	2	0.6%

*responses not mutually exclusive

Among the prevention methods, religious elements (pray and holy water) counted for the highest response (33.4%). This may indicate the degree of influence that religion has in the community under study.

In an attempt to see if there is any relationship between knowledge of preventative nature of trachoma and educational level of respondents, it has been observed that chi-square test has a significant difference ($\chi^2=27.023$) at degrees of difference 10 and $p<0.05$. Another chi-square method compared knowledge of trachoma (whether it is preventable or not) with different sex groups and resulted in a significant difference: at degrees of difference 2 and $p<0.05$, it was read as $X^2=23.380$.

Behavior Change Level

Hygienic Practice

Face washing wise, approximately, 45.3% of the responses indicated that children washed their faces more than once a day, 28.3% once a day and 13% once in 2 to 3 days. Face washing practice of more than 3 days seemed very insignificant.

The practice of face washing seemed most accustomed among adults. The majority (64%) reported that they washed their faces more than once a day and 32% once a day. Washing faces within 2 days or more was rather inconsiderable.

As mentioned in the literature review section, one of the ways of transmitting trachoma is sharing towel and shawl to wipe faces. The response of the households concerning this issue was unsatisfactory. Overall, 68.1% of the respondents reported that they wiped their children's faces with a shawl, dress or clothes.

The chi-square test results (34.302) revealed that there was no statistically significant education difference among respondent groups in the practice of children face washing. Whereas, chi-square value 13.269 showed there was statistically significant difference in

practices of using a cloth to wipe children's faces among people of different educational level. Another chi-square test for adult face washing practice between different educational levels was not significant.

Cleaning Houses

85.6% of the sample households cleaned their house daily. The second largest number of response (6.4%) given for this question fell on cleaning between 4 days upto 1 week. 3.6% of them have disclosed that they cleaned their house in every 2 days and another 4.1% said in 3 days.

Disposal of Rubbish

It was found that households were likely to adopt more than one method of removing garbage. As a result, only 23% of them had good practice in rubbish disposal by burning (10%), burying (4%) or using a rubbish pit (9%). 42% of the respondents threw rubbish straight into the environment (near their living area) and 72% threw rubbish further away from the house (in farm area).

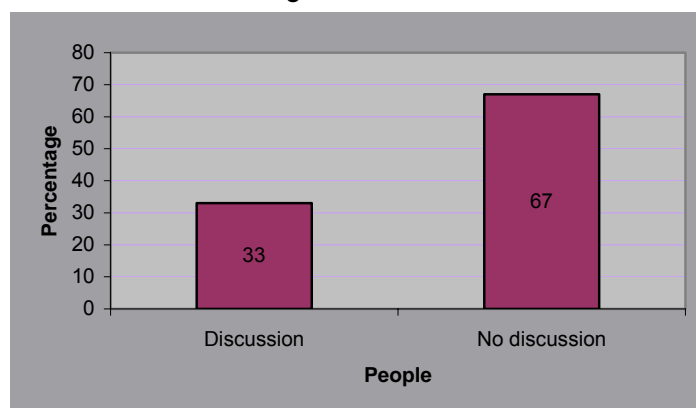
Defecation Site

Of 390 responses collected in connection to defecation site, 40.7% were found to have latrine and 59.3% exhibited the other way. Whether they had latrine or not, the practice of defecating in farm area and/or open field was very common. For this reason, another question requiring whether all members of the household use the latrine permanently or not was incorporated in the questionnaire. Consequently, 29.3% reported that part of the household especially children didn't use the latrine for various reasons.

Inconsistency in defecation site observed among those who did not have a latrine facility in their house. As a result, the sum of the responses under this question has exceeded the total number of respondents who had no latrine. Among the 231 households, 78% claimed to have the practice of defecating in farm areas (away from house), 47% of them defecated in close proximity to their house and insignificant number of households defecated near river or stream. Chi-square test competed to see the relationship between educational level and latrine usage indicated a significant difference of $X^2=50.697$ at degrees of freedom 5 and $p<0.05$. On the contrary, the chi-square test was insignificant ($x^2 =7.961$) among the respondents income level with regard to the use of latrine.

Attempt was made to see the respondents' practicality level in relation to trachoma control. Figure 2 elaborates the result.

Figure 2: Discussion on Personal Instigation in the Last Six Months



Of the total 396 respondents, 32.8% appeared to made discussion on eye disease or trachoma with personal instigation in the last 6 months. Whereas the remaining 67.2% failed to made discussion.

The subject of the discussion appeared to cover various aspects of the disease. For about 36% of the respondents, the discussion was on environmental sanitation. Personal hygiene got the second proportion (34%) and the issue of eye surgery stood next with 23%. 17% of the responses reported the discussion revolved around the subject of getting advice from medical professionals in case of facing eye problems. Here it should be noted that respondents were likely to give more than one answers depending on the number and type of discussion they made. That is why the total number of response in this regard was greater than the respondents' number.

Out of the 396 sample respondents, only 12.3% were found to be participated in trachoma control activities.

4.2 Qualitative Data

4.2.1 Interview with Experts

Trachoma Communication Approaches

It was learnt that the campaign adopted behavior change communication model. Beyond this, no attempt was made to solely fit the communication effort with any of the known development communication theories. Media wise, multiple approaches-mass media and interpersonal-have been employed to reach the target community (IN:18).

Apart from the Ethiopian National Radio Service, there was another Regional Radio Station called The Amhara Mass Media Service, which was mainly intended to serve the Amhara community. This station has a weekly health program aired for 30 minutes (starting from 7:00 A.M), on Wednesdays. This program focuses on trachoma and sanitation practices among others. In addition, trachoma issue would get news

coverage though not frequent. In the last 11 months of the current Ethiopian year, only 12 news and 3 programs were produced on trachoma and related matters (IN: 16).

Different educational materials: leaflets, flipcharts, posters, storybooks, magazines (for women) and t-shirts were employed as instruments for trachoma communication. The materials were prepared by the Carter Center in collaboration with the Ministry of Health, the Ministry of Education and Women's Affairs. It was also learnt that the IEC materials were prepared two years ago here in Ethiopia. Regarding content, the materials were composed of predetermined facts like "Increase clean face decrease flies!" or demonstrating the different stages of trachoma, the different pillars of the SAFE strategy and the likes that seemed less influential. Plus they use standard Amharic and familiar (local) pictures (IN:17). The reason to use standard Amharic could be that the materials were meant for the entire Amharic speakers of the nation.

Problem observed in material dissemination. Some of the development agents complaint that IEC materials were too small in number to be distributed sufficiently. A health worker from Geregera Woreda revealed that even the health post itself didn't have enough IEC materials to support their communication activity (IN: 4). Arguably, however, another informant said, "I don't think there is a problem with the quantity, but the problem is with the communicators. They don't use it at all" (IN: 18).

Interpersonal communication was one of the various methods used to communicate trachoma in the Amhara Region. To this end, 353 volunteers, 79 health workers, 196 community leaders and 92 schoolteachers have been trained since the launching of the program. And these trained people were giving health education different occasions like health posts/health centers and community meetings and churches (IN: 12).

Recently adopted method solely designed for women was a women sensation group. Women Union's bureau personnel were trained at Woreda level and they in turn trained other competent women at Kebele level. The later group of trainees was responsible to teach the community. Each trainee was assigned to teach 12 to 15 women in her neighborhood informally and regularly. Occasions like coffee gatherings, fetching water, collecting firewood and the likes are to be recognized (IN: 18).

A school health program on trachoma control that went side by side with the school curriculum was also implemented as an intervention. The program, 12 hours in academic year, implemented on primary schools (grade 1st - 4th students). Accordingly, 231 schoolteachers were trained for the purpose since the launching of the campaign (IN: 18).

Explaining its effect, a teacher informant said that teaching and initiating students through eye-clubs and regular checking of students hygienic habit especially face washing were part of the school health program. He also said that "Now, students are more or less aware of the symptoms as well as transmission and prevention methods of trachoma (IN: 11)

Another method is one-to-one communication. In this system, volunteer health workers and health extension workers may went to every house and teach trachoma. This approach was supposed to be the most effective of all (IN:17). However, a health worker from Geregera Kebele put the challenge of house-to-house communication this way. "Considering the scattered rural settlement, it is very tiresome to move from house

to house. On top of that, people do not seem to be interested in us. Most of them say they are busy, and some even chase after us, by dogs” (IN: 4).

As some of the informants from the experts group stated, effective trachoma communication could not be achieved given that there is shortage of manpower and competent personnel (IN: 14&17).

It is assumed that the communicators should be role models for the rest of the society. But in Yilmanadensa, some actions of the development agents made the community refrained from the desired change. Informants indicated that some of the development communicators themselves did not have latrine. “I know teachers and health extension workers who defecate outside. So what lesson do we expect people to learn from them” (IN: 17). Problem was also observed on the efficiency of communicators. “The change is very slow not because there is a resistance, but because of lack of commitment on the side of the professionals. If they have the confidence and the competence, then the people won’t hesitate to accept” (IN: 14). This idea was supported by “I have some doubt on the knowledge and competency of the communicators themselves. They are rather worsening the situation. It could be better to keep silent than disseminating misleading information” (IN: 12). She further indicated, “For instance, they usually teach about face washing, but they themselves know nothing about proper face washing, where to start and which direction to move hands and the likes.”

In response to this, Carter Center personnel said, “The Kebeles normally supply us with inefficient people who have very low level of understanding. Some of them are even illiterate” (IN: 17). He also admitted that enough training has not been given for communicators before they start to teach the community. “I can’t even call it a training; it

is just a one day long orientation on the materials. Therefore, it might not be enough to equip them with the required knowledge and skill.”

Trachoma Messages

One reason behind the bad practice of defecation site was found to be inconsistency of messages from different sources. On top of everything, agricultural workers were propagating the importance of defecating on farmlands. “People don’t want to use latrine with the intention of improving the quality of the land as they were told by agricultural workers” (IN: 12). An agricultural professional said, “We advise them not to go to grassy lands for call of nature because the waste can’t be easily decayed in grassy areas. But if it is a farmland, the waste will be easily decomposed and might help the crops grow faster” (IN: 13). Another informant said the following on the matter. “Our organization has a plan to implement a system that enables farmers get the best out of it without affecting their health” (IN:14).

Harmony Between Trachoma Communication and the Local Culture?

Some of the development agents expressed their confidence that the TCP matched with the culture. “We use local people and so if we come up with something strange, then these communicators will point us. So we can say we are involving the entire community” (IN: 17). However, others (IN:11&12) believed that the campaign lacked community participation.

Research, Monitoring and Evaluation

Interview with the concerned body revealed that prior to implementing the trachoma intervention program, no initial study was undertaken to learn the cultural norms of the society. “The focus of our baseline study was on the prevalence of trachoma, not the culture” (IN: 18).

The main stakeholder of the trachoma program in the area, the Carter Center enunciated that they had a plan to evaluate the campaign at the end of the project. Intermittently, however, they had some other ways to monitor their progress. Other than annual meetings with partners, there were monthly reports from Woreda offices that contained different commentary and suggestions forwarded by the community. Based on this input, the follow-up strategies would be shaped (IN: 17).

Awareness and Behavioral

Responses of most of the informants tend to one fact that there was a certain level of awareness created among the public following the SAFE TCP implementation. “Now many people are aware of the fact that poor personal and environmental sanitation practices result in fly breeding and flies transmit trachoma. They also know that regular face and hands washing can avoid the disease” (IN: 17). The problem seemed to dwell on behavior change.

In her attempt to explain low behavioral change of the study group, one informant said, “Unfortunately, washing faces is not part of the culture. Even if they wash they do not do

it properly” (IN: 12). Another key informant (IN: 15) explained her concern in that people may say, they wash, but for them washing is merely applying a very small amount of water on face.

Part of the informants was very positive about the change observed in latrine construction. “We can see a significant improvement in this regard. There was only 3% coverage of latrine in this area, when we first started the intervention, in the year 2003. Now it has reached 50%. It is really considerable” (IN: 18). While reporting its achievement Carter Center (2005) showed that 22,851 household latrines have been constructed since the launching of the campaign.

However, the increase in construction of latrine doesn’t seem to guarantee proper usage of it. “Though latrines are constructed, people still use the outside for call of nature” (IN: 13). They did not use latrines because of the smelling and unfamiliarity. Besides, there was a widely held belief of the community that the use of latrine may bring about constipation. More and more, it was very embarrassing for one tacitly especially for women to be seen defecating (IN: 12).

Some people did not prepare a separate place for their livestock especially when they had small number of animals to raise. What they were accustomed to is keeping animals with the family, in the living house during night times. Nevertheless, such exercise had a negative impact on their sanitation behavior (IN: 17).

Smoking is one of the risk factors for trachoma disease; but people preferred to cook outside the living house although materials were available around them to make extra

buildings or kitchens. This is because they believed that smoking in the living house help to avoid insects (IN: 14).

Talking about behavior change, all interviewees agreed that the main reason why trachoma affects the study group was the virtual absence of personal and environmental hygiene. In addition, shortage of water was pointed as contributor to the insanitation behavior. In the current fiscal year, 130 small-scale water supply schemes each believed to serve not less than 65 households were constructed (IN: 14). Also, one informant argued that the survey conducted by Carter Center disclosed that there was a 74% water supply in the area. He added, "Proper face washing merely requires 3 – 5 handful of water" (IN:14). Financial problem was also taken into account by some of the informants. "Latrine construction requires some money especially to erect wall and the shelter. But these people are too poor to afford that. Even if they can, they don't want to spend a coin on something that doesn't have any significant impact in a short-term basis" (IN: 15).

4.2.2 Interview with Target Groups

Indigenous Information Sources

All the responses received, were on consent that verbal communication was the main means of transmitting information among the study group. People in their neighborhood gather for coffee at least once a day and thereby exchange information. Women can also be informed each other when they fetch water or collect firewood. Other than these, important messages can be conveyed in churches or meetings (IN:1&9). Credibility wise, interviewees underlined that religious leaders were indisputable sources.

Trachoma Communication Approaches

Regarding trachoma, informants underlined that unlike other killer diseases, enough attention has not been given to this disease. Most of the time, the focuses of health communicators were HIV/AIDS and Malaria. “It is very rare that we receive trachoma information” (IN: 8). In any case, the current trachoma communication program in the Amhara region mainly involves interpersonal sources like house-to-house and communicating using groups (IN: 6 & 7).

Other than this, posters and leaflets with trachoma messages were posted at health institutions, Kebele offices and schools. Though most of the people couldn't afford the transistor, radio was also found to be one source of information (IN: 5). Normally, rural people listen to radio by sitting in groups in their spare time.

Trachoma Messages

It was learnt that the beneficiaries did not have confidence on the messages of development agents. This happened after a mass antibiotic treatment with zithromax. Basically, the medicine was obtained by aid and brought into Ethiopia via the Carter Center. Unfortunately, the treatment resulted in great damage. It caused infections like constipation among others. “We won't listen to them anymore. That medicine was meant to dismantle us” (IN: 8). Whereas development agents explained differently. “There is no doubt that the medicine is internationally proved.” He further pointed out, “Problem occurred only because health professionals didn't teach the people prior to disseminating. They should have been told about its side effects and prerequisites ”(IN:17)

Harmony between Trachoma Communication and the Local Culture

One of the informants said, Amharas are very religious people. “They strongly believe in God and go to church frequently” (IN:9). He also said that children are good assets in that boys can follow their fathers foots prints’ and be responsible for the family while girls help their mothers with the housework, treat their parents in case of illness or old age and bring in money when married. Another informant explained her community as “very conservative who can’t easily absorb something foreign” (IN:5). Whereas for other informants the Amharas were hospitable and very proud of themselves (IN:7,9,3).

When we look at the TCP under discussion, none of the informants from the target group believed that the trachoma campaign involved community participation. “They have never asked us for consultation.” (IN: 3). A priest said “Those who work on trachoma, be it a governmental or non-governmental body, should involve us because followers usually listen to us than any other more seriously body (IN: 5).

Awareness and Behavioral Change

Informants agreed that there was certain level of awareness in all sections of the community. Nevertheless, there seemed to be a long way to go to achieve the intended behavior change. (IN: 6,7&2).

As is explained by informant 2 “No one sits for a meal without wiping his/her face. In fact we might not wash it properly as we have to conserve water. Especially on Saturdays and Sundays we do not fetch water because it is the Sabbath. We will do the same thing on days of St. Mary, St. Michael, St. Gabriel and the Lord.” Customarily, on Fridays, they fetch as much water as they can for the weekend. But most people do not

have a big container and so they need to conserve the water for their entire weekend consumption. The problem got even worse when one of the celebrated days fall immediately before or after the weekend. Informants also believed that the dusty nature of the surrounding, lack of hygienic practices in the culture, shortage of water and financial problems were among the various factors to higher prevalence of trachoma.

4.2.3 Interview with Children

Sixteen children ranged grade 1 - 4 were interviewed to assess the effort of trachoma communication campaign at school.

Trachoma Communication Approaches

All the children interviewed agreed that teachers always gave lesson on personal and environmental hygiene. Unfortunately, none of the children interviewed ever heard of any eye-club in their school. But the teachers said there is. All of them reached in congruency that teachers provided them with trachoma related information in a very interesting and understandable manner.

In all the four schools, posters about trachoma or sanitation were hung in a way that students can see it. But none of the interviewees were familiar with the storybook prepared by the Carter Center.

Awareness and Behavior Change

Out of the 16 children approached some of them (CH: 1, 5&7) reported that they had never heard of trachoma. But the rest answered that they knew trachoma as an eye problem. Again, out of the 13 children who knew trachoma as an eye problem, all of

them were able to create a link between trachoma, blindness and personal and environmental hygiene. “If we do not wash our faces and hands and if we do not clean our house we might get a disease like trachoma. So we should always keep ourselves clean” (CH: 2).

The majority with the exception of two children (CH:7&8) provided a positive response regarding face washing. One of them said he didn’t wash his face frequently because his family was always in short of water and there was no water supply in the school as well. Whereas as the other (CH:8) didn’t wash her face frequently for no concrete reason. Regardless of their response, it was observed that most of the children appeared for interview had unclean faces but some (CH:2, 4,11&13).

Concerning latrine usage, some children said that they use latrine all the time. However, the condition of the backyard of two school compounds indicated that the toilets were not regularly used. Some of them said their family didn’t have latrine and so not accustomed to it; others said they had latrine at home but at school, they should use the open fields because the latrines were poorly maintained. Female students in Kore gave a different reason that they couldn’t use latrine at school because the males’ and females’ toilets are next to each other. “If the boys looked us they will insult us” said child 4.

4.2.4 Focus Group Discussions (FGDs)

The FGDs were two homogeneous groups - group of mothers (women) and group of fathers (men). The reason of grouping was to avoid the possible dominance that men would gain on women in heterogeneous group discussions. The following is summary of the discussions.

Women Focus Group Discussion

Indigenous Media and Credible Information Source

All of them said that their main source of information is coffee gathering. They also indicated that educated people, priests and the elderly were respected and so listened.

Trachoma Communication Approaches

Most women said that they had obtained trachoma information from neighbors and half of them agreed the primary source of this information were health workers (house-to-house communication). The women mentioned lack of adequate knowledge as one of the constraints. They said that they did not get sufficient and regular information on trachoma.

Harmony Between Trachoma Communication and the Local Culture

Part of them added that health professionals were not easily available to them and did not share their opinion on the subject. Two of the participants even explained their concern on the Women's Union. They said the Union is rather very and was composed of women who were only closer to each other and not committed to teach and change the rest of the community. The damage that the recent mass treatment has caused was also mentioned as a major problem. They even forwarded their suspicion on future health messages communicated by the same people.

Awareness and Behavioral Change

Part of the women defined trachoma as an eye disease and they mentioned the signs and symptoms like the men and some of them said they did not know that trachoma

disease is either transmissible or preventable. Some of them mentioned that urinating in front of their living house causes this disease. Regarding its magnitude, some of the participants agreed that the community has been suffering from trachoma for many a long year.

Still, most participants agreed that face washing and availability of latrines are important for prevention of trachoma and one of them said that she had a latrine but among her family children did not usually use it. One woman mentioned that she did not have a latrine because of her low and irregular income. Most of the women said that face washing every morning was accepted culturally but severe shortage of water in their area has influenced their hygienic practice somehow. All of them believe that smoking in the living house is useful to avoid insects.

Men Focus Group Discussion

Trachoma Communication Approaches

The men discussed along the lines of the importance of communication to control impact that the disease is causing. Most of the men mentioned that they obtained trachoma information on different occasions like community meetings or church and health institutions. Participants reached on agreement that the church was the right place to reach the community with whatever message intended. They added that some people may or may not went to Kebele meetings but everybody visited the church for lots of reasons: to attend mass, memorial service or funeral ceremony. They also underlined the acceptance of religious leaders than any other body.

As constraints, the men mentioned lack of professionals' commitment was the main obstacle of effective communication. Participants further indicated that problem occurred because health workers were not engage in trachoma communication alone. Still others explained financial problem as a hindrance to change.

Harmony Between Trachoma Communication and the Local Culture

They also reported that government organizations and NGOs working on trachoma didn't have any close relationship with the community. Participants also indicated that development agents should be careful of their innovations like zitromax.

Awareness and Behavior Change

All of the participants agreed that they knew trachoma, which is manifested with redness of the eye, pain, itching and the like. They discussed that trachoma is transmissible and preventable as well. All agreed that they have been suffering from it for many years. Most importantly children suffer a lot than adults.

Most participants agreed that face washing and availability of latrines are important for prevention. According to one participant, construction of latrine and a separate kitchen are costly and also took a piece of land that might be used for growing vegetables otherwise. Two of them mentioned that they had latrine but among their family, children didn't use it often.

CHAPTER FIVE

V. DISCUSSION

This chapter meshes the major findings with the purpose of the study in light of the basics of the social marketing theory. Mainly, the discussion zeroed in on the types and appropriateness of communication strategies used in tackling trachoma in the Amhara Region.

5.1 Indigenous Media and Credible Information Source

This survey found out, coffee gathering (64.3%), church (51.3%), fetching water and firewood (47.5%) and meeting (46.7%) were important indigenous communication channels of the community.

Social marketing theory suggests prior study on the media habit of the target group in order to identify the best approach. As confirmed by TCP stakeholders, no pre-study was made to obtain such kind of information as an input of the intervention. Despite the recently launched effort to reach women in informal situations by fellow friends, the trachoma program benefited less from such indigenous media.

Though the Kebele and development workers had recognition, still the community tends to accept indigenous sources like church for the most part. The quantitative data revealed that 86.6% of the sample population said church or religious leaders were more trusted than any other source. Again, the in-depth interview with the target community including religious leaders themselves reinforced this idea. Next to that, respected members of the community (other than religious leaders) were also found to be credible

with 77.8%. Nevertheless, the trachoma communication campaign failed to involve these important parts of the community.

5.2 Communication Approaches Used to Tackle Trachoma

Interview with Carter Center personnel revealed that the communication campaign didn't take any of the existing communication theories into consideration except focusing on the end result-behavior change. So it seems very difficult to match the campaign's communication system with any of the known theories. The program seems to have something in common with the social marketing theory when we see its devotion on top-down approach. Apart from this, however, the communication effort differs from the mentioned theory in many ways.

According to the social marketing theory, choosing effective, credible and frequently accessible channels of communication and pre-testing should be crucial stages of any development communication campaign. Also this theory highly advocates the use of mass media coupled with interpersonal communication.

When we look at the trachoma communication campaign under discussion, it seemed to utilize mass media (radio) 28.1%, IEC materials (19.9%) and interpersonal communication to reach the intended public. Of all the methods, interpersonal sources (using development workers) seemed to be highly employed (55.6%). Considering the low education and income level of the community, high use of interpersonal communication than mass media seems appropriate. Nevertheless, social marketing advocates mass media than any other means of communication. It only accepts interpersonal communication as a backing for mass media.

Findings also indicated the absence of any form of traditional media in the intervention. But such form of communication is believed to be principal influencing methods by involving powerful role models.

Added to that, the qualitative data attested the overall media utilization was insufficient. This was confirmed by limited distribution of IEC materials and very small airtime coverage of trachoma issue by the Amhara Mass Media Service.

Actually, “Life in the Amhara farming society is hard...the men in the fields, the women around the house and the children at home and watching the sheep-all work very hard” (Lundquist and Jenkins, 1997:5). But there observed failure of trachoma sessions to be synchronized with the audience’s convenient time. This can be explained by the radio health program broadcasting time (early morning) and the 71% response rate for inconvenience (with no X^2 difference among sex) with time of the interpersonally communicated trachoma programs.

Source credibility is a very important thing in health communication. But in the case of the trachoma campaign under study, some grassroots development communicators exhibited undesirable practices like failure to construct latrines in their house. So their credibility is rather questionable. Another problem with source of information could be low level of education of the communicators. The data revealed that some of the people assigned to communicate trachoma at the grassroots level were illiterate. But it is very unlikely for people who can’t read and understand the communication materials to be good sources. Besides, they were not equipped with enough communication skill and knowledge of the disease before assignment. In addition, trachoma is not their only concern. Rather, they are mostly occupied by other campaigns concerning killer

diseases. Moreover, they are too small in number to pay frequent visit throughout the community under their scope.

One way of localizing service is trying not to offend beneficiaries. The social marketing theory also advises voluntary exchange of products or services. Unfortunately, hostility occurred in the study area after the mass treatment of zitromax which affected the people's health negatively. When we look at the consequences of the mass treatment from a different angle, we might be able to link it with one of the critics of social marketing, that is, the hidden agenda of campaigners or their influencers to search for market for their products in the Third World. The TCP stakeholders simply brought a medicine and distributed among the mass without any caution of its side effects and overlooking adequate lesson on the usage. As a result, the society was exposed to other health problems and the overall picture of the program was ruined somehow.

Talking about source, the social marketing theory suggests audience segmentation as a useful tool to identify the best media and message that can appeal to the intended audience. To this end, the effort of the communication campaign to reach school children through school health program and women through Women's Union can be good examples.

A number of things were observed as living factors for lagging trachoma communication. One could be shortage of water. The fact that 61.9% of the sample population faces shortage of water as well as 24.5% of the study group is at least 1 km away from their main water source can be a concrete evidence for this. Above and beyond, the quantitative data resulted in a very small amount of water consumption per capita per day: 6.82 litter (it may even be less in some cases). Reinforcing this idea, school

children gave inadequate water for their infrequent face washing habit. Women focus group participants also confirmed the same idea.

The quantitative data also revealed that the community under study is of low living standard (the majority earn between ETB 1 and 100 per month and the maximum monthly income was estimated as ETB 500). FGD participants and some interviewees were also pointed out financial problem as one of the drawbacks of the desired practice. People didn't construct latrine and separate kitchen for financial reasons.

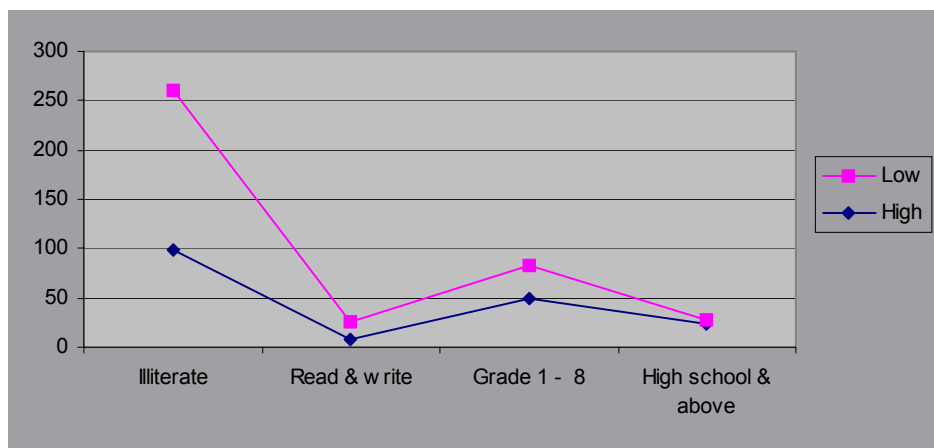
Not only communicating the information, but also addressing the structural and environmental situations is mandatory according to the social marketing theory. In this regard, the TCP have tried to improve water and sanitation facilities of the community. So far, 130 small-scale water supply schemes were constructed for the entire Woreda in the current fiscal year and 22,851 household latrines were constructed since 2004 (Carter Center, 2005).

Though the school health program found to be effective in creating awareness on trachoma among school children, in some cases, the school environment itself was seen as an obstacle for behavior change. The response of female students that they couldn't use the school's latrine for male's and female's latrine were adjacent to each other is a good example.

5.3 Trachoma Messages

Unsatisfactory result was obtained in an attempt to see the quality of the campaign's message by two different categories-sex and education. Message efficiency scores given by female respondents were interpreted as 132 high and 166 low. In a like fashion, male respondents gave 46 high and 52 low scores for messages. The chi-square didn't show any significant difference ($X^2 = 78.616$).

Figure 3: Message Efficiency by Educational Level



Again, figure 3 demonstrates that the message is of low quality in view of all respondents from different educational level.

Another aspect of the social marketing theory is message designing. Messages should be in such a way to meet the needs and interest of the audience, which involves pretest. Nevertheless, the actual practice in the study area is found to be merely dumping messages that were prepared elsewhere for a different community. Normally, pre-determined facts (the importance of hygienic practices, eye surgery and antibiotics) were disseminated without taking the society's perspective into consideration.

Findings also indicated that the essence of the community was disregarded while developing messages. “There is the cultural belief that to be Amhara is to be Christian and to be Christian is to be Orthodox” (Lundquist and Jenkins, 1997:4). Cultural beliefs in relation to toilet as well as trachoma disease were found to be obstacles to effective communication. Another major hindrance was the deep-rooted quasi-religious belief, which affects people’s water fetching habit. The Holy Bible says, “Wherefore it is lawful to do well on the Sabbath days” (Matt 12:12). Unfortunately, people still refrained from proper hygienic practices for religious reasons and none of the TCP messages tried to deal wisely with such obstacles.

The message formats that involved picture were found to be successful in using familiar images. Language wise, the only medium employed was Amharic, which is also the native language of the community. A slight problem in this regard could be failure to use the Amharic of Gojjam dialect, which might ensure instant understanding for that locality.

Contrary to what the social marketing theory said, due attention wasn’t given to pretest the communication methods and media. Pre-testing was only done with another community in the early stage of the campaign. This creates concern on the efficiency of the communication strategy.

Social marketing campaign management emphasizes proper coordination of partners among others. In this regard problem created in the implementation of the trachoma program. The results of the study indicated that 72% of the respondents had a practice of garbage disposal on farm areas and 78% of the respondents reported defecation on farmlands.

We have also learnt that agricultural professionals were communicating the importance of relieving oneself on farmlands. Whereas other development communicators especially health workers conveyed a different message—advocating for latrine construction and usage. This message inconsistency was likely to create confusion at the audience's end.

Probably, the chi-square test result, which showed a significant difference between respondent's educational level and latrine usage ($X^2=50.697$ at degrees of freedom 5 and $p<0.05$) could partly be attributed to this problem. Educated people might tend to be conscious of the importance of latrine than the uneducated.

5.4 Harmony between Trachoma Communication Activity and the Local Culture

In the quantitative data it was revealed that most of the respondents (88%) hadn't observed anything that opposed their culture in the trachoma communication. The remaining 12% may be due to hostility caused by zitromax mass treatment. Nevertheless, other indicators in the data led towards a different direction.

Prior to implementing the trachoma program, research was conducted with the objective of investigating the prevalence of the disease in the area. However, dreams, desires and culture of the target audience were not within the scope of that research. So it was very likely for the program to mismatch with the local situation.

Though the effort to use local and appropriate people (like women communicators to address women audiences) was to be appreciated, it seems that the campaign didn't involve religious leaders who were the most respected and influential members of the

community. The program didn't get the consent of village elders before implementation. Disregarding these steps is likely to pose a serious problem especially in communities like the Amhara, who are mainly known for their resistance of new ideas. "The Amhara are very proud of their culture and religion. There is a latent resentment of foreign ideas and ways of living. Innovations tend to be viewed with skepticism" (Lundquist and Jenkins, 1997:3).

5.5 Awareness and Behavior Change

To check whether the desired goal-behavior change was met or not, the theory suggests successive monitoring and evaluation of the campaign's activity. However, this activity seems to be neglected by the TCP applied in the study area. In-depth interview with the concerned body affirmed that there was no any monitoring mechanism except periodical report of the performance. Also evaluation was only planned at the end of the project.

Awareness wise, the term trachoma was known by the majority (89.6%) of the respondents. Good number (72.5%) was reported for considering trachoma as a public health problem. When looking the school health program it seems to be more or less successful in creating awareness on the issue among children. Unfavorable responses obtained from adults concerning causes, transmission and symptoms of trachoma. As causes of trachoma, 47.5%, 35% and 29.3% were reported for old age, curse and dust respectively. Women focus group participants gave a scientifically unacceptable answer (urinating in front of once house) for the same question. Wiping children's faces with a cloth, which is considered as a principal mode of transmission of trachoma, is found to be a widespread practice in the study community. In this regard, $X^2 = 13.269$ indicated a statistically significant difference among respondents of different educational level.

In addition, the consequence of trachoma that is blindness was not that much known (7.6%). Moreover, highest response rate (33.4%) was given to prey and holy water as preventative measures of the disease. Chi-square test results of statistically significant difference $X^2=27.023$ (by education) and $X^2=23.380$ (sex) were show in relation to knowledge of the preventive nature of trachoma.

Though the research faced difficulty in getting the present threshold prevalence of the disease to compare it with previous survey data, both the qualitative and the quantitative results confirmed that the campaign wasn't successful in making the audience practice the desired action. Concerning face washing, there showed a positive response. The practice of around 45.3% of the households in relation to child face washing indicated more than once a day and 28.3% washing once a day. The adult behavior was even better, only 4% reported for ≥ 2 days washing. However, personal observation of the researcher as well as interview with health professionals confirmed that proper face washing was not still accustomed. Good practice of rubbish disposal was only observed as 23%, and 59.3% of the households reported that they didn't have any latrine facility. Additionally, the presence of latrine didn't seem to be a good indicator for behavior change. Both qualitative and quantitative data contended the distinction between latrine availability and use. Some may use the available latrine, but others, usually children, defecate in the bush around the living houses. Above and beyond, most of them prefer to relieve on farmlands thinking of adding quality to the soil. Further, people who cook in their living house and didn't have a separate shelter for their livestock are considerable in number. Their change level was also crosschecked by personal instigation of respondents to discuss on trachoma in the last 6 months. And the result was unsatisfactory: only 32.8% were reported for making discussion.

CHAPTER SIX

VI. CONCLUSION AND RECOMMENDATION

6.1 Conclusion

In this study, an attempt was made to assess the health communication strategies used and their appropriateness in tackling trachoma in one Woreda of the West Gojam Zone in the Amhara Region. Specifically, the researcher wanted to know about the indigenous and credible sources of information in the area, communication approaches and messages of the trachoma campaign, harmony between the trachoma control program and the local culture as well as level of awareness and behavior change of the target public. The discussion was based on the social marketing theory.

Other than reviewing previous studies and literature, data were collected through both quantitative and qualitative methods to complement each other. The sampling technique was multi-stage sampling by randomly selecting four Kebeles from the Woreda, Yilmanadensa. 396 adult household members in the selected Kebeles filled close-ended questionnaire; in addition, 8 target group members, 10 responsible people at community level, and 16 school children were interviewed. Moreover, two focus group discussions and personal observation were utilized. Finally, analysis was made using standard qualitative and quantitative research analysis methods. Apart from the primary data, different web sites and printouts have also been consulted for the sake of completeness. The research was conducted between April and July 2006. On the basis of the findings of the study, the following conclusions have been drawn.

- ❖ Interpersonal communication: coffee gathering, church, fetching water and firewood and meeting were found to be important indigenous media among the study community;
- ❖ Religious leaders along with other respected members of the society are found to be the most credible information sources, however, the TCP doesn't seem to be benefited from such media;
- ❖ The health communication strategy was not designed based on cultural study of the community;
- ❖ The effort to take professional input in designing the communication strategy is encouraging but;
- ❖ Primarily, the campaign utilizes interpersonal communication media. Other than this, radio and IEC materials were also utilized;
- ❖ Using local people to communicate grassroots level is found to be useful;
- ❖ The campaign seems to suffer from inefficient communicators at grassroots level as well as shortage of manpower;
- ❖ Adequate IEC materials are not available to enhance communication;
- ❖ The mass media and interpersonal communication are characterized by inappropriate time of transmission;
- ❖ Trachoma communication materials include familiar pictures that can easily appeal the audience;
- ❖ Inconsistent information are disseminated by different partners;
- ❖ Trachoma messages mainly domain in predetermined facts, they do not seem to address culture-specific values and obstacles plus the message is transmitted through standard Amharic but not of Gojam dialect;
- ❖ Generally, the TCP messages were viewed as of low quality regardless of sex and education level;

- ❖ The practice of audience segmentation is found to be useful especially in the case of school health program and women sensation group;
- ❖ There seems to be hostility with TCP and the target community due to inappropriate service delivery;
- ❖ Generally, audience's awareness and practice exhibited poor communication strategy; and
- ❖ Effort to improve the overall condition of the society, which in turn curbs trachoma problem, is very limited.

6.2 Recommendations

Based on the findings of the study as well as the suggestions of the informants and FGD participants, the following recommendations are made:

- ❖ Health communication strategy designed to the study community should give prior emphasis to core cultural values like religion;
- ❖ Whenever practicable, the program should use indigenous as well as traditional media to accelerate information transmission;
- ❖ Needs assessment, audience segmentation and analysis, community and professional input should be given due emphasis in the design of messages and approaches for trachoma program in the study area;
- ❖ Care should be taken in selecting grassroots level communicators in order to enhance the audience satisfaction level;
- ❖ The program should take the move to engage development workers in the required number.

- ❖ Relevant trainings should be given in a timely and continuously manner to the relevant personnel to ensure capable manpower and up to the standard service;
- ❖ Trachoma is a multi-dimensional problem. Addressing trachoma means addressing different environmental and structural problems that require a call at all levels. Hence, there needs to be a slight shift of focus from individual and social scopes; and
- ❖ Finally, further study is still recommended to see the effectiveness of other health communication approaches.

Bibliography

- Agricultural Communication in Education, 2000. *The Communicator's Handbook: Tools, Techniques and Technology*. 4th ed. U.S.A: Maupinn House
- Backer, E. and Rogers, E., 1993. *Organizational Aspects of Health Communication Campaigns: What Works?* U.S.A: SAGE
- Balan, K. and Rayudu C., 1994. *Effective Communication*. Delhi: Beacon Pooks
- BBCWST, 2003. *Trachoma Awareness Communication Campaign: A Paper Presented to Communication Interventions Experience Sharing Workshop*. Addis Ababa: HAPCO
- Blind Hope, 2006. *Vision of Hope with Support for Blind Women* [online], Available from: <http://news.scotsman.com/international.cfm?id=1465232004> Date accessed 06/03/06
- Brooks, W., 1971. *Speech Communication: 3rd Edition*. Dubuque: Wm. C. Brown Company Publishers.
- Carter Center, 2005. *Amhara Regional State Trachoma Control Program Proceedings of Third Annual Review Meeting*. Bahir Dar.
- Carter Center, 2005. *Summary Proceedings Six Annual Trachoma Control Program Review: Strategies for Scaling up* [online], Available from: <http://www.cartercenter.org>. Date accessed 06/03/06.
- CDC, undated. *Communicating the Message* [online], Available from: : www.cdc.gov/drpsurveillancetoolkit/docs/CommunicatingTheMessage.pdf Date accessed 23/04/06
- Clift, E. and Freimuth, V., 1995. *Communicating the Message*. Dubuque: Wm. C. Brown Company Publishers.
- Community Health Department, 2003. *A Study on Media Use and Preference in Addis Ababa City Administration Health Education Center*. Addis Ababa: MOH
- Cook, J., 2003. *The Founding of the International Trachoma Initiative and the Challenges Ahead in Drug Donations for the Elimination of Blinding Trachoma*. [online], Available from: <http://www.ttrachoma.org/pdf> Date accessed 08/02/06
- CSA, 2005. *Ethiopia Demographic and Health Survey*: [online] Available from: :
- Cumberland, P. and Todd, J., 2002. *Measuring the Impact of Azithromycin, Mass Media, Print Materials and Video Vans on Trachoma in Ethiopia: A Report on the Baseline Survey*. London: Institute of Child Health
- Emerson et al., 2006. *Implementing the SAFE Strategy*. U.S.A: Carter Center.

- Edwards, T. and Todd, J., 2004. *Measuring the Impact of Mass Media and Video Vans on Trachoma Prevalence in Ethiopia: 1st Year Follow-up Survey Result*. London: Institute of Child Health
- Francis, V., 2004. Bridging the Gaps. *Community Eye Health*, 17(51), (33-48)
- Health Education Center, 2004. *Guideline for Prevention of Blindness Programs in Ethiopia*. Addis Ababa: MOH
- Health Education Center, 2004. *National Health Communication Strategy*. Addis Ababa: MOH
- Holy Bible, 1973. *The Old and New Testament Books*. UK.: International Bible Society.
- ICEH, 2004. *Community Eye Health*. U.S.A
- International Eye Mission, 2005. *Community Eye Health*. U.S.A
- JHSPH, 1998 *Water and Sanitation Facilities in Ethiopia* (Unpublished)
- Kloos, H. and Zein, Z., 1993. *The Ecology of Health and Disease in Ethiopia*. U.S.A: Westview Press, Inc.
- Kuumaesan, J., 2004. What's New in Trachoma Control. *Community Eye Health*, 12(52), (49-64).
- Lundquist, R. and Jenkins, O., 1997. *Strategy Leader Resource Kit: Orville Jenkins Thoughts and Resources* [online] Available from <http://endor.hsuuttx.edu/~obiwan/profiles/amhara.html> Date accessed 12/07/06
- Marcia et.al., 2004. Effective Trachoma Control Communication. *Community Eye Health*, 17(51), (51-75)
- Mariotti, S., 2004. Trachoma Rapid Assessment. *Community Eye Health*, 12(32), (49-64).
- Microsoft Encarta Encyclopedia, 2003. Communication [online], Available from <http://www.microsoft.com/ecaarta/uk> Date accessed 12/04/06.
- Miller, K., 2004. *Pesky Trachoma Suspect Finally Caught*. Scientific Report, 88, 750-751.
- ORBIS, 2006. *Unnecessary Blindness in Ethiopia*. [online], Available from: Date accessed 12/04/06
- Ramachandran, L. and Dharmalingam T., 1976. *Health education: A New Approach*. New Delhi, Vikas Publishing House
- Servaes, J. 2002. Communication for Development. One World Multiple Cultures. New Jersey: Hampton Press.

- Simons-Morton, B. et al (1995) *Introduction to Health Education and Health Promotion*. 2nd ed. U.S.A: Waveland Press, inc.
- UNAIDS, 2002. *Behavior Change Communication (BCC) for HIV/AIDS: A Strategic Framework*.
- UN-EUE, 1995. *Food and Agriculture Organization of the United Nations* [online], Available from <http://www.africa.penn.ed/eue> Date accessed 27/03/06
- USAID, 2002 *Behavioral Change Communication*. (Unpublished)
- Wasbor, S., 2006. *Family Tree of Theories, Methodologies and Strategies in Development Communication* [online], available from: <http://www.eldis.org/about/index.htm> Date accessed 01/12/05
- West, S., 2003. *Blinding Trachoma: Prevention with the SAFE Strategy* [online]. 69(5), Baltimore. Available from: <http://www.ajtmh.org/misc/terms.shtml> Date Accessed 10/03/06
- WHO, undated. *Introducing VISION 2020 The Right to Sight*.
- WHO, 1991. *A Practical Manual: Sample Size determinations in Health Studies*. Geneva
- Wondu et al., 2005. *Active Trachoma in Children in Central Ethiopia: Association with Altitude*. USA: Elsevier Ltd.
- Wondwossen, 2004. *Literature Review on Selected Social Science Theories and Models of Behavior Change*. Addis Ababa; Health Education Center
- Yusuf, 1994. *Comparison of Three Health Education Methods in Increasing the Knowledge about Marlaia*. Thesis (MSC). Addis Ababa University

Appendixes

ANNEX I

Adult Questionnaire

PART ONE

Socio-demographic Characteristics

1. What is the name of your Kebele _____
2. Please specify your sex?
 1. Male 2. Female
3. How old are you? _____
4. What is your occupation?
1. Farmer 3. Merchant 5. Government worker 7. Pension
2. House wife 4. Daily laborer 6. Student 8. Other/Specify/ _____
5. What is your educational level?
1. Unable to read and write 4. Grade 5 - 8
2. Read and write 5. Grade 9 - 12
3. Grade 1 - 4 6. Above high school
6. What is the monthly income of your family? (Estimate) _____
7. Number of your family member _____
8. What is your ethnic group?
1. Amhara 2. Other /Specify/ _____
9. What is your religion?
1. Orthodox 2. Other /Specify/ _____

PART TWO

MAIN QUESTIONS

I. Water Access and Hygiene Practices

1. Do you think there is enough water access in your area?
1. Yes 2. No
2. What is the main source of water for your household? (Multiple answers are possible)
1. Pipe water 5. Protected well
2. River 6. Unprotected well
3. Stream 7. Other /Specify/ _____
4. Pond
3. How long does it normally take you to reach your primary water source? (min.) _____
4. How many times in a week do you collect water from this water source?
1. More than once a day 4. Once in 3 days
2. Once in a day 5. Other/Specify/ _____
3. Once in 2 days 6. Don't know

5. How much is your family's water consumption per day? (in liter) _____

Question 6 – 8 are for respondents who have children of less than 11 years old at home.

6. How often are the children in your family wash their faces?

1. More than once a day 4. Once in 3 days 7. Other (Specify) _____
2. Once a day 5. From 4 days upto 1 week
3. Once in 2 days 6. Don't know

7. Do you use your shawl/dress/clothes to wipe your children's faces?

1. Yes 2. No

8. How often are the adult members in your family wash their faces?

1. More than once a day 4. Once in 3 days 7. Other (Specify) _____
2. Once a day 5. From 4 days upto 1 week
3. Once in 2 days 6. I don't know

9. How many rooms are there in your house? _____

10. If you have any livestock, where do keep them during nights?

1. In the house with the family 2. Other (Specify) _____

11. Where do you usually cook?

1. In the living house 2. Other/Specify/ _____

12. How often do you clean your house?

1. Daily 3. Once in three days 5. Other/Specify/ _____
2. Once in two days 4. From 4 days upto 1 week

13. How do you dispose of rubbish from the house? (Multiple answers are possible)

1. Burning 4. Throw away near house
2. Burying 5. On the farm, further away from the house
3. Rubbish pit 6. Other/Specify/ _____

14. Do you have a proper toilet facility in your house?

1. Yes 2. No

14.a. If your answer for Q 15 is NO, where do you use?

1. In the backyard/near house 3. Near or in River/stream
2. On the farm, away from the house 4. Other /Specify/ _____

14.b. If your answer for Q 15 is YES, do all members of the household use the toilet permanently?

1. Yes 2. No

14.c. If your answer for Q 15 is NO, specify those members who do not use the toilet permanently and give their reasons.

II. Knowledge of Trachoma

1. Have you ever heard of the eye disease called trachoma?

- 1 Yes 2. No 3. Not sure

Question 2 – 6.a. are for respondents who said YES to Q.1.

2. What are the symptoms of trachoma? (DO NOT read list, Multiple answers are possible)

- | | | |
|--|---|---|
| <input type="checkbox"/> 1. Red eyes | <input type="checkbox"/> 5. Discharge (not tears) | <input type="checkbox"/> 9. Swelling |
| <input type="checkbox"/> 2. Itching | <input type="checkbox"/> 6. Pain | <input type="checkbox"/> 10. Don't know |
| <input type="checkbox"/> 3. Inturned eyelashes | <input type="checkbox"/> 7. Loss of sight | <input type="checkbox"/> 11. Other (Specify)_____ |
| <input type="checkbox"/> 4. Tears | <input type="checkbox"/> 8. Visual impairment | |

3. What do you think are the causes of trachoma? (Multiple answers are possible)

- | | | |
|--|--|--|
| <input type="checkbox"/> 1. Injury/accident | <input type="checkbox"/> 6. Cursed | <input type="checkbox"/> 11. Other infection/disease |
| <input type="checkbox"/> 2. Dirty surroundings (including dirty water) | <input type="checkbox"/> 7. Smoke | <input type="checkbox"/> 12. Insects |
| <input type="checkbox"/> 3. Poor personal hygiene, not washing | <input type="checkbox"/> 8. Poverty | <input type="checkbox"/> 13. Dust |
| <input type="checkbox"/> 4. Contagion from a blind person | <input type="checkbox"/> 9. Malnutrition | <input type="checkbox"/> 14. Don't know |
| <input type="checkbox"/> 5. Inherited from parents or grandparents | <input type="checkbox"/> 10. Old age | <input type="checkbox"/> 15. Other/Specify/_____ |

4. Is trachoma a major health problem in your area?

- 1 Yes 2. No 3. Not sure

5. Is there anyone in your family suffering from trachoma?

- 1 Yes 2. No

5.a. If your answer for Q. 5 is YES, specify your relationship with the victim/s

6. Is inturned eyelash trachoma preventable?

- 1 Yes 2. No 3. Don't know

6.a. If your answer for Q.6 is YES, how? (Multiple answers are possible)

- | | |
|--|--|
| <input type="checkbox"/> 1. Daily face washing | <input type="checkbox"/> 5. Pray, holy water |
| <input type="checkbox"/> 2. Keep home and surroundings clean | <input type="checkbox"/> 6. Improved diet |
| <input type="checkbox"/> 3. Keep flies away | <input type="checkbox"/> 7. Don't know |
| <input type="checkbox"/> 4. Not sharing cloth to wipe eyes/faces | <input type="checkbox"/> 8 Other (Specify) _____ |

III. Mass Media and Message Questions

1. What is the usual way of transmitting information in your area? (Multiple answers are possible)

- | | | |
|--|--|--|
| <input type="checkbox"/> 1. Coffee gathering | <input type="checkbox"/> 4. Fetching water | <input type="checkbox"/> 7. Meeting |
| <input type="checkbox"/> 2. Feast | <input type="checkbox"/> 5. Collecting fire wood | <input type="checkbox"/> 8. Church |
| <input type="checkbox"/> 3. Communal labour | <input type="checkbox"/> 6. Areke house | <input type="checkbox"/> 9. Market place |

2. Who/what is the most trusted source of any information in your area? (Multiple answers are possible)

- | | |
|--|--|
| <input type="checkbox"/> 1. Kebele or other governmental organizations | <input type="checkbox"/> 7. Respected members of the society
(other than religious leaders) |
| <input type="checkbox"/> 2. development workers (Including health workers) | <input type="checkbox"/> 8. Radio |
| <input type="checkbox"/> 3. Religious leaders (Church) | <input type="checkbox"/> 9. Posters, billboards, leaflets,
notice boards, magazines, booklets etc.) |
| <input type="checkbox"/> 4. Educated people | <input type="checkbox"/> 10. NGOs |
| <input type="checkbox"/> 5. School | <input type="checkbox"/> 11. Other (Specify) _____ |
| <input type="checkbox"/> 6. Women's/Youth's association | |

1. _____
2. _____
3. _____

4. _____
5. _____
6. _____

3. Who/what is the most trusted source of health information in your area?

(Multiple answers are possible)

- 1. Kebele or other governmental organizations
- 2. Health workers (Other development workers)
- 3. Religious leaders (Church)
- 4. Educated people
- 5. School
- 6. Women's/Youth's association
- 7. Community elders/respected members of the community
- 8. Radio
- 9. posters, billboards, leaflets, notice boards, magazines, booklets etc.)
- 10. NGOs
- 11. Other (Specify) _____

4. In the past 12 months, have you heard or noticed any information about eye diseases from any source?

- 1. Yes
- 2. No
- 3. Don't remember

4.a. If your answer for Q.4 is YES, who was your source of information?(Multiple answers are possible)

- 1. Radio
- 2. Posters/Notice board/Magazine/booklet Leaflets Story books
- 3. Church/religious leaders
- 4. Meeting
- 5. Health workers
- 6. Neighbors/friends
- 7. Market place
- 8. Coffee gathering
- 9. Don't know
- 10. Other (Specify)_____

4.b. What was the main message in the information you saw or heard?

(Do not read list, Multiple answers are possible)

- 1. Wash my face
- 2. Do not share cloths to wash eye/wipe faces
- 3. Use latrine for defecation
- 4. Use farmlands away from house for defecation
- 5. Burn or burry rubbish
- 6. Keep animal away from house
- 7. Keep area around house clean
- 8. Talk to a health worker about eye problems/trachoma
- 9. Use tetracycline/antibiotic for eye problem
- 10. Get surgery for trichiasis/turned in eyelid
- 11. Eye problems/trachoma can be prevented/cured
- 12. Eye problems/trachoma can be transmitted from one person to another
- 13. Other (Specify)_____
- 14. Don't remember

5. How frequently have you received information from the source mentioned under Q. 6, during the last 3 months?

- 1. Regularly
- 2. Occasionally
- 3. Once

6. If you have received the information from multiple sources, then the messages

- 1. Support each other
- 2. Oppose each other
- 3. Do not oppose but of different content
- 4. Don't remember
- 5. Other (Specify)_____

7. What was your reaction to the message?

- 1. Accept entirely
- 2. Accept partially
- 3. Do not accept it at all

8. Is there a radio in your house?

- 1. Yes
- 2. No

8.a. If your answer for Q.8 is YES, who in the household listens to the radio permanently?

1. The entire family 3. Women only
2. Men only 4. Men and children

8.b. If your answer for Q.8 is NO, do you have any other access to radio outside your house?

1. Yes 2. No

8.c. If your answer for Q.8.b is YES, where is it?

1. Neighbourhood 4. Kebele/public gathering
2. Market place 5. Other (Specify)_____
3. Health center/clinic

9. Do you think the messages transmitted through radio were clear?

1. Clear 2. Partially clear 3. Not clear

10. What do you say about the content?

1. Very useful 2. Useful 3. Moderate 4. Not useful 5. Don't know

11. Do you think the message transmitted through printed sources was clear?

1. Clear 2. Partially clear 3. Not clear

Questions 12 - 15 are to be answered by those who said health workers and meeting for Q.5.a.

12. Was the orally transmitted message clear?

1. Clear 2. Partially clear 3. Not clear

13. If it was not clear, why? (Multiple answers are possible)

1. The communicators were not effective
2. Their voice was not clear
3. They were using difficult language/vocabulary
4. I was tired of attending the session
5. I didn't give much attention to it (Something was going on in my mind)
6. I didn't give much attention to it (It doesn't concern me)

14. How interesting was the way of presentation?

1. Very interesting 2. Interesting 3. Moderate 4. Not interesting 5. Don't know

15. Do you think the time was convenient for you?

1. Yes 2. No

IV. Attitude and Practice

1. In the last 12 months have you made any discussion on eye diseases or trachoma?

1. Yes 2. No 3. Don't remember

1.a. If your answer for Q. 1 is YES, with whom you made the discussion? (Multiple answers are possible)

1. Husband/wife 6. Health professionals/workers/
2. Adult member of the household 7. Teachers
3. Children 8. Traditional healers
4. Neighbours/friends 9. Relatives
5. Religious leader 10. Other (Specify)_____

1.b. The discussion was on

- 1. Eye surgery
- 2. Modern medicine (tetracycline/antibiotics)
- 3. Washing faces regularly
- 4. Make children wash their faces regularly
- 5. Use latrine for defecation
- 6. Keep area around house clean
- 7. Get advice from health workers/professionals regularly
- 8. Keep animals away from house
- 9. Other /Specify/ _____

2. Have you ever participated in trachoma control activities?

- 1. Yes
- 2. No

3. Do you recognize these materials? **SHOW possible materials**

- Poster or sticker 1. Yes 2. No 3. Not sure
- Magazine or booklet 1. Yes 2. No 3. Not sure

V. Culture Related Questions

1. Who is the creator? _____

2. What is the most important thing in the Amhara culture? (Please prioritize the alternatives in order of their importance)

- 1. Wealth
- 2. Children
- 3. Health
- 4. Livestock
- 5. Land
- 6. Respecting elders
- 7. Communalism
- 8. Individualism
- 9. Religion
- 10. Honesty
- 11. Other (Specify) _____

3. Do you think the current trachoma communication in your area goes with your culture?

- 1. Yes
- 2. No

3.a. If your answer for Q3 is NO, why?

ANNEX II

¾>Ã" T' / f^çT / çS<' <Ý?i"" u)SKÿ} u>T^ iMM
ÃMT" È"d "[ç 'a]-< ¾T>VL SÖÃp

iõM >"É
>ÖnLÃ SÍ

- ¾S>]Á >É^h /kuK? _____
- ið
 1. "É 2. c?f
- °ÉT@ _____
- ¾Y^ Sej
 1. Ñu_ 3. 'ÒÈ 5. ¾S"Óef W^)— 7. Ö<]—
 2. ¾u?f [Su?f 4. "Á` 6. }T] 8. K?L /ÃÑKi/ _____
- ¾fU\ f Á[
 1. ÁM}T[4. Ý5— — 8— iõM
 2. T"uw" Síó ¾T><M 5. Ý9— — 12— iõM
 3. Ý1— — 4— iõM 6. Ý12— iõM uLÃ
- ¾u?}cw- ¾" Ñu= /uÓUf/ _____
- ¾u?}cw- w³f _____
- wN?
 1. >T^ 2. K?L /ÃÑKi/ _____
- ÃT·f
 1. *,Éje 2. K?L /ÃÑKi/ _____

iõM G<Kf
>wÃ ØÁo-<

I. ¾"<H>p`xf' ¾ÓM" ¾>"vu= "il" >Övup

- u>"vu= ¾"<H>p`xf' ÞrÁMw >K;
 1. > 2. ¾KU
- ¾[e- u?}cw >w³—<" Ñ>²? "<H ¾T>ÁÑ—< Ý¾f " "< ; /Ý>"É SMe uLÃ SeÖf Ã%LM::!
 1. ÝvD"vD 5. Ý²S"© ¾Ñ<ÉÖÉ "<H
 2. "Í "<H 6. ÝvIL© ¾Ñ<ÉÖÉ "<H
 3. ÝU"ß 7. K?L /ÃÑKi/ _____
 4. Ýÿ<_
- "<H"<" ¾UÑÑ—<uf xð ÝS·]Á u?f- U" ÁIM Ã`nM; _____
- Ý²=| xð u¾e" f Ñ>²? "<H fkÇL<G<;
 1. uk" Ý>"É Ñ>²? uLÃ 4. uZef k" >"É Ñ>²?
 2. uk" >"É Ñ>²? 5. K?L /ÃÑKi/ _____
 3. uG<Kf k" >"É Ñ>²? 6. >L"<pU
- u?}cw- u>"É k" U" ÁIM "<H ÃÖkTM; /SMc< uK=f ÃÑKi/ _____

Ý 11 "Sf ulk ¾J' < MĐ < uu?łł" < ¾K?K < }ÖÁm- < Ý6 leÝ 8 ÁK < f" ØÁo > ÄÖ¾IU::

6. MĐ < - dłł" < " u¾e" f Ñ > ?" < ÄÖvK < ;

- 1. uk" Ý > "É Ñ > ?" uLÄ
- 2. uk" > "É Ñ > ?
- 3. uG < Kf k" > "É Ñ > ?
- 4. uZef k" > "É Ñ > ?
- 5. Ý > ^ f k" leÝ > "É XU" f
- 6. > L" < pU
- 7. K?L /ÄÑKi/ _____

7. ¾MÍ- /¾MĐ < -" òf u"ÖL' ukT > e "ÄU u"É > Mvdf- Ýö ¾SÖ^ [Ó MTÉ > M- f;

- 1. > -
- 2. ¾KU

8. ł e- "ÄU K?KA † > ^m ¾u?}cu < > vLf u¾e" f Ñ > ?" < òkG < " fÄÖvL < G < ;

- 1. uk" Ý > "É Ñ > ?" uLÄ
- 2. uk" > "É Ñ > ?
- 3. u¾G < Kf k' <
- 4. uZef k" > "É Ñ > ?
- 5. Ý > ^ f k" leÝ > "É XU" f
- 6. > L" < pU
- 7. K?L /ÄÑKi/ _____

9. uu?f- "eØ e" f jöM > K; _____

10. uu?f- ł"edf "K < ¾ł"ed, † TÄJÄ ¾f " < ;

- 1. uS·JÄ u?f- Ýu?}cu < Ö`
- 2. ÝS·JÄ u?f " < Ü u}K¾ eö^

11. UÓw ¾UöueK < f ¾f " < ;

- 1. uS·JÄ /uTÄJÄ/ u?f-
- 2. K?L /ÄÑKi/ _____

12. S·JÄ u?f- u¾e" f Ñ > ?" < ÄiÇM;

- 1. u¾°K-
- 2. uG < Kf k" > "É Ñ > ?
- 3. uZef k" > "É Ñ > ?
- 4. Ý > ^ f k" leÝ > "É XU" f
- 5. K?L /ÄÑKi/ _____

13. Óu- u¾e" f Ñ > ?" < ÄiÇM;

- 1. ÝXU" f v c Ñ > ?
- 2. uXU" f > "É Ñ > ?
- 3. uG < Kf XU" f > "É Ñ > ?
- 4. ÝZef XU" f leÝ > "É "
- 5. > L" < pU
- 6. K?L /ÄÑKi/ _____

14. u?}cw- Ýu?f ¾T > "x" qhh ł"Èf Äe"ÓÇM; łÝ > "É SMe uLÄ SeÖf Ä%LM::/

- 1. uTnÖM
- 2. uSpu`
- 3. uqhh Ñ < ÉÖÉ uSÉóf
- 4. Ýu?f > " < Ø, uS·JÄ u?f > "vu= uSÉóf
- 5. ^p ÁK/ ¾ł h xł uS×M
- 6. K?L /ÄÑKi/ _____

15. uu?f- u>Óvu < ¾}ÖÈ jÇ" ÁK" < ¾SiÇÍ eö^ > K;

- 1. > -
- 2. ¾KU

15.G. K15— " < ØÁo SMe- #¾KU\$ ÝJ' ¾T > ÖkS < f ¾f " < ; łÝ > "É SMe uLÄ SeÖf Ä%LM::/

- 1. uS·JÄ u?f Öa
- 2. ÝS·JÄ u?f ^p ÁK eö^
- 3. " " "ÄU łf > p^u=Á
- 4. K?L /ÄÑKi/ _____

15.K. K15— " < ØÁo SMe- #>-\$ ÝJ' G < K < U ¾u?}cu < > vM SiÇÍ u?-" uST > 'f ÄÖkTM;

- 1. > -
- 2. ¾KU

15.N. K15.K. ØÁo SMe- #¾KU\$ ÝJ' ¾TÄÖKS < f" ¾u?}cw > vLf" ¾TÄÖKS < uf" Uj" Áf ÄÖKi < ::

II. ¾>Ä" T' /f^cT/ ð<kf

1. f^cT/ ¾>Ä" T' eK}vK ¾>Ä" uiðcU} < Ä" <nK<;
1. >- 2. ¾K<U

Y2 ðeY 6 ÄK<f" ØÁo ¾T>SMc<f K>Ä— < ØÁo #>-\$ ¾T>M ULi ¾cÖ< w%o "t" <::

2. ¾>Ä" T' /f^cT/ UM_{i,†} U" U" "t" <; /~\ >Ä'uw' Ý>"É SMe uLÄ SeÖf Ä%LM::/
1. ¾>Ä" SpLf 6. ISU 11. K?L/ÄÑKi/ _____
2. ¾>Ä" TdÝj/Sq`q` 7. >Ä" SÒ[É
3. ¾>Ä" iöiö, < "Ä" <eØ SkMue 8. ¾>Ä" uYòM SÝKM
4. Þv "KTs[Ø Söce 9. ¾>Ä" ÞwÖf
5. >Ä" 10. >L" <pU

3. K>Ä'e" <'f S"e>" < U" ÄSeKA[M; /Ý>"É SMe uLÄ SeÖf Ä%LM::/
1. >ÄÖ 6. ÞÓT" 13. >D^
2. qhh ¾S•JÄ >"vu= 7. Be 14. >L" <pU
3. ¾ÖM "il" >KSÖup 8. É'f 15. K?L/ÄÑKi/ _____
4. ÝK?L >Ä'e" < Ý' c" < Ø' uT>Ä[Ó "jÝ= 9. ¾}S×Ö' UÓw >KSSÑw
5. Ýu?}cw/² ¾T>}LKö SØö ÞÉM 10. ÞÍ"
11. K?L uið
12. u'ödf >TÝ" f

4. ¾>Ä" T' /f^cT/ u"vu=- a"— ¾Ö?" <Ó' " <;
1. >- 2. ¾KU 3. ÞÓÖ— >ÄÄKG<U

5. Ýu?}cw- SGM ¾>Ä" T' /f^cT/ ÄKuf >K;
1. >- 2. ¾KU

5.G. K5— < ØÁo SMe- #>-\$ ÝJ' ¾}Ä²" <" c" <|c- < T" f ÄÓKi <

6. f^cT ÝSYc- uöf >ekÉV SÝLYM Ä%LM;
1. >- 2. ¾KU 3. >L" <pU

- 6.G. K6— < ØÁo SMe- #>-\$ ÝJ' ²É" < U"É" <; /Ý>"É SMe uLÄ SeÖf Ä%LM::/
1. öf" u¾°K- SÞÖw/¾ÖM "il" SÖup/ 6. ¾}S×Ö' UÓw SSÑw
2. ¾S•JÄ u?f" >"vu=" "il" SÖup 7. >L" <pU
3. "x" TØóf 8. K?L/ÄÑKi/ _____
4. ¾öf" ¾>Ä" SÖ^[Ñ>Á Ú`q" uÖ^ >KSÖku
5. uiKAf'iuM' ÞU'f

III. S[Í Te}LKòÁ S"ÑÉ<" ¾SM°_{i,†} &A²f

1. Þe- uT>•luf Qw[}cw ¾}KSÄ" <" vIL© ¾S[Í Te}LKòÁ S"ÑÉ u=ÑMi<M" /Ý>"É SMe uLÄ SeÖf Ä%LM::/
1. ¾u<" LÄ" <ÄÄf 4. " <G KSpÇf uT>Ý?Éuf Ñ>²? 7. uewcv /¾TQu[cw " <ÄÄf/
2. Ów¹/c"u, 5. ÞÚf KkT LÄ 8. ¾NÄT•f >v, <S"öð© eö^/
3. Äx 6. >[o u?f 9. uÑuÁ eö^

2. u"vu=Á<G< }cT>'f ÁK" < ¾S[Í U"ß T" <; "ÁU U"E" <; /Ý²=I ułk ¾}²[²f" >T^à< [r"Á¾}cT>[t" < pÁU }Y}M uTeÁ' Ylk u}} < jōf xđ AekUÖ<:./

- 1. kuK? "ÁU K?KA< S"ÓY[® É`İ, <
- 2. ¾Ö?" vKS<Á-<¾MTf W^}™ </
- 3. ¾GÁT·f >v, </S"ōd® eō^
- 4. ¾}T\ c-<
- 5. f/ u? f
- 6. Tlu^f /¾c? , <¾" x, < . . /
- 7. u"Yvu=" < ¾}Yulc-< /¾NĀT·f >v, <" >ÁÚU' U/
- 8. _Ç=Ä
- 9. }K>ō "k, <' u^] "[k, <' u=Mx' É'
- 10. S"ÓY[® ÁMJ' < É`İ, <
- 11. K?L/ĀÑKî/ _____

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

3. u"vu=Á<G< YÖ?" Ò` u)ÁÁ² S[Í ¾SeÖf a" — [Lò'f ¾T" <; /Ý>"É SMe uLĀ SeÖf Ā%LM:./

- 1. kuK? "ÁU K?KA< S"ÓY[® É`İ, <
- 2. ¾Ö?" /¾MTf W^}™ <
- 3. ¾GÁT·f >v, </S"ōd® eō^
- 4. ¾}T\ c-<
- 5. f/ u? f
- 6. ¾c? , <¾" x, < Tlu`
- 7. fLmp c-< /¾GNĪ` ITÓK?-</
- 8. _Ç=ĵ'
- 9. }K>ō "[k, <' u^] "[k, <' u=Mx' É'
- 10. S"ÓY[® ÁMJ' < É`İ, <
- 11. K?L/ĀÑKî/ _____

4. eK>Ā" ISU S"e>? "ÁU S}LKòĀ "ÁU SÝLYĀ S"ÑĒ< LKñf 12 "f S[Í >Ó` < Á" <nK<;

- 1. >-
- 2. ¾KU
- 3. >LeĪ <eU

4. 4.G. K4— < ØÁo SMe- #>-\$ ŸJ' S[Í <" ĀÑ-<f Ÿ¾f " <; /Ý>"É SMe uLĀ SeÖf Ā%LM:./

- 1. Ÿ_Ç=Ä
- 2. ŸT>KÖñ "[k, </pe]a</¾TeĪ mÁ cK?Ç' ŸSiN?f
- 3. S"ōd® eō^
- 4. ewcv
- 5. Ÿu?f Ku?f uŌ ðnĀ— ¾Ö?" W^}™ <
- 6. ŸŌ[u? , </ŌĀ—
- 7. uŪuĀ eō^
- 8. ¾u<" LĀ " <ĀĀf
- 9. >L" <pU
- 10. K?L/ĀÑKî/ _____

4.K.u"É >Sf Ū>²? " <eØ eKĀ" T' /f^cT/ S[Í >Ó` < ¾T>Ā" <I ŸJ' ¾S[Í < ÖpKM ÁK SMĪ;f U" 'u'; / ^ 1 >Ā'uw' Ÿ>"É SMe uLĀ SeÖf Ā%LM:./

- 1. òf eKSĪŌw
- 2. ¾òf" Ā" SŌ^[Ū>Á Ú`q<" uŌ^ >KSÖKU
- 3. ²S"®" ;Ç" ÁK" < SiÇÍ u?f eKSÖKU
- 4. Ÿu?f ^p ÁK ¾[hxl-<" KSiÇÍ xđ SÖKU
- 5. qhh" Spu' / TnŌM/
- 6. [redf" ŸS·JÁ u?f >`q eKT·
- 7. ¾u?f" >"vu=" iÇf eKSÖup
- 8. ¾>Ā" ISU c=ÁŌØU ¾Ö?" vKS<Á" eKTTY`
- 9. K>Ā" ISU ²S"® SÉG'>f eKSÖKU
- 10. ¾>Ā" ioiōf SkMue c=ÁŌØU ukĒØÑ" TÇ" [r"ĀT>%M
- 11. ¾>Ā" ui[/¾>Ā" T" / [r"Éf SÝLYM [r" TÇ" [r"ĀT>%M
- 12. ¾>Ā" ISU / ¾>Ā" T' / Ÿc" < "Ā c" < [r"Éf [r"ĀT>}LKō
- 13. K?L/ĀÑKî/ _____
- 14. >LeĪ <eU

5. u4— < ØÁo Y' YÖkc<f/YÖkc<at+ </ U"à< S[í< vKñf Zef ^f Ñ>2? <eØ U" ÁIM Á f-ØM;
□1. u)ÄÖÖT> □2. >Mö >Mö □3. >"É Ñ>2?

6. Ý>"É Ñ>2? uLÄ SM°j~ Á f-f Y'J' u)KÁ¿ Ñ>2?Áf ¾cS<at+ < SMl_j<
□1. }ÄÖÖð 'u\ □3. [e u\ dt+ < vÄÖÜU ¾)KÁ¿ Á²f 'u^†+ <
□2. [e u\ dt+ < ¾T>ÖÜ 'u\ □4. >Le\ <eU □5. K?L/ ÄÑKi/ _____

7. ÄÑ—<f" S[í
□1. S<K< KS<K< >U-@ }kwÄ°KG< □2. uYðM >U-@u\KG< □3. >LS"Y<ufU

8. _Ç=Ä uu?f- <eØ >K;
□1. >- □2. ¾KU

8.G. K8— < ØÁo SME- #>-\$ ÝJ' _Ç=Ä <" uSÄu—'f ¾T>ÁÇUÖ < T" <;
□1. G<K<U ¾u?)cu< >vM □3. c?,<[",</ w%
□2. >ªm ""É ¾u?)cu< >vM □4. MÐ<" >ªm ""É ¾u?)cu< >vM

8.K. K8.— ØÁo SME- #¾KU\$ ÝJ' Ýu?f- <Ü _Ç=Ä ¾T>ÁÇUÖ<uf Yö^ >K;
□1. >- □2. ¾KU

8.N. K8— <#K\$ ØÁo SME- #>-\$ ÝJ' Ýu?f- <Ü _Ç=Ä ¾T>ÁÇUÖ<uf" Yö^ÁÓKi<::
□1. Ö[u?f □3. Ö?" >u=Á/Y?L □4. kuK? /Q'w uT>cucwufYö^
□2. uÑuÁ x\ □5. K?L/ÄÑKi/ _____

9. u_Ç=Ä ¾T>}LKð < ¾>Ä" T' /f^çT/ SMl_jf ÓMi 'u';
□1. S<K< KS<K< ÓMê 'u' □2. uYðM ÓMi 'u' □3. ÓMi >M'u[U

10. ¾SMl_j- " Á²f [Éf >Ñ—<f;
□1. u×U Önt> □2. Önt> □3. S"YK— □4. U"U >MÖKSU □5. >L" <pU

11. u)K×ð [k,</pe}a\ u=Mx' Ê<' uÖ2?× " ÄU SiN?f ¾k[u" < ¾>Ä" T' /f^çT/ SMl_jf ÓMi 'u';
□1. S<K< KS<K< ÓMê 'u' □2. uYðM ÓMi 'u' □3. ÓMi >M'u[U

Ý12 [eY 15 ÁK<f" ØÁo-< ¾T>SMc<f K5G. ØÁo unM ¾Te}T]Á ²È ¾S[Ö< "†" <::
12. unM ¾)LKð < ¾>Ä" T' /f^çT/ SMl_jfe ÓMi 'u';
□1. >- S<K< KS<K< ÓMi 'u' □2. uYðM ÓMi 'u' □3. ÓMi >M'u[U

13. >k^[u< ÓMi "MJ' U; "Á~ U"É " <; Ý>"É SME uLÄ SeÖf Ä%LM:./
□1. >e}T]-‡ Öuµ< >M'u\U
□2. ÉUit+ < >ÄcTU 'u'
□3. ÝuÉ ÁK s"s ÄÖKS< eK'u'
□4. [íU c- f uSq¾, eM<," eK'u'
□5. u'p~ >[JaÄ uK?L Ñ<ÇÄ }ÖUÊ eK'u' KfUI~ fY<[f >McÖG<fU
□6. eKTÄSKY}~ fY<[f >McÖG<fU

14. fUI~ ¾k[uuf ²È U" ÁIM du= 'u';
□1. u×U Äe ¾T>M 'u' □3. S"YK— 'u' □5. >L" <pU
□2. Äe ¾T>M 'u' □4. Äe >ÄMU 'u'

15. fUI~ ¾T>cØuf c- f K\ e- >S' 'u';
□1. >- □2. ¾KU

IV. vI]“ MUUÉ

1. LKñf >e^ G<Kf “^f ¾>Ä” QSU/¾>Ä” T”/ u}SKÿ} u] e- >di’f ÿK?L c”< Ò` }ÄÄ”< ‘u;

1. >- 2. ¾KU 3. >Le]’<eU

1.G. K1—“< ØÁo SMe- #>-\$ ÿJ’ “<ÄÄ-” ÄÄ[Ñ<f ÿT” Ò` “<; /ÿ>”É SMe uLÄ SeÖf Ä%LM:./

1. ÿvKu?f- 6. ÿÖ?” vKS<Á/W^)—/
2. ÿK?L >^m ¾u?}cw- >vM 7. ÿ>e}T]
3. ÿMÐ<- 8. ÿvIM SÉG’>f >^m-<
4. ÿÖÄ—ÑA[u?f /¾>”vu=”< c-d 9. uK?L x] ¾T>•` ²SÉ/u?}cw/
5. ÿ”eG >vf- 10. K?L/ÄÑKi/ _____

1.K. ÄÄ[Ñ<f “<ÄÄf eKU”É” ”<;

1. ¾>Ä” kË IjU”
2. SÉG’>f
3. òf” G<MÑ>²? S]Öw
4. ¾MÐ<” òf G<MÑ>²? TÖw/ÿÇ=]Öu< TÉ[Ó/
5. jÇ” ÄK”< ²S”© SiÇI u?f SY^f/SÖku/
6. ¾>”vu=” iÇf SÖup
7. u¾Ñ>²?”< ÿÖ?” vKS<Á-< Uj` SkuM/SÖ¾p/
8. ÿredf” ÿS·]Á u?f u}K¾ eö^ TXÄ`
9. K?L/ÄÑKi/ _____

2. ÿ e- f^çT” KTØóf uT>Ä[Ó T”—“<U ÿpenc? }dfö”< Á”<nK<;

1. >- 2. ¾KU

3. ÄI”” ‘Ñ” >Ä}”<f Á”<nK<;

- }Kxò “[kf /þe]/ “ÄU u=Mx`É 1. >- 2. ¾KU 3. >Le]’<eU
 ▪ SiN?f 1. >- 2. ¾KU 3. >Le]’<eU

V. vIM

1. c”<” T” ðÖ]; _____

2. u>T^ vIM fMp ^Ö ÄK”< ‘Ñ” U”É”<; /¾}cÖ<f” >T^à<ÿÄ¾^Öt”< upÄU }ÿ}M ÄekuÖ</

1. Gwf 5. S_f 9.]ÄT·f
2. MÍ 6.]LLq<” Tju` 10. ÿT”·f
3. Ö?” 7. }ÇÉ,” }ÿvwa S· 11. K?L/ÄÑKi/ _____
4. ÿw,< 8. ÓK”·f

3. u>ÖnLÄ >G<” u”vu=Á<G< [¾}cÖ /B¾}c^Ú/ ÄK”< ¾f^çT fUI’f ÿ>T^”< wN?[cw vIM Ò` u}xxS SMÿ< ”< ÄLK<;

1. >- 2. ¾KU

3.G. K3—“< ØÁo SMe- #¾KU\$ ÿJ’ Uj`Áf-” u=Áw^IM”

ANNEX III

Interview with key informants

Code: _____

Date: ____/____/____

Part One: *Demographics*

1. Name: _____
2. Respondent's Kebele/PA _____
3. Sex: _____
4. Age: _____
5. Marital status: _____
6. Occupation: _____
7. Education level: _____
8. Ethnic group: _____
9. Religion: _____

Part Two: *Main Questions*

1. How do you describe the Amhara people?
2. What is the most valuable/important thing in the culture?
3. What do you think of the magnitude of trachoma in the area? Is it a major public health problem?
4. Is there any cultural practice of the Amhara people or environmental situation that enables high trachoma prevalence?
5. What are the common traditional media in the society?
6. Who/what is the most trusted source of information in the area?
7. What method/s have been employed to provide the people with trachoma information? By whom they are employed?
8. Have you heard or noticed any information about trachoma from any source in the last 12 months? Who was the source?
9. Do you think the trachoma communication is tailored with the culture?
10. Do you think the people have enough knowledge on trachoma? How do you see their behavioral change?
11. Do you believe that the trachoma communication activity is enough, interesting and effective? (Considering the competency of the communicator, the appropriateness of the venue and tools as well as the message)
12. Does the trachoma communication campaign involve the community in the planning and implementation stages?
13. Is there any feedback mechanism to learn from beneficiaries?
14. Do you have any suggestion to improve the efficiency of the campaign?

ANNEX IV

ŸQw]cu< /ŒŒT>/ "Ñ" KJ'< S[í cÜ-< nK SÖÄp ¾k[u< ØÁo-<

ŒÉ: _____

k": _____ / _____ / _____

iöM >"É
>ÖnLÄ S[í

1. eU _____
2. ¾S•]Á >É^h /kuK?/ _____
3. iŒ _____
4. °ÉT@ _____
5. ¾Öw%o G<'@Œ _____
6. ¾Y^ Sej _____
7. ¾fUI' f Ä[í _____
8. wN? _____
9. ŒÄT•f _____

iöM G<Kf
>wÄ ØÁo-<

1. ¾>T^" <" wN?[cw Œ'Éf ÄÑMi<ŒM;
2. ¾>T^" < wN?[cw fMp xŒ ¾T>cÖ" < 'Ñ" U"É" " <;
3. f^ŒT u>"vu=" < U" ÁIM }c^B...M; /¾Qw]cu< a"— <Ö" " <;/
4. Ÿ>"vu=" < G<'@Œ" ÄU ŸvIK< " <eØ Kf^ŒT Seóóf Œ'Ä Uj"Áf ¾T>Öke 'Ñ" >K;
5. ¾Qw]cu< vQL© ¾S[í SK^Y S"ÑÉ U"É" " <;
6. ¾Qw]cu< }T'> ¾S[í U"B T" <;
7. f^ŒT" u)SK} ¾>"vu=" < Q'w S[í ¾T>Ä`c" < uU" S"ÑÉ " <; uT" >T"~'f;
8. vKð" < >É "Sf Ñ>??" <eØ ¾f^ŒT fUI' f KQ'u< c=}LKö >Ä}M "Ä; }dfð^M "Ä; uU" SMŸ<; uT" >T"~'f;
9. ¾f^ŒT fUI' f Ÿ>T^ Q'w vIM Ö" ¾}xS " < ÄLK<;
10. ¾>Ÿvu=" < Q'w ¾f^ŒT S}LKöÄ S"ÑÉ<" SŸLYÁ ?É-< LÄ um Ó"³u? >K" < wK" < ÄU"K<<; MUUÆe U" ÄSeLM;
11. u)KÄ¿ >"Lf KQw]cu< ¾T>cÖ" < ¾f^ŒT fUI' f U" ÁIM um " <; U" ÁIM du= " <; /fUI' ~" ¾T>cÖ<f c-< wnf' fUI' ~ ¾T>cÖuf xŒ SM°j~ Œ' ¾k[uuf ²É/
12. uf^ŒT fUI' f 'Óif" H>Äf LÄ Qw]cu< }dŒb " <; uU" SMŸ<;
13. ¾f^ŒT fUI' f 'Óif" H>Äf" u)SKŸ} ŸQw]cu< u¾Ñ>??" < >e}Ä¾f ¾T>cucwuf G<'@Œ>K;
14. u>ÖnLÄ u>T^" < jMM B¾}cÖ ÄK" < ¾f^ŒT fUI' f Ä²f" ¾S}LKöÄ S"ÑÉ >eSMj, K=hhM ÄÑvM ¾T>K<f 'Ñ" "K;

ANNEX V

Interview with development agents

Code: _____

Date: ____ / ____ / ____

Part One: Demographics

1. Name: _____
2. Respondent's Kebele/PA _____
3. Sex: _____
4. Age: _____
5. Marital Status: _____
6. Occupation: _____
7. Educational Qualification: _____
8. Ethnicity: _____

Part Two: Main Questions

1. What do you think of the magnitude of trachoma in the area? Is it a major public health problem
2. What do you think about trachoma victims?
3. Is there any cultural practice of the Amhara people or environmental situation that enables high trachoma prevalence?
4. Overall, how is the effort of the government, the people and NGOs in tackling trachoma in the area?
5. What are the process involved in preparation and production of the program?
6. Was there any pre research undertaken to know the culture, dream, desire as well as media habit of the society?
7. How is community's involvement in formulating strategies and implementation?
8. What messages and communication methods do you think can appeal to the audience? (Thinking of the different segments-age, sex- of the society)
9. What communication methods and tools have been employed to disseminate trachoma message in the area currently? Are there differential strategies for men, women and children?
10. Is there any material available for teaching trachoma in the area? What is their content? Where and by whom they were prepared? For whom they were intended for?
11. Was there professional involvement in developing the materials or messages of trachoma? Specify those professionals having experience in the field and professionals in other field?
12. Did you make any pretesting on the message or materials?
13. Do you think the trachoma communication is tailored with the culture?
14. Are the communicators well armed with trachoma knowledge and communication skills?

15. Do you think the public is well-aware of the way of transmission and prevention of trachoma disease? What about the level of their behavior change?
16. Who is the main focus of the communication campaign? (Individual people or the society)
17. Is there any mechanism to check the knowledge, attitude and practice of the public regarding trachoma problem?
18. Is there any feedback mechanism? If yes, what are the most common comments and suggestions given by the society? Have you ever made any changes based on the comments and suggestions of the public?
19. Do you think the current trachoma communication campaign in the Amhara region is efficient? If not, why?
20. What challenges have been faced in communicating trachoma information in the area? What mechanisms have you employed to overcome those challenges?
21. What should be done to deliver improved service?
22. What is your plan for the future?

ANNEX VI

u>T^ ;MM f^cT" KSÝLÝM" KTØóf K)cTl
¾ÓM" S"ÓYl© É`jf W^}™< ¾k[u nK SÖÄp

çÉ: _____

k": _____ / _____ / _____

jöM >"É
>ÖnLÄ Sjí

1. eU _____
2. ¾S·]Á >É^h /kuK?/Ñu_ Tlu' / _____
3. iü _____
4. °ÉT@ _____
5. ¾Öw%o G<'@l _____
6. ¾Y^ Sej _____
7. ¾fUI`f ÄÍ _____
8. wN?` _____

jöM G<Kf
>wÄ ØÄo-<

1. f^cT u"vu=" < U" ÁIM }c^B...M; ¾Qw}cu< a'— <Ó' " < ÄLK<;
2. [e- Kf^cT }Öm-< ¾T>cT-f" eT@f ÄÑKèM";
3. u[e- >SK"Ýf Ý>T^ Q`w S·]Á >"vu=" vIM "ÄU MTÉ " <eØ K>Ä" T' /f^cT/ u[e Seóóf [r^AU;]Áf ¾T>Öke `Ñ' "K u=ÑMi<M";
4. uu>ÖnLÄ u>G<'< "pf f^cT" Ý>T^ ;MM KTØóf uQ`u< uS"ÓYf" S"ÓYl© vMJ< É`l,< uY<M [¾]ÄÑ ÁK< < Ø[f U" ÄSeLM;
5. u>T^< ;MM [¾]"H@Ä ÁK<< ¾f^cT jáÓ^U °pÉ" >Ñvu` U" ÄSeLM;
6. u>ÖnLÄ ¾f^cT -aÓ^U u">vu=" < ÝSES\ uøf ¾Qw}cu< vIM` öLÑAf' U™f" ¾Sjí M<" <Ö<" G<'@l KT`p ¾T>Äe<M Ø"f }"H>ÇDM;
7. uf^cT fUI`f [pÉ" >Ñvu` LÄ ¾Q`u< }dfö U" ÄSeLM;
8. Ýf^cT Ø` u]AA² U" >Ä`f SM°;f" ¾>k^ [w ²È Qw}cu<" ÄevM ÄLK<; /u[ÉT@" uèl ÝóöK<" < u=Ád;"/ K""É' Kc?," Klí"f ¾}K¾ SM°;f" ¾>k^ [w ²È >K;
9. u>G<'< "pf ¾f^cT fUI`f KQw}cu< uU" SM; [¾]LKð " <;
10. Kf^cT Te}T]Á`f }²Öl)" < ¾k[u< S[í Te}LKöÄ SX]JÁ-<>K<; ÝK< Ä²l" < U" ÄSeLM; uT" KT" [r SŠ " < ¾}²Öl}f; u^—'f K²=l Qw}cw ¾}²Öl "t" <;
11. uTe}T]Á SX]JÁ-† ¾Te}LKöÄ S"ÑÈ† `Ójf LÄ ÝcS<'@Ý?i"" ÝK?L ¾S<Á ²` ö< ¾} ×Ö< vKS<Á-< }dfö< "u"; }dfö< Ýu[¾]d)ñf" c< ¾S<Á ²` ö u=ÑMèM"; /SX]JÁ-† uY^ LÄ Ý²K< u%ELU ¾vKS<Á-<" >e)Ä¾f KScwcv }Vja ÝJ/

12. Te}T]Á SX]Á-‡ Y^ LĀ ŸS°L†ˆ < uòf }Vj[ˆ < wn]†ˆ < }[ÖÓ×DM;
13. ¾f^†T fUI`f Ā²f" >k^[w Ÿ>"vu=" < vIM Ò ¾}××S "ˆ <;
14. ¾f^†T fUI`f" KTe}T` ¾}SĀu<f c-< um ¾†S<'>Ÿ?!" YMÖ" ĀÑ-< "†ˆ <;
15. Qw}cu< ¾f^†T ui]uU" SMj]'ĀT>}LKō]' uU" SMj; SŸLŸM]'ĀT>%oM um Ó³u? >Kˆ < wKˆ < ÁevK<; MUUÆe U" ĀSeLM;
16. fUI` ~ Á'×Ö[ˆ < uÓKcw LĀ "ˆ < "Āe uTlu]cw LĀ;
17. ¾Qw}cu<" ¾f^†T]' <kf' vj]" MUUE SS²— ²È >L<G<;
18. ¾UfcÖ<f" >ÑMÓKAf u)SK}u)KĀU Ā"T ĀA" <G<" KT'p ŸQˆu< >e)Ā¾f ¾U]Ñ-<uf ²È >K; "K Ÿw²<G' < }ÖnT> ¾U]Ñ-<f >e)Ā¾f U"É" "ˆ <; ĀÑ-<G<f >e)Ā¾f uY^<G< LĀ U" Kˆ <Ø >S×;
19. u)ÖnLĀ u>G<' < "pf u>T^ ;MM f^†T" KSŸLŸM" KTØóf u)KĀ; >"Lf]¾}ĀÑ ĀKˆ < Ø[f um" f;jjK— "ˆ < wKˆ < ÁU"K<; jō}f "K u="Ó";
20.]eŸ >G<" u>T^ˆ < ;MM ¾f^†T fUI`f" uTc^Úf H>Āf "ˆ <eØ]'póf J"ˆ < ¾}Ñ-< 'Ña< "K< u=ÑMèM"; Ÿ'u\ uU" SMj; Mf" Ö<†ˆ < VŸ^<G</%oL<G<;
21. -aÓ^S<" ¾uKÖ KThhM K=Ā[Ó ĀÑvM ¾T>K<f 'Ñ` "K;
22. "Āòf U" KSY^f]levDM;

ANNEX VII

Interview with in-school children

Code: _____

Date: ____/____/____

Part One: *Demographics*

1. Name: _____
2. Respondent's Kebele/PA _____
3. Age: _____
4. Sex: _____
5. Respondent's School _____
6. Respondent's Grade: _____

Part Two: *Main Questions*

1. What do you think are the causes of blindness?
2. Have you ever heard of the eye disease called trachoma?
3. If yes, what are the symptoms?
4. What are the consequences of trachoma?
5. How can you prevent this eye disease?
6. How frequently do you wash your face?
7. If you don't wash frequently, what is the reason?
8. Where do you defecate? If you don't use latrine, why?
9. What is your source of trachoma information?
10. If school is your source, when and how?
11. Is there any eye-club in your school? If yes, are you a member of that club?
12. Do you recognize these materials? SHOW possible materials
 - Poster 1. Yes 2. No 3. Not sure
 - Story book 1. Yes 2. No 3. Not sure
13. What is their message?

ANNEX VIII

Klí" f ¾k[u nK SÖÃp

čÉ: _____

k": _____ / _____ / _____

ïöM >"É: >ÖnLÃ S[í

1. ¾}ÖÁm" < eU -----
2. ¾S•]Á >É^h / kuK? -----
3. °ÉT@ -----
4. i| -----
5. }ÖÁm" < ¾T>T uf f/lu?f eU -----
6. ¾ïöM Á[í -----

ïöM G<Kf: >wÃ ØÁo-<

1. >Ã'e" <`f YU" YU" ÄS×M;
2. ¾>Ã" T` / f^çT eKT>vM ui| cU} / i | <nKI/mÁKi;
3. ¾f^çT UM|, < U" U" "t" <;
4. f^çT U" U" ÁeYfLM;
5. ¾f^çT" ui| | Èf SÝLYM Ã%oLM;
6. òf" / i" u¾e" f Ñ>²? < f|ÖvKI/u=ÁKi;
7. òf" / i" „KA „KA ¾Tf|Öw/u= YJ' U|" Á~ U"É" " <;
8. ¾SiÇ| u?f }ÖnT> ' / i; "MJ" / i ¾f" < ¾UfÖKS" </T>" <;
9. eK>Ã" T` / f^çT Y¾f Y¾f fUI f |Ñ—KI / i;
10. uf/lu?f ¾>Ã" T` / f^çT fUI f ¾T>cØ YJ' fUI ~ uT" |" uU" >Ã' f Ñ>²? |"ÁT>cØ }"Ñ / |;
11. uf/lu?f [kG< ¾>Ã" |uw >K; "K >"} / ¾|uu< >vM ' / i;
12. Ã|"" e°M >Ã} < / i" < | <nKI/mÁKi; ÁK<f" Sd]Á-< Ádž::
pe} 1. >- ¾KU 3. |ÓÖ ÁKG<U
¾} |f SiGö 1. >- 2. ¾KU 3. |ÓÖ >ÃÁKG<U
13. ¾|Á"Ç"Çt" < SM|;f U"É" " <;

ANNEX IX

Focus group discussion topics for women and men in the study area.

1. What is trachoma?
2. What do you think of the magnitude of trachoma in the area? Is it a major public health problem
3. Is there any cultural practice of the Amhara people or environmental situation that enables high trachoma prevalence?
4. What is the most valuable/important thing in the culture?
5. What method/s have been employed to provide the people with trachoma information? By whom they are employed?
6. Do you believe that the trachoma communication activity is enough, interesting and effective? (Considering the competency of the communicator, the appropriateness of the venue and tools as well as the message)
7. Do you have any suggestion to improve the efficiency of the campaign?

ANNEX X

Ÿ)KÁĴ ¼lw[]cw jōKA< K}¨<xÖ< ¨"Ê<" c?,< ¼k[u< ¼S¨ÁÁ `°f<

1. f^ÇT /¾>Ã" T' / U"É"¨<;
2. f^ÇT u>"vu="¨< U" ÁIM }c^B...M;
3. Ý>"vu="¨< G<'@[] ¨ÁU ÝvIK< ¨<eØ Kf^ÇT Seóof [r^Á Uj"Áf ¾T>Öke 'Ñ¨ >K;
4. ¾>T^ wH@[cw fMp x[] ¾T>cÖ¨< 'Ñ¨ U"É"¨<;
5. f^ÇT" u)SKÝ} ¾>"vu="¨< Q'w S[[] ¾T>Á`c¨< uU" S"ÑÉ"¨<; uT" >T"¨'f"¨<;
6. u)KÁĴ >"Lf KQw[]cu< ¾T>cÖ¨< ¾f^ÇT fUI`f U"ÁIM um"¨<; U" ÁIM du="¨<;/ fUI`~" ¾T>cÖ<f c-< wnf'fUI`~ ¾T>cØuf x[] SM°j~" ¾k[uuf ²Ê/
7. u>ÖnLÃ u>T^¨< jMM [¾]cÖ ÁK¨< ¾f^ÇT fUI`f Á²f" ¾S}LKòÁ S"ÑÉ"¨>eSMj, K=hhM ĀÑvM ¾T>K<f 'Ñ¨ "K;

ANNEX XI

School observations

1. Is there any latrine facility in the school?
2. How far apart are the latrines of boys' and girls'?
3. Is the school compound clean?
4. Are there posters and flipcharts on trachoma in an easily recognizable site?
5. Does this child have discharge in the eyes and nose?

Health posts/stations observations

1. Are there posters and flipcharts on trachoma in an easily recognizable site?

ANNEX XII

¾fUI`f u?f Ø"Π© UMŸΠ

1. uf/uf?~ " <eØ ¾SiÇÍ u?f >p`xf >K "Ã;
2. ¾"Ê<" ¾c?„< SiÇÍ u?„< U" ÁIM ¾}^I "†"<;
3. ¾f/uf?~ Óu= "íl" U" ÃSeLM;
4. f^çT" u)SKŸ} fUI` cÜ pe} " òK=y %oo`„< ukLK< K}T]-< °ÃΠ ΠÇ=Ñu< J"" < }KØðªM "Ã;
5. }ÖÁm"< lí" ¾„Ã" Π" ¾„ð"Ÿ"< îÇf ¾}Öuk ""< "Ã;

uÖ?" Ÿ?L ¾}Ã[Ñ UMŸΠ

1. pe} " òK=y %oo`„< f^çT" u)SKŸ} ukLK< °ÃΠ "" <eØ K=Ñu< uT><K<uf xΠ LÃ >K<;

ANNEX XIII

List of Target Audience

	Name	Sex	Social Position	Code
1	Yaregal Garedew	M	Farmer	IN:1
2	Belaynesh Abebaw	F	Housewife	IN.2
3	Gelaneh Belete	M	Community leader	IN:3
4	Aynekulu Jemere (Father)	M	Religious leaders	IN:5
5	Atitegeb Molla	F	Housewife	IN.6
6	Mare Aschalew	F	Merchant	IN.7
7	Temesgen Geta	M	Student	IN.8
8	Lissanu Tadele (Father)	M	Religious leader	IN.9

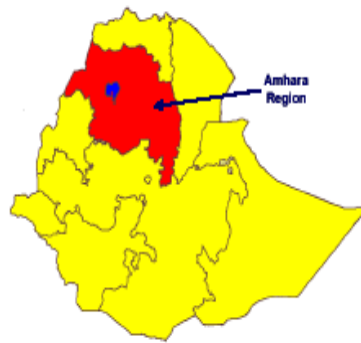
List of Experts

	Name	Sex	Responsibility	Code
1	Agernesh Mengistu	F	Health worker	IN.4
2	Beyen Mulualem	F	Teacher	IN.10
3	Gashaw Muche	M	Teacher	IN.11
4	Mastewal Kibru	F	Health professional	IN.12
5	Getaneh Mechal	M	Agricultural professional	IN.13
6	Tezera Mengesha	M	Water technician	IN.14
7	Tinegager Shiferaw	F	Women's Union Rep.	IN.15
8.	Yaschalew Getnet	M	Journalist	IN.16
9.	Bazew Gesesse	M	WHB Official	IN.17
10	Mulat Zerihu	M	Carter Center	IN.18

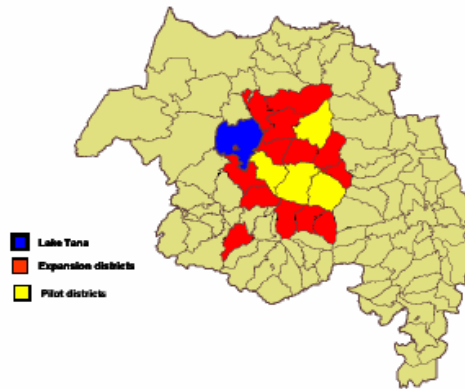
List Students

	Name	Sex	School	Grade	Code
1	Tigistu Tadele	M	Geregera Primary School	1	CH:1
2	Mitkie Teshale	F	“ “ “	2	CH:2
3	Achamyelah Layne	M	“ “ “	3	CH:3
4	Yayesh Metaferya	F	“ “ “	4	CH:4
5	Etagegnehu Melaku	F	Gonje Primary School	1	CH:5
6	Mengistu Eshetu	M	“ “ “	2	CH:6
7	Alemzewid Teshale	F	“ “ “	3	CH:7
8	Fantahun Belay	M	“ “ “	4	CH:8
9	Demmelash Mihiret	M	Kiliit Junior Secondary School	1	CH:9
10	Shittaye Atnafu	F	“ “ “ “	2	CH:10
11	Muluken Getachew	M	“ “ “ “	3	CH:11
12	Meskerem Ambaye	F	“ “ “ “	4	CH:12
13	Birtukan Mulu	F	Kore Primary School	1	CH:13
14	Tsegaye Shimeket	M	“ “ “	2	CH:14
15	Ayalsew Simachew	F	“ “ “	3	CH:15
16	Yohannes Alemu	M	“ “ “	4	CH:16

ANNEX XIV



Map of Ethiopia



Map of Amhara Region with TCP districts, 2003



Map of West Gojam Zone

Declaration

I, the undersigned, declared that this thesis is my original work and the sources of materials used for the thesis have been duly acknowledged.

Advisor

Name: _____

Name: _____

Signature: _____

Signature: _____

Date of submission _____

Date: _____

Place of submission: _____