SUMMARY PROCEEDINGS

Of

THE ETHIOPIA PUBLIC HEALTH TRAINING INITIATIVE

REPLICATION CONFERENCE

THE
CARTER CENTER

Waging Peace. Fighting Disease. Building Hope.

ADDIS ABABA, ETHIOPIA
FEBRUARY 12-14, 2007

THE REPLICATION CONFERENCE WAS FUNDED BY:

skoll FOUNDATION

THE ETHIOPIA PUBLIC HEALTH TRAINING INITIATIVE IS FUNDED BY:

USAID
FROM THE AMERICAN PEOPLE

SUMMARY PROCEEDINGS

Of

THE ETHIOPIA PUBLIC HEALTH TRAINING INITIATIVE

REPLICATION CONFERENCE

THE
CARTER CENTER

Waging Peace. Fighting Disease. Building Hope.

ADDIS ABABA, ETHIOPIA
FEBRUARY 12-14, 2007

The Ethiopia Public Health Training Initiative
REPLICATION CONFERENCE
Addis Ababa and Debre Zeit, Ethiopia
February 12-14, 2007

TABLE OF CONTENTS

Acknowledgements…… i
Executive Summary……..... ii
Acronyms…… iii
Introduction…… iv
Agenda of the Conference…….. v-vii

SUMMARY
Minutes of Replication Conference…… 1

PRESENTATIONS
Keynote Address – President Jimmy Carter, Co-Founder of The Carter Center…. 24
History of EPHTI – Prof. Dennis Carlson, EPHTI Senior Advisor……..... 28
Current Status of EPHTI – Prof. Joyce Murray, EPHTI Director....……..... 35
Remarks by USAID – Mr. Glenn Anders, Mission Director……... 41
EPHTI Council Perspective – Dr. Kifle Woldemichael, Council Chair……. 44
University Institutional Perspective – Prof. Belay Kassa, Haramaya U. President.. 49
University Individual Perspective – Mr. Amsalu Feleke, EPHTI Council Member. 55

FIELD TRIP
Presentation by Defense University – Col. Dr. Yodit Abraham, Dean…… 65

DISCUSSIONS
Summary of Day 3 Plenary Group Presentations……. 81

CONTACTS
Participant list and contact information…….. 88
Mailing Address of The Carter Center…….. 94

ACKNOWLEDGEMENTS

The Replication Conference was funded through a generous grant from the Skoll Foundation. The Carter Center's Ethiopia Public Health Training Initiative (EPHTI) is currently funded under USAID Cooperative Agreement #663-A-00-00-00358-00. Previous donors of the EPHTI include: United States Agency for International Development (USAID), The David and Lucile Packard Foundation, OPEC Fund for International Development, The Rockefeller Foundation, GlaxoSmithKline PLC, Turner Foundation, and individual donors.

The individuals below assisted with the preparation of these proceedings. The contribution and support are gratefully acknowledged.

Nigussie Belake
Assefa Bulcha
Shelly Brownsberger
Dejene Hailu
Joyce Murray
Hailu Yeneneh

Note:
Inclusion of information in the Ethiopia Public Health Training Initiative Replication Conference Proceedings does not constitute "publication" of that information.

EXECUTIVE SUMMARY

The Carter Center's Ethiopia Public Health Training Initiative (EPHTI) program held a Replication Conference February 12-14, 2007 in Addis Ababa and Debre Zeit, Ethiopia. The purpose of the conference was to showcase the challenges, successes, history, and methods of the EPHTI for other African countries with similar health problems and resources, as an adaptable and customizable model for pre-service health education. The Ministers of Health, Education and Science and Technology were invited to the Replication Conference from ten African countries: Benin, Ethiopia, Ghana, Kenya, Mali, Nigeria, Government of Sudan, Government of Southern Sudan, Tanzania, and Uganda.

In the morning on the first day of the conference, President Jimmy Carter gave a keynote address and spent some time answering questions. The history and current status of EPHTI were then presented, with discussion from the participants. In the afternoon of the first day, the impact on Ethiopians, from those on the EPHTI Council, to individuals and university faculties, were discussed. There was also a presentation on two activities of the EPHTI, the Drought Response and Reproductive Health Programs, followed by further discussion.

On the second day of the conference, the ministers from the invited countries and a few EPHTI Council members traveled approximately 45 kilometers south of Addis Ababa, to Defense University's College of Health Sciences. While on this field trip, the group heard a presentation on Defense University's experience with the EPHTI program and then divided into two groups and each group visited one of two health centers, Dukem Health Center and Defense Health Center.

During the third and final day of the conference, the ministers were divided into three groups and joined by members of the EPHTI Council and The Carter Center staff to discuss the Initiative, and brainstorm on methods to adopt and customize the program for their respective governments.

In addition to the ministers from the ten African countries, other key participants in the Replication Conference included organizations that have partnered with EPHTI for past activities, or who have expressed interest in working with EPHTI in the future. Also in attendance were donor organizations, representatives from each of the seven EPHTI universities, media personnel, and staff from The Carter Center's offices in Atlanta, U.S.A., and Addis Ababa, Ethiopia.

The Replication Conference was funded by a generous grant from The Skoll Foundation. EPHTI is currently funded by the United States Agency for International Development (USAID) under cooperative agreement #663-A-00-00-00358-00.

ACRONYMS

AHOTP	**Accelerated Health Officers Training Program**
BCC	**Behavioral Change and Communication**
BSc	**Bachelors of Science**
CBRHA	**Community Based Reproductive Health Attendants**
CDC	**Centers for Disease Control**
DDT	**Dichloro-diphenyl-trichloroethane**
DPPC	**Disaster Prevention and Preparedness Commission**
EHT	**Environmental Health Technicians**
ENA	**Essential Nutrition Action**
EPHTI	**Ethiopia Public Health Training Initiative**
FDRE	**Federal Democratic Republic of Ethiopia**
FP	**Family Planning**
GOS	**Government of Sudan**
GOSS	**Government of Southern Sudan**
HEW	**Health Extension Worker**
HLM	**Health Learning Materials**
HO	**Health Officer**
HS	**Health Science**
HSEP	**Health Service Extension Program**
LCD	**Liquid Crystal Display**
MD	**Medical Doctor**
MLT	**Medical Laboratory Technicians**
MOE	**Ministry of Education**
MOH	**Ministry of Health**
MPH	**Masters of Public Health**
MSc	**Masters of Science**
NGO	**Non-Governmental Organization**
PHCU	**Primary Health Care Units**
PRSP	**Poverty Reduction and Sustainability Program**
RH	**Reproductive Health**
RHB	**Regional Health Bureau**
SNNPR	**Southern Nations, Nationalities, and Peoples Region (Ethiopia)**
TB	**Tuberculosis**
TBA	**Traditional Birth Attendants**
TCC	**The Carter Center**
THC	**Training Health Center**
TOR	**Terms of Reference**
UoG	**University of Gondar**
USAID	**United States Agency for International Development**
USD	**United States Dollar**

INTRODUCTION

Presenting EPHTI as a model for pre-service health education

These proceedings reflect the presentations, thoughts, discussions and proposals made during the Ethiopia Public Health Training (EPHTI) Replication Conference. This Replication Conference offered a unique opportunity for the Ministers of Health, Education, and Science and Technology from ten sub-Saharan African countries to come together to discuss the EPHTI as a possible model for pre-service health training in their respective nations.

Less than half of Ethiopia's population has access to modern health services, including health education, immunization, family planning and appropriate treatment for prevalent illnesses like malaria, diarrhea, pneumonia, malnutrition and sexually transmitted diseases. Most causes of poor health and death in Ethiopia can be prevented or treated through basic methods that do not require advanced professional education.

The underlying principle of the Initiative's capacity-building strategy is that Ethiopians should play the primary role in meeting the country's community health needs. With its Ethiopian partners, The Carter Center began implementation of the Initiative based on three major objectives:

- Collaborate with Ethiopians to develop training and educational materials designed to meet the specific learning needs of health center team personnel;
- Strengthen the teaching capacity of university-level teaching staff through program activities and field training; and
- Improve the teaching and learning environments by acquiring much-needed journals, textbooks, technology, and equipment.

The Initiative seeks to create environments in which senior international experts work side-by-side with Ethiopian teaching staff to train health center teams and develop learning materials based on Ethiopian experiences, which are directly relevant to Ethiopia's health problems. The health center staff carries the responsibility of training and supervising all community health workers, including traditional birth attendants and community health agents. Thus, the basic training for health center teams given in the colleges has a direct and immediate impact on all modern primary health services throughout the country, extending even into villages and homes.

With similar problems and resources, other African countries could benefit from adopting and customizing the model of EPHTI for use in their national programs. Thus, the Replication Conference was held to showcase the challenges, successes, history and methods of the EPHTI. President Carter has welcomed each participating country to submit proposals to The Carter Center for support in replicating the Initiative.

Ethiopia Public Health Training Initiative
The Carter Center
One Copenhill
453 Freedom Parkway
Atlanta, GA 30307
U.S.A.
Ph: +1-404-420-3857
Fax: +1-404-874-5515
Email: Shelly.Brownsberger@emory.edu

AGENDA OF EPHTI REPLICATION CONFERENCE
FEBRUARY 12-14, 2007
ADDIS ABABA, ETHIOPIA – U.N. CONFERENCE CENTER

Day 1 – February 12, 2007

Date/Time	Topic/Activity	Presenter
8:30 - 9:00	Registration	Organizers
9.00 - 10.00	Keynote Address	President Jimmy Carter
10.00 - 10.30	Tea/Coffee Break	Organizers
10.30 - 11.00	History of EPHTI	Professor Dennis Carlson
11.00 - 11.30	Current Status of EPHTI	Professor Joyce Murray
11.30 – 11.40	Remarks by USAID	Mr. Glenn Anders, Mission Director
11.40 - 12.30	Discussion	Professor Joyce Murray
12.30 - 14.00	Lunch Break	Organizers
14.00 - 14.30	The EPHTI Council Perspective	Dr. Kifle Woldemichael, Council Chairman, Jimma University
14.30 - 15.00	University Institutional Perspectives	Prof. Belay Kassa, President, Haramaya University
15.00 - 15.30	University Individual Perspectives	Mr. Amsalu Feleke, Council Member, Gondar University
15.30 - 16.00	Discussion	Participants
16.00 - 16.30	Tea/Coffee Break	Organizers
16.30 – 17.00	Discussion on The Drought Response and Reproductive Health Programs	Dr. Hailu Yeneneh and Professor Joyce Murray
17:00 – 17:15	Announcements and Group Photo	Organizers
17.15 - 19.00	Transportation back to hotel / Free time	Organizers
19.00 - 21.00	Social Dinner – Sheraton Hotel, Lalebela Hall	Organizers

AGENDA OF EPHTI REPLICATION CONFERENCE
FEBRUARY 12-14, 2007
ADDIS ABABA, ETHIOPIA – U.N. CONFERENCE CENTER

Day 2 – February 13, 2007

Date/Time	Topic/Activity	Presenter
9.00 – 10.00	Departure from Sheraton Hotel via ground transportation to Debre Zeit, Ethiopia	Organizers
10.00 – 11.00	Briefing followed by discussion at Defense College of Health Sciences in Debre Zeit	Organizers
11.00 – 11.30	Tour of the College campus	Defense College Faculty
11.30 – 12.30	Visit of two training health centers (Debre Zeit and Dukem) – 7 km from Debre Zeit	Organizers
12.30 – 13.00	Arrival at Officer's Club for Lunch	Organizers
13.00 – 14.30	Lunch	Organizers
14.30 – 15.30	Departure to Addis Ababa via ground transportation	Organizers
15.30	Arrival at Sheraton Hotel, end of organized activities for the day	Organizers

AGENDA OF EPHTI REPLICATION CONFERENCE
FEBRUARY 12-14, 2007
ADDIS ABABA, ETHIOPIA – U.N. CONFERENCE CENTER

Day 3 – February 14, 2007

Date/Time	Topic/Activity	Presenter
9.00 - 9.30	Overview on Group Work	Professor Dennis Carlson
9.30 - 10.30	Group Work	Groups
10.30 - 11.00	Tea/Coffee Break	Organizers
11.00 - 12.00	Group Work continues	Groups
12.00 - 13.30	Lunch Break	Organizers
13.30 – 13.50	Group Presentation	First Group
13.50 - 14.10	Group Presentation	Second Group
14.10 - 14.30	Group Presentation	Third Group
14.30 - 15.00	Plenary Discussion & Recommendations	Participants
15.00 - 15.30	Tea/Coffee Break	Organizers
15.30 - 16.00	Next Steps (Consensus Points)	Professor Dennis Carlson
16.00 - 16.30	Remarks by Ethiopian Government	Ethiopia Ministry of Education and Ethiopia Ministry of Health
16.30 – 17.00	Closing remarks	Professor Joyce Murray

The Carter Center / Ethiopia Public Health Training Initiative
Replication Conference
United Nations Conference Center
Addis Ababa, Ethiopia
February 12-14, 2007

Introduction

The Carter Center's Ethiopia Public Health Training Initiative (EPHTI) has been successful in working towards its three main objectives (Curriculum Materials Development, Staff Strengthening and Improving the Teaching/Learning Environment), as well as other activities which it has undertaken. The experiences of the Initiative can be replicated to other African countries in order to adapt and benefit from the EPHTI network's successes and methods, as applicable to their respective countries' context. The purpose of the Conference was to present EPHTI as a model for pre-service health education.

Ministers of health and education from 10 African countries were invited to the Replication Conference: Benin, Ethiopia, Ghana, Kenya, Mali, Nigeria, Government of Sudan, Government of Southern Sudan, Tanzania, and Uganda. Other attendees of the conference included former and new EPHTI Council members, presidents of the EPHTI-networked universities, heads of Ethiopian regional state health bureaus, Carter Center staff from Atlanta, USA and Addis Ababa, representatives of major donor organizations, officials of government & non-government agencies that have been or would like to partner with EPHTI, and other collaborative institutions, for a total of approximately 130 participants (please find contact information in the last section of these proceedings).

Agenda Items for Day 1 (Monday, 12 February 2007)

1. Keynote address - President Jimmy Carter
2. History of EPHTI - Prof. Dennis Carlson
3. Current status of EPHTI - Prof. Joyce Murray
4. Remarks - Mr. Glenn Anders USAID, Mission Director, USAID Ethiopia
5. General discussion - Moderated by Prof. Carlson and Prof. Joyce Murray
6. The EPHTI Council perspective - Dr. Kifle Woldenmichael, Jimma University
7. University institutional perspective - Prof. Belay Kassa, Haramaya University
8. University individual perspective - Mr. Amsalu Feleke, University of Gondar
9. General Discussion
10. Discussion on the Drought Response Intervention program and video show

Agenda Items for Day II (Tuesday, 13 February 2007)

1. Briefing and discussion at Defense College of Health Sciences (Debre Ziet/Bishoftu), followed by tour of the College's Campus
2. Visit to two training health centers (Debre Zeit/Bishoftu & Dukem)

Agenda Items for Day III (Wednesday, 14 February 2007)

1. Group work
2. Presentation of group work

3. Plenary discussion and recommendations
4. Next steps/consensus points
5. Remarks - HE Minister of Health, Dr. Tedros Adhanom
6. Closing Remarks - Prof. Joyce Murray

Day I: Monday, February 12, 2007

1. Welcoming and Keynote Address

Dr. John Hardman, Executive Director of The Carter Center introduced the participants from Ethiopia and other invited countries as well as the schedule for the 3-day Conference (12 - 14 February 2007) to be an overview of EPHTI experiences on the 1st day, a tour of one of the EPHTI-networked universities and to two affiliated training health centers on the 2nd day, and small group discussions and presentations on observations from the conference and recommendations for the future on the 3rd day. Dr. Hardman then invited President Jimmy Carter to address the participants.

President Jimmy Carter welcomed the invited guests, government officials, donors, non-governmental organizations, University presidents, former and current EPHTI Council members, Carter Center staff and others. He then explained the history of EPHTI from its inception to present. According to President Carter, the turning point for realization of EPHTI was his visit to Ethiopia two years after EPRDF came to power, the time when he met His Excellency Prime Minister Meles Zenawi and discussed the mechanism for strengthening the health service delivery system in Ethiopia. Soon afterwards, a committee was formed and series of meetings and workshops were conducted to reach consensus on how to proceed with the new EPHTI program.

One of the prominent problems identified in the first stages of EPHTI was the chronic shortage of trained health manpower to provide quality and expanded service to the community. In 2001 a Memorandum of Understanding (MOU) was signed between the government of Ethiopia (Ministry of Education) and The Carter Center. The Ethiopia Public Health Training Initiative (EPHTI) was officially established to support the higher health learning institutions in the country in their endeavor to produce professionals relevant to provide basic health services to the Ethiopian masses. The activities of the program actually began before the agreement was signed with minimal funding secured from a few donors, namely, OPEC, Yoshida, Rockefeller and others, until in 2001 USAID became the major funding agency of the Initiative.

The mechanisms designed for EPHTI to assist the higher health learning institutions (universities) were 1) production of health learning materials {(HLMs), mainly modules and lecture notes} for providing and standardizing curriculum, 2) strengthening teaching staff capacities, and 3) enhancement of the teaching learning environment (classrooms, offices, library, laboratory, etc.) in the universities. Accordingly, regarding the first objective, 123 lecture notes and 65 modules have been prepared and distributed to the universities and other health learning institutions in the country, more than the initial plan to produce 30 modules on prevalent diseases in Ethiopia and 80 lecture notes on various courses of the curriculum in collaboration with the networked universities. The materials focus on pre-service training of

the four categories of health professionals working in teams in primary health centers in rural areas of the country {health officers (HOs), nurses, environmental health technicians (EHT) and medical laboratory technicians (MLT)}.

President Carter also reported on the following additional achievements of the Initiative:

- More than 500 workshops were conducted, both for developing HLMs and planning and evaluating the implementation of the Initiative.
- Approximately 6,500 text and reference books have been purchased and distributed to the universities.
- More than 700 faculty have undergone training in teaching/learning methodologies, conducted both at the national and training health institution levels.
- Of the 30,000 health extension workers planned by the Ethiopian government, 17,000 have been trained and deployed for providing the necessary services in the rural areas of the country. EPHTI supported the Ministry of Health in developing 22 lecture notes in collaboration with the universities for the training of these health workers.
- More than 7,000 health science students were trained and deployed from the seven EPHTI networked universities.
- Other equipment, worth approximately $1 million USD, such as office, classroom, library and laboratory equipment, has been purchased and distributed since the inception of EPHTI.

The President then discussed other health care service areas supported by The Carter Center and which have shown positive progress, such as guinea worm, trachoma, river blindness, and malaria. President Carter stated that these diseases given little attention by the World Health Organization, although they entail tremendous loss of life and disability especially in the rural community.

In conclusion, President Carter urged the participants, particularly the government officials invited from outside of Ethiopia, to learn from the efforts of EPHTI (objectives, intervention processes and achievements) and adapt the experience to their countries so as to strengthen the teaching/learning capacities of their health professional training institutions to produce competent health workers that in turn provide quality, extended health care services throughout all of Ethiopia. Finally, the President expressed his appreciation to the Ethiopian government for working with The Carter Center and hosting the Replication Conference. He expressed his sincere thanks and appreciation to USAID, The Packard Foundation and other donor organizations for the indispensable support they provided in funding the Initiative, and to the staff of The Carter Center for their accomplishments in the Initiative's activities.

Following the President's keynote address, the attendees, especially the ministers from the other African countries (Kenya, Uganda, Ghana and others), raised questions and gave comments pertinent to the President’s life and the issues discussed. Some are noted below:

a) Your Excellency the President, we congratulate you for promoting peace, democracy and development (especially regarding health and education), in different countries of the world. Since these tasks are huge and time consuming, how do you manage to

accomplish them? Would you tell us how you mobilize funds for supporting these activities and programs?

b) In developing countries, school children are commonly infested by intestinal parasites believed to interfere with their learning ability. What intervention mechanism is The Carter Center undertaking to deworm the children and promote preventive activities regarding personal hygiene and environmental sanitation in schools to alleviate these problems?

c) How do you actually start the programs/activities you are engaged in?

President Carter responded:

- Since his retirement from the presidency, President and Mrs. Carter have devoted most of their time to working in The Carter Center. Secondly, staff of The Carter Center, other organizations, governments and people in each country of intervention do assist in the activities.
- In order to mobilize the necessary funds to run a given project, the government of the country requesting support should design a proposal explaining the objective of the intervention activities, the mechanism for implementing it, the outcome and funding required to run the project, and then submit it to The Carter Center for review. If approved, the proposal will be given to relevant funding agencies suppliers, which most of the time assist in the materialization of the program, either with cash or in-kind donations. Here, the most important issue to note is that the government seeking support has to take the initiative and show commitment for the implementation of the program.
- Some of the intervention activities undertaken by The Carter Center do include work regarding health education pertaining to personal hygiene and environmental sanitation in schools. For example, many of the people in the Amhara region of Ethiopia have learned the importance of hand and face washing (61%) and the appropriate use of latrines through the Trachoma program of the Center. With the concerned government bodies (e.g., Ministry of Health, Agriculture and/or Education) playing an active role, the program can now be expanded to cover a wider population. Accordingly, The Carter Center also has been involved in de-worming school children. In fact, The Carter Center activities mostly focus on children because many of the prevailing diseases affect children under five years of age.
- To become involve in a program, The Carter Center has to understand the existence of the problem and the extent to which it affects the community seeking support, in addition to the respective country's governmental commitment and request. For example, the Guinea Worm Eradication Program of the Center started in Ghana based on the observations of President Carter while he was visiting the country. He said he saw the people, especially children, suffering from the agonizing pain of the disease. Based on Ghana's proposal of the project, funding was solicited by The Carter Center to implement the eradication program, which has been successful to date.

2. **History of EPHTI - Prof. Dennis Carlson**

After the morning's tea break, around 10:30 AM, Dr. Don Hopkins, Associate Executive Director for Health Programs of The Carter Center, took the floor and introduced Professor

Dennis Carlson (Senior Advisor to EPHTI), Professor Joyce Murray (Director of EPHTI) and Mr. Glenn Anders (Director of the USAID Mission in Ethiopia).

Professor Dennis Carlson worked for EPHTI from 1992 to 2006. Currently, he is a Senior Advisor for the Initiative. Expressing his appreciation for the opportunity, Professor Carlson talked about the history of EPHTI in chronological order starting from 1991 when President Carter came into the picture, how EPHTI was initiated and established, the objectives, funding status, the activities undertaken, the problems faced in the process of its development, and what the Initiative accomplished up to 2002. He said that the success of EPHTI in its endeavors emanated mostly from the working agreement made between The Carter Center and the Government of Ethiopia (Ministry of Education). Secondly, he cited as part of EPHTI's success the reform the government of Ethiopia was undertaking to revitalize the training of an adequate number of mid-level health professionals (health officers, nurses, medical laboratory technicians and environmental health technicians) and community health workers to provide service at Primary Health Care Units (PHCUs) in teams. Another opportunity for the success of EPHTI was the opening of universities and colleges (e.g., Hawassa, Haramaya, and others) to train sufficient health professionals that would be deployed to the rural areas of the country in order to alleviate community health problems.

3. **The Current Status of EPHTI - Professor Joyce Murray**

Professor Joyce Murray has been the Director of EPHTI since 2002, and she is based in Atlanta, USA at The Carter Center and Emory University as a professor of nursing. She explained the status of the Initiative since its establishment, including activities accomplished as follows:

a) Reproductive Health was one of the activities undertaken by EPHTI, financially supported by the Packard Foundation. The aim of this program was to improve the health of mothers and children in the rural communities. By the time the program phased out in March 2005, the following were accomplished in collaboration with the EPHTI-networked universities:
   - Staff of the universities and health service facilities, students and community based reproductive health agents (CBRHAs) have undergone training in reproductive health and family planning components.
   - A comprehensive manual on reproductive health has been developed, printed and distributed to the universities and other health science training institutions in the country in collaboration with the EPHTI-networked universities.
   - In collaboration with Ipas (a US-based NGO) and the universities affiliated with EPHTI, a module on post-abortion care was developed and is currently being used by all health training organizations.
   - Skill labs were established and equipped in 5 universities to help staff and students practice before they are exposed to the real patient.
   - Office and teaching materials as well as landcruisers were purchased and distributed to the then 5 EPHTI-networked universities.

b) More than 700 staff of the universities and Accelerated Health Officer Training Program (AHOTP)-implementing hospitals have undergone training in teaching/learning methodology courses, conducted both at the national and university level. This training is

critical for teachers serving in higher health learning institutions and has positively contributed to the improvement of teaching skills of instructors.

c) In collaboration with the EPHTI-affiliated universities, 65 modules and 123 lecture notes (22 of them for training health extension workers) have been prepared and distributed to health training institutions throughout the country.
d) Teaching resources very much needed by EPHTI-networked universities and AHOTP hospitals for the training of health professionals have been procured and distributed.
e) Approximately 2,500 staff and students have participated in the 2002—2003 Drought Response Program of EPHTI.

The future direction for the implementation of EPHTI includes:

a) A need to further expand the Initiative,
b) Pocket- and hand-books need to be developed for students' quick reference,
c) A focus on improvement of technology in order to improve quality of training,
d) Attention should be placed on Safe Motherhood activities to improve the general health of mothers and children and help students develop the necessary RH skills,
e) The issue of brain drain needs to be properly addressed.

4. Remarks from USAID - Mr. Glenn Anders

Following Professor Murray's presentation, Mr. Glenn Anders, Director of USAID's Mission in Ethiopia, addressed the audience. He said that USAID is the major funding agency during both the first and second phase of EPHTI. Mr. Anders thanked President and Mrs. Carter for their unreserved efforts to support the Initiative and other social service programs pertinent to health, education and agriculture, to alleviate the associated problems. He also expressed his appreciation to staff of The Carter Center in Atlanta and Addis Ababa, the EPHTI-networked universities, and others who assist the Initiative to meet its objectives and who worked hard for the realization of the conference. He then mentioned that USAID, as the major funding agency of EPHTI, has spent more than $12 million USD and will continue its financial assistance to build the capacity of the Initiative to improve the health status of Ethiopia.

Mr. Anders explained that Ethiopia is the second most populous country in sub-Saharan Africa, after Nigeria, and has inadequate health services – a result of which there are high incidences of mortalities and morbidities threatening the people. Ethiopia is a country with an infant mortality rate of 77/1,000, a maternal mortality rate of 671/1,000, an under-five child mortality rate of 123/1,000, a life expectancy of around 50 years, and a high fertility rate of 5.8 births per woman. About 472 children die each year before their 5th birthday. The support of USAID covers the purchase of drugs, vaccines, contraceptives, etc, to alleviate the shortage of these supplies and to provide necessary services to communities.

Hence, Ethiopia has to be supported to enable it to resolve these problems. The plan is to strengthen the health facilities at woreda (district) and lower levels, including health centers and health posts, so that they provide both curative and preventive health serves to the community. He praised EPHTI for contributing to the government's effort for giving quality and extended basic health services through supporting production of capable professionals

able to fulfill their responsibilities. According to Mr. Anders, by 2010, all Ethiopian health centers will have health officers managing them, and USAID and the people of America are proud to be partners of this undertaking.

In conclusion, Mr. Anders thanked the government of Ethiopia and the African ministers attending the conference who were willing to replicate the EPHTI experience in their countries.

Following Mr. Ander's remarks, Dr. Hailu Yeneneh, Resident Technical Advisor of EPHTI, was introduced to the audience by Professor Joyce Murray. Dr. Yeneneh moderated the discussion that followed the morning's presentations.

5. **General Discussion**

The morning's presentations were followed by comments and questions, some of which are as follows:

a) Brain Drain is a common threat to development in African countries. Is that true for Ethiopia and if so, what mechanism is planned to control it?
b) Please explain the cost implication of EPHTI activities and the status of economic development in Ethiopia, as these issues enhance improvement in the health service system and other social services.
c) For improvement of the health service system, the involvement of other relevant ministries and commissions, including ministries of water, agriculture, environmental protection and others is of paramount importance. In the endeavor of EPHTI for producing able professionals, did you involve these bodies?
d) EPHTI has been conducting a huge undertaking for improving the health of its people for more than 7 years. Have you tried to assess and measure essential health indices to note the impact of the investment? Didn't the drought response program affect the academic calendar of the universities?
e) The health learning materials are found to be very important for conducting the teaching/learning process in the training health institutions. Can these materials be accessible on the internet to those who want to use them for their own projects?
f) Health officers are now trained in large numbers with the aim of providing community-level health service delivery. Are there career development schemes and other incentives designed to attract and retain them?
g) Although EPHTI works with some ministries (MOE & MOH) to discharge its responsibilities, it is still donor-dependent. What has the government contributed towards supporting its activities and ensuring its sustainability?
h) Is there a timeframe for EPHTI to finish working with the seven networked universities? Are there universities with health professional training colleges/faculties from among the 12 new universities that will start functioning soon? How are they going to benefit from the activities of the EPHTI program?
i) Why are only females trained to work as health extension workers?

The following were the responses of presenters and conference attendees, including high officials of the government (Ministry of Health & Education, university presidents and deans) as well as staff of The Carter Center's Atlanta and Addis Ababa offices.

- As for brain drain, it is also a chronic problem in Ethiopia as in other developing countries. To tackle the issue, Ethiopia is trying to implement strategies such as producing mid- level health professionals less likely to migrate in large numbers. Providing incentives to retain these and higher level professionals is also under way.
- As for the status of economic development, there has been a 9—10% increase in Ethiopia over the last consecutive 3 years and studies show that this will continue in the future, contributing to the strengthening and expansion of social services including health. In this respect, EPHTI's contribution to health and development has been immense; these two areas go shoulder-to-shoulder, one supporting the growth of the other.
- Although EPHTI works with relevant government organizations, so far the Ministry of Health and Education are the major partners because of the nature of its activities. In fact, these organizations have contributed to the successful implementation of EPHTI activities in terms of allowing practical training facilities and supply of materials to work with, including allocation of vehicles.
- EPHTI does not claim the positive changes in the country's health status as the impact of solely its program activities, because improvement in health services is the result of the participation of many government and non-government organizations operating together. The contribution of EPHTI has been mainly to strengthen the pre-service training in the EPHTI-networked universities to enable them produce competent professionals that offer quality and expanded health service delivery. In addition, to date there hasn't been an impact assessment done by EPHTI and/or other organizations to demonstrate that the health status improvement within the country is solely due to the contribution of the graduates from the higher learning institutions supported by EPHTI. However, the contribution of the Initiative to positive changes in health care services can not be denied.
- The deployment of students to drought intervention areas did not interfere with the universities' academic calendar because these were senior health science students of different categories deployed to drought-affected areas instead of going to the usual practical training places (facilities) on rotation basis. Only the locations of performing their practical training were changed, as during the Drought Response Program the students were still completing their academic progress.
- The EPHTI teaching/learning materials will be put on the website very soon and will be available to all those who want to use them. Currently, the Carter Center is negotiating to get the consent of the materials' authors and to put in place copyright protections.
- Regarding the career development for health officers, there are a number of options to upgrade their educational standards, including a Masters of Science degree in emergency surgery and obstetrics care and a Masters of Public Health or MD degree, depending on their area of interest and competence. It is believed that these opportunities will enhance their educational level and allow them to earn higher salaries. Although not yet finalized, the Ethiopian government (the regional health bureaus) is currently working on incentive schemes for health officers and other health professionals with the aim to attract and

retain them. Based on the government's plan, 5,000 health officers will be trained in the next 5 years to work in over 3,000 health centers and 600 woreda (district) health offices.

- EPHTI, in its endeavor to build public health capability, is on the right track. In this regard, its contribution to health and development has been immense, as improvements in each area support the growth of the other. Hence, there is no doubt for the sustainability of the Initiative's activities because it is an Ethiopian project with a vision and mission to address the pressing needs of Ethiopians**.** Secondly, the MOH, MOE and the EPHTI-networked universities have learned from the experience and so it is now a matter of keeping the network from the Initiative alive and extending it further to the new health sciences teaching universities. Universities expressed that they own the Initiative, which ensures sustainability.
- EPHTI is presently in its second phase, which terminates in September 2008. However, this time frame for the contract agreement could probably be extended at least by three years since one of the important programs of EPHTI, the Accelerated Health Officers Training Program (AHOTP), concludes in 2010. But, as to what will actually happen remains to be seen at the end of the contract year.
- The number of universities in Ethiopia have now grown to 21 (9 old and 12 new starting in February 2007). Some of the new universities have public health faculties/colleges. In total, the new universities will enroll 121,000 students. The new universities will be financed by the government of Ethiopia but may need the support of partners like EPHTI for material resources, especially with health learning materials.
- Concerning the distribution of EPHTI health learning materials, the seven networked universities, government health science colleges and the 20 AHOTP hospitals receive HLMs free of charge while private colleges pay only the cost of printing, so long as the number of copies requested do not exceed 500 each university, per MOE guidelines for royalty fees.
- The focus of the health service system is provision of curative and preventive care to uphold, especially, the health of mothers and children, the most vulnerable segment of the population. That is why the government is conducting mass training of health extension workers and health officers. Basically, the health extension workers live and work at the community level to deal with programs such as Reproductive Health and Family Planning, health education, control of communicable diseases and environmental health sanitation with the aim of bringing about positive behavioral change and practice, especially with mothers. These health professionals are on the government payroll, technically and administratively supported by woreda health offices and their affiliated health center. EPHTI assisted the health extension program through production of health learning materials in collaboration with the networked universities. These professionals' career progress is being developed by the government.

From the discussions, the following priority problem areas were underscored:

a) There is still a large number of health learning materials, especially lecture notes, required.

b) Since the teaching staff turnover is high, there are many new instructors coming to teach in the universities and training health facilities. Hence, pedagogical training should continue for those who have not yet received training.
c) Shortages of education materials and equipment for academic offices, laboratories, libraries, classrooms and wards are still prevalent.
d) There is a serious shortage of teaching staff, both at the universities and training hospitals; thus efforts should be made to alleviate this problem.
e) The impact of EPHTI is "infectious", in a good sense of the word, since the tradition of collaborative effort is now spreading to non-health faculties in other universities.

In conclusion, it was recommended that workable remedies should be sought by all concerned bodies to resolve or at least minimize these problems.

In the afternoon session, Dr. Kifle Woldemichael (EPHTI Council Chairperson, from Jimma University), Professor Belay Kassa (President of Haramaya University) and Ato Amsalu Feleke (Instructor at the University of Gondar), were introduced to the audience by Professor Carlson (Moderator). They spoke on the EPHTI Council, and the University Institutional and University Individual Perspectives.

6. EPHTI Council Perspective – Dr. Kifle Woldenmichael, Chair of EPHTI Council

Dr. Kifle Woldenmichael, Associate Professor, spoke in his capacity as EPHTI Council Chairman regarding the structure of the EPHTI Council, its member composition, its terms of reference (TOR) as the governing document for the Council, activities the Council has planned and implemented so far, problems faced by the Council and its future direction.

The functions of the Council include: planning and monitoring program activities, making decisions regarding budget, equipment and supplies, organizing major workshops and program reviews where activities of the Initiative are evaluated and future plans are discussed. The EPHTI Council has established committees to oversee some of its programs such as Reproductive Health/Family Planning, Mental Health, Health Learning Materials and Distance Learning. The Council also manages programs like the Drought Response Program and training given on topics like Essential Nutrition Action, Behavioral Change Communication, Post-abortion Care, Teaching & Learning Methodology and HIV/AIDS. Of the health learning materials developed for use by staff and students of the 7 EPHTI-networked universities, the council has contributed to the development of 22 lecture notes for training the health extension workers with its coordination.

In regards to challenges encountered by the Council, Dr. Kifle cited staff mobility, staff turn-over, a growing demand for health learning materials and other supplies, issues regarding institutionalization of the Initiative, and constraints faced in implementing the planned activities.

In conclusion, Dr. Kifle underlined production of learning materials and the networking of universities as useful undertakings to improve the quality of teaching & learning processes in

the training institutions, which in turn contributes to the enhancement of health service delivery in the country.

Finally, Dr. Kifle acknowledged The Carter Center, the Ministry of Education, the Ministry of Health and university administrations for their unreserved efforts to keep EPHTI functioning.

7. EPHTI University Perspective – Prof. Kassa Belay, President, Haramaya University

Professor Belay's presentation focused on the benefits that the seven universities of EPHTI have gained from the Initiative. In his introductory remarks, he explained that the goal of the government is to expand health services to the grassroots level, and one of the critical factors of that endeavor is the training and deployment of health center teams. Although the higher learning institutions of the country were established to bridge these gaps, prior to being networked through EPHTI they hardly discharged their responsibilities due to shortage of appropriately equipped teaching set ups for training health professionals. Currently, thanks to the EPHTI network, such problems have been markedly minimized. EPHTI supports the networked universities, such as Haramaya, in the following areas:

- Strengthening of staff through training in teaching/learning methodology courses, training on RH/FP, nutrition, post abortion care & HIV/AIDS, etc.
- Development, printing and distribution of teaching materials (lecture notes, modules and manuals).
- Provision of teaching and office materials, laboratory equipment, text and reference books and vehicles.

Finally, Prof. Belay stated on the importance of the contribution of EPHTI in enhancing the teaching/learning processes in the universities and the networking created this it as added value and which enabling the universities to share experiences and resources whenever deemed essential. He concluded with sincere thanks to President and Mrs. Carter, EPHTI staff in Atlanta and Addis Ababa and all those involved in the realization of the Initiative's activities, including the Ministries of Health and Education, USAID, the Packard Foundation and others.

8. EPHTI Individual Perspective – Mr. Amsalu Feleke, Asst. Prof., Gondar University

Ato Amsalu Feleke, Assistant Professor at the University of Gondar and former EPHTI Council Member, began with a few words about the ancient and historic town of Gondar, his birth and current working place, and then shifted to explaining his personal, educational and professional experiences, as well as the benefits he and his university gained through the participation in EPHTI activities.

Regarding his educational and professional experiences, Ato Amsalu said he became a medical laboratory technician in 1968 and then a health officer in 1979. He worked in many health facilities, mostly health centers, both as a laboratory technician and a health officer, until he went to the University of Boston's School of Public Health in the United States and

graduated with a Masters Degree in Public Health in 1995. Currently he is working at the University of Gondar both as an Instructor and as Head of Graduate Programs.

Ato Amsalu's participation in the EPHTI includes working as member of the Council and as focal person of the EPHTI Core Committee of his university. He has participated in the preparation of health learning materials as a coauthor, planned and evaluated program activities during workshops and program reviews and managed Gondar's activities of the EPHTI Drought Response Program.

As for his personal benefits from EPHTI, he had been trained in teaching/learning methodologies, reproductive health, clinical and supervision skills, and nutrition courses. In addition, he has learned how to prepare teaching materials, transfer his skills and knowledge to students, make collective team decisions, and methods to develop and implement proposals.

Ato Amsalu cited his experience as exciting and recommended the networking from ePHTI should be sustained and replicated for use in new universities and similar ones outside Ethiopia. He acknowledged all stakeholders of EPHTI including President and Mrs. Carter, EPHTI staff in Atlanta and Addis Ababa, the University of Gondar, and donor agencies supporting the Initiative. Ato Amsalu concluded by thanking EPHTI for the opportunity given to him to share his experiences with the Initiative.

9. General Discussion Session – Moderated by Professor Joyce Murray, Director of EPHTI

Intensive discussion followed the three presentations delivered in the afternoon. Some participants underlined the positive impacts achieved through the implementation of EPHTI activities while others posed questions regarding issues pertaining to the Initiative's experiences. The advantages/impacts gained as the result of the networking of universities mentioned include:

- The skills achieved in producing and using EPHTI teaching/learning materials, which contributed to enhancing the instructors' competence and decreasing the students' attrition rate. This undertaking also assists the training institutions to save time, energy and resources that would have been used to seperately develop and distribute the materials.
- The establishment of the networks among the universities, or the "EPHTI Model", has the advantage of bringing the instructors and the learning institutions together to share their experiences and resources for the betterment of the teaching/learning process.
- The **expansion** of the universities, especially the health sciences colleges/faculties, due to the supply of the necessary training materials and professional assistances secured from EPHTI.
- The impact of "linking health to development" by strengthening higher learning institutions which in turn enables them to produce professionals competent to promote the health of the community and make them strong enough to work and contribute to development.

- In general, conference participants acknowledged the model of EPHTI and its networked universities as innovative. The network should be sustained and expanded to other faculties and colleges. Appreciation was given to President Carter for his unreserved support and all those who contributed to the effort of realizing the Initiative and its continued growth to the current stage. The participants underscored all the endeavors undertaken by the Initiative for the betterment of the Ethiopian people and the country in general, for which due credit should be given.

Some of the questions asked were:

1. Since poverty could block EPHTI activities, what is the magnitude of poverty in Ethiopia? And what are the mechanisms undertaken to fight poverty in order to enhance health and health conditions?
2. Do teaching/learning materials take culture and religion into account as related to health?
3. Is there participation of the community in the development of the materials?
4. Are the health problems commonly prevailing in the country incorporated into the curriculum?
5. It is observed that the relationship of the Ministries of Health and Education at the tertiary level is good. Is this good example reflected in the health and education organizations at the grassroots level?

The moderators and participants responded to the questions:

- True, there exists a problem of poverty negatively impacting the effort of improving the health of the people. In a country where poverty is prevailing, it is not possible to have adequate resources, including human, material and facilities, which thus interferes with the effort of promoting health. As a result, diseases such as malnutrition and common infections prevail. Hence, development suffers, impacting economic growth vis-à-vis social services such as health. For example, malnutrition is very much linked to poverty and it is an underlying cause of various health problems. Hence, Ethiopia, as a developing country, cannot be outside this scenario. On the other hand, although averting poverty would be one of the prime mechanisms of promoting health and other socioeconomic services, it should be underlined that poverty cannot be merely removed without enhancing the socio-economic aspect (health inclusive) of the people to fight poverty and bring about development. Thus, one should strive to come out of poverty while at the same time register improvement in health.
- Since religion and culture play a significant role in positively or negatively affecting the attitude of people towards health and healthy conditions, these had been recognized from the outset to be incorporated in course materials such as sociology, cultural issues and anthropology. Cultural issues are, in addition, very well-treated in pedagogical training so that instructors convey the message properly to their students, who in turn reflect them in the community. Moreover, the duties and responsibilities of health extension workers are, among others, working on cultural values pertinent to health, including related to delivery, family planning, HIV/AIDS, personal and environmental sanitation.

- As for community participation in the preparation of EPHTI teaching/learning materials, it was explained that the materials have been prepared based on experiences gathered from the field (e.g., model communities) and carefully tailored to address the health needs of the people.
- All EHPTI teaching/learning materials are based on the curricula of the networked universities, mainly on common diseases and conditions that the trainees encounter after graduation.
- The good working relationship of the 2 Ministries (Health and Education) is not confined to the tertiary level of the country. It does work at the grassroots level. That is, the health professional operating in the health system, especially at the health centers, are trained and work in teams, which are the efforts of the staff (both from the Ministry of Health & Education) functioning harmoniously at each administrative level of the country. There are university-regional health bureau joint task forces that address especially the training of health officers in the Accelerated Health Officer Training Program (AHOTP). Health science colleges and AHOTP implementing hospitals also work together through singed terms of reference that bind their partnerships.

10. Video on the Drought Response Program

A brief video showing the EPHTI networked universities' response to the 2002-2003 drought in Ethiopia was viewed for about 15 minutes. The video showed instructors and students managing patients with various diseases (particularly related to malnutrition) at health facilities and therapeutic feeding centers, conducting environmental health sanitation activities (including protecting water sources and constructing pit latrines), immunizing children, providing health education and controlling epidemic diseases in the drought-affected areas. Appreciating the harmonious working atmosphere of the students and staff to discharge their responsibilities, conference participants raised the following questions for clarification:

a) Where and how did you manage to get drugs distributed to the drought-affected population?
b) Is it not possible to manufacture nutritious food and supply the victims rather than always distributing donated food since the problem appears to be of a chronic nature?
c) Who supervised the students while on the intervention activities?
d) What happened to those people affected by the drought after the problem was over?
e) How did students happen to move and work in teams harmoniously? What was the approach?

The following were the responses for the aforementioned questions:

- The source of the drugs used in the drought-affected areas was basically from the government, but agencies such as USAID made substantial contributions. Drugs were prescribed and issued free of charge.
- Although not large scale, providing manufactured nutritive food was done and is being done. To improve the supply in amount and quality, the concerned body is working on it.

- While at the intervention sites, the students were supervised by their instructors and staff of the health facilities were they were assigned. Since the health science students deployed to the drought affected areas were in their senior years of study, they were able to work by themselves to a large extent.
- After the problem of 2002-2003 drought was over, the situation was left to be taken care of by the government body responsible for such conditions, the Disaster Prevention and Preparedness Commission (DPPC). Currently, the circumstances in these areas are stable. Fortunately, there has been enough and regular rainfall since then in the country. Some of the affected people were moved to fertile areas in the countryside and they are presently better off.
- Even though done in teams, the work performed by the students was profession-specific, and their working attitudes were generally good.

Day II, Tuesday, February 13, 2007

The Day II conference activities were solely devoted to field visits. Defense Health Sciences College (one of the EPHTI-networked universities) located at Debre Ziet/Bishoftu and two affiliated training health centers (Bishotu and Dukem) were visited. Upon arrival at the College, Colonel Dr. Yodit Abraham, (Dean) together with Dr. Bekelle Kebede (Associate Dean) and staff of the college welcomed the conference participants at 10:30 AM.

In her welcoming address, Dr. Yodit explained that the college serves both military and civilian society in that it trains both civilian and military students on curative and preventive aspects of health care service with the following mission:

a) Train and deploy qualified health professionals,
b) Reduce the shortage of middle & high level health personnel,
c) Provide further training to upgrade the standard of the existing professionals, and
d) Contribute to the national pool of health human resources with the goal of reducing poverty.

According to Dr. Yodit, the college has a functional structure consisting of 7 departments: Public Health, Nursing, Environmental Health, Medical Laboratory, Pharmacy, Radiology and Basic Sciences. The College currently has a total of 391 students; 68 civilian and 23 military academic staff. So far, the college has graduated 3,130 health professionals in various disciplines. Currently, three new training programs are emerging in the college (MD degree, Bachelor of Science in Nursing and a Diploma Program for Generic Nurses). These programs are all expected to begin by next academic year. The college has an accommodation capacity for 700 trainees, and classrooms sufficient for 1,200 students. For practical purposes, it uses hospitals and training health centers in and around Addis Ababa.
The Defense Health Sciences College joined the EPHTI network in 2004, a result of which it has benefited by:

- 75 % of the staff having undergone training in pedagogical skills,
- 4% and 5% of the staff having received training in BCC/ENA and Lactation Management, respectively,

- The opportunity to share experiences with sister colleges and universities,
- The teaching/learning capacity of the college being strengthened with office and teaching materials, supplies of text and reference books, journals, and EPHTI network-produced teaching/learning materials, and
- The training and materials received having contributed to staff motivation and self-confidence in discharging their instructional responsibilities.

The participants posed the following questions to Col. Dr. Yodit:

a) Congratulations on your success in leading such an institution. Can you tell us the mystery behind the success?
b) What are the challenges you usually face in leading the institution, if any?
c) How many Defense health training colleges do you have in the country?
d) Do you have training in midwifery? If not, have you planned to have one together with the new programs you proposed?
e) Is the nutrition education related to the local food that is available?
f) Is your Health Sciences College affiliated with a university or does it stand by itself?
g) What is the minimum requirement for generic students to be admitted?
h) What is the type of health officers you train (i.e., Clinical, Public health)?
i) Orthopedic surgery is very essential for military health services, especially at times of war. Why do you not have orthopedic surgery training in your programs?
j) Why did you say the upgrading of health officers to MDs that you planned is unique?

The following are Dr. Yodit's responses:

- Her success and her leadership to establish and manage the college emanates from the encouraging support of the government, especially for women, and the hard working staff assigned to work with her.

- The major challenge she faces in her endeavors to strengthen and lead the college has been the scarcity of resources, including the quality and quantity of teaching staff. To overcome this challenge, the college has a workable remedy which could be accomplished gradually and efficiently with the limited resources available. The other challenge that ought to be tackled is appropriate use of the available budget, rather than complaining about shortages. As for attracting and reducing turnover of teaching staff, we have planned to provide reasonable incentives, both in cash and in-kind. This is believed to create a conducive and motivating environment for staff.

- There are currently 17 government-owned health sciences colleges in the country, of which Defense is one. Launching Midwifery, Biomedical and Orthopedic Surgery training programs are part of the College's plan in the forthcoming years. The Defense College of Health Sciences stands by itself and is not at all affiliated to any university. The upgrading of health officers to MDs is a unique undertaking in Ethiopia because it is the first of its kind so far and a big incentive for these professionals. The health officers are very excited to join the training for MDs

- The curriculum for training in nutrition encompasses consideration of locally produced food items and the mechanisms to mix and use them in balanced ways. The recruitment and enrollment requirement for generic students is to pass an entrance examination as per the cut-off point set by the Ministry of Education. The type of health officers trained in Defense Health Sciences College are professionally competent to engage in both curative and preventive health aspects, and they are willing to serve at war fronts and in remote rural areas of the country.

The stay at Defense College of Health Sciences at Debre Zeit ended at about noon, after which the participants were divided into two groups to visit Bishoftu and Dukem training health centers.

At both health centers, the participants visited the different sections of the facilities, including registration, out- and in-patient departments, examination, laboratory, dressing and injection, immunization, family planning and delivery services. They were satisfied with their observations at the facilities. The only abnormally noted issue by the participants was that health officer students perform all their practical experience in the absence of supervisors, including the prescription of drugs for patients. Many participants stated that such a practice was unexpected. The response given by the college to this inquiry was that there are normally supervisors from within the health center and from the college with the students, but that day was different because the supervisors were all busy facilitating the conference visit. The college representatives assured the participants that proper attention will be given to correct such practices in the future.

Day III, Wednesday, February 14, 2007

During the morning of Day III, the participants were divided into three groups to discuss the following key questions pertinent to what was presented and observed during the first two days of the conference. Each group was advised to select its group chairman and rapporteur. The rapporteur would present outcomes of the group discussion at the afternoon plenary session. Professor Dennis Carlson was the chaired the day's sessions. The questions distributed for discussion and members of each group are given below.

1) **Questions for Group Discussion**:

a) How do you think the ideas learned in this conference might fit into your health and education system for health professionals?

b) What lessons can be drawn from your observations of EPHTI, specifically for your country's needs, opportunities and challenges?

c) Will the types of partnerships described in the EPHTI model be adaptable to your specific settings?

d) What barriers do you think you will encounter in your own country? How will you approach these challenges?

e) What specific steps would you suggest for exploring and implementing a similar project in your country?

2) Members of each Group:

Group I	Group II	Group III
Benin	Ghana	Kenya
Mali	Nigeria	Southern Sudan
Ms. Shelly Brownsberger	Sudan	Uganda
Dr. Hailu Yeneneh	Tanzania	Professor Dennis Carlson
Ato Negga Baraki	Professor Joyce Murray	Ato Aklilu Mulugeta
Dr. Damte Shimelis	Ato Assefa Bulcha	Dr. Tadesse Anteneh
Ato Dejene Hailu	Ato Melake Demena	Ato Fekadu Aga
Ato Amsalu Feleke	Dr. Zelalem Kebede	Ato Tadesse Alemayehu
Dr. Kifle Woldenmichael	Ato Getu Degu	Ato Melkie Edris
Ato Kebede Faris	Dr. Yazezew Kebede	Ato Mamo Wubeshet
W/t Birhane Megerssa	Dr. Bekele Kebede	Professor Challi Jira
		Col. Dr. Yodit Abraham

The afternoon session was devoted to discussion on the group presentations, conference recommendations (consensus points) and remarks by His Excellency Dr. Tedros Adhanom, Minister of Health of Ethiopia, and closing remarks by Professor Joyce Murray.

Summary of Group Work Presentations and Discussions

Lessons Learned

The experience gained from the Replication Conference on EPHTI can be adapted to fit into a specific country's setup to enhance the provision of training conducted in the higher learning institutions, which will enable them to produce health professionals competent to promote the health care services in the country. Specific lessons learned from the EPHTI are:

- EPHTI is established based on the prime needs of the Ethiopians. That is, it works on promoting health and healthy situations in the country by assisting the enhancement of the production of competent health professionals.

- EPHTI is a network of 7 health training universities and helps these institutions come together and share experiences and resources for the betterment of their respective constituents.

- The materials produced through the Initiative by the networked universities are used by all the universities to train their students. This contributes greatly to the standardization of curriculum. Since the materials are developed by instructors teaching the respective courses, they are extremely important to be used both as training and reference materials. These materials are also cost effective.

- Since EPHTI works closely with the Ministries of Health and Education, it has helped the two government bodies and the networked universities to plan and implement production of the necessary health human resources collaboratively.

- It is commendable that Defense College of Health Sciences is included in the network, since this assists the college to train and deploy professionals efficiently, as well as effectively provide the necessary health services for both the military and civil society, especially during times of crises in remote or urban settings.

- The EPHTI model (the networking of the universities) has a high chance of sustainability because it has full political support from the government. In addition, all stakeholders, including donor organizations, also support the Initiative.

- It can be concluded that the EPHTI model would be useful to adapt to each country's local context.

Country Needs, Opportunities and Challenges

Country Needs

Issues for each country to make the program practical were presented and discussed, with the highlights as follows:

- There should be high political commitment and involvement of decision makers including the higher educational policy to adopt the EPHTI model.
- The Initiative needs to be included in national health programs as a means of enhancing and promoting health delivery systems, particularly for vulnerable communities.
- There should be support of the partner organizations operating in each country, such as The Carter Center, USAID, and other organizations.

Opportunities

Based on the presentations, there are certain opportunities that the countries who wish to adopt EPHTI as a model for pre-service health training must capitalize upon. These include making use of the existing training institutions and health facilities, gaining consultation experience for various diseases and health states and reforms for more collaboration in relative ministries of the government to encourage inter-ministry collaboration for a project such as EPHTI.

Challenges

The major challenges mentioned were convincing political leaders and professional associations that collaboration such as done in the EPHTI network is worthwhile. There is also a challenge of ensuring the quality of training and the eventual provision of health services in the communities.

Partnerships

Based on the culture, environment, socio-economic status, disease patterns and systems of health care delivery of each country, it is believed that partnerships and collaborations between government and non-government organizations are required. Partners in Ethiopia that were essential for EPHTI and would be advised in other countries include the Ministries of Health Education, Water Resources and Agriculture, along with the national universities, an organizing organization such as The Carter Center, a donor organization such as USAID, and other relevant stakeholders and partners.

Obstacles and Approaches

These include anticipated obstacles that could be encountered during implementation of an EPHTI model in other countries, and suggested approaches to overcome these obstacles.

Obstacles

Some of the obstacles to implementing an EPHTI-type program could be:

- A lack or shortage of resources (material, human and facilities) to adapt and carry out activities,
- Funding constraints,
- Incentives needed to motivate and retain qualified professionals to participate in the initiative,
- Professional jealousies and prejudices from high-level professionals to mid-level professionals,
- Difficulty in getting recognition of the graduates by professional associations, and
- The possibility of a pool of unemployed health workers.

Approaches

The most important approaches cited to overcoming the above possible obstacles were gaining the political support and determination to undertake an initiative such as EPHTI, as well as mobilizing the necessary resources, such as funding and motivated professionals.

Specific/Next Steps

These are actions suggested to be explored and undertaken in each respective country in adapting and implementing projects similar to EPHTI.

- Involve the country's leadership in the entire process (planning, implementing, monitoring and evaluation).
- Plan for the program, and undertake real advocacy for it, including reporting on the experience of Ethiopia to political leaders and relevant decision makers. Set out a timeline for implementing the program in each respective government.
- Get political decisions on the status recognition of graduates from the new program.

- Strengthen institutional partnerships and collaboration between ministries and relevant sectors (Ministries of Health, Education, Water and Agriculture, etc.).
- Secure and mobilize resources from potential donors and partners to achieve specific goals.
- Involve professional associations with the degree curricula and consensus on training mid-level health workers.
- Develop health learning materials (lecture notes, modules and manuals) with the involvement of partners, universities and relevant professionals, to ensure the standardization of university curriculum. Ensure the appropriate use of the health learning materials by all training institutions, be it public, private. In addition, assist the networked organizations with staff strengthening programs and enhancement of their teaching/learning environments.
- Develop strategies for assisting in the training of relevant mid- level professionals and community health workers to function in the primary health care units, such as the Accelerated Health Officer Training Program and Health Extension Workers of Ethiopia.

4. **Plenary Discussions and Recommendations**

Following group work presentations by the respective countries, questions were raised:

a) How do you retrain and upgrade the skills of junior level health workers to be able to prescribe drugs?
b) Can the experience gained from Ethiopia be adapted and implemented?
c) Is there a response from health officers related to their training to become MDs? What is the guarantee for health officers to prescribe drugs, in case they face legal problems?
d) What methods do you use to control non-licensed professionals?
e) Do military health workers go to remote and hard-to-reach areas to provide the necessary health services that are especially difficult for civilian health workers to provide? Are they qualified to manage facilities in remote areas during times of disaster?
f) What actions have been taken after the drought to maintain the health of the people? What are the prevailing conditions in Ethiopia regarding poverty, as reduction of poverty leads to improvement in health?
g) What are your comments on the absence of supervisors in the training health centers?
h) Are there enough resource to pay for health workers? How do you mobilize resources for the 13 new universities, which is a huge investment?
i) In the malaria control program, are bed-nets the only option? Are there other methods to control the disease?
j) What is the status of 'brain drain' now in Ethiopia? Are there mechanisms or incentives to retain health professionals? Are physicians included in the incentive scheme? How many years are graduated physicians expected to serve in the country to receive their certificates?

The following were the responses from presenters, conference organizers and participants:

- Health professionals (physicians, health officers and nurses) receiving training to prescribe drugs while they are in college and after graduation. But the scope of prescribing drugs differs depending upon the professional level of the health workers.
- The adaptation of EPHTI experiences should be done by other countries, with the exception that some strategies for the program's implementation might differ in each country depending on its particular socio-economic and cultural situations. In addition, it is crucial to the success of the new program that it has the commitment of the government's political leaders before and during implementation.
- Health science students are supervised during their practical training at community health facilities to help them apply the skills they have learned.
- Military health workers also undergo emergency preparedness training to enable them to manage emergency health and nutrition conditions, such as during times of drought.

6. Remarks by Dr Tedros Adhanom, Minister of Health of Ethiopia

His Excellency, the Minister of Health, responded to questions from participants as follows.

- Ethiopia has learned and adapted a lot from the experiences of many countries. Other African countries can also learn from the experiences and best practices in Ethiopia to avoid 'reinventing the wheel', but focus on items relevant to their own country's specific context and situation. Sometimes, one can learn from committing mistakes and from the encouraging results achieved in implementing certain programs.
- Regarding poverty reduction, there is a strategy called the Poverty Reduction and Sustainability Program (PRSP) that the Ethiopian government is working on to reduce poverty and bring about sustainable development with the belief that it is only if poverty is addressed that the other prevailing problems in the country can be alleviated.
- In planning health sector activities, more focus is made on areas like Maternal and Child Health, Reproductive Health, HIV/AIDS, TB and Malaria, which are common and contribute to about 80% of our health problems. It is possible to set ambitious targets in planning a program and it usually works to set high goals, as evidenced in many health aspects we've achieved while using the limited resources we have available.
- One primary reason for training mid- level health workers (health officers in particular) is to improve the quality of health care service at the Primary Health Care Units (PHCUs). The health extension workers are also believed to transfer knowledge, skills, etc., for the betterment of health. In Ethiopia's current situation, we believe in 'big volume, high speed and reasonable quality' to meet our urgent health needs.
- Concerning the training of Health Officers, the plan is also to withstand the shortage of physicians predominantly seen in the service health facilities. Health officers are less mobile and can do the job if properly trained. Only bemoaning the migration of physicians can do us little good.
- As to their career structure, health officers can join universities to become physicians or obtain an MPH. They can also be trained in emergency surgery at the Masters level. A huge support was made on malaria prevention by providing long-lasting bed-nets. Out of 20 million bed-nets planned by August 2007, The Carter Center contributed 3

million. Besides providing bed-nets, various malaria control methods like DDT spray, source reduction and other preventive mechanisms are being employed in Ethiopia.

- The best way to control the practice of non-licensed professionals is to educate the community not to be treated by them.
- Various activities have followed the drought of 2002-2004 in terms of providing safe and adequate water supplies, educating farmers to work hard to attain food self-sufficiency, and keeping health facilities alert to act accordingly in case drought situations occur. Fortunately, there has been sufficient rainfall since the last drought.
- The new universities are supported by the government, although there is a little amount of funding that is being solicited from some partners.
- To attract and retain health professionals, particularly physicians, a dialogue has been held on incentive packages. A study has been conducted by international consultants and the recommendations would be examined and materialized soon. It takes 2—4 years for graduate physicians to receive their credentials depending upon their places of assignment. Or if they can repay the amount invested on them for their training, they can get their certificates without the obligation to serve in specific areas. However, the ability of these students to repay their education costs is very remote since the amounts are usually unaffordable for their families.

7. Closing Remarks

In her closing remarks, Professor Joyce Murray expressed her appreciation to all those who worked hard as a team and individually to make the conference a reality, including the Government of Ethiopia, staff of The Carter Center in Atlanta and Addis Ababa, former and current EPHTI council members, donor organizations, heads and representatives of regional health bureaus, university presidents, the EPHTI Council and all participants. Her special thanks went to the distinguished guests, the Ministers of Health and Education of the ten invited African countries (Benin, Ethiopia, Ghana, Kenya, Mali, Nigeria, Government of Sudan, Government of Southern Sudan, Tanzania, and Uganda) for accepting the invitation and traveling long distances to participate in the conference, and for their interest in adapting and implementing EPHTI activities to their specific situations.

President Carter's Speech at the EPHTI Replication Conference
February 12, 2007

Good Morning. I'd like to welcome the Ministers of 10 different countries, Ministers of Health and Education and some others. We are very glad to have you here, distinguished guests, and other officials who have accompanied the delegations from other countries, we welcome you here to Ethiopia.

First of all I want to thank the Skoll Foundation for providing funds to make this very important conference possible. USAID, who has been a party with us for many years, the David and Lucile Packard Foundation who has helped us with Reproductive Health studies, Yoshida, the OPEC nations have also helped with us, and of course our key partner the government of Ethiopia.

My wife and I have been coming to Ethiopia and to many of your other countries for a long time, beginning even when I was President, and afterwards I even came here when the Dirge regime were still in power and when Mengitsu, the communist dictator, was oppressing this country. And I knew now Prime Minister Meles Zenawi quite well, long before he was able to get to Addis and overthrow that oppressive regime. In 1989 he was successful and he inherited a country that is very large, 75-80 million people, one of the poorest nations on earth, with the highest incidence of blindness in the world, and a very discouraged people. But since that time great progress has been made. The Direge regime as overthrown just two years before then-acting Prime Minister Meles Zenawi and I began talking about this program. He called me to his office when I was on one of my visits here and the first idea was to create a school of public health because none existed in Ethiopia at that time. Later we thought why don't we let the school of public health in Ethiopia cooperate with a major university in the United States of America. And it was no accident that we choose Emory University because that is where I have been a professor since I was involuntarily retired from the presidency by the 1980 elections in my country. I have enjoyed my teaching there, it is 25 years now I have been a professor. We've continued to work on this but as you know in the early stages of Ethiopia's new regime, new government, it was very difficult to get the inter-organizational structure concluded and one of the greatest steps forward has been the cooperation between the Ministry of Health and Ministry of Education. We have programs, The Carter Center does, in 35 different African nations, and we know how rare it is to get Health and Education to cooperate as thoroughly and as enthusiastically as they have done here in Ethiopia.

In 1993, we formed this team and they came to TCC in Atlanta, GA and we changed our concept from a school of public health to creating 500 community health centers around this country, because Meles Zenawi felt that the services to be provided to his people should be dispersed throughout the country and not just concentrated in the capital city. We established a mechanism, that is to train staff who would become increasing levels of expert on knowledge and training in the health field. Between 1997 and the year 2000, for 3 years, almost 4, we depend on workshops to train these workers to staff the 500 health centers around Ethiopia. And finally in the year 2000 we received adequate funds from USAID and the David and Lucile Packard Foundation to embark on a major project.

Again, it was very important that Health and Education cooperated thoroughly. We were constrained by instructions from PM Meles Zenwai and also from the Ministers to concentrate on the diseases that afflicted the Ethiopian people in the individual communities and not have outsiders tell the Ethiopian people that these are the diseases they should study about. At first there were 30 diseases identified and The Carter Center agreed to work with Ethiopia and develop a complete training module for each one of those 30 diseases. That was in the early stages of this project, about 6 years ago. We've completed those 30 modules and they have now expanded to 65. So 65 analyses of diseases that afflict Ethiopia, and probably afflict all of the other 9 countries here, have been completed, and they will be available to you. We also were asked to help with the evolution of lecture notes for full professors, medical doctors and others to use in the training of students. Our first goal was 80 lecture notes, we've now completed 123 of those. In addition ,the through our own funds and through contributions from other sources, more than $1 million worth of textbooks have been provided for the different public health schools now in Ethiopia. We've had 538 workshops, some in Addis, but mostly scattered all over then nation of Ethiopia; 538 of them and they have been attended by many people. As far as faculty are concerned, that is professors, more than 700 faculty members have been trained. And already from the seven regional public health universities, 7,135 students have been graduated.

This is a notable achievement in itself but what has happened is that the training curriculum in all these seven universities now are standardized, they are compatible, so professors and students can now move from one university to another and not have their education or their work interrupted. Also I would guess that Ethiopia, even compared to my country the United States, has as intimate a relationship between the government on the one hand and the universities on the other as any country I know. And that is very important because the government in Ethiopia, as it does question, in addition to health questions, can relate easily to the higher education institutions of this country. We later decided to comply with the request from the Ethiopian government to train extension workers. These receive about two years of training, and the ultimate goal, which will be completed next year, is 30,000 of these trained extension health workers. We've already completed training more than 17,000 of them.

That is all I'm going to say about the program, which you'll learn about thoroughly in the next two days. But I'd like to shift to one element of health progress that has been made possible by this intimate cooperation between donor organizations here, The Carter Center, the political leaders of Ethiopia, and the health and education leaders. One of the goals of The Carter Center is to eradicate Guinea Worm in every country on earth. When we began this program, Guinea Worm existed in twenty nations, three in Asia (India, Pakistan and Yemen), and seventeen across the continent in Africa, south of the Sahara desert. Guinea Worm has been addressed successfully in Ethiopia. Last year, in 2006, they had one indigenous case of Guinea Worm and two imported from Sudan, in the Gambella District, which is in the far western part of this country. There hasn't been a single case of Guinea Worm found in Ethiopia since July of last year, and we hope and believe that Guinea Worm has now been eradicated once and for all in Ethiopia.

As I mentioned earlier, when this government took over, Ethiopia had the highest incidence of blindness in the world. So high that more than 1% of people in Ethiopia were blind. We formed

a close alliance with the Lions Club International. There are 45,000 Lions Clubs throughout the world – I was a Lion and an officer myself in my earlier days. Since the 1920's the Lions clubs throughout the world have concentrated on one major project and that is eyesight. By performing cataract operations and giving eye glasses, they have been a partner with us in two terrible diseases that cause blindness. One is Onchocerciasis, or River Blindness, as you know, and the other one is trachoma. There are ten zones in Ethiopia that are afflicted or endemic with Onchocerciasis or River Blindness, and The Carter Center has been assigned responsibility in eight of those ten zones. Again, working very closely with our donor organizations, Lions and others, and with the health workers that we have helped to train in those regions, last year alone we treated 2,500,000 people with Mectizan, a medicine given to us by Merck & Company. And whenever a person in an endemic area receives 1 tablet a year, they will not go blind. And the terrible itching and discoloration of their skin and sores, goes away. This is a very successful program and we'll be seeing more about it tomorrow.

Trachoma is concentrated in this country in the Amhara district, which is the area from which the Nile River flows. We deal with Trachoma with a very simple formula called SAFE. The first is obvious and that is Surgery. There is a simple surgery that can be conducted that can correct the problems with Trachoma. I'm sure some of you are familiar with this, maybe some are not. Trachoma is caused by filthy eyes, particularly among little children who don't brush away the flies that are around their eyes and suck the moisture out of the eyeball. And eventually, as you know, the eyes get infected, the upper eyelid turns inward. Every time the person blinks their eyes their eyelashes slash their cornea and cause blindness. There is a much higher incidence among children because they don't know how to take care of themselves. So we have now seen Ethiopian-trained health specialists perform 64,000 surgeries. The next part of that is the treatment with antibiotics and the Pfizer Corporation gives us free Zithromax, that's the second thing. The next one is Facial Cleanliness. In the areas that we visit before we start our health instruction program, quite often a child is never taught to wash their face. I know the vision of face washing is an important element. And you might be interested to know, I'm sure you are, that in the Amhara district this past year, 61.8%, you might want to write that down, of children we examined there had clean faces. So they now know how to wash their faces. And as you know, in Trachoma regions, and when I was a child we had trachoma where I lived, flies are prevalent. And what causes the eruption of the fly population is the relieving oneself, defecation and urination, of human beings in the open spaces in the ground, on the ground. In some regions of Africa, including parts of Ethiopia, it is not acceptable for a woman to relieve herself in public in the daytime. And so this has been a very serious problem. The Carter Center working again with the Health Ministry of this country, has taken on the responsibility of teaching people how to create a very simple latrine that they can build with local materials and with household labor. And you might be interested in knowing that we have now seen built in the Amhara district 303,400 latrines. I used to be known as the President of the United States, or someone who negotiated peace between Israel and Egypt, and now I am known as the number one latrine builder in the world. Because of that, we are making good progress with Trachoma, and we've now expanded our services to the entire region of Amhara, which is the number one center for Trachoma.

These are some of the results and progress made possible by the fact that health workers have been trained, university systems have been set up for education, and a close, intimate and

permanent relationship has been developed between the government of Ethiopia, the health ministry, and the education ministry, and donors, and what we hope to accomplish at this conference is to make it as easy as possible for the other nine nations and later others throughout Africa to adopt similar programs in your own country, modifying the modules that fit the health problems in your own communities. But using the ones we've already prepared, there is no need to go through a 5-6 year effort, and also the teaching materials and the system that we have used to create these accomplishments.

In closing let me say that we are very grateful that you came, we are grateful to the government of Ethiopia for hosting this program, and we hope that in the next two days you will be ready to take back to your country a determination to replicate or even to improve upon what has been done here in Ethiopia. It has been a great honor for The Carter Center to participate, and we wish you well in the future. Thank you very much.

HISTORY OF THE ETHIOPIA PUBLIC HEALTH TRAINING INITIATIVE

Professor Dennis G. Carlson

It is a high honor and privilege to tell the story of the early development of the Ethiopia Public Health Training Initiative. My colleagues and I *keenly* desire that learning of these experiences will be of *practical* use in human resource development in other situations.

Within weeks after taking power in 1991, the new Ethiopian Government began shaping new health policies and priorities. A week long conference was conducted where stakeholders discussed needs and strategies for expanding health services. The top priority was extension of modern health care to under-served populations. Consequently, the *urgent* necessity of training large numbers of front-line and mid-level health personnel was recognized as a strategic challenge.

A few weeks later, the Minister of Health enlisted a broadly based Technical Advisory Committee to explore options for strengthening human resources for health services. She called on all concerned parties to participate, with colleges and universities playing key leadership roles; WHO and UNICEF were also invited to contribute to framing a comprehensive proposal.

The Technical Advisory Committee worked intensively for several months under supervision of the Ministries of Health and Education. By March 1992 a comprehensive plan had been drafted for broad review and discussion, and a national workshop was held that included top level Government officials, and delegates from nearly all relevant organizations.

The Technical Committee revised the proposal according to recommendations of the National workshop, presented the revisions to the Ministers of Health and Education, who in turn passed the plan to the Head of State. Soon thereafter, President Carter visited Addis Ababa and was invited by Prime Minister Meles to assist the Government in achieving its objectives in expanding basic health services.

The Carter Center was *pleased* to collaborate, and consultations by high Carter Center officials were conducted in Ethiopia over the next two years, as well as a reciprocal visit by ministerial and professional leaders from Ethiopia to Atlanta, Georgia, and Washington, D.C. in 1994. Throughout these deliberations, top priority continued on training of personnel for community and health center based programs. Prime Minister Meles made it clear to President Carter that learning should be focused on *specific health problems in Ethiopia* and that *all* training *must* be conducted in Ethiopia, thus lessening loss of valuable personnel, and, simultaneously strengthening health science faculties within the country.

The Technical Advisory Committee submitted its final revision of the comprehensive plan in late 1993 and Government immediately established a more formal commission to review options and recommend concrete plans for implementation. The Commission soon suggested re-institution of the highly successful health center team training model used by the Public Health College in Gondar from 1953 to 1977, until abandoned by the previous regime.

Meanwhile, federal government was implementing regionalization and decentralization - expanding regional bureaus, and strengthening higher education in the regions. In 1995 Government announced plans to establish four new programs to train teams of health officers, nurses, environmental health technicians and medical laboratory technicians for 600 new and refurbished health centers in rural Ethiopia. Two new *post-basic* programs were inaugurated in 1995 in Gondar and Jimma, where higher education of health personnel had been going on for many years. Experienced nurses would be retrained as health officers, with baccalaureate degrees awarded after two and a half years; other team members would receive *diplomas* in two years. Two completely *new* faculties of health sciences were founded in Dilla and Haramaya in 1996. In Haramaya the new faculty of health sciences was "grafted" into a strong agricultural university. In Dilla the new college prepared both health personnel and school teachers in a new university complex. Both new faculties matriculated "generic" students who had recently passed 12th grade qualification and had no previous health training.

Intensive discussions continued among high Ethiopian Government officials, presidents and deans of Ethiopian higher education institutions, and top Carter Center staff. Two problems emerged as the *most* critical needs to be addressed: First, *large numbers of competent Ethiopian health science teachers were essential* ---but, very *few* experienced health science teachers in mid-career, or senior levels, were available to teach in regional institutions. Some expatriate instructors were recruited from abroad, but their numbers were limited, and they often *did not fit well* into the Ethiopian educational situation. The four new regional programs outside of Addis Ababa were thus *compelled* to hire recent graduates from baccalaureate programs to fill essential teaching positions. These young recruits had practically *no* preparation as teachers and *minimal* health service experience

The second critical problem was *near total lack of published books and other learning materials relevant to Ethiopian health needs, policies and service programs.* Books from industrialized societies did NOT fit Ethiopia's health and disease ecology and were NOT appropriate for Ethiopian students at this level. Training materials available from international organizations, such as WHO, required *extensive adaptation* to Ethiopian service systems, though some *would* be useful as *reference* documents. *The challenge to create and publish learning texts <u>explicitly fitting Ethiopia's needs</u> became the second clear, top, priority.*

Material requirements such as reference literature, teaching and office equipment, and transportation emerged as a third significant area to be addressed; classrooms needed teaching equipment such as projectors and teaching aids; shortages of information technology and laboratory equipment were prevalent in all institutions; computers and photocopiers were scarce; faculty members had few reference books and almost no professional journals. Strengthening *practical* training in training health centers and communities was recognized as important, but was postponed for later study.

As needs and priorities became more clearly defined, a planning workshop was conducted in September 1997 to frame detailed plans for a partnership between the Ministry of Education, Ministry of Health and The Carter Center. Sixteen delegates came from the four regional institutions that had launched health center team training, as well as representatives from the

Ministries of Education and Health, as well as The Carter Center. Participants soon recognized that development of strong self sustaining programs and institutions is a long, slow process--- requiring at least ten to fifteen years, --and *decades more* to mature. This realization dictated the need to design programs for a ten year period, even though funding cycles of possible donors seldom exceed three to five years. Another fundamental realization was that working as a national *network* of health science faculties would provide many important benefits to all concerned; time and effort could be used more effectively without duplication; professional experience and expertise could be shared; geographic and professional isolation would be reduced; a *much BROADER* scope of work could be accomplished; standardization of education and training would be strengthened; and a *cohesive professional community of health science teachers would emerge* which would help motivate higher performance and morale of teaching staff.

The planning participants made another critical discovery: *the twin goals of developing health science teachers and creating appropriate learning materials could be achieved simultaneously in an integrated and synergistic fashion.* Effective teachers *should* be able to analyze health problems, stay informed about scientific developments, communicate effectively and be positive role models. These abilities would be strengthened if Ethiopian teachers, inexperienced though they might be, were the primary writers –the "architects"--of the new learning materials. The experience of creating relevant teaching aides would demand learning the latest and most significant information from both international and Ethiopian sources; it would mean consulting central and regional health authorities - to ensure that content was in keeping with government policy and programs; collaborating with colleagues in their own universities, and consulting teachers in *other* network faculties would *strengthen the content and authority* of the materials. Improvement of writing skills would be an important part of teacher development. Reaching these two overarching goals required enhanced skills in information gathering, analytical and synthesizing thinking, and learning communication skills that fit the learning capacities of Ethiopian students. These processes would result in the learning materials being thoroughly "*owned*" by the collaborating teachers and institutions.

What formats would the teaching/learning materials take? --- After lengthy discussions, three major categories were outlined: first, *lecture notes* for classroom courses for all four categories of students: health officers, nurses, environmental health technicians and medical laboratory technicians; second, *training manuals* to serve as practical training and supervisory guides in clinical and community settings, and third, *training modules*, focused on the major health problems in Ethiopia that *require concerted teamwork by several categories of health workers*. Modules would include case studies, the epidemiology, pathology, and clinical aspects of essential services for each health problem. The essential roles and tasks of each team member required to manage the health problem would also be determined and described in detail.

Obviously, young and inexperienced teachers would need considerable assistance and facilitation by *seasoned professionals* who knew the problems, the health services, the professional and scientific literature, and were skilled in teaching and learning processes.

In effect it was necessary to build professional support communities and referral networks that would provide assistance, guide the process, and maintain standards. To the maximum extent

possible, senior *Ethiopian* scholars, scientists and other professionals were enlisted. Sometimes professionals were not *available* in specific subject areas, and other times were not *accessible* for collaboration. Thus, efforts were made to find and recruit senior short term *international* consultants with broad experience to work with groups writing modules. If possible these experts would also have had previous experience in Ethiopia. They would review drafts of all *modules*, which would be very complex and necessitated up-to-date professional knowledge and approaches from many sources, national and international.

By the end of the 1997 planning workshop, delegates had written goals and specific objectives, laid out strategies and methods, set priorities and a tentative time schedule. The main forum of interaction and activities was planned for *week long workshops*, held twice a year at the four regional campuses on a rotating basis. Each faculty would send five or six teaching staff representatives who were teachers of the different categories of the health center team. Participants determined the *first ten* modules to be created, including diarrhea, pneumonia, malaria, protein-calorie malnutrition, HIV/AIDS, tuberculosis and trachoma, chosen because of their widespread prevalence and serious consequences. Immunization and family planning were also among the first ten module topics. These semi-annual workshops included training experiences in teaching/learning methodologies which delegates could use improved approaches. Special speakers would be invited to present the latest and best information on important topics such as obstructed labor, family planning, malnutrition, mental health, environmental health, and others.

The first "pilot" workshop fittingly was held in Gondar in February 1998 with 15 delegates attending from all faculties of health sciences and the Ministries with teamwork as the major theme. Teams began working on the first module drafts with assistance of senior consultants. Varieties of innovative educational methods were demonstrated, then practiced by participants. The delegates visited a training health center used by the College for practical training. Participants were enthusiastic about the workshop process, and plans were laid for a second one to be held later in 1998, at the new Dilla College where the teaching staff was predominantly recent BSc graduates from Jimma. First drafts of modules were completed on malaria and pneumonia and shared with the 25 delegates. Gradually the format of the modules was evolving. A "core" module was created which was the primary reference for all categories of students. "Satellite" modules were designed which described the roles and tasks of each type of student. Plans were expanded for producing further health learning materials, beyond the initial assignments.

Workshops continued to be held twice per year with similar elements included each time: working on teaching materials, observing classes and practical training, practice teaching, plenary session discussions of EPHTI development and presentations by guest experts on salient problems.

By 2001 it became clear that more formal management structures were essential for the Initiative to have consistent administration, communications, planning, evaluation, and steady institutionalization by member universities. After extensive discussion in plenary session, the Ethiopia Public Health Training Initiative Council was formed with two delegates from each university; the chairman, and secretary chosen from among these members.

Financial resources were *very* limited during the early years. The Carter Center was able to find small amounts of money from a variety of sources, including foundations such as Rockefeller and Yoshida and a pharmaceutical company. The OPEC Foundation provided a critical contribution at one point. Expenses for the workshops were held to a bare minimum, with low per diem rates for participants and consultants receiving only actual expenses and travel, no consulting fees. Support functions were provided by the regular Global 2000 staff of The Carter Center in Atlanta and an Ethiopian administrator in Addis Ababa, who was hired for a few weeks at a time to handle logistics and arrangements for each workshop.

Meanwhile larger funds were being sought from a number of multilateral agencies, bilateral organizations, such as USAID, and major foundations. One significant difficulty encountered was that the proposed activities encompassed both higher education and health sectors and funding was usually not shared between them; this was finally overcome in joint negotiations between Ministries and major funding for a three year program was made available by USAID in the year 2000. A few months *before that,* the Packard Foundation made a significant grant to advance reproductive health training on campuses and in communities, but could *not* be used until other funds were available for management purposes.

With sufficient funds available, the Initiative moved to full implementation; a program officer was appointed in Atlanta, and a Resident Technical Advisor with core support staff employed in Addis Ababa. Procurement of equipment and publications expanded rapidly: reference books and international professional journals for instructors, teaching aids for classrooms, computers and printers, photocopiers for teachers' offices and instruments for science labs. Large initial orders were delivered followed by annual "rolling" additions as needs arose. Student enrollments were increasing rapidly, and many new teachers added for replacement and expansion.

The EPHTI Council met three or four times per year, engaged in policy making and planning functions. The two representatives from each institution were responsible for informing their leadership and professional peers, and monitoring progress of EPHTI activities in their own institutions. Likewise, delegates communicated concerns and requests from their university officials and colleagues. Standing technical committees were organized to oversee activities and progress in all aspects of the program, particularly in lecture note preparation, module writing, reproductive health issues, mental health problems, and study of possible distance learning options.

The pace of writing lecture notes, modules, and manuals intensified. However teaching staff were (and still are) *heavily* burdened with teaching and other campus responsibilities and found it difficult to find the time and focused energy to devote to the creative process. In order to provide time and conducive environments for writing teams to work, a new format called "mini-workshops" was instituted, where teams of teaching staff worked on drafts and revisions for three or four days either on campus, or in locations away from the university. This was followed by <u>inter</u>-institutional workshops for teachers from different universities meeting to answer remaining questions.

An advanced writing seminar on technical writing was conducted by the African Medical Research and Education Foundation from Nairobi for key staff members from each university who then were charged with assisting their colleagues to formulate and write learning materials.

Once presentable drafts of lecture notes and modules were completed, they were given for review to senior colleagues within their own universities for suggestions, changes and additional content. Drafts of lecture notes were then sent to teachers in *other* institutions of the network for *further* review. Finally, the most senior experts in ministries and universities in Ethiopia were asked to review the next-to-final drafts. In the case of draft *modules*, they were also reviewed by international experts. *Editors* reviewed them for language improvements.

At the same time that new funding became available, a major *new* effort in staff development was launched. Two teaching/learning workshops each lasting two weeks were conducted during July and August, each year by highly experienced health science teachers from Emory University. As Professor Murray will soon describe further, one was primarily for teachers with some years of teaching experience, the other for recent university graduates. Even though about 60 teaching staff participated each year, the numbers of new faculty members far exceeded that.

As special needs and training opportunities arose, the EPHTI Council arranged for centralized training of selected teachers from each university in practical knowledge and skills in family planning, post abortion care, and essential nutritional actions. Again, those who participated in these workshops were expected to train their colleagues on their home campuses.

Evaluation functions of the Initiative frequently took place in the EPHTI Council, at annual major workshops, in participating institutions, and in "Annual Program Reviews," when high ranking officials from the Ministries of Education and Health, top university officers and high level administrators from The Carter Center met to monitor progress, analyze problems and facilitate institutionalization. A major external evaluation by USAID was conducted.

Three basic dynamics of social and institutional change as described by Professor Carl Taylor have clearly been operating throughout the life of the Initiative[1]; "Top - *down*" influences involving the Prime Minister's office and President Carter continued as they monitored the entire process and provided timely support. There was "bottom-*up*" development as teaching staff members and representatives shaped programs at Council meetings and major workshops. Finally, there were "outside -in" factors effecting the process, as consultants, Carter Center staff and technical training by international organizations made significant inputs.

By the end of 2002 when Professor Joyce Murray became director, the EPHTI had moved from what we might call the "start-up phase" into a "steady growth" period. *Significant* progress had been made in strengthening teaching capacities and nurturing *other* professional development of staff in five health science faculties. A steady stream of health learning materials, particularly tailored for Ethiopian problems and programs was flowing. Class rooms, libraries, laboratories, and practical training sites were being outfitted with essential commodities. By 2002 many indicators showed that the Ethiopia Public Health Training Initiative was reaching its objectives; it was much *more* than successful "technology transfer"; to the satisfaction and delight of nearly

everyone, a highly cohesive and effective professional community of health science teachers was emerging. Despite many challenges, a successful partnership between Ethiopian Government institutions and The Carter Center had been formed, ---- based on mutual respect, trust and good will. Those of us privileged to collaborate through the years are deeply grateful and hopeful that effective collaboration will continue.

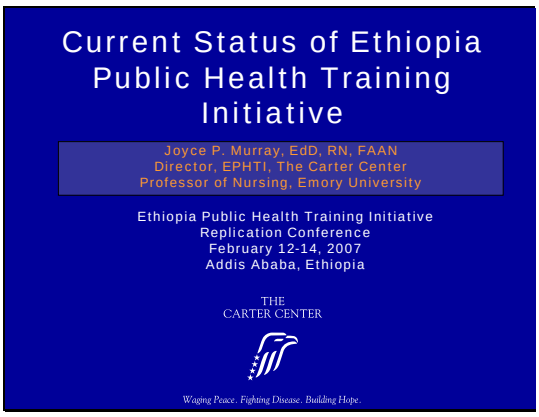
Thank you.

1. Reference: Daniel Taylor-Ide and Carl E. Taylor, Just and Lasting Change: When Communities Own their Futures, *2002, Johns Hopkins University Press, Baltimore.*

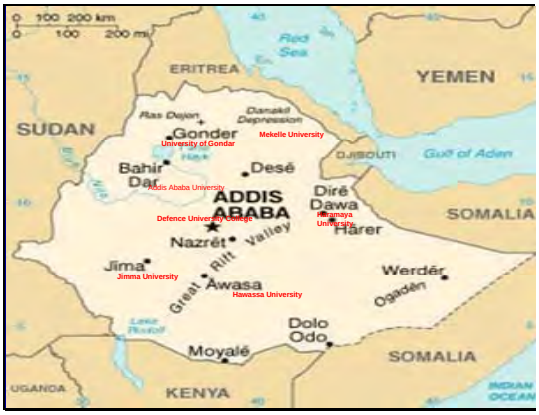
Current Status of Ethiopia Public Health Training Initiative (EPHTI)

Prof. Joyce Murray – Director, EPHTI

Slide 1



Slide 2



Slide 3

Current Status of Ethiopia Public Health Training Initiative (EPHTI)

Prof. Joyce Murray – Director, EPHTI

Slide 4

Packard Reproductive Health Project

THE CARTER CENTER

Activity	Number
Model Villages Surveyed	16
HS Students Trained	268
Staff Trained	157
CBRHAs Trained	138
TBAs Trained/Refreshed	31
Persons Sensitized	86

EPHTI Replication Conference

Slide 5

Teaching Learning Workshops

THE CARTER CENTER

Slide 6

Number of Faculty Trained in Teaching Learning Workshops

THE CARTER CENTER

Teaching Learning Workshops	Numbers Trained
National Workshops	292
Cascade Workshops	436
Total	728

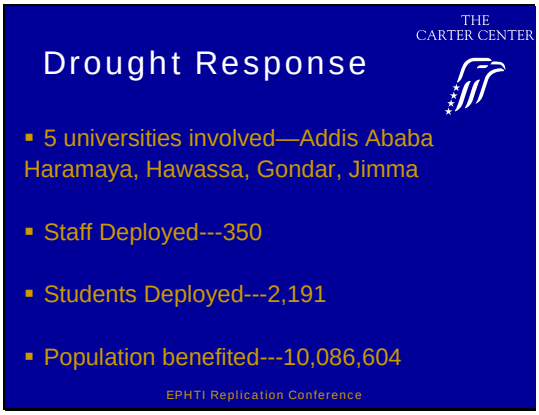
EPHTI Replication Conference

Current Status of Ethiopia Public Health Training Initiative (EPHTI)

Prof. Joyce Murray – Director, EPHTI

Slide 7

Slide 8



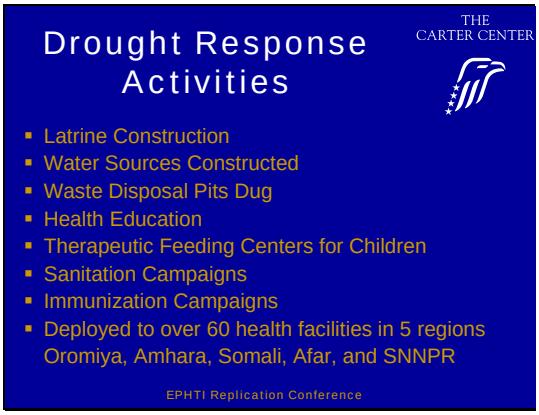
Slide 9

Current Status of Ethiopia Public Health Training Initiative (EPHTI)

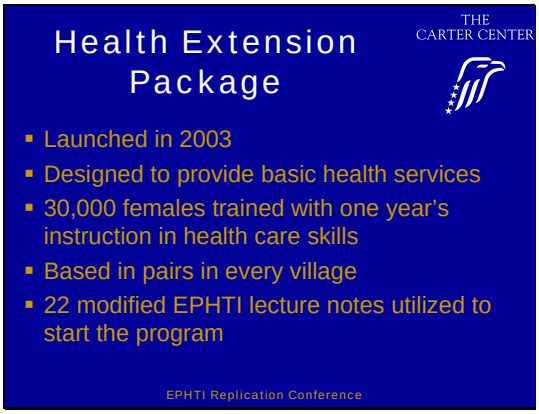
Prof. Joyce Murray – Director, EPHTI

Slide 10

Slide 11



Slide 12



Current Status of Ethiopia Public Health Training Initiative (EPHTI)

Prof. Joyce Murray – Director, EPHTI

Slide 13

Accelerated Health Officer Program Activities

THE CARTER CENTER

- Organizational arrangements
- Monitoring by EPHTI Council
- Permanent staff assigned from universities and RHB
- 1,055 nurses admitted Year 1
- 20 hospitals assessed and being renovated
- EPHTI teaching materials printed and distributed
- 20 Vehicles provided by the MOH
- Books and journals distributed

EPHTI Replication Conference

Slide 14

Slide 15

Summary of Major EPHTI Activities

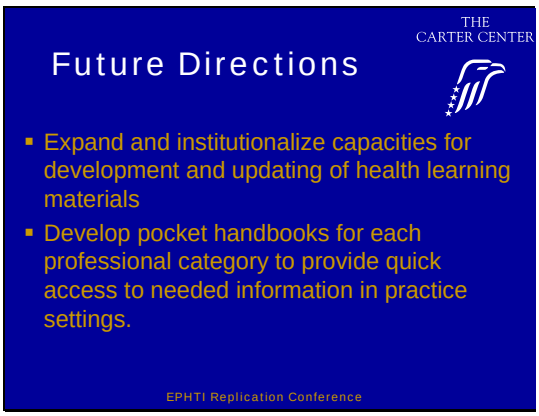
THE CARTER CENTER

Modules	65
Lecture Notes	101
Manuals	2
HLMs Printed	370,125
Workshops Held	538
Students Graduated from Health Science Colleges	7,135
Office/Lab Equipment	$986,082
Text and reference Books	6,398

EPHTI Replication Conference

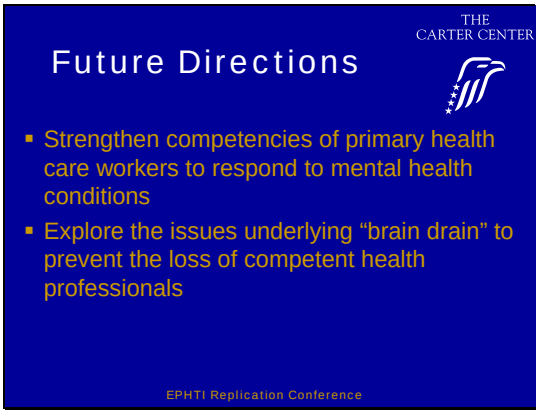
Current Status of Ethiopia Public Health Training Initiative (EPHTI)
Prof. Joyce Murray – Director, EPHTI

Slide 16



Slide 17

Slide 18



Replication Conference of the Ethiopian Public Health Training Initiative

February 12, 2007

UN Conference Hall, Addis Ababa

Remarks

Glenn Anders, USAID Ethiopia Mission Director

It is a true honor to be here today among a great leader and humanitarian, former President of the United States, Jimmy Carter. Mr. Carter, thank you and Roslyn for your commitment and service to our country. We are also celebrating this morning your commitment and service to strengthen the health care in Africa through The Carter Center.

I am honored to represent the people of the United States through its Agency for International Development, or better known as USAID. Improving the health and prosperity of Ethiopian people is a priority for the US government. I am personally very proud as a taxpayer that the American people, through USAID, has been able to contribute more than US$12 million over the past seven years to the Ethiopian Public Health Training Initiative through our partnership with The Carter Center. Our support has provided the resources necessary to develop new curriculum, enhance the teaching and learning environment through the purchase of medical equipment and other supplies, and train university instructors in pedagogical skills and health response.

The investment of the American people in this program – an investment in Ethiopia's human capacity and social resiliency – responds directly to the health policies and strategies of the Government of Ethiopia. This strategy is to empower woredas and communities to plan and manage social service delivery, while strengthening the supporting key national and regional systems at the same time. And Ethiopia's Ministry of Health is taking the necessary steps to implement this strategy by decentralizing health care decisions to spread responsibilities between and among the federal, regional and woreda levels. We fully support these efforts to empower woredas to manage their own implementation of primary health care and education services.

Like all of our countries, Ethiopia has serious health challenges that must be addressed. With 78 million people, Ethiopia is the second most populous nation after Nigeria in sub-Saharan Africa with an annual population growth rate estimated at 2.7%. If this trend continues, by 2025, the population will increase to almost 120 million. Many of the health problems of women and children are related to high fertility, estimated to be 5.8 births per woman in 2005. Ethiopia is one of the six countries that account for 50% of under-five child deaths worldwide. Approximately 472,000 Ethiopian children die each year before their fifth birthday.

USAID has been funding health, HIV/AIDS, population, and nutrition programs in Ethiopia for over a decade to help address these startling statistics. In partnership with the Ministry, our programs are expanding family planning and reproductive health services and working to reduce harmful traditional practices. Along with our partners, we are working to prevent and treat infectious diseases, such as malaria, TB, and HIV/AIDS. Through the Presidential Emergency Plan for AIDS Relief, or PEPFAR, we are helping reduce mother to child transmission of HIV, increasing access to care and treatment for people living with HIV and AIDS, and increasing care and support to orphans and vulnerable children.

At the most fundamental level, it is imperative that basic, primary health services and education be improved and expanded. This requires better development of front line health workers and public health and nutritional information so that communities have access to information and quality care – and this is exactly what the Ethiopian Public Health Training Initiative supports.

In addition to the already low coverage for basic health services, new initiatives in HIV/AIDS, malaria and TB treatment are adding to the strain on health care delivery. At the current levels of manpower and health facilities, it will be a significant challenge to reach the Government of Ethiopia's targets for the roll out of HIV treatment programs. In this respect, the Ethiopian Public Health Training Initiative has contributed greatly to the development of manpower in Ethiopia.

Through the Ethiopian Public Health Training Initiative, by the end of 2008, approximately 3,000 Health Officers will graduate from five different universities. By 2010, a total of 5,000 Health Officers will be assigned to almost all health centers and woreda health offices. The US is proud to be a part of this accomplishment, which would not have been possible without the unique partnerships formed among seven universities and four regional health bureaus forged by The Carter Center.

Beyond the daunting challenges of malnutrition, HIV/AIDS, and malaria, another hurdle is ensuring that trained health professionals remain in and continue to serve in rural communities. An overwhelming majority of Ethiopians, 85 percent, live in rural areas. We must all make an effort to commit that health services are reaching the people of Ethiopia.

I encourage our partners as well as the Government of Ethiopia to implement strategies that supports on-the-job training *and* retention of trained health professionals to work at rural primary health care units. High-level advocacy is needed to coordinate efforts and maximize partnership among stakeholders. Strengthening the skills of health professionals that are working in the rural communities is critical to maintain the success of health services and the already launched health service extension program. I know that within the Health Sector Development Plan, the Federal Ministry of Health is pursuing increased access to quality health care, particularly among rural populations.

USAID is committed to support the accelerated health officers and the health service extension programs in Ethiopia through the Ethiopian Public Health Training Initiative,

Ministry of Health and other partners. The American people will continue to provide support to improve the health of all Ethiopians.

I would like to take this opportunity to applaud the government of Ethiopia and The Carter Center for their commitment to this extraordinary effort. Leadership is essential to this initiative. Thank you for being our partner in development and for continuing your support for future health officers of Ethiopia.

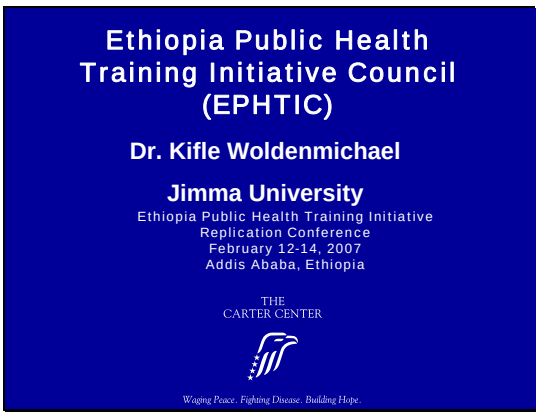
Many deserve credit for making this conference happen. I'd like to express my sincerest appreciation to the Ethiopian Public Health Training Initiative implementing partners, The Carter Center staff both from Atlanta and Ethiopia, as well as university presidents, professors in health and health related fields, national board and council members and the resident team members in Addis Ababa. Thanks also to Health Ministers and senior health officials from several countries who have traveled to join us for this conference.

I hope this conference is productive and useful for you, and that the lessons we have learned from the Ethiopian Public Health Training Initiative will help guide us in strengthening quality health care for Ethiopians and others throughout Africa.

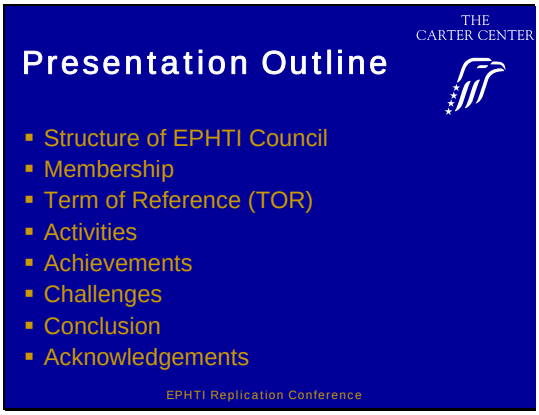
Thank you.

Ethiopia Public Health Training Initiative Council Perspective
Dr. Kifle Woldemichael, EPHTI Council Chairman

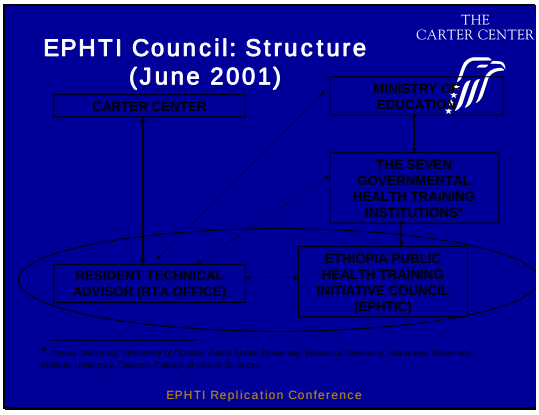
Slide 1



Slide 2

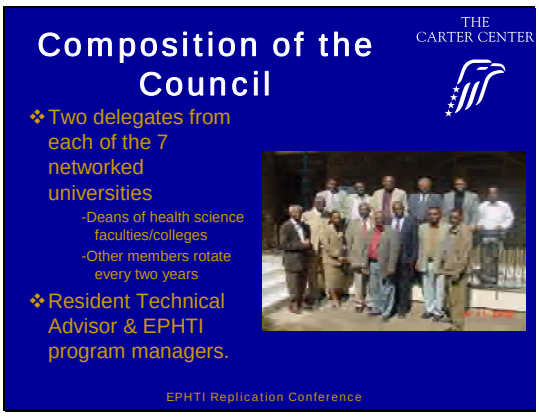


Slide 3

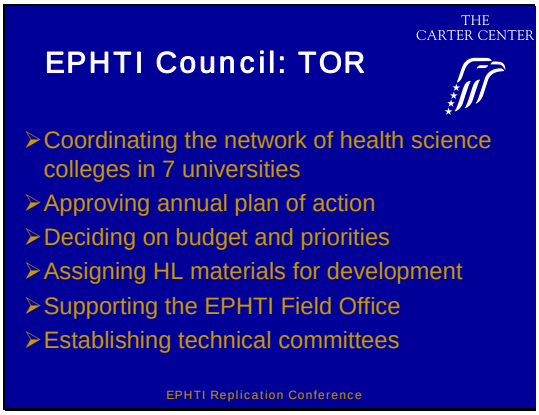


Ethiopia Public Health Training Initiative Council Perspective
Dr. Kifle Woldemichael, EPHTI Council Chairman

Slide 4



Slide 5



Slide 6

Ethiopia Public Health Training Initiative Council Perspective
Dr. Kifle Woldemichael, EPHTI Council Chairman

Slide 7

Slide 8

Slide 9

Ethiopia Public Health Training Initiative Council Perspective
Dr. Kifle Woldemichael, EPHTI Council Chairman

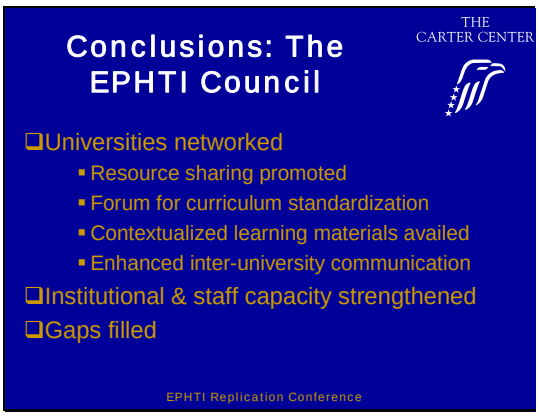
Slide 10

Slide 11

Slide 12

Ethiopia Public Health Training Initiative Council Perspective
Dr. Kifle Woldemichael, EPHTI Council Chairman

Slide 13



Slide 14

Slide 15

The Ethiopia Public Health Training Initiative (EPHTI) and its Innovative Approach to Building the Capacity of Health Professional Training Institutions: The Experience of the Faculty of Health Sciences of Haramaya University

Presented at the EPHTI Replication Conference
February 12, 2007

It is an honour and a privilege for me to address this distinguished audience. It was with great pleasure that I accepted the invitation to come to Addis Ababa and to share my experiences with you. I would like to take this opportunity to express my sincere thanks to the organizers of this Replication Conference for giving me the honor and the opportunity of addressing this august body.

I am here as a representative of Haramaya University in eastern Ethiopia. The University has been one of the key stakeholders of the Ethiopia Public Health Training Initiative since its very beginning in 1997. I would like to discuss how Haramaya University has benefited from the EPHTI network.

This august assembly recognizes that high-level human resources training is a subject that is important to all of us who have a stake in the development of our nation. Given the diversity of issues that my topic of discussion entails, I have taken the liberty of preparing my speech by focusing on several major issues.

From an historical perspective, a major goal of the government was the expansion of health services to the underserved rural populations in Ethiopia. Special attention is given to the nation's population who were without access to modern health care. In meeting this objective, strategies were created including building new health care facilities, equipping them; staffing them and integrating prevention and health promotion with curative services.

A team of health professionals namely; health officers, public health nurses, environmental health workers and laboratory technicians constituted the health center team and they were charged with working together in alleviating public health problems.

To respond to demands, the government opened new programs in four higher learning institutions located in Dilla, Gondar, Jimma and Haramaya. However, due to the nature of the programs, their inadequate staffing and a lack of organizational development, the earlier government system did not work effectively.

Also, there was an agreement among policy makers and professionals that most of the curricula had not been adjusted to the new requirements and demands for trained health professionals. Moreover, students had been given heavy doses of theory, without adequate exposure to real-life problems and environments similar to those they would

face after graduation. This was believed to have resulted in producing graduates who lacked technical competence and professional confidence to work in a complex and changing health care environment.

At this juncture, it is gratifying to note that the need to build and strengthen human resource development capacity of Institutions of Higher Education (IHE) to meet the great demand for skilled professionals to staff governmental and non-governmental institutions has been given high priority and support by the current government. In this respect, His Excellency Prime Minister Meles Zenawi discussed the issue with President Jimmy Carter requesting for support and the Ethiopia Public Health Training Initiative (EPHTI) was conceived in collaboration with the four institutions based on the agreement between them and aimed at three major issues. They are:

- **Curriculum material development** (development of appropriate and relevant teaching materials including modules);
- **Strengthening the capacity of the teaching staff** by providing pedagogic and other training focused on Ethiopian health problems; and
- **Enhancing the learning environment** to upgrade the quality of teaching and learning through networking of health training institutions.

The Carter Center's EPHTI was probably the first of its kind in the country in that a non-academic institution has opted to deal with issues of high level human resource training and knowledge generation which, until that time, were considered to be a reserved territory of institutions of higher learning.

A year after the Initiative was launched; Addis Ababa University and more recently, Mekelle University and Defense University College became a part of the EPHTI Network. From its inception, the Initiative's relationship with the universities has become even stronger. Its activities are also broad based and deeply rooted.

The Universities have enjoyed the support from the Carter Center/EPHTI which has made a substantial effort to enhance their capacities in meeting their goals. The Initiative has facilitated acquisition of equipment, educational materials and funds for the universities to work towards excellence in teaching. The support of the Carter Center has been focused on the following areas which I will try to elaborate taking Haramaya University as an example:

1. Strengthening staff competence and skills

Haramaya University has enjoyed teacher training of both junior and senior academic staff on teaching skills through EPHTI. In addition, different training workshops focusing on health problems of the country have given the staff opportunities to strengthen their knowledge, communication and writing skills.

Staff members of the Faculty of Health Sciences have been trained on a student-centred approach to education and on experiential education strategies on the grounds that these approaches are more aligned with the skills (life-long learning, inter-personal, higher

order thinking, and communication skills as well as specialized and general knowledge) needed in the workforce of the increasingly competitive labour market environment.

2. Filling the gap in teaching materials

Lack of relevance of the curriculum was found to be a serious problem that health professional training institutions had to live with. The problem had been compounded by the fact that standard textbooks and teaching materials relevant to the Ethiopian conditions had been lacking for many of the courses taught in our institutions. The absence of teaching materials relevant to Ethiopia, coupled with the limited circulation of the results of different research projects undertaken in the country, had led to the utilisation of western and mostly theoretical textbooks and reference materials. The EPHTI Network of Universities recognized this problem right from the very beginning and has helped produce teaching modules, lecture notes and manuals which address the prevailing health problems in the country.

The shortage of text books and educational materials is now history thanks to the support of the Carter Center/EPHTI. Numerous modules and lecture notes have been developed which are now widely used by students and academic staff in our institutions. These locally developed teaching materials are also used by health science colleges run by the Ministry of Health and regional States. In addition to this, a substantial number of much needed books and journals have been procured and distributed to respective universities to help as reference materials for developing local material, enhancing the teaching-learning process and for the purpose of advancing knowledge.

- Lecture notes on a variety of subjects based on the national curriculum were developed. These notes which are actually ‘mini text books’ are also distributed to Ministry of Health colleges.

- Selected health problems of the country have been presented in the health center team modules developed to help in quick reference at the training health center level and specific case studies at health institutions. Our university has benefited from such a process. Our staff members have participated in development of the modules and this has helped them in improving their writing skills. Moreover, the shortage of quick references on particular conditions was mitigated in many of the cases. The modules are also distributed to the health centers run by the Ministry of Health and used by Haramaya University as training sites, where both staff in the health centers our students can access them easily.

- There are situations where the EPHTI Networked universities have engaged in the development of modules which are prepared not only by staff of the Faculty of Health Science but also with the active participation of other university staff. A typical case in point is the development of an HIV-English module entitled "Develop your English through Awareness of HIV" which was developed jointly by staff of Health sciences and the English Department. This module is intended to teach about HIV to students in our universities and colleges through active engagement of students while they get an English course. As a result, the University could teach about HIV and its

modes of transmission to students in an effort to meet the national call to fight HIV/AIDS.

One point I would like to note here is that teaching materials developed in-country through the EPHTI network are updated and upgraded from time to time.

3. Teaching aids, equipment and material supplies

- The EPHTI has been supplying the Faculty of Health Sciences with basic materials and teaching aids, such as photocopy machines, computers, audio-visual aids, video cameras, overhead projectors etc. This has been extremely important in facilitating the activities of instructors and harmonising the teaching-learning process.

- Laboratory and demonstration equipment are among the supplies given to the University that help us to strengthen the teaching and learning processes of the Faculty of Health Sciences.

- The support of the Carter Center is not limited to helping the Faculty of Health Sciences, but is extended to areas where students are going for field practices. Several health centers have received equipment which aid effective treatment of patients. The equipment is also used by students during their field placements.

4. Reproductive Health Program

The Reproductive Health Program of Haramaya University (as well as of others) is one of the most successful programs which helped us reach communities where traditional practices have been deep-rooted.

- The Carter Center/EPHTI in collaboration with the Packard Foundation has given the opportunity to the University to teach skills related to reproductive health for staff and students. The program also helped the university to train additional health workers and update the already existing community-based reproductive health agents.

- The Carter Center/EPHTI has helped us establish a Reproductive Health Skills Lab in the university premises which has created an environment for effective and efficient training.

5. Sharing experiences through cooperation and networking

The Initiative has helped the partner institutions establish strong and firm linkages among themselves which have eventually led to: exchange of professional information (educational and research); staff exchange and sharing; collaboration in research work; effective use of financial & material assistance; and participation in curriculum development.

- Several joint annual workshops were conducted. These were valuable in sharing experiences among sister universities and experiences gained due to their respective specialties. These annual workshops and review programs were of paramount importance in enriching the knowledge base.

- There is added value of universities joining hands to work on solving national needs and filling gaps; strengthening partnerships thus breaks from the tradition of competing for resources.

6. Drought intervention

- The years 2003-2004 were special for the EPHTI-networked universities. During those two years, there was a delay and/or severe shortage of rains in much of Ethiopia. Hence, the Ethiopian Government called for national and international action against the catastrophe. The Carter Center assisted with this.
- The Carter Center, in collaboration with USAID, planned a contribution to the management of the crises in aspects of health and nutrition. Our University was given the responsibility to manage cases that occurred in eastern Ethiopia (the Somali National Regional State, and some parts of the Oromia National Regional State). Students and staff members of the Faculty of Health Sciences were dispatched to various areas reaching half a million people to provide professional services to the needy.
- In the process of doing this, epidemics were averted or managed and health care services were delivered. Our staff and students gained practical skill in managing health components of disasters.

7. Millennium Development Goals - How the EPHTI network contributes

The Ethiopian Government is striving for the achievement of the Millennium Development Goals (MDG). With the right of every citizen to have access to health care efforts in developing health human resources will have to be enhanced. Hence, in addition to what has been undertaken to date, the Government has launched Accelerated Health Officer Program in October 2005 with the financial support of USAID and Technical support of The Carter Center/EPHTI. At the end of the Program in five year a total of 5000 health officers are expected to graduate, including those from the generic system. Health officers are assigned in health centers and work with other team members in curative, preventive, promotive and rehabilitative health care. They are also in charge of district health management to oversee equity and efficiency of health services.

- Our university is part of this accelerated program (as are four others) and we have completed one year thus far. Our students are now moving to hospitals for practical training for the next two years. We will be working with the hospitals closely to monitor and assist so that students acquire the necessary skills. At the end of their training the students will get their degrees from the University. In this engagement, we are receiving enormous support from the Carter Center ranging from facilitating and selecting clinical teaching areas to the provision of funds and materials for the program further strengthening the EPHTI Network of Universities.

Allow me to conclude up my speech by extending my heartfelt thanks to the officials and staff of the Carter Center and EPHTI. Please also allow me to thank USAID, the David and Lucile Packard Foundation and other donors for their financial and technical assistance.

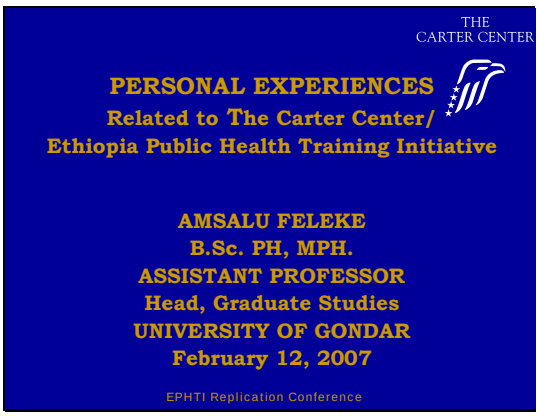
I have to admit that without the hard work, devotion, perseverance and support of the staff members of the Faculty of Health Sciences, the Ministry of Education, the Ministry of Health, the Regional Health Bureaus, the Carter Center/EPHTI, and the university community as a whole, it would have been difficult, if not impossible, to run our health professional training program successfully. Therefore, on behalf of the university community and myself, I would like to thank them all for making the program a successful reality.

As a last note, I would like to underline that EPHTI has helped us in creating such a sense of belongingness among us universities that it is now almost a habit to work hand-in-hand to identify and fill gaps in national needs. I strongly believe this will have a lasting impact on the way we do things.

Thank you for your kind attention.

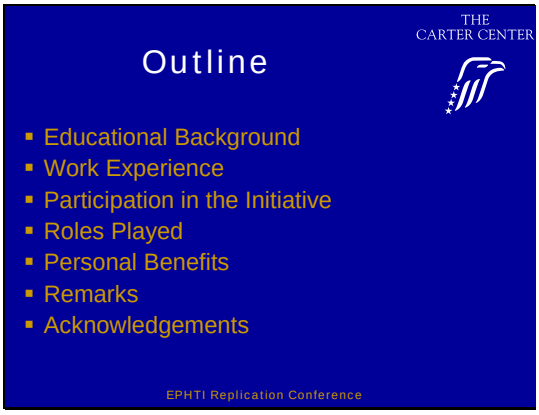
Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 1



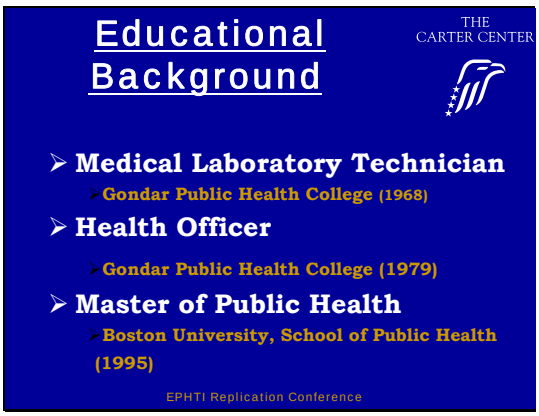
Slide 2

Slide 3



Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 4

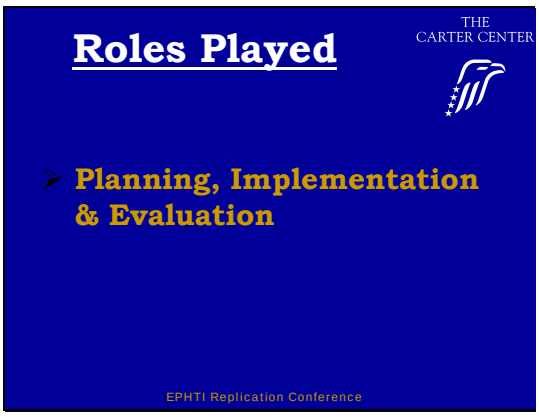


Slide 5

Slide 6

Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 7



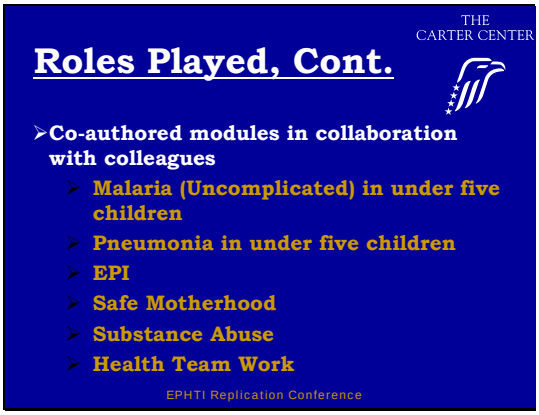
Slide 8

Slide 9

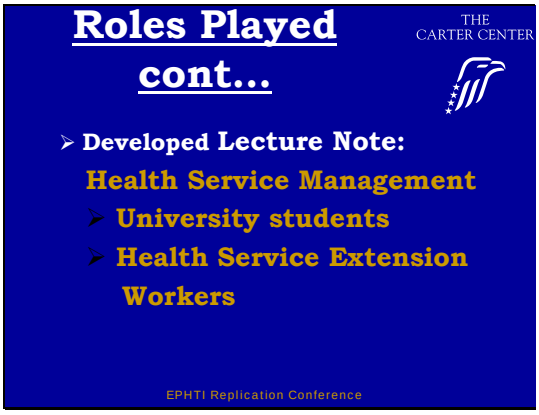
Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 10

Slide 11



Slide 12



Slide 13

Slide 14

Slide 15

Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 16

Slide 17

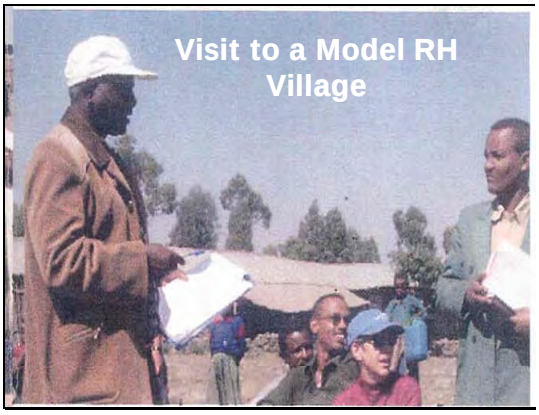
Slide 18

Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 19

Slide 20

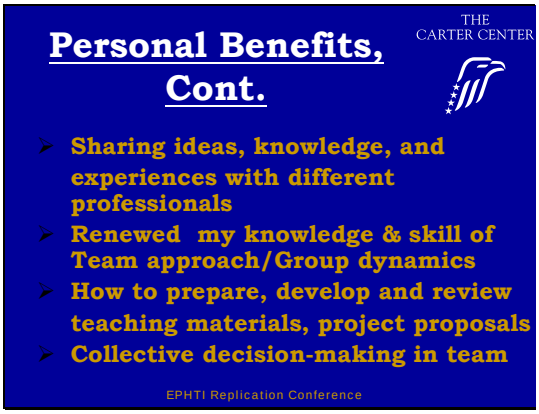
Slide 21



Slide 22

Slide 23

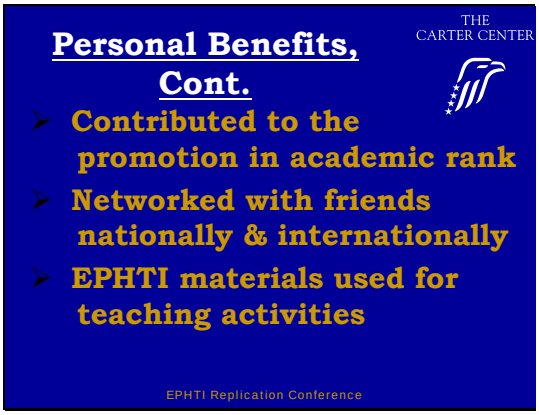
Slide 24



Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 25

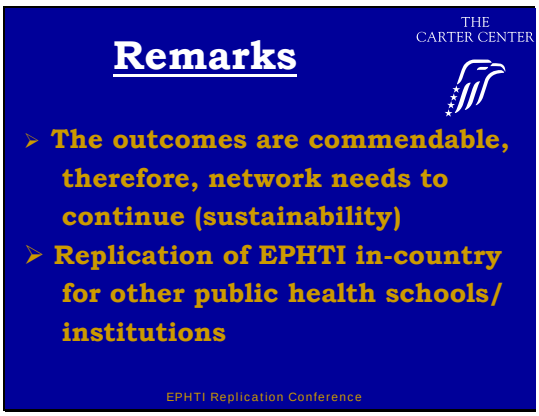
Slide 26



Slide 27

Ethiopia Public Health Training Initiative Individual Perspective
Mr. Amsalu Feleke, EPHTI Council Member

Slide 28

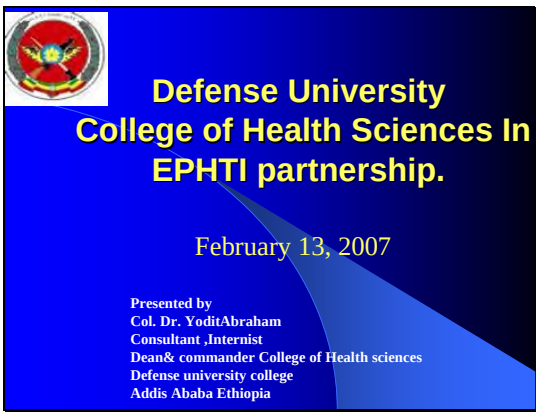


Slide 29

Slide 30

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 1



Slide 2

Slide 3

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 4

Background

- In the 60s and 70s Nursing and health assistant training were conducted at the Defense Hospitals.
- Health professionals in uniform were also trained in at the then Public Health College in Gonder and abroad .

Slide 5

In 1996 the first Health officer school in the Defense was established at the AFGH compound

Slide 6

Background *cont….*

- 1998 College of health sciences was established by merging the HO school and school of Nursing.
- 2003 Amalgamation of the Armed Force General Hospital and the College of Health Sciences was made to establish the New Defense College of Health Sciences.

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 7

Rationale for establishing Health sciences teaching institutes in the Defense.

- To educating enough qualified health professionals, and there by contributing to the well being of our Defense Forces.
- The shortage of mid and high level of health professionals assigned from MOH.
- The need to upgrade existing health workers with in the Defense .
- Respond to the demand of Health Care in the Public sector (Strong civil military alliance).
- Part taking in poverty reduction through a prominent role in improving the public health.

Slide 8

VISION

National leadership in military health education and research.

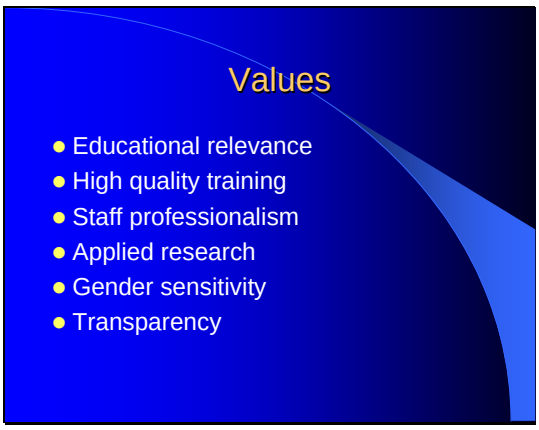
Slide 9

MISSION

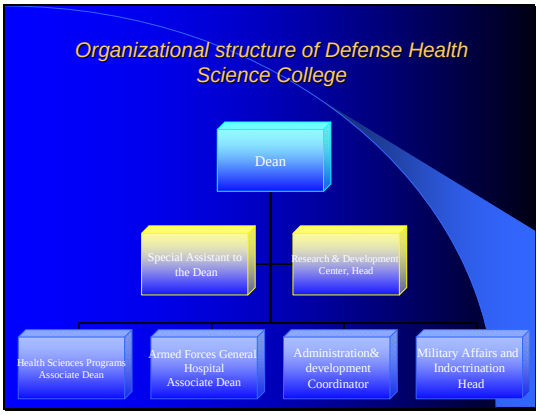
- Serve as the center of academic excellence and integrate high quality education, research and service.
- Produces competent health professionals to meet the combat and peacetime medical needs of the Armed Forces.
- Work in partnership with related training research and service institutions both locally and internationally.

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

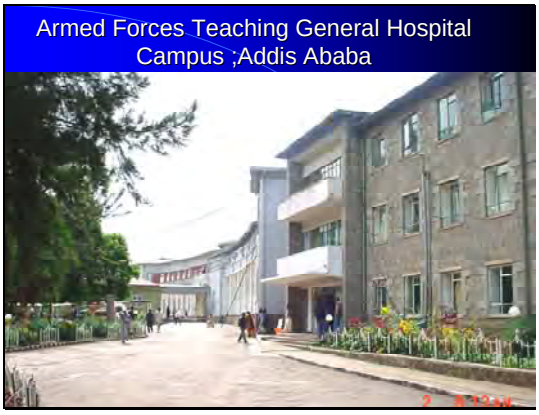
Slide 10



Slide 11

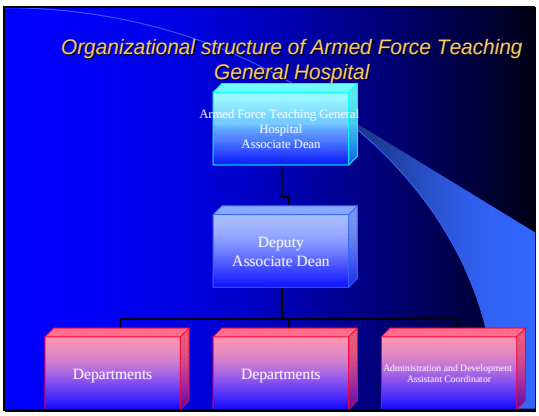


Slide 12

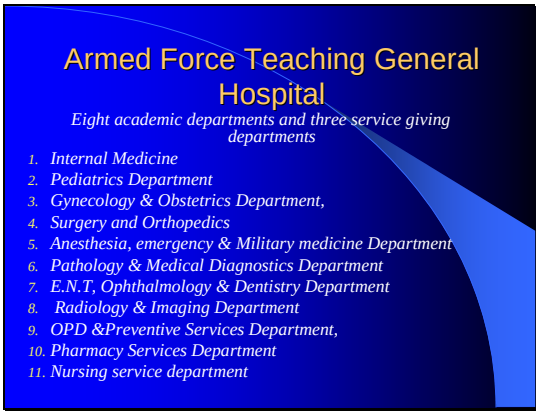


Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 13



Slide 14



Slide 15

Slide 16

Slide 17

Slide 18

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 19

Slide 20

Teaching Departments ,Health Sciences program at Debre Zeit campus

- Public health Department
- School of Nursing
- Environmental Health Department
- Medical Laboratory Technology Department
- Pharmacy Technology Department
- Radiography Technology Department
- Basic Sciences Department

Slide 21

Current number of Students In the college.

Health officers	198
Nursing	76
Laboratory	32
Radiography	21
Environmental health	31
Pharmacy	33
Total	391

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 22

Slide 23

Slide 24

Slide 25

Academic & supportive staffs at Health Sciences program- Debre -Zeit Campus

- Academic staffs
  - Civilians 68
  - Military 23
- Supportive staffs
  - Civilians 105
  - Military 67

Slide 26

Graduates from the College.

The college has produced a total of 3130 health professionals:

- Degree Health offices 149,
- Diploma Senior Nurses 535,
- Certificate Junior Nurses 1946,
- Diploma Junior Nurses 252,
- Diploma Pharmacy 85,
- Diploma Laboratory 62,
- Diploma Radiography 33.
- Diploma Environmental health workers 33
- Diploma Dental therapists 35

Slide 27

Current Programs provided in our college

- BSc program , Health Officers
- Diploma program , Clinical nurses
- Diploma program , Medical Laboratory Technology
- Diploma program , Environmental Health
- Diploma program , Pharmacy Technology
- Diploma program, Radiography Technology

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 28

New programs to be started in March 2007

- Medical Doctors program
- BSc Nursing Program
- Diploma program for Generic Nurses

Slide 29

Newly constructed
Medical School Building at the AFTGH campus

Slide 30

Physical Facilities of the college (2 campuses)

- Accommodations for 700 students
- Classrooms for 1200 students
- Demonstration, laboratories; Drawing Room
- Computer recourse center , tele-medicine (on formation)
- Offices for faculty and staff members
- Audiovisual, Libraries
- Multi-purpose auditoriums and Conference rooms

Slide 31

Practical teaching Hospitals

- Armed Forces Teaching General Hospital
- Zewditu Hospital
- Bella Referral Hospital
- Menelik II Hospital
- Police Hospital
- Black Lion Hospital
- Yekatit 12 Hospital
- Alert &EHNRI

Slide 32

Health centers and Rural Attachment centers

- Army health centers in the various military camps
- Holeta Health Center
- Debrezeit Health Center
- Dukem Health Center
- Awassa Health Center
- Fiche Health Center
- Wollisso Heath Center
- Nazareth Health Center
- All Health Centers in Addis-Ababa

Slide 33

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 34

Slide 35

Slide 36

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

Slide 37

EPHTI Partnership.

- The college has been member of The Carter Center/ EPHTI network since April 2004.
- our partnership with EPHTI was important in the development and upgrading of our college to first and second degree level teaching institution.

Slide 38

Added values from the EPHTI partnership.

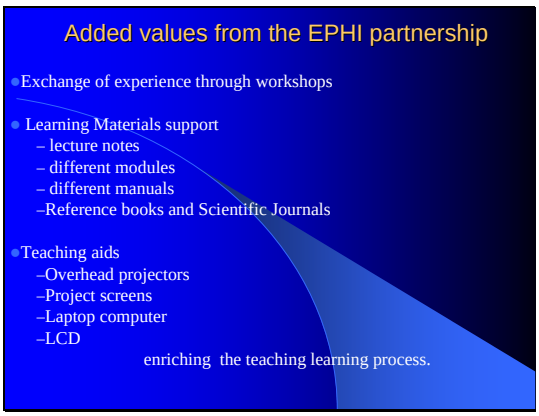
- Trainings provided for faculty members:
  - Series of Teaching methodology Trainings 75%
    - For senior staffs
    - For junior staffs
    - Series of in house (cascade) Trainings on Teaching Methodology.
  - Essential Nutrition Action & Behavioral Change and Communication 40%
  - Lactation management training workshop 25%

Slide 39

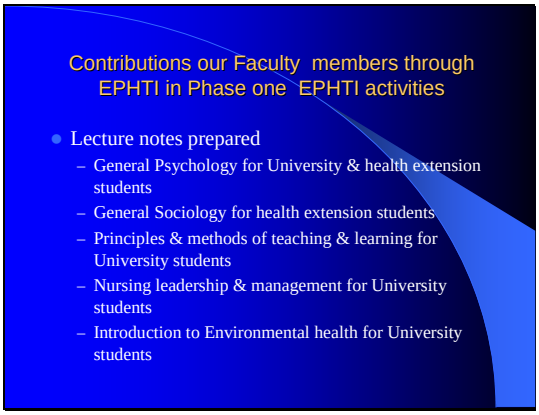
Cascade Trainings being conducted

Defense University College of Health Sciences – EPHTI Partnership
Col Dr. Yodit Abraham – Dean, Defense University College of Health Sciences

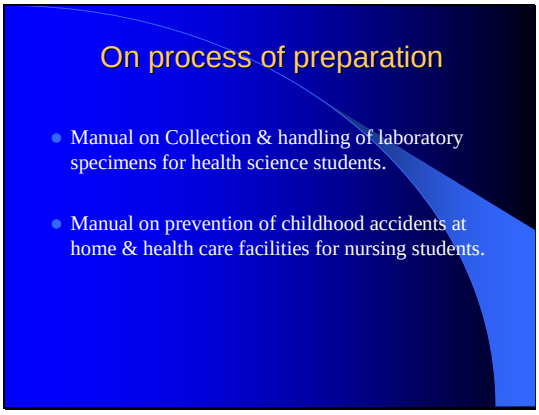
Slide 40



Slide 41



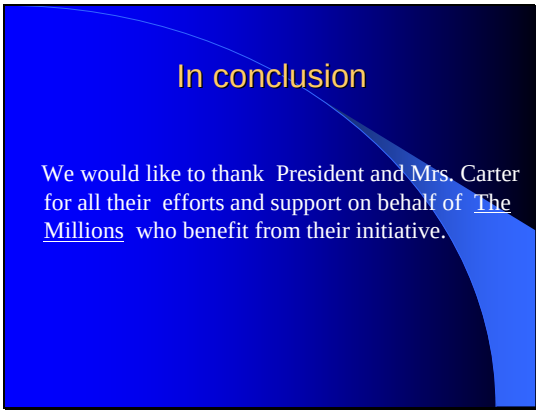
Slide 42



Slide 43

Slide 44

Slide 45



Slide 46

Slide 47

SUMMARY OF PLENARY GROUP PRESENTATIONS
DAY 3 – February 14, 2007
EPHTI REPLICATION CONFERENCE

Group Discussion

Group 1 – Benin, Mali

Group 2 – GOS, Nigeria, Tanzania, Ghana (not attending)

Group 3 – GOSS, Uganda, Kenya

Questions:

1. How do you think the ideas learned in this conference might fit into your health and education system for health professionals?

2. What lessons can be drawn from your observations of EPHTI specifically for your country needs, opportunities, and challenges?

3. Will the types of partnerships described in the EPHTI be adaptable to your specific setting?

4. What barriers do you think you will encounter in your own country? How will you approach these challenges?

5. What specific steps would you suggest for exploring and implementing a similar project in your country?

Rapporteur reports

Group 3

Lessons Learned from EPHTI Replication Conference:

- We believe that this Initiative is purely Ethiopian (homemade) and thus acceptable.
- It has the participation of all the national institutions, MOE, MOE, universities.
- Therefore there is a high chance of sustainability because of commitment from all relevant parties.
- Consultants are national.
- The initiative offers a chance for capacity building due to the training of mid-level professionals.
- Training is very useful because of deployment in disaster and needed areas.
- Ethiopia meets opportunities and challenges because of the involvement of policy and decision makers, which is critical.

- Higher education policy on the Initiative is very important.
- EPHTI has become part of the national health program, as a means of exchanging health delivery.
- The initiative makes use of the existing partners and donors (TCC, USAID, etc).

Types of partnerships:

- This initiative can be adopted by other countries.
- A partnership is required between the MOE, MOH, and Ministries of Water Resources, Environment and Finance.
- Involvement of the universities is crucial.
- Funding constraints are recognized.
- Incentives to get health personnel to work in rural areas is critical.
- There is prejudice on part of MDs, who resist upgrading of Health Officers to MDs.
- The program must recognize graduates for it to work.

Specific steps required:

- Must advocate program (so people will know and accept the graduates who will serve them in rural areas and accept them as substitutes for MDs).
- Must have political support for graduates to ensure job security.

Group 1

Question 1:

- We must first review the systems we have in place in our countries, though examination of current administrative policies.
- We must put in place a collaboration platform which would involve all the stakeholders concerned.

Question 2:

- The Ethiopian approach and what we should do must be a holistic approach. We must involve all the sectors.
- We raised the problems of a networking system which must be in place, where we assemble all concerned stakeholders for the system. We saw that the designed programs responding to the realities currently on the ground are also found in the Ethiopian experience. We must inform our governments on this interesting experience to learn and model if possible.
- The training programs for the health officers and training of MDs are also of interest to us. The training of the auxiliary officers for the needs of the people far away from the towns is interesting, because in our system MDs don't go far away from the cities. We have chosen this system to replace the doctors where there are no doctors.

Question 3:

- We must convince the political leaders at all levels of the importance of this program.
- We must convince the health professionals in our country of this program.
- In order to convince the policy makers we must first convince the health professionals.
- Opportunities in our country for this program:
  - There are already training institutions in formation in our country.
  - These networks must be strengthened to achieve our goals.

- Yes, the partnerships of EPHTI are adaptable to our countries. We also have an inter-sectoral partnership. Here there is an inter-sectoral partnership with the universities to train the health professionals. We must have the community partnerships. We must strengthen these partnerships as you have done in your country. We agree your network is applicable to our systems in our countries.

Question 4:

- Obstacles we will face are:
  - There will be resistance to change (occurs many times).
  - We have the legal framework which will be of assistance to us.
  - We have insufficient resources (material, human, etc).

- What approach will you use to address these challenges?
  - We must convince the political will of our country.
  - We must mobilize resources to incorporate this initiative.

Question 5:

- There must be a restitution of the mission on what we have seen and listened to in Ethiopia. We must have a real advocacy and inform at all levels through reports and convincing to see the reactions of those in our country who are policy makers. We must explore the problems we have in rural communities.
- We must put in place a framework for consultation, which will be on the partnership level (internal, international, and institutional).
- We must define the strategies to put in place in order to achieve these goals.
- We must mobilize resources to implement plans.

Group 2

Question 1:

- Retrain and upgrade skills of junior-level health workers to be able to prescribe prescriptions.
- Review our training modules with the EPHTI ones for improvement.
- Institute/strengthen collaborations between the line ministries (Education, Health, Water, Environmental & Agricultural).
- Student lecture notes are extremely useful in health and other sectors to equip education.

Question 2:

- Networking among participating universities and all stakeholders would be a good opportunity for us.
- Quality assurance and supervision are major challenges.

Question 3: Yes, these include:

- Networking between universities.
- Collaboration of Ministries.
- Partnerships of government, TCC, and other NGOs.

Question 4:

- There already exists some cadres of health workers who can prescribe, but who are unemployed.
- Vibrant professional associations who guard their territory jealously, and will resist health officers who will take their turf.
- Funding of initiatives.
- Challenges will be addressed through strengthening of health systems and development of human resources for health policy.

Question 5:

- Send report up for political approval.
- Dialogue with health professional associations.
- Current health and education sector reform is an opportunity.
- Harmonize teaching materials of public, private, and faith-based health training institutions.
- Develop strategies for accelerating training/upgrading of community health extension workers who serve rural peoples.
- Equip public health centers.
- Building sustainability of programs.

Discussion

Uganda – All countries are at different levels in training. The group is in agreement that the EPHTI would have to be adapted to the local levels and systems in place. Ethiopia had to first develop this program because of its long history and because of community perception of needs in the country. Because of the different levels of each country, this might be an advantage – we can start fresh in instituting systems that might not be there.

But a disadvantage is that because we're at different levels, the speed and modalities we'll use will differ from country to country. There is a lot in common by way of culture in these groups, so we can link and use similar experiences. However, the adaptation of this program would be very important. Political leadership is very important to get this off the ground.

Benin – Is there medical responsibility of health officers who have been trained? In Benin, it is only doctors who prescribe drugs; here, in Ethiopia, health officers can also prescribe drugs. What is the guarantee that is offered in case health officers make medical errors? What is the coverage that is given to health officers in case of medical mistakes, since they aren't educated as much as MDs?

Nigeria – What is the role of health promotion & education? The awareness among the community members is very critical to the success of health care delivery. We want to bring the community up to the level where they will demand quality health care delivery. Nigeria just launched its health care promotion, and while very expensive, we're realizing that this is the only way to wage war on malaria, etc, and the other things crippling our country. So when someone is sick, instead of going for quick medical attention, they rely on cultural believes such as sacrifices and faith-based beliefs. So we need to get the people to the point where they start demanding good health.

Col. Dr. Yodit, Defense College, Ethiopia – To the question of prescribing drugs by health officers and by doctors, those who do prescribe drugs are properly trained, and their privileges are qualified to certain levels and situations. There is a national registration for health professionals and those who can prescribe drugs. With regards to mistakes or malpractices, the professionals will be asked according to their levels. The most important thing is that we train them and there is a limit to their prescription abilities.

Regarding supervision of students, there will be a supervisor in each health center and hospital to make sure students are always supervised.

Nigeria (MOE) – I want to say something about Question 4, regarding barriers and challenges. We mentioned in our group that we have a sizable number of medical practitioners who will be resistant to training health officers. Also, there are a lot of categories of workers in the health field who are quacks and who mimic trained medical professionals who operate out of their homes. Quackery is a big problem in Nigeria. I want to know if that sort of situation is a problem here in Ethiopia, too. If so, what are you doing about it? What methods are you using to stop the quacks?

Tanzania – At the Dukem health center, we found that some of the students weren't supervised. Of course we heard that yesterday was hectic and an isolated incident, but we went through the case notes and found that students were prescribing. I think this is something to be examined, because we also found that case notes weren't always recorded properly without writing down an initial diagnosis. It is for the safety of the patients that students are supervised better and monitored so they will write better case

notes and initial diagnosis. There should be a continuous supervision, so at the end of the day, a student knows that it is not only how much time you spend on a student, but how much you spend on case notes, so as to not waste resources.

Uganda MOE – I would like to request for Dr. Yodit to make a comment on an observation made in our group. The observation is that health workers who are trained can serve very well in hard-to-reach and hard-to-serve areas, as well as being able to serve in disaster areas such as a famine. Civilian workers find it difficult to work in such areas, but military workers, because of their training, are used to it because they can withstand hardship. Would she find it useful to recruit into the military health workers and train them militarily, or have the soldiers first who can then be trained to become public health workers?

Col. Dr. Yodit's response - Yes, the military should be the first to go into disaster areas. Should we train health personnel as military, or military as health personnel? What we have been doing so far is to train all our health workers, especially health officers and nurses, in the area of disaster preparedness and triage skills. In the future, we envision having a specialty in emergency/disaster medicine.

MOH, Ethiopia – Dr. Tedwodros - We are very glad we are supporting EPHTI and are happy to be participating in this Replication Conference, because we have learned a lot from other countries. We've received a lot of help and information and experience from Ghana, South Africa, Cameroon, Rwanda, Uganda and Botswana. What I'd like to say is that we have tried to get experience from many countries around the world. The issue of finding experiences and adapting them to our situation is for continuous improvement. Our goal is to become a learning organization that engages in continuous improvement. It is good to scan our environment to give our people the best services out there.

Summary from Prof. Dennis Carlson on the day's discussion

Yes, there are many elements of what have been observed and experienced in last two days that are useful in countries that have participated. The energy and dynamism of the dialogue has been impressive. The commitment to propose in home governments new kinds of health service training and different volumes of workers being trained and new institutions being organized is very remarkable. As one of our delegates said, each of the countries has a different situation, and this program will have to be adapted and tailored to the specific country situation. All of the participating countries believe that they have already developed partnerships and alliances and common activities, particularly health, education, water, agriculture, environment, etc. There were many different kinds of barriers mentioned, but this needs to be dealt with assertively, patiently, but quite boldly. If the discussions with established professional associations can be held and with those who understand the real needs of the countries, they will support and continue, there will be commitment and movement towards those goals. There was general agreement that a report and a proposal would be presented to the home governments and in particular, active participation by the head of state and top level officials in each of the societies.

Specific steps will be taken and these will be communicated eventually to the international community and other funding sources. One country said, amusingly, that we have too many friends. We have to choose which of our friends to collaborate with. But if the vision is set and if the goals are committed, then the countries can choose which of their friends they want to work with.

Closing comments from Prof. Joyce Murray, Director of EPHTI

Thank you everyone for coming and our colleagues and all participants. There are some special thanks to those who have contributed to making this a special conference. Dr. Yodit, EPHTI Council members (past and present), Craig Withers, Shelly Brownsberger, the EPHTI RTA office, Dr. Hailu Yeneneh, and all staff. Thank you to the Shebelle Conference planner, Berhane. Together we created a wonderful event.

Contact Information of Participants at the EPHTI Replication Conference

Ministries of Health, Education and Science and Technology from Invitied Countries			
Name	**Title**	**Country/Organization**	**Telephone/Email**
Ato Birhanu Alebachew	Head, Higher Education and Research, Ministry of Education	Ethiopia Ministry of Education	251-091-168-2017
Dr. Adhana Haile	State Minister of Federal Ministry of Education	Ethiopia Ministry of Education	251-011-156-0063
Ato Yohannes Tadesse	Head, Human Resource Department, Ministry of Health	Ethiopia Ministry of Health	251-011-515-9976
Dr. Kebede Worku	State Minister, Ministry of Health	Ethiopia Ministry of Health	251-011-551-6396
Dr. Tedros Adhonom	Minister of Health	Ethiopia Ministry of Health	251-011-551-6378
Prof. Sogbadji Joseph Vodouhe	Distinguished Faculty Member, University d'Abomey-Calain	Benin Ministry of Education	229-95-28-9928
Mr. Vincent Faby	Director of Human Resources, Ministry of Health	Benin Ministry of Health	229-97-98-2473
Prof. George Saitoti	Minister of Education	Kenya Ministry of Education	254-20-34-3176
Dr. Noah Wekesa	Minister of Science and Technology	Kenya Ministry of Science and Technology	254-722-825-912
Mr. Bonaventure Maiga	Representative	Mali Ministry of Education	223-223-0545
Dr. Ngozi Njepuome	Director, Department of Public Health	Nigeria Ministry of Health	FAX: 234-9-523-4590

Dr. Tabita Botros Shokai	Minister of Health	Government of Sudan Ministry of Health	249-837-73-001
Dr. Peter Nyot Kok	Minister of Education	Government of Sudan Ministry of Education	249-1-83-774295
Dr. Theophilus Ochang	Minister of Health	Government of Southern Sudan Ministry of Health	256-477-107-454
Dr. Michael Milly Hussien	Minister of Education	Government of Southern Sudan Ministry of Education	N/A
Dr. Aisha Omar Kigoda	Deputy Minister of Health	Tanzania Ministry of Health	255-26-23-23-267
Dr. Richard Nduhuura	Minister of State for Health	Uganda Ministry of Health	256-41-250-042
Hon. Gerldine Namirembe Bitamazire	Minister of Education	Uganda Ministry of Education	256-41-234-451
Hon. Courage E.K. Quashigah	Minister of Health	Ghana Ministry of Health	233-21-66-5323
Mrs. Angelina Baiden-Amissah	Deputy Minister of Education, Science and Sports	Ghana Ministry of Education, Science and Sports	233-21-67-2540

Partner Organizations with EPHTI

Name	Title	Organization	Telephone/Email
Dr. Tadesse Whuib	CDC- Ethiopia, Country Director	CDC	251-011-466-9547
Dr. Yigeremu Abebe	Country Director, Clinton Foundation-Ethiopia	Clinton Foundation-Ethiopia	251-091-121-7708
Dr. Tesfaye Bulto	Acting Project Director, ESHE Project-Ethiopia	ESHE	251-091-121-0773
Dr. Mengistu Asnake	President, Ethiopian Public Health Association-Ethiopia	Ethiopian Public Health Association	251-011-661-3330
Dr. Tsehaynesh Messele	Director, Health & Nutrition Research Institute	Health Nutrition Research Institute	N/A

Ms. Saba K/Mariam	Ipas-Ethiopia, Country Director	Ipas	251-011-662-6312
Carlo Resti	Italian Cooperation T.A.	Italian Cooperation	251-011-618-3070
Ms Anne Pfitzer	JHPIEGO-Ethiopa, Country Director	JHPIEGO	251-011-618-7823/25
Dr. Negussu Mekonnen	Senior Technical Advisor, Management Service for Health	Management Service for Health	N/A
Mr. Donald Yamamoto	USA Embassy, Ambassador Extraordinary & Plenipotentiary.	USA Embassy	251-011-151-7400
Ato Tilahun Gidey	Pathfinder-Ethiopia	Pathfinder	251-011-661-3330

Donor Organizations

Name	Title	Organization	Telephone/Email
Ms. Sono Aibe	The David and Lucile Packard Foundation	The David and Lucile Packard Foundation	251-011-662-7073
Ato Sahlu Haile	Packard-Ethiopia, Senior Advisor	The David and Lucile Packard Foundation	251-011-662-7074
Mr. Glenn Anders	Mission Director, Ethiopia	USAID	251-011-551-0088
Ms. Susan Anthony	Chief, Health Population and Nutrition Office	USAID	251-011-551-0088
Ms. Judith McCord	Health Team Leader	USAID	251-011-551-0088
Ms. Natalie Thunberg	Contracting Officer	USAID	251-011-551-0088
Dr. Kassahun Belay	Cognizant Technical Officer	USAID	251-011-551-0088
Ms. Melissa Jones	HIV/AIDS and PERFAR Officer	USAID	251-011-551-0088

EPHTI Network Members			
Name	**Title**	**Organization**	**Telephone/Email**
Dr. Asrat Genet	Head, Amhara Regional State Health Bureau	ARSHB	251-091-834-0523
Dr. Gebreab Bernabas	Head, Tigray Regional State Health Bureau	TRSHB	251-091-430-0164
Ato Fekadu Aga	EPHTI Council Member, Addis Ababa University	Addis Ababa University	251-091-103-3684
Ato Berhane G/Kidan	Addis Ababa University	Addis Ababa University	251-091-112-5186
Dr. Damte Shimelis	EPHTI Council Member, Addis Ababa University	Addis Ababa University	N/A
Dr. Bekele Kebede	EPHTI Council Member, Defence College of HS	Defence College of Health Science	251-091-140-5691
Col. Dr. Yodit Abraham	EPHTI Council Member, Defence College of HS	Defence College of Health Science	251-091-120-0667
Prof. Belay Kassa	President, Haramaya University	Haramaya University	251-025-661-0707
Ato Melake Demena	EPHTI Council Member, Haramaya University	Haramaya University	251-091-574-2196
Ato Tadesse Alemayehu	EPHTI Council Member, Haramaya University	Haramaya University	251-091-105-2656
Prof. Zinabu G/Mariam	President, Hawassa University	Hawassa University	251-091-658-0262
Ato Negga Baraki	Former EPHTI Council Member, Haramaya University	Hawassa University	251-091-574-5812
Dr. Zelalem Kebede	Former EPHTI Council Member, Hawassa University	Hawassa University	251-091-682-7598
Dr. Tadesse Anteneh	EPHTI Council Member, Hawassa University	Hawassa University	251-091-175-8119

Ato Dejene Hailu	EPHTI Council Member & Secretary, Hawassa University	Hawassa University	251-091-682-9271
Dr. Kaba Urgessa	President, Jimma University	Jimma University	251-091-755-0509
Prof. Challi Jira	Jimma University	Jimma University	251-091-780-1957
W/t Birhane Megerssa	EPHTI Council Member, Jimma University	Jimma University	251-091-780-4469
Dr. Tefera Belachew	Former EPHTI Council Member & Secretary,Jimma University	Jimma University	251-091-780-4072
Dr. Kifle Woldemichael	Chairman of EPHTI Council Member, Jimma University	Jimma University	251-091-780-4029
Dr. Mitiku Haile	President, Mekelle University	Mekelle University	251-034-440-9228
Dr. Yazezew Kebede	EPHTI Council Member, Mekelle University	Mekelle University	N/A
Prof. Tefera Abula	Vice President, University of Gondar	University of Gondar	251-058-114-1236
Ato Melkie Idris	University of Gondar	University of Gondar	251-091-877-7661
Ato Getu Degu	Former EPHTI Council Member, University of Gondar	University of Gondar	251-091-877-6010
Ato Mamo Wubeshet	EPHTI Council Member, University of Gondar	University of Gondar	251-091-877-1522
Ato Amsalu Feleke	Former EPHTI Council Member, University of Gondar	University of Gondar	251-091-877-1312

The Carter Center Staff

Name	Title	Organization	Telephone/Email
President Jimmy Carter	Former US President and Co-Founder, The Carter Center	The Carter Center	1-404-420-5100

Mrs. Rosalyn Carter	Co-Founder, The Carter Center	The Carter Center	1-404-420-5100
Dr. John Hardman	Executive Director	The Carter Center	1-404-420-5100
Mr. John Moore	Chairman of The Board of Directors	The Carter Center	1-404-420-5100
Dr. Donald Hopkins	Associate Executive Director for Health Programs	The Carter Center	1-404-420-3830
Mr. Craig Withers	Director of Program Support	The Carter Center	1-404-420-3830
Dr. Joyce Murray	Director, EPHTI	The Carter Center	1-404-420-3830, joyce.murray@emory.edu
Dr. Dennis Carlson	Senior Advisor, EPHTI	The Carter Center	1-404-420-3830
Ms. Shelly Brownsberger	Assistant Director, EPHTI	The Carter Center	1-404-420-3830, shelly.brownsberger@emory.edu
Dr. Hailu Yeneneh	Resident Technical Advisor, EPHTI	The Carter Center	251-11-553-6833, ephti@ethionet.et
Ato Aklilu Mulugetta	Senior Program Manager, EPHTI	The Carter Center	251-11-553-6831, ephti@ethionet.et
Mr. Assefa Bulcha	Program Manager, EPHTI	The Carter Center	251-11--554-1043, ephti@ethionet.et
Ms. Meseret Tsegaw	Executive Office Manager, EPHTI	The Carter Center	251-11-553-6832, ephti@ethionet.et
Mr. Negussie Bekele	Monitoring and Evaluation Officer, EPHTI	The Carter Center	251-11-554-1044, ephti@ethionet.et
Ms. Meryl Bailey	Public Information	The Carter Center	1-404-420-5100, meryl.bailey@emory.edu
Ato Teshome Gebre	Country Representative, Ethiopia	The Carter Center	251-11-663-1863

MAILING ADDRESS OF THE CARTER CENTER

Ethiopia Public Health Training Initiative
The Carter Center
One Copenhill
453 Freedom Parkway
Atlanta, GA 30307
U.S.A.

Phone: +1-404-420-3830
Fax: +1-404-874-5515

THE
CARTER CENTER

Waging Peace. Fighting Disease. Building Hope.