Giving Back to the Community: Community Development Projects Implemented by Academics in Ethiopia

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Contents

List of Figures and Tables iv
Preface vii
List of Acronyms and Abbreviations xi

Chapters

1 Introduction 1
Helmut Kloos, Getnet Tadele and Worku L. Mulat

2 Arya Jawi: A Faith-Based Community Development Project 15
Kebebew Daka, Tsegab Kebebew Daka and Aynalem Adugna

3 Building Household Resilience in a Village in South Wello Zone Using a Family Approach 29
Worku L. Mulat, Abate L. Mulat, Cheru L. Mulat, Zewdu L. Mulat, and Yirga L. Mulat

4 Bridging Gaps and Building Opportunities: Reflections on my Experience of Engaging in Community Development in Azena 53
Getnet Tadele

5 Grarbet Tehadiso Mahber, a Non-Governmental Organization in Central Ethiopia: Its Inception and Development over the Last 20 Years 93
Redda Tekle Haimanot

6 Conclusion 116
Helmut Kloos and Getnet Tadele

Contributors 122

Figures and Tables

Figures

2.1 Women members of Arya Jawi Church and the savings and credit program 20
2.2 Students attending classes in Arya Jawi Church School 22
2.3 The landscape around Arya Jawi. Note the remnant tree from the original forest in the foreground 25
3.1 The *woredas* of South Wollo Zone, Ethiopia 31
3.2 Farm plots after nine months of drought in 2014. Kersole Village is in the background 33
3.3 Menbere Tsehay Kersole Mariam Church 36
3.4 Hand dug well on raised stone platform, water tanker and supply line in Kersole 38
3.5 Toilet facility with water source equipped with shower and water for flushing 39
3.6 Nursery with three seedlings and plowed seed beds framed by young eucalyptus trees 41
3.7 Traditional and modern bee hives surrounded by recently planted trees 42
3.8 Mobile phones being recharged at the charging unit providing service to Amayo and surrounding *kebeles* 45
3.9 The electric motor and the two flour mills 46
4.1 Ayo River during the rainy season 57
4.2 Ayo River during the dry season in April 2008 60
4.3 The bridge under construction and during the opening ceremony in May 2009 60
4.4 Daily traffic on the bridge 60
4.5 Two laboratory buildings constructed in 2010 66
4.6 The high school library built and furnished in 2010 66
4.7 Two elementary school classrooms before renovation 70

4.8 One of the elementary school classroom blocks and a renovated classroom 72
4.9 Surroundings of some of the renovated buildings 73
4.10 Elementary school students in a renovated classroom 73
4.11 The new elementary school library 75
4.12 Azena Preparatory School: Two new classroom blocks, IT lab and technical drawing room 78
4.13 Officials visiting the IT room in the preparatory school 78
4.14 Two of the high school building blocks renovated with support of Live to Give Charitable Trust 80
4.15 Celebration of the completion of the preparatory school; people came from Azena and surrounding areas 80
4.16 The celebration of the completion of the preparatory school was started with a ceremonial blessing 81
4.17 Selection of contractors for the construction of the new elementary school in Azena in the presence of many community members and donors 86
5.1 Grarbet operational districts (*woredas*) in the Southern Nations Nationalities and People's Republic (SNNPR) and the Oromia Regional State 94
5.2 Grarbet Hospital in Butajira and Grarbet Secondary Eye Center in Ziway 98
5.3 Different activities of GTM's comprehensive eye care services at Grarbet Hospital in Butajira 99
5.4 The development and use of a hand-dug well and water system maintenance workshop 101
5.5 Assistive devices produced by the GTM workshop and a girl fitted with assistive devices 104
5.6 Different aspects of vocational skills training 106
5.7 The rehabilitation of Abenet Abera 107
5.8 Health education at health posts and in schools 109

Tables

3.1 Agroecological zones and altitude of selected *woredas* and peasant associations of Wollo South Zone 33
5.1 GTM yearly achievements of the different services, 2010-2014 112

Preface

The perception that university professors in Ethiopia and other developing countries are preoccupied with teaching and research in the "ivory tower" of academic pursuits to the neglect of active and effective participation in socioeconomic development on the ground prevails. This view is especially widely held among people in industrialized countries unaware of cultural traditions and the increasing social activism of academics in developing countries. In Ethiopia, programs by the central government and universities geared toward recruiting university faculty and students and engaging them in various conservation and rehabilitation, resettlement, water/sanitation, and educational programs go back to the establishment of the first universities in Ethiopia under the Haile Selassie regime. Interest in community development programs increased largely because of the realization that communities and the country at large can benefit from the knowledge and commitment of university educated individuals, reaching peak levels following the sociopolitical upheavals of the past four decades. Less publicized approaches to community development reflecting culturally proscribed social obligations of offspring looking after the wellbeing of aging parents and extended family members have been practiced since time immemorial but these relationships have not been examined in the context of university-locality of birth linkages. This book examines four projects initiated by college educated individuals with the aims of presenting evidence that academics can, in fact, help develop their rural home base and proposing that the paradigm of community development in the university setting may have to be expanded in view of the rising trends in university-locality of birth linkages. The diversity of the projects and sub-projects presented in this book range from planting of trees to installation of beehives, the development of a savings and credit program for women, the construction of schools and a bridge, as well as the provision of health services in large catchment areas of hospitals and clinics. These undertakings may provide insights into a wide range of possibilities in community development that other university faculty may want to

consider pursuing. Similarly, the diversity of planning and managerial approaches used by the projects—whether church-based committees, family links with the diaspora, or an individual's initiative assisted by community-based committees and managed by an indigenous non-governmental organization (NGO)—can provide a best-practices guide for engagement in different environmental, social, and cultural projects in varied environmental, social, and cultural settings. We hope the successful completion and operation of all projects, in spite of numerous challenges, will inspire and guide other university educated persons to plan and implement infrastructural and social services projects needed by their home communities.

We are indebted to many individuals for their help and encouragements. Most of them, except two, are mentioned in the individual chapters. Here we want to thank Mrs. Ann Byers for her assistance with editing and formatting the manuscript and Mr. Matebu Tadesse for technical assistance.

Helmut Kloos and Worku L. Mulat

Acronyms

CR	Country representative
CSO	Civil society organizations
EECMY	Evangelical Church Mekane Yesus
FGCF	Francis G. Cosco Foundation
GTM	Grarbet Tahiso Mahber
NGO	Non-governmental organization
PiHA	Partners in the Horn of Africa
PSNP	Productive Safety Net Program
PDW	Person with disability
USD	US dollars
WASH	Water, Sanitation, and Hygiene program
WHO	World Health Organization

1
Introduction

Helmut Kloos, Getnet Tadele, and Worku L. Mulat

Community Development: Definitions and Approaches Used

Community development definitions and approaches have evolved over time and currently vary widely. The notion of community development first emerged from British literature and experiences in Africa and India in the 19th century and focused on the development of social welfare and basic education using models developed in Great Britain (Smith 2013). These experiences, together with the subsequent growth of nationalism and economic development in the post-colonial era, are revealed in a United Nations document which defined community development as "a generic term used to describe the processes by which local communities can raise their own standard of living" (UN 1956). But the processes and activities, including the establishment of services for social welfare, health, education, and the development of agriculture and industries, were implemented mostly under the sponsorship of national governments and NGOs rather than by local communities themselves (Smith 2013; UN 1956). This contradiction between the stated goals of community development as a vehicle and process of participation and self-help on the one hand and top-down planning and administration of programs as part of national development plans on the other, led to widespread disillusionment and brought few benefits for many years (Smith 2013).

The definition of community development continues to be controversial partly because community development is both a process and an outcome and because integrated community-specific and unified approaches that assess local problems, build capacity, and then address

the problems are rare (Wise 1998). Nevertheless, consideration of seven major components of the community development approach can guide readers of the four successful case studies presented in this volume. They are the following: (1) community development characterized by self-help, mutual support and cooperation, development of capacity for problem solving, and empowerment of collective action to inform political decision makers of community priorities and needs; (2) social planning that addresses community needs and problems and the planning of programs or strategies for solving them; (3) extension of services of agencies or other outside service providers and making them more accessible; (4) capacity building as a "bottom-up" approach to development, where people are the formulators of their own development rather than a prescribed, pre-packaged set of interventions conceived and implemented by outsiders; (5) community participation, which in addition to self-help denotes increasing responsibility and possibly ownership of community assets (Smith 2013); (6) trusted community leaders with skills to promote the mobilization for empowerment; and (7) outside support from the government and NGOs (Alene 2011).

The focalization of these processes and elements at the community or locality level where the poor live, work, and learn their livelihood skills further facilitates the positive outcome of community development projects (Friedman 1992). These relationships and the wider literature on alternative development in recent decades are evidence that poor people in developing countries are not passive subjects but primary actors and more capable of solving local problems than top-down development policies and programs (Cheshire 2006). The capacity of communities to solve their own problems is also illustrated by 53 stories by senior management students from many developing countries, showing that communities successfully constructed roads, bridges, and schools and developed income generating activities, reforestation projects, and antipollution measures using the self-help approach (Mathie and Cunningham 2003).

Community Development in Ethiopia

Government sponsored

In Ethiopia, government, indigenous and international churches, local and international NGOs, and universities have contributed much to community development. The Haile Selassie regime developed an "integrated rural development" strategy to accelerate economic growth in several geographical areas in the late 1960s and early 1970s. Perhaps the best known of these programs were the CADU (Chilalo Agricultural Development Unit) in the former Chilalo *Awraja* in Arsi Region, the WADU (Wollayta Agricultural Development Unit) in Wolamo (Wollayta) *Awraja* in the former Sidamo Region, and the MPP (Minimum Package Program) in different parts of the country. The objective of these programs was to develop agricultural extension, credit, and marketing that would encourage participation of the target population in making decisions in the formation of cooperative societies and mechanized farming. Although some success was achieved towards small farmer development, peasant participation was generally low, the required material and financial inputs could not be sustained, and the necessary managerial capacity for cooperative framing could not be achieved (Tecle 1974).

The land reform by the Derg regime; the formation of peasant associations, service cooperatives, and agricultural producers' cooperatives (collective farms); and the implementation of villagization, resettlement and food-for-work programs brought many social and political changes. These institutional policies and programs facilitated state intervention in agricultural production and marketing and have been associated with an economic crisis marked by a decline in the living standard and an increase in food insecurity in the 1980s and 1990s and increasing alienation of the population from the government (Aredo 1993; Henze 1989). Perhaps the most beneficial programs for the rural population during the Derg regime were the health and literacy programs. Adoption of the primary healthcare approach and decentralization of health services, with corresponding increases in health facilities and manpower in rural areas, significantly

increased access to healthcare and disease prevention for the masses of the population (Kitaw et al. 2012, 2014). Literacy campaigns increased literacy rates significantly under the Derg, when school attendance became compulsory for all citizens above eight years of age. However, the imposition of rigid curricula formulated for political reasons and lacking flexibility for successful application in different cultural contexts, as well as economic impediments, were major drawbacks of that program. Because conditions for adult education were not favorable, literacy rates declined sharply after 1991 (Kenea 2014).

The current Ethiopian government has been operating, largely with donor funding, the Productive Safety Net Program (PSNP), the largest social safety net program in Africa, since 2005. By 2015, it provided food for labor on small public works projects to about 8 million food insecure people in six regions. From the initial emphasis on emergency relief this program has increasingly focused on development through providing credit, agricultural extension, and microenterprise advice towards food security and building assets for livelihood diversification (The Ethiopia Observatory 2014, World Bank 2015). Nevertheless, while program administrators consider the PSNP as having fostered environmental rehabilitation, infrastructure development, and asset creation, beneficiaries tend to see it as an emergency relief program (Devereux et al. 2008). In the lowlands, the government launched in 2004 the 15-year Pastoral Community Development Project (PCDP), aiming to help 5 million pastoralists and agro-pastoralists with domestic water supply, clinics, schools, animal health posts, livestock marketing and vaccination centers, and other needs. Although this program has been referred to as "community driven service provision" (Mburathi 2014) and as such is more likely to facilitate community development than the PSNP, logistic problems prevailing in the sparsely settled lowlands and, more importantly, the government's slow pace in ceding some decision making to civil society and private business (NATO 2010) may limit real community development. Small-scale government projects well connected to supporting agencies appear to fare better, as demonstrated in Chapter 4.

Faith-based organizations

A large number of community focused development programs have been developed by churches, NGOs, and universities. Similar to the situation in other African countries, there is little empirical data on their impact due to the scarcity of research (Dalelo and Stellmacher 2012). The Ethiopian indigenous evangelical churches, particularly the Ethiopian Evangelical Church Mekane Yesus (EECMY) (Peace of Jesus) and the Kale Heywot Church (Word of Life), emphasizing the holistic ministry approach (spiritual, physical and psycho-social growth), have encouraged and initiated many community development projects. Both churches have supported the developmental goals of communities, including potable water, sanitation, food security, savings/small credit credit, natural resources management, conservation schemes and soil and water conservation (Abiche 2004; Negeri 2010). EECMY had 5.8 million members in 2012, and Kale Heywot had 6.5 million members in 2010, making them the largest indigenous evangelical churches in Africa (EECMY 2012; Menberu 2004).

Non-governmental organizations (NGOs)

International and local NGOs, currently being referred to as civil society organizations/nongovernmental organizations (CSOs/NGOs), have been important agents of development in Ethiopia. Following the 1984/85 famine CSOs/NGOs broadened their focus from famine relief to a larger agenda, including human rights, governance, advocacy, environmental rehabilitation, poverty alleviation, food security, health, education, income generation, and self-help, among others (Chelkeba 2011). Three of the four chapters in this book describe projects supported by NGOs. The number of CSOs/NGOs in Ethiopia increased from 240 in 1998 to about 600 in 2000 and to 2,305 in 2007. The number declined to 1,761 in 2011 and to approximately 1,500 in 2013, with similar declines in the number of beneficiaries and employees of CSOs/NGOs (Ravelo 2013; Chelkeba 2011). The reason for this decline is the passing by the Ethiopian government of Charities and Societies Proclamation No. 621/2009 in 2009, which curtails their fundraising activities and operations. The law was promulgated to

prevent international NGOs from engaging in politically and socially sensitive activities and "as a primary tool enhancing the transparency and accountability of civil society organizations" (Chelkeba 2011:2). The vagueness of the law and the punishment of violators have "created a state of controversy and lack of trust between the government and the civil society sector" (Chelkeba 2011: Abstract).

The Academic Community at Home and Abroad

The university-community connection dates back to the famines of the 1970s, when university students and faculty supported famine victims through a famine relief fund (Zewde 2014:181) and then served in rural areas in the *zematcha* campaign of the Derg regime. In recent years, several departments in five universities sent students to conduct outreach activities in communities as part of their academic requirements. For example, the Ethiopian Institute of Water Resources Development of Addis Ababa University and four other Ethiopian universities sent undergraduate students to urban and rural communities to assess water and sanitation conditions, construct latrines, and develop new water supply technology, such as defluoridation (EIWR 2014). Social work students from Addis Ababa University carried out skill assessments and capabilities of households in a poor Addis Ababa neighborhood to inform a development agenda that involved community members, *kebele* administration, and the university faculty. Difficulties and misunderstandings arose during these dialogues and discussions because the students were viewed as outsiders (Yeneabat et al. 2012).

All chapters in this book were authored by current or former academics from Addis Ababa University and Jimma University who carried out social service and infrastructure projects in various small towns and rural villages in northwestern, northeastern, western, and southern Ethiopia. Three of the projects were undertaken in the rural communities where the authors were born (Daka et al., Mulat at al., and Tadele) and one author had worked for many years as a physician (Teklehaimanot). Although the projects were of different sizes and

durations, addressed different problems, and used different strategies, they all were headed by one or more individuals who played central roles in defining project objectives, generating the necessary resources, and implementing and evaluating the projects.

The Four Community Development Projects

Chapter 2, by Ato Kebebew Daka (a former lecturer in the Sociology Department of Addis Ababa University) and co-authors, describes six projects developed by a local family-based foundation in close collaboration with the Ethiopian Evangelical Mekane Yesus Church (EECMY) in Arya Jawi *Kebele* in the Eastern Wollega. One of the authors was born in Arya Jawi. The other two are members of the Buraka Family Committee. They help manage the Buraka Memorial Fund. The pastor of Arya Jawi EECMY submits annual reports to committee members. The six projects being carried out in 2014/15 are: (1) spiritual growth and capacity building, (2) savings and credit program for women, (3) sponsorship program for poor preparatory and high school students, (4) construction of the first dry-weather road that links Arya Jawi to the Addis Ababa-Nekemte highway, (5) environmental and natural resources rehabilitation, and (6) raising awareness about harmful traditional practices. The success of the overall project, which resulted largely from effective management of out-of-pocket contributions by the Buraka Committee members and resources made available by the EECMY congregation, has been recognized by the local *woreda* administration as a model for community development. This project used the bottom-up approach to community development characterized by successful community-based planning, intervention, and capacity building through a church-linked family committee.

The other three projects discussed in this book depended to a greater degree on outside inputs, both from NGOs and in the form of private contributions by the authors, and management. These have also achieved their objectives. The main lesson learned is that communities with different priorities, capacities, and project objectives can benefit

from various approaches to addressing their particular socioeconomic, spiritual, and environmental needs.

The projects presented in Chapter 3 by Dr. Worku Mulat (formerly an Associate Professor in environmental science at Jimma University and currently associated with the University of Connecticut, USA) and his five brothers used a unique family approach to community development that has hitherto not been reported in the Ethiopian community development literature. The project launch involved the return to their place of birth—Kersole Village in South Wollo Zone—of six Mulat brothers living abroad and two living in Ethiopian towns to carry out various projects aimed at benefiting their family and the wider community. Assisted by their intimate familiarity with the living conditions and socioeconomic conditions in Kersole and using their own financial resources, the authors were able to identify and support eight projects ranging from the spiritual to the economic, water/sanitation, and technological needs of the community. The project was implemented in a span of 10 years, starting with the construction of the first church in the village in 2005. Subsequently the six project founders installed a safe ground-water source, built a toilet, developed a nursery and apiculture, connected the village to the electric grid, installed a station to charge mobile phones, opened a kiosk to sell household goods, and built two flour mills. The connection to the electric grid, the installation of the mobile phone charging station, and the building of the flour mills all had a trickle-down effect on the entire village and nearby communities that had not had access to these services in the past. The information and experience gained in the administration of this family-based project has shed new light on best practices for community development and can inform other Ethiopians in the diaspora looking for a new paradigm in leveraging family-based resources to initiate community-run rural development. The project also demonstrates that a seemingly impossible task, connecting a remote rural village to the electric grid (Dalelo 2003), can be accomplished successfully by dedicated community members in the diaspora.

In Chapter 4, Dr. Getnet Tadele of the Sociology Department of Addis Ababa University describes the infrastructure project he developed in

close liaison with local officials and NGOs in Azena community in Agew Awi Zone in Amhara Region. A native of that area, the author recognizes the crucial importance of preparatory and high school education in achieving personal and societal goals and also recalls the drowning of fellow villagers in the course of crossing the seasonally swollen Ayo River. He therefore developed a plan to build schools and a bridge. He obtained funds from international NGOs that were managed and disbursed by a community committee and NGO and worked with local community leaders and administrators to facilitate the construction process. The new steel bridge not only prevented further drownings but also resulted in increased road traffic in the *woreda.* This benefited businesses; met social needs; and increased access to markets, healthcare, and other services. The construction of three schools increased access to primary and secondary education and prepared students for higher education. Upgrading Azena elementary school to a high school eliminated the long trips and dormitory living expenses in distant towns and increased high school attendance. Renovation and furniture upgrades for the elementary school, the building of a library, and installation of toilets improved the teaching and learning environment and increased the school's enrollment capacity. Moreover, upgrading the existing general secondary school to a preparatory school significantly increased access to preparatory education required for university entrance. In addition to the personal gains higher education confers on individuals, there is evidence it helps Ethiopia's subsistence farmers increase their production (Weir 1999). Tadele ends the chapter by briefly describing his next project in Azena, the building of a new elementary school to further increase access to primary education. The successful completion of the projects and the consequent increase in access to primary, secondary, and tertiary education are proof that collaboration among community, committed individuals, and NGOs can contribute significantly to increased access to education in rural Ethiopia.

In Chapter 5, Professor Redda Tekle Haimanot summarizes his many years of public health, water resources development, and broader livelihood promoting work in several communities in the Lake Ziway

and Gurage areas. He launched his projects after retiring early from his position as a Professor of Neurology at Addis Ababa University to devote his retirement years to helping underserved communities. By 2015, the indigenous NGO he founded (Grarbet Tehadiso Mahber—GTM) employed 120 health professionals, technicians, and rehabilitation and support staff in a hospital in Butajira Town, four eye care centers in Butajira and Ziway towns, and numerous community outreach centers**.** Taken together, these facilities provide services that are scarce in Ethiopia. They are especially scarce in small towns and rural areas where comprehensive eye care, trachoma control and WASH (Water, Sanitation and Hygiene), epilepsy treatment services, ear and hearing care, physical rehabilitation services, vocational skill training, and training of health professionals and teachers are hard to come by. GTM has a reputation not only for the excellent services it provides but also for its contribution to community development and wider health service coverage in surrounding areas. Its sanitarians have developed spring, well, and rainwater sources for human consumption and are promoting the WASH program in collaboration with sanitation committees formed by the peasant associations at the community level and in schools. Moreover, the village-based vocational skills training program, administered by local skilled staff and rehabilitation workers, teaches crafts to rehabilitated disabled patients to promote self-sufficiency and self-esteem. In addition, training of local high school graduates in occupations ranging from construction workers to community health agents and health extension workers constitutes a significant achievement in capacity building. The extension of GTM's services to 10 *woredas* in Southern Nations Nationalities and People's Region (SNNPR) and Oromia Region constitutes a much needed but challenging development effort. Clearly, the low fees charged by GTM for its services cannot cover the operational costs of operating this large multidisciplinary organization, requiring substantial financial contributions from international NGOs and other sources. GTM has now grown into a mature, effective, efficient, and locally accepted NGO that may inspire other health professionals to give back to the community by providing medical and social services holistically and sustainably.

Chapters 2 and 5 use the third-person and Chapters 3 and 4 the first-person nomenclature. Whereas third-person usage is the standard in quantitative writing, first person can better convey social elements of the research process in qualitative research based on intimate personal participation of the author(s) (Webb 1992). Use of first person in Chapters 3 and 4 is justified because these chapters are based on information directly obtained by the authors themselves whereas the information in Chapter 2 was obtained largely from two committees and in Chapter 4 from the NGO the author heads.

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2
Arya Jawi: A Faith-Based Community Development Project

Kebebew Daka, Tsegab Kebebew Daka, and Aynalem Adugna

Introduction

Arya Jawi *Kebele* is located 10 km east of Nekemte Town in Wayu Tuka *Woreda*, East Wollega Zone, Oromia Regional State. The predominantly Oromo population of the *woreda* numbered just over 66,000 during the 2007 national census. About 63,000 reside in rural areas (FDRE 2008); this includes an estimated 3,000 people in Arya Jawi *Kebele*. Subsistence agriculture characterized by *teff*, sorghum, and maize cultivation and livestock husbandry form the economic base. Transportation is mainly by foot and by beasts of burden as the rugged terrain of the area impedes motorized transportation. It also curtails access to social and economic services. No systematic social and economic surveys have been undertaken in Arya Jawi *Kebele* to show the magnitude of poverty and deprivations. However, extreme poverty, environmental degradation, decreasing agricultural production, gender inequality, high population growth, illiteracy, low levels of sanitation and healthcare, and problems related to lack of access to safe drinking water and transportation are known to prevail.

The authors are members of the Buraka Family Committee, which was instrumental in initiating and managing the Arya Jawi community development project through the church that family members built in 2001. Kebebew Daka is a former lecturer in the Department of Sociology of Addis Ababa University. He and Aynalem Adugna established the Buraka Memorial Foundation in 2000, named after

Buraka, a well-known and influential community leader who lived in Arya Jawi *Kebele* in the early 1920s. Kebebew subsequently set up a committee—the current Buraka Family Committee—whose board oversees the day-to-day operations of the foundation. As head of the foundation, Kebebew continues to make periodic visits to Arya Jawi in his retirement years from his home in Addis Ababa and provides guidance to his nephew, Fikru Regassa, a possible successor. The project has been supported by the Ethiopian Evangelical Church Mekane Yesus (EECMY), which established the parish at a later stage, gave it recognition, and assigned a pastor to carry out the church ministry. A sizeable portion of development activities is being funded by members of the Buraka Family Committee and other committed family members in Ethiopia and in the diaspora.

The Ethiopian Evangelical Church Mekane Yesus (EECMY) was introduced into Wollega Region in 1890 and has served the region for more than a century with strong ties to and assistance from the church headquarters in Sweden (Negeri 2010). Subsequently EECMY expanded with four founding synods: the Western Wollega Synod, the Eastern Wollega and Shoa Synod, the Sidamo and Gamo-Gofa Synod, and the Wollo and Tigre Synod (Galla, 2011). In 2009, 58.8% of the 63,000 residents of Wayu Tuka *Woreda*, where the project site of Arya Jawi is located, were Protestants (nearly all EECMY members), 28.7% belonged to the Ethiopian Tewahedo Orthodox Church, 9.1% to the Catholic Church, 0.4% were Moslems and fewer than 50 individuals reported themselves to be members of traditional religions, which is a very small proportion. For Oromia in general, the true proportion of persons adhering to traditional religions is undoubtedly higher but the suppression of Oromo ritual practices and beliefs persists under the veneer of Christianity (Bulcha 2015). The proportion of Protestants was more than four times larger in this *woreda* than in Oromia Region overall but Muslims represented only 1% of the *woreda's* population. Large EECMY congregations are also found in Gambela Region and in southern Ethiopia but not in the northern and eastern parts of the country, where the Ethiopian Orthodox Tewahido Church (EOTC) and Islam have traditionally prevailed, respectively (Negeri 2010).

Similarly, the great majority of the Arya Jawi residents are EECMY members, with a small number of Catholics who attend church services in neighboring communities. However, no information is available on the size of the EOTC, Muslim, and traditional Oromo religion followers. Arya Jawi Church is doing its level best to accommodate traditional Oromo religious beliefs while at the same time carrying out its primary mission of spreading the gospel.

A cornerstone of EECMY theology is holistic human development that emphasizes spiritual and social development based on the worldly ministry of Jesus Christ. The various EECMY churches have adopted this model, although local conditions largely determine which one of the two objectives is prioritized (Galla, 2011:51). The Buraka Family Committee and the church leadership are deeply committed to the cause and have been guided and inspired by Bible verses such as "As the body without the spirit is dead, so faith without deeds is dead" (James 2:26), "Jesus went about doing good" (Acts 10:38), and those who trust in God are instructed to "devote themselves to doing what is good" (Titus 3:8).

Arya Jawi Church and the Buraka Family Committee

The founding of the Buraka Family Committee was inspired by the community leader Buraka. Some of his descendants who had the opportunity to obtain higher education and later became Christians decided to give back to the community a fraction of what was invested in them. They formed the Buraka Family Committee in 2000 to provide assistance to the community through the church. The Committee decided to mobilize resources to address some of the major pressing problems with personal contributions constituting the initial inputs and wider support eventually added. The committee has been interested in a holistically developed community that can be a model for other congregations in the *woreda*.

The following nine developmental challenges were identified to be addressed in phases, starting with felt-needs, with the goal of holistic

development that considers the spiritual, physical, and environmental needs of the Arya Jawi community: (1) problems surrounding child education, (2) health problems affecting women and children, (3) poverty, (4) environmental degradation, (5) declining agricultural production in the face of increasing land scarcity, (6) low status of women and unequal division of labor, (7) high population growth rates in the face of dwindling natural resources, (8) issues revolving around child rearing practices, and (9) transportation problems related to access to the Addis Ababa-Nekemte road. The committee's vision is to help create a holistically developed and prosperous community taking good care of its human and environmental resources based on Christian principles and meeting environmental challenges. The primary mission is to build capacity and enable the Arya Jawi community to become holistically developed and self-reliant and to reduce poverty or eliminate it if possible. These goals are to be achieved by raising awareness levels of the community, conducting various capacity building activities, and mobilizing both human and material resources based on the principles of holistic development, self-help, and self-reliance.

There were no major development activities in the Arya Jawi area prior to the founding of the Buraka Memorial Foundation in 2000, the main exception being the construction of an elementary school, which was built by members of Kebebew Daka's family, including his niece Mulu Itana. Resource conservation, environmental stewardship, hygiene, child nutrition, and community self-help were concepts first introduced to the community by the foundation. One of the major consequences of past neglect is land degradation and soil erosion caused by extensive deforestation for charcoal making to supplement family incomes and the expansion of degraded agricultural land to include hitherto unaffected and fertile forest lands.

Ongoing Spiritual Development Initiatives and Poverty Alleviation Programs

Starting in 2000 and particularly since a visit by a diaspora member in 2008, the Buraka Family Committee and the church have worked in close cooperation to achieve the major goals set out initially. The pastor of the church plays a major role in the day-to-day administration of community development projects. The various programs of the development project are being implemented based on annual plans of action. The focus is on resource mobilization that will facilitate work on the existing programs and address emerging challenges. The pastor sends annual summary activity reports to the Committee in Addis Ababa, which shares these with friends and donors. The head of the Committee or his representative pays a visit to Arya Jawi *Kebele* at least once a year and often two or three times a year to see the progress of the programs and encourage the community. Six groups of spiritual and community development programs were carried out in 2014 and 2015. These are discussed in detail in the following sections.

Spiritual and related activities

Religious activities were attended by over 350 congregation members in 2015. Additionally, there were 83 Sunday school attendants (50 girls and 33 boys). Other programs included youth activities**,** women's spiritual activities, outreach services**,** training/capacity building activities, and leadership development activities.

The goal of the spiritual activities is to spread the gospel and follow the Mekane Yesus Church's motto of "serving the whole person." These activities have fostered community collaboration through weekly church attendance, during which issues of helping the needy and selfless devotion to others are discussed (Figure 2.1).

Figure 2.1. Women members of the Arya Jawi Church and the savings and credit program.

A savings and credit program for women was initiated in 2001 to help 54 female church members who were organized into four groups for the purpose of mutual support and collective savings. By 2015, 52 women had participated in the program. Each of these women borrowed 500 Birr during a four year period, primarily towards the purchase of livestock, clothes, and shoes. They were able to collectively earn 87,404 Birr by 2013, with individual earnings ranging from 110 Birr to 8,490 Birr. Members who owned nothing, not even a hen, at the start of the program now have chickens, goats, and other small animals and some have cows and oxen, which contribute to household food security. Group members and their children now attend church with better

garments and shoes and are in better physical health. The group members have 83 pre-school children who attend Sunday school regularly.

Other income generating projects initiated by the church include animal fattening for sale in the open market, bee-keeping, and coffee tree planting. However, these activities are in their infancy. Each group member saves 10 Birr weekly; these savings are deposited after each monthly meeting of the group in a collective savings account in a bank in Nekemte. Most of the savings are to be distributed to new cooperative members for further income generation.

This discussion indicates that Arya Jawi community has developed a strong sense of self-reliance and is laying the foundation for a better future. The program was evaluated by the *woreda* office in November 2012. The *woreda* experts were deeply impressed with the performance of the community development program and sent a letter of appreciation to the church in which they described the program as a model for other churches. They thanked the church and the Buraka Family Committee for the exemplary community development program they founded.

Student sponsorship program

A sponsorship program started by the church in 2001 addresses the needs of children who have completed grades six or eight (a national examination is administered at the completion of grades 6 and 8) but find it difficult to pursue education in higher grades due to poverty (lack of school uniform, shoes, stationery, sanitary materials, etc.). The Buraka Family Committee assists such children after screening by the church's sponsorship committee. On average, 10 students receive financial assistance annually. In the 2014/2015 academic year, eight students who received assistance graduated from elementary and high schools and only one failed; another student dropped out. A number of girls discontinued school over the years due to early marriage. In 2015, two students enrolled in a university and a college through the sponsorship program (Figure 2.2).

Figure. 2.2. Students attending classes in Arya Jawi church school.

The education sponsorship program has been encouraging as the program has inspired most youths in the church school to pursue their education. These boys and girls could not pursue education without such assistance due to poverty and lack of family support. It is anticipated that the program will produce leaders who will lead and contribute to Arya Jawi's community development aspirations in the years to come.

Infrastructure development

The church considers infrastructural improvement to be vital to any development. Until recently, Arya Jawi *Kebele* was inaccessible by motor vehicle. Through community mobilization and cash infusion by family members, a 4km dry-weather road was constructed. Building this road was costly and challenging because of the absence of building materials such as sand and stones in the *kebele* and the resulting need to

acquire them from distant *kebeles* or even other zones. The church can now bring in building materials and other goods during the dry season on the dirt road the community built although the rugged topography of the area remains a major problem.

Environmental protection and development

The environment and natural resources of Arya Jawi *Kebele*, on which the inhabitants depend for their livelihood, have been increasingly impacted by poverty and overpopulation. These and other social as well as demographic factors, rather than lack of environmental awareness, may be the major driving forces in the degradation of the natural environment in Arya Jawi as the Oromo have traditionally protected the natural environment in manners proscribed by the indigenous Oromo religion (Kelbessa 2001). Some of the Arya Jawi women haul firewood and occasionally charcoal, which is sold predominantly by men to Nekemte to earn extra cash for the purchase of cooking oil, kerosene, salt, soap, and sugar. Wood is needed in the area primarily for energy, for housing construction, and for furniture making. Wooded areas of the village continue to be cleared for farming and dense forests are burned in the name of destroying insects but primarily to clear wooded areas for use as farm plots and for planting crops (Figure 2.3).

Overgrazing is a significant problem in Arya Jawi *Kebele* as families keep small or large herds on the community grazing land, which includes both grassland and wooded areas. Cattle are kept in enclosures for overnight deposition of dung. Three sides of the rectangular corrals are removed weekly and reinstalled in adjacent spaces. This permits the gradual fertilization of the land for cultivation and represents a manure management system which is more beneficial for agricultural production than the systems in other Ethiopian highland areas, which use animal manure mostly as a fuel (Mekonnen 1999).
According to living witnesses, Arya Jawi *Kebele* was covered with dense forests that supported many wild animals of different species some 40 or 50 years ago. Only a few of the wild animals exist in the area today.

Figure 2.3. The landscape around Arya Jawi. Note the remnant tree from the original forest in the foreground.

Between 2008 and 2015, encouraging measures were taken by Arya Jawi Church to reverse the destructive trend in the natural environment. These measures include:

- Putting in place seed beds and seedling raising programs around the church and in selected areas for reforestation
- Protecting flora and fauna that are becoming scarce in the area
- Educating the community about the importance of the natural environment, including wild plants and animals, in sustaining economic activities

- Making the compound of the church a demonstration and practice site with a variety of trees planted; other churches now visit the church to learn from the best practices
- Encouraging church members to plant at least 10 coffee seedlings and 10 other plants on their compounds each year in a competitive spirit; prizes are given out to winners/achievers
- Constructing hand-dug wells to water seed beds and plants during the dry season.

Awareness raising against harmful traditional practices

Harmful traditional practices, especially those affecting women and children, are causes for concern. These practices are reflected in the low status accorded to women and gender-based division of labor that is biased in favor of men. Additionally, traditional treatment of the sick, such as exorcism of the "evil eye" and use of traditional healers, discouraged the use of modern health facilities. Hospitals and clinics continue to be visited by many only as a last resort in late stages of illness or after accidents. The absence of a health center in Arya Jawi *Kebele* promotes the use of traditional medicine, which may provide psychological benefits but does not actually treat the illness or address underlying causes. There is also concern over child-rearing practices such as dietary intake among children, and the lack of a saving culture, to name a few concerns. Experts from sectoral *woreda* offices (health, agriculture, and social services) regularly visit the Arya Jawi community for awareness raising and capacity building activities to bring about attitudinal changes in in this and other communities. Such capacity building activities are highly appreciated by participants of both sexes in Arya Jawi, who try their level best to implement what they have learned.

The most important achievement, in the opinion of the Buraka Family Committee, are tangible attitudinal and behavioral changes away from apathy and non-participation in community activities toward increased awareness of the prevailing socioeconomic and environmental needs

and active and committed participation in community affairs, self-help, and self-reliance.

Challenges

Of the various programs discussed in this chapter, environmental conservation is least likely to generate positive changes in the short term primarily due to persisting poverty and lack of alternative income sources for this agricultural community. Environmental degradation and decreasing carrying capacity of the land may be controlled and reversed only with further progress in socioeconomic development and greater awareness of the importance of environmental conservation and natural resources management.

Much work also remains to be done with respect to parents' attitudes toward the education of their children as most parents tend to attach little value to education even in this 21st century. The urgent need for raising of community awareness cannot be overemphasized. Poverty also impacts school enrollment and attendance. Most parents give less priority to children's schooling and greater emphasis to realizing child labor contributions, including herding small animals, running errands, fetching water, and other domestic activities. It is believed that nonattendance of Sunday school affects children adversely in their primary education by depriving them of the chance for early engagement in learning, although this observation needs further study. Part of the problem is the lack of qualified Sunday school and public school teachers.

The project suffered a big setback in 2014, when the pastor, a strong proponent of community development activities, left the church. Finding a replacement has been difficult due to the low number of educated persons in the area as well as lack of leadership skills in the community. Capacity problems remain a major concern. Since the departure of the pastor, the Buraka Family Committee has been facing the problem of monitoring the project and of receiving progress reports

from the church. It is hoped that this problem will be solved shortly**.** Similar leadership issues and community mobilization for the ministry now represent a significant problem in a number of EECMY synods in Ethiopia (Negeri 2010), not just in Arya Jawi.

Another concern of an internal nature for EECMY is the rise and spread of secularism, which threatens to weaken the social fabric and community bonds as well as communal cooperation in the project, as observed in other EECMY churches in Ethiopia (Negeri 2010). On the plus side, the threat of indigenization of religion, where Christianity is seen as foreign, and competition from Islam, both of which have been reported by other EECMY churches in Ethiopia (Negeri 2010**)**, are of little concern in Arya Jawi due to the small number of persons adhering to indigenous religions or Islam in this community and in Wayi Tuka *Woreda* at large.

Conclusion

The Buraka Family Committee, in close collaboration with the local EECMY Church, has been playing the leading role in development projects in Arya Jawi *Kebele*. The Committee's goals are to achieve the most with the lowest possible level of external financial inputs; to ensure the sustainability of the project by mobilizing the community through the local church; and to meet the spiritual, physical, and social needs of the Mekane Yesus congregation in a holistic manner. Although external support has been instrumental in financing development activities to date, there are efforts in the making to accord the project a more self-sustaining future. To this end, a major objective of the Committee is to mobilize the people for self-help and self-reliance, thereby reducing the risk of a dependency syndrome. In sum, the overarching focus of Arya Jawi Church's community development effort is to holistically plan for both the spiritual and physical needs of its congregation. Results to date indicate that sustainable spiritual, economic, social, health, and environmental developments can be achieved through church leadership and community mobilization.

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3

Building Livelihood Resilience in a Village in South Wollo Zone Using a Family Approach

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Introduction

Born and growing up under economic hardship in a rural village in the drought-prone Wollo Region, we were determined at an early age to escape the cycle of poverty through higher education. Today, all six of us have enjoyed the benefits of urban cultures in Africa, Europe, and the United States. We returned to Kersole Village in recent years to implement a community development project, the results of which are presented in this chapter. Kersole Village is located in Amayo *Kebele* in Jama *Woreda*, South Wollo Zone. For the majority of its approximately 350 residents, life has changed little during the three decades since we left the area. Thus our descendants still live under precarious conditions. Non-government organizations are reluctant to go into this remote area due to lack of all-weather roads. Subsistence agriculture on dwindling plots of degraded and eroded land can no longer sustain the ever increasing population. As a result, many parents are now responding to the crisis by sending some of their children to nearby towns and the Middle East for better job prospects. Adult men have been migrating seasonally for decades to work as laborers on commercial farms in the Awash Valley. This case study demonstrates that this situation can be reversed through altruistic endeavors along

family and neighborhood lines. Our father once said, “Even though you have started a new life in the United States, do not cease to help one another, including your descendants back home.” In response to this local wisdom, the six authors were motivated to help their parents and improve livelihoods in their village as a way of paying back their community. They followed their father’s advice and developed several projects in Kersole Village. In the following sections these various projects are highlighted, challenges and opportunities presented, and lessons learned documented.

Ethiopia has been praised for its outstanding natural beauty, dramatic landscapes, and ancient cultures. The European Council on Tourism and Trade selected Ethiopia out of 31 countries as the 2014 top holiday spot (Eastaugh 2015). On the other hand, the nation is still known as a prime example of prolonged and devastating droughts and famines in Sub-Saharan Africa. The smallholder mixed farming units in the densely populated Ethiopian highlands cannot ensure food security through on-farm production or purchasing capability (Negatu, 2004). South Wollo Zone is particularly vulnerable to the vagaries of the weather. Unlike most other Ethiopian highland regions, which grow their crops during both the *belg* and the long *kiremt* rains, South Wollo Zone depends mostly on the *kiremt* rains, prolonging the seasonal hunger period. The land in this mountainous landscape is degraded and eroded; plots are becoming smaller and smaller; and lack of income diversification makes the people vulnerable to hunger and famine. Consequently, South Wollo has been referred to as “the buckle of Ethiopia’s famine belt” and has experienced recurring severe droughts (Little, 2002a). Thousands of people died during the 1973/74 and 1984/85 famines. During the 1999/2000 drought, when 16% of Ethiopians received food rations, one-half of South Wollo’s population depended on food aid (Figure 3.1; Little, 2008). A recent rain distribution assessment report by OCHA (2015) showed South Wollo received only 5-20% of normal rainfall in the *kiremt* season of 2015.

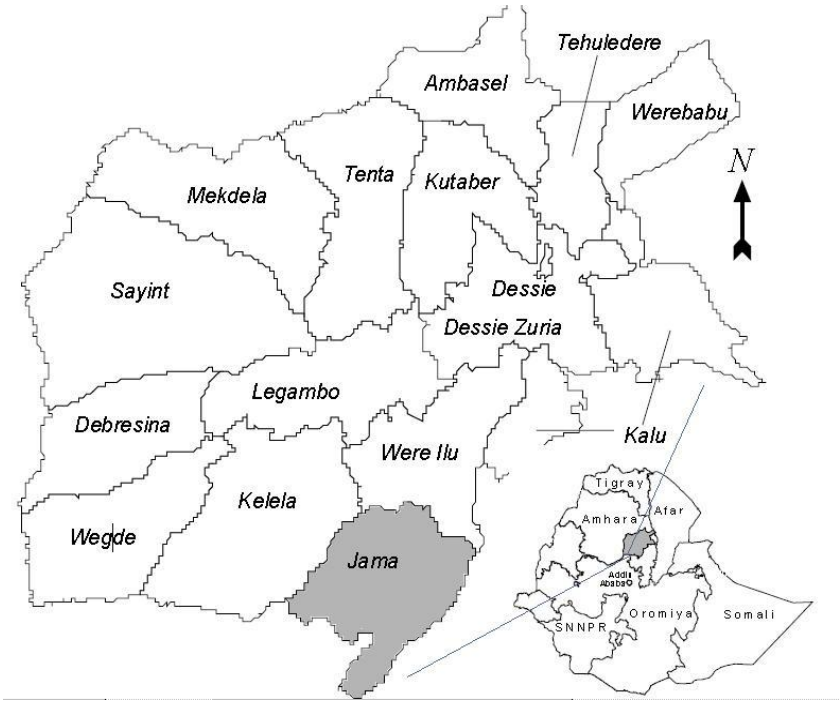

Figure 3.1. *The woredas* of South Wollo Zone, Ethiopia. Source: Little 2002a.

Food insecurity in Amayo *Kebele* in Jama *Woreda*, with a population of 127,467 in the 2007 census (FDRE, 2008), follows a similar pattern. Residents informed us that they had experienced one of the longest rainless periods in 2015. This is quite disturbing as residents of the *woreda* have to endure food insecurity after home-grown food stocks become depleted after the single *meher* harvest, usually between May and September.

Jama *Woreda* has some of the highest illiteracy rates and proportions of female-headed households in South Wollo Zone; these households

represent the poorest segment of the population. A household illiteracy rate of 73.8% and a female-headed household rate of 30.8% were reported by Negatu (2004), which are higher than those reported for Ethiopia overall in 2011 (26.1%) (World Bank no date). The high proportion of female-headed households in South Wollo Zone is apparently due to male migration to commercial farms and towns for work, although this requires further study. Increasing numbers of single-headed households have been reported throughout Africa; they are associated with a higher dependency ratio, fewer assets, less education, smaller households, less male manpower, limited access to land and credit, and thus greater vulnerability to food insecurity (Tempelman 1996). These statistics and the prevailing environmental conditions, including climate change as manifested by increasing warming and flooding (Moges et al. 2010), indicate the vulnerability of the local peasants to production shortfalls and their low capacity to diversify their livelihoods and overcome poverty and hidden inequalities in rural settings.

Kersole Village is located in the cool *dega* agro-ecological zone on a high plateau in Amayo *Kebele* at a mean altitude of 2,630 m (Table 3.1; Little (2002b). This *kebele* lacks surface water except for a few scattered springs located at considerable distance from the village and an intermittent stream carrying silt laden water from soil erosion during the rainy season. Due to the scarcity of surface water it was first inhabited as recently as the early 20th century, at a time when the surrounding areas had already been occupied for a long time. Mixed agriculture involving the staples wheat, barley, and *teff* and livestock raising, mainly cattle, sheep, and goats, constitutes the economic base of most households. During the drought in 2015, many fields were not planted due to lack of rain or the experience of disastrous crop failure (Figure 3.2).

Table 3.1: Agro-ecological zones and altitude of selected *woredas* and peasant associations of South Wollo Zone

	Peasant association	Mean altitude(m)	Agro-ecological zone
Jama	Tulumojo	2,670	*Dega*
	Yedo	2,690	*Dega*
	Amayo*	2,630	Dega
Legambo	Temu	3,480	*Dega*/*wurch*
	Tachakesta	3,150	*Dega*
Dessie	Tebasit	3,180	*Dega*
Zuria	Gerado	2,330	*Woina dega*

Sources: Little (2002b); *field measurements by the authors in Amayo *Kebele*.

Figure 3.2. Farm plots after nine months of drought in 2014. Kersole Village is in the background.

Family History and Planning the Project

The authors grew up in a large extended family in Kersole Village in South Wollo Zone which was founded by our grandparents, Aleka Mulat Metekia and Emahoi Wosene Desta, almost a century ago. Our family eked out a living as share croppers in the 1960s and 1970s. Plots became even smaller during the land reform in 1975 due to frequent land distribution and frost and drought frequently killed our crops. Our parents realized that our large family could not be sustained on our small plots and decided to send us to school.

Dividing our time between school and helping our parents on their farm and living from the meager farm production, the authors developed a strong desire for education and eventually helping our parents and rural community. Our parents, who never attended school, have seen all their children graduate with BSc, MSc and PhD degrees in physics, computer science, ecology, chemistry, and math. Our father did not live long enough to enjoy the success of his family but our mother is still alive and cherishes our accomplishments. Through the miracle of education, four of us made it from our remote village to Bill Gates' neighborhood, where two are currently working at Microsoft as software engineers. But this and our recent community development project in Kersole Village are just part of the success story. It will not be complete until the authors and out whole community extend our hands to lift the village out of poverty.

In 2005, the authors conceived the idea of launching a livelihood improvement project in Kersole Village. Both Lakew and Yirga traveled to Ethiopia to make feasibility assessments and identify potential projects that could be implemented. In order to mobilize the required financial resources, the authors established the non-profit organization Serving Ethiopia Foundation in the United States. But legal requirements to operate this NGO in Ethiopia became a major hurdle with the introduction of a new law at that time (this law is mentioned in the Introduction). Thus the authors abandoned plans to raise funds through this organization in favor of mobilizing family-

based resources. In 2005, we decided to first build a church in Kersole Village and then develop a water supply. This was to be followed by constructing a line connecting to the electric net to provide electricity to several households and building a flour mill and charging units for mobile phones. After the water supply was found to be more than adequate for domestic needs, the authors introduced a small-scale irrigation scheme for vegetable cultivation and tree planting.

Implementation of the Projects

Building the church

The people of Amayo *Kebele*, in particular Kersole Village, had entertained hopes for many years of building a church to better meet the religious and social needs of the community. Concrete plans were finally made in 2005 under the leadership of community leaders and individuals, primarily the authors, their immediate families, and some community leaders**.** The land for building the church was donated by our parents, Legesse Mulat and Wudie Tadesse. Our father's name has been inscribed on the church in recognition of his contribution. Yheyis Mulat, currently serving as coordinator of the church activities, also contributed a small plot. Besides the authors of this case study, Kassahun Yimer, an engineer; Menilik Yheyis, a nurse by training; as well as several other people born in the village contributed money to building the church (Figure 3.3).

Since the completion of the church the villagers no longer have to carry the bodies of their loved ones for burial ceremonies to distant churches and many social events and religious ceremonies are held in the new church. In addition, many more Sunday school children now receive church education and adults bring food and drink to the church, providing priests and the congregation with lunch after prayer. In the past these and other important social and religious functions had to be discontinued during the rainy season, when swollen rivers impede overland travel to far-away churches. Almost a decade after its

establishment, the church was recognized by the community as well as the w*oreda* administration as a religious institution.

Figure 3.3. Menbere Tsehay Kersole Mariam Church (built in 2006, photo taken in September 2014).

Water supply and irrigation project

Potable water has always been considered a precious resource in Kersole Village and the demand will most likely increase significantly in the foreseeable future in response to increases in both the size of the community and household consumption. Consequently, collecting water for domestic purposes was and remains one of the most important household duties in Kersole and other communities in Jama *Woreda*. In the past, household water consumption was regulated to balance demand and the meager supply. The major water uses in a typical household involved drinking (both humans and animals), cooking, and personal hygiene (bathing and cloth washing). There were competing demands for the limited water fetched by girls and women (although water fetching was largely the domain of females, at times males in families with more male manpower also participated in this activity). During the rainy season the water needs of several households were supplemented with roof water collected by using gutters and collection containers from typically old and rusted corrugated iron roofs. Prior to our project, all domestic water had to be fetched from distant unprotected springs or rivers that were not safe for human consumption or through roof water harvesting.

The authors faced two challenges in developing safe and adequate water supplies. First, it was difficult to identify locations where water could be found at a relatively shallow depth. Second, it was necessary to separate animal watering and domestic water collection points to ensure that water for human consumption would not be contaminated. The first problem was solved by engaging locally trained water supply experts who had both modern techniques and indigenous knowledge of the area. The second problem was solved by putting the pump on top of a raised cemented stone platform and using a long pipe that freely rotated to supply water designated separately for animal watering and human water at the collection points (Figure 3.4).

Figure 3.4. Hand-dug well on raised stone platform (left), water collection tanker and supply line (right) in Kersole.

In an effort to improve food production in Kersole Village, the authors launched a small- scale irrigation project on a plot of about 0.1 ha our family owned. In order to satisfy irrigation needs, a multipurpose hand-dug well was constructed in 2010 and equipped with two water storage tanks. One tank was built from concrete and buried underground. The second one, shown in Figure 3.4, was provided by Jamma *Woreda* Agricultural Extension Office. Local masonry workers trained through the *woreda* agricultural extension program manually dug a shallow well. Construction of the well took close to a month and an Indian hand pump was installed to serve as a multipurpose water resource. The well has an estimated flow rate of 25 liters per minute. It has to satisfy the domestic water demand of village households and their animals and provide water for irrigating a vegetable garden and, recently, also for planted trees. It has been in existence for three years now and the well is satisfying all water needs, even during droughts. Cabbage, garlic *(nech shinkurt*), and other garden vegetables have been grown successfully. In 2014, close to 400 kg of garlic were harvested, with part of the surplus sold in the market. This is a remarkable success, considering that this is the first attempt to implement an irrigation project in the village. In the beginning, all residents of Kersole were allowed access to the water from this well. However, they failed to

comply with the request to contribute labor to dig additional wells nearby. Consequently, the *woreda* office asked the operators of the well to lock the water source to indirectly force households to develop their own wells through *woreda*-assisted projects.

Sanitation project

One of the public health challenges in a rural setting such as Kersole has been the provision of functional toilets and their proper use and maintenance by the community. Having acceptable toilet facilities not only ensures the dignity of the people, but is also a critical health requirement. Therefore, the authors constructed a toilet equipped with a shower and running tap water for hand washing in August 2013 to provide service for our family and to inspire others to build their own toilets (Figure 3.5). Although open defecation was the norm in the 1970s and 1980s, most people now use pit latrines. However, their poor construction and maintenance appears to have discouraged households from continuing to use them. Unlike the traditional pit latrines, the new toilet facility is used by all residents in the neighborhood, suggesting that quality of toilets is an important factor in the success or failure of sanitary interventions.

Figure 3.5. Toilet facility with water source (left) equipped with shower and water for flushing (right).

Nursery, silviculture, horticulture, and apiculture project

Considerable income has been generated and household expenditures reduced through the production of vegetables, nursery seedlings, and honey. The authors developed the irrigated nursery with its silviculture, horticulture, and apiculture subprojects at household level on our family plot with the hope that it will serve as a demonstration ground for other families (Figures 3.6 and 3.7). Although the *woreda* agricultural extension bureau encouraged other households to replicate this project, none had done so by late 2015. Villagers told us the high initial investment cost is the major impediment. Nevertheless, this self-help project may serve as an entry point to identify, formulate, and implement other income diversification projects that enable farmers to take advantage of *woreda* and international assistance programs in utilizing improved water management technologies and new horticultural methods.

Mid-altitude and lowland crops such as sorghum and millet, which are highly drought tolerant and give relatively high yields, do not grow in the cool *dega* agro-ecological zone of Jama *Woreda* and elsewhere in the Ethiopian highlands (Teshome et al. 2007; Hari et al. 2006) (Table 3.1).

In the past, it was difficult to spot a tree in Kersole. The authors recently planted five species of trees from seedlings, most of them good sources of fuel wood, animal feed, and food for bees. These include *Acacia saligna* (*omedla*), *Acacia decurrens* (*yeferenji grar*), *Acacia abyssinica* (*yeabesha grar*), *Eucalyptus globulus* (*nech barzaf*), and *Eucalyptus camaldulensis* (*key barzaf*). The introduction of new plant species in the village encouraged the development of bee keeping, an unintended benefit of this program (Figure 3.7). Traditional apiculture has a long history in Ethiopia and continues to be practiced in South Wollo (Adal et al., 2015).

Figure 3.6. Nursery with tree seedlings (top) and plowed seed beds framed by young eucalyptus trees (bottom).

Figure 3.7. Traditional and modern bee hives surrounded by recently planted trees.

The crucial role of reforestation in maintaining ecosystems, providing fuel wood for cooking, providing other ecosystem services, and reducing soil erosion has been described by numerous authors from various parts of the Ethiopian highlands (Bishaw and Asfaw 2010; Lowman and Mulat 2014). The authors hope that tree planting and vegetable growing will be taken up by more households in Kersole and other villages, contributing to resilience to drought in the face of climate change and dwindling resources.

Kiosk project

The goals of opening a kiosk in the village in August 2013 were to increase the availability of common manufactured household goods, provide a local outlet for farm produce that could benefit both households and the wider community, improve food security, and

supplement household incomes. Our families used to divert a considerable amount of their crops and other farm produce to buying spices, salt, coffee, soap, and other household goods from the market, contributing to the exhaustion of food reserves prior to the next crop cycle. Households throughout the village used to adjust to the ensuing food scarcity by reducing the number of daily meals. The sale of butter, cheese, and milk in exchange for market goods further increased food deficits throughout much of the year. The implementation of the kiosk project provides supplemental household incomes and ensures that food is on the table throughout the year. In addition to expanding the income base of households, this project brings household items closer to consumers at lower prices. These various benefits may therefore play vital roles in improving the nutritional status of households.

At the village level, the success of the kiosk undertaking prompted another household to open a second kiosk and supplement its income. This helped reduce the need for long treks to nearby towns at least once a week to trade farm produce and animal or dairy products in local markets. Thus the establishment of several kiosks in Kersole by different households brings more manufactured products close to home, saving travel time as well as money. The potential domino effect of this income-generating activity may be considerable. For example, some young people who migrate to nearby towns, cities, and even across borders to the Middle East and Europe could stay home and make a better living working in kiosks and other home-spun enterprises. For instance, two people were employed permanently and temporarily in kiosks in Kersole in 2014/2015. Not only males but also females have opened kiosks. A mother of six recently opened her own kiosk as an off-farm activity. The kiosk owners report that these micro ventures are sizeable and sustainable sources of income.

Electricity grid connection

A recent World Bank report shows that 73.4 percent of the Ethiopian population had no access to electricity in 2012. Coverage in remote rural areas was significantly lower. Ensuring access to electricity in rural households is a daunting task from the economic as well as the

administrative perspective. Nevertheless, the World Bank report (2015) noted that access to the grid provides numerous opportunities for socioeconomic development, ranging from a healthier indoor environment to the use of electric light, household appliances, and machines**.**

The project manager, Zewdu Legesse, skillfully negotiated with the *woreda* authorities to secure the delivery of a transformer in July 2014. The electric supply arrived to our mother on 16 July 2013; our father did not live to see this joyful event. A nearby household also got access to electricity. Poles were being erected in mid 2015 to extend the electric service to the church. Several households resorted to solar energy and many others are considering connecting to the electric net, which is fed by hydropower. Through this self-help effort, Kersole Village is now the first village in the area to be connected to the electric grid. The first two major benefits coming from the electricity are the installation of a mobile phone charging facility and of two electric flour mills, described below, and satellite TV has also become accessible.

Mobile phone charging facility

Our family constructed a small house with a charging facility that can handle up to 50 cell phones at a time (Figure 3.8). The cost of charging a mobile unit is in this facility is less than in towns and, probably more important, the facility makes the charging service readily accessible locally. Moreover, this small business is providing much needed extra income to our household. Farmers from the surrounding villages are now recharging their cell phones each day, saving them travel to more distant charging stations.

Besides the mobile charging facility, market goods such as soap and other necessities needed for rural life are now locally available. Thus customers coming to charge their mobile phones can also buy household items in one-stop shopping.

Figure 3.8. Mobile phones being recharged at the charging unit providing service to Amayo and surrounding *kebeles.*

Flour mill project

As young boys, the authors were told that their father had to travel more than a day to reach a hydraulic flour mill. That was long before the introduction of diesel operated flour mills. Diesel flour mills were introduced in the region but the authors' family had to travel a long distance to those mills. Thus Kersole villagers continued to manually grind their flour using stone and pestle. Childhood memories of this hard work prompted us to install two electric flour mills. Since the electric grid connection also required a business plan to justify connection to the electric grid in this remote area, the authors bought two flour mills. They started operating in 2013—almost two years after the machines were installed (see Figure 3.9).

Figure 3.9. The electric motors (right) and the two flour mills (left).

Since their connection to the electric grid, the two mills have been operating long hours each day to process the large amount of grain they receive, unimpeded by the frequent blackouts occurring in Addis Ababa and other major towns. The location of the project nearer to the hydropower source and away from major towns precluded power rationing. Farmers are coming to use the service in Kersole even from areas close to towns because of lower milling prices and better treatment of customers. Two permanent and three temporary workers were employed by the community in 2015 to run the mills. Economic performance of this project so far is very encouraging and promises to be sustainable. Obviously, the benefit of such a small business in a rural setting is far reaching: it promotes resilience of households to food insecurity and brings grain milling service closer to villagers, creating free time for other important socioeconomic activities.

Challenges and Opportunities

This community development project revealed that Kersole and to some extent also surrounding communities could be provided with

spiritual, water, sanitation and technological services and food resources more effectively and appropriately through family self-help endeavors than by the typical government programs or international aid organizations that have yet to arrive. The information and experiences gained through this family-based project shed new light on best practices for Ethiopians interested in helping their rural communities and academics looking for a new paradigm in rural development.

The time saved from some of the interventions is enormous. People are no longer required to travel to distant towns to charge their mobile phones, mill their grain, and buy household necessities. They no longer need to go to faraway communities for church services, prayer, religious ceremonies, and death processions. The project has provided employment for several permanent and part-time workers and may be expected to provide more job opportunities. Due to increased food security and higher incomes the authors' household in Kersole is no longer dependent on remittances from its three sons who live abroad, and the wider community is benefiting as well.

Ensuring the project's sustainability and its potential for expansion to nearby communities carries a number of challenges. First, the culture of saving in Kersole Village, including in our own household, is weak. Even during a good harvest season, there were times of the year when the number of meals per day had to be reduced to one until the next harvest. There is a tendency to share rather than save resources in the extended family system. This practice reduces any profit made from the project and thus resources for investment. As a result, project maintenance costs have to be constantly paid for from our (the authors') pockets, raising the question of whether the project may be sustainable. Labor cost in particular is relatively high as a total of 10 workers (4 permanent and 6 temporary) are employed by our family. Although employment creation for these people is a lofty goal, it presents a financial challenge in the initial stage of this small-scale project, especially due to the high up-front cost of installing the two flour mills, the water supply, and the electricity line.

Bureaucratic delays in obtaining permits and other hurdles are challenge that need to be taken into account in planning rural development projects. For instance, it took more than a year to approve and install the connection to the electric grid, after all the required inputs for running the project were put in place. Another challenge was the tenuous collaboration among family members running the project. Family members other than the six authors have shown a tendency to divide the various projects and run them individually, the outcome of which we consider an impediment to the smooth operation and profitability of the project.

At the community level, the observed resistance to digging wells, notwithstanding the fact that the *woreda* bureau was willing to provide considerable subsidy and expertise, constitutes another weakness in collaboration that may be due to lack of community leadership. These observations corroborate the finding by Negatu (2004) that culturally embodied traditional values and attitudes toward work, time management, capital accumulation, and profit often negatively affect livelihood activities and the management of households in South Wollo Zone.

Conclusion

Because it contributes to meeting the economic, social, and spiritual needs of the communities it serves, the family-based project in Kersole can be regarded as successful. The planning and most of the implementation and management activities could be carried out by the six authors/family members who made repeated trips to Ethiopia from the diaspora. Although the Kersole project does not represent a community development project in the sense that it features mostly for-profit interventions and was planned and managed by family members rather than community-based organizations, the economic trickle-down effect improves the livelihood of the whole community. But the construction of the church was clearly a community effort embraced by all Kersole residents. The logistics of reaching this isolated village,

particularly from the diaspora, made regular visits difficult and impeded the development of community self-help groups and management capacity. This problem could be largely solved by scheduling the visits of individual brothers at different times to ensure their frequent presence in Kersole for the implementation of the various projects.

Remaining tasks and challenges include the up-scaling of well and toilet construction and better sanitation for the wider human and livestock population of the community to prevent contamination of water supplies, as well as expanding the irrigation, silviculture, and beekeeping activities to strengthen food security and the income base. Sustainability of this project will require broader community participation and investment. This account of the activities, achievements, and bottlenecks of this project may both encourage and guide other members of the Ethiopian academic community and the general public to develop similar projects in their home areas as an expression of gratitude and respect for their families. Moreover, this case study can broaden our understanding of community development needs in areas in the Ethiopian highlands chronically impacted by drought and offer insights into potential remedial actions. We addressed some of the high priority livelihood issues of our family and other residents of Kersole Village. Other urgent needs include access to land, labor, oxen for plowing the land, credit, the development of alternative income sources other than those described in this chapter, and climate change. Perhaps above all, the need for parents to send their children to school should be addressed for this and other in drought-affected communities in Ethiopia to enable residents to cope effectively with perennial and acute livelihood challenges.

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Kersole project, and our father, Ato Legesse Mulat, who led the effort of building the church and had a strong wish to connect Kersole to the electric grid. He did not live long enough to enjoy the outcome of the project but his leadership in making Kersole a better village in which to live continues to inspire our whole family. Finally, we appreciate the support provided by the Jama *Woreda* Agricultural Bureau and the Kersole community as well as many individuals.

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4

Bridging Gaps and Building Opportunities: Reflections on My Experience of Engaging in Community Development in Azena

Getnet Tadele

The bridge has brought a sigh of relief to the women and men in this community. Many of our sisters and daughters used to dread the day they will give birth. With no bridge over the river, there was no easy way of getting a woman in labor to the clinic. We were separated from our families and relatives, we couldn't even go to market to sell our produce and buy things we needed. Every journey across the river was perilous. But the bridge has put an end to all of that and today we are able to come and go as we please. (A woman from Azena area)

The high school and preparatory schools have brought a lot of joy to our lives. First, these schools are fully equipped, fully staffed and modern so our children are getting the best education they can. That is cause enough for happiness by itself. But what makes us even happier is that they are getting such an education right here while they are with us. In the past, our children had to go far away to attend high school and preparatory school. They had to live apart from us and that meant a lot of costs. From food to housing, everything required money, and there weren't many who had it. Even if they could afford the costs, there was the separation from family, which made things hard for both children and parents. Children missed their families and parents missed their children. So all of that made education a lot harder than it ought to be and it was painful. It was especially hard for our girls; they

risked a lot by going somewhere and living amongst people they did not know. They could be robbed, they could be raped, and they did not have anyone they could call upon for help. But not anymore. Today our girls and boys can pursue a good education right here amongst us without having to go through all that trouble, and this has brought so much joy to all of us. (A female resident of Azena in November 2015).

Introduction

I grew up in the rural village of Dogen near Azena Town in the Anekesha Gugsa *Woreda*, Agew Awi Zone of the Amhara Regional State. During my childhood I became aware of two major problems the people of my village and surrounding communities faced, namely the threat of drowning when crossing the local Ayo River and the lack of access to elementary and secondary schools within a reasonable distance. After moving to Addis Ababa, where I obtained my university education, I decided to help the Azena community to safely cross the Ayo River and obtain better access to education. Since 2006, I have been working with NGOs and the community of Azena, in which I attended elementary school, to design and implement the construction of a bridge over the Ayo River, upgrade the Azena elementary school to include a high school by building additional classroom blocks and a library and laboratory facilities, renovate the elementary school, and build a senior secondary (preparatory) school. This chapter describes the implementation impacts, challenges, and lessons learned from these infrastructure projects.

The initial impetus for undertaking community development projects in Azena was the annual loss of lives to the Ayo River during the main rainy season. This seasonally swollen river used to claim about 20-30 lives during every rainy season, and it was heartbreaking to witness babies taken by the river from the backs of their mothers. It was traumatizing for families and relatives to find the bodies of the drowning victims, which sometimes took days or weeks. The river also

swept away property and goods. I grew up with such sad memories and in 2005, when I returned from my PhD studies in the Netherlands, I decided to do something to help.

Together with Getnet Mossie from Azena I developed a proposal in English and Amharic and e-mailed it to around 250 charities operating in Ethiopia, asking them to partner with the Azena community in constructing a bridge over the Ayo River. In spite of the lack of positive responses from these charities, I pressed on with my requests for support. In 2008, while browsing the internet, I came across the Partners in the Horn of Africa's (PiHA) website and contacted the country office. PiHA found out that Azena community is very poor and remote and yet there was no NGO operating in the area. The onsite needs assessment carried out by PiHA revealed that the need for a safe river crossing was great and long overdue, prompting the organization to support this project.

I played a key role in mobilizing the community, serving as a liaison between the community and PiHA and facilitating the smooth implementation of the project. Motivated by the success of the bridge project, I continued to play a pivotal role in addressing the other equally important need of the community, which is dear to my heart: enabling children to access elementary and high school education within a reasonable distance from home

The project area

Agew Awi is one of ten zonal administrations of the Amhara Regional state of Ethiopia. Agew Awi is named for the Awi sub-group of the Agaw people, some of whom live in this zone. Agaw Awi is characterized by a flat to undulating topography, fertile soil, and adequate rainfall, making it food sufficient in most years. Elevations range from 1,800 to 3,100 m, with an average altitude of about 2,300 m. The economy is based on mixed agriculture of the subsistence type, including livestock husbandry and the cultivation of the staples *teff*, wheat, maize, and pulses.

In the 2007 census, Agew Awi Zone had a total population of 982,942, an increase of 37.1% since the 1994 census. Of this population, 12.5% lived in towns. With an area of 9,148.43 square km, Agew Awi had a population density of 107.4 persons per square km and the average household size was 4.6 persons (PDRE 2008).

Anekesha Gugsa *Woreda* is one of the seven predominantly rural *woredas* of Agew Awi Zone, with a population of 226,004 in the 2007 census, 94.5% of whom lived in rural areas (CSA 2007). Administratively, the *woreda* is divided into 3 urban and 29 rural *kebeles* and the two towns of Azena and Gimjabet. The population density of the *woreda* was 283 per square kilometer in 2007 and average land holdings were less than 1 hectare.

Azena is a subdistrict of Ankesha Gugsa *Woreda*, in which Azena Town is located.[i] The economic base of the subdistrict is predominantly mixed farming involving animal husbandry and the cultivation of the staples *teff* and maize. The average farm size is less than two acres, precluding further division of most farms among children and making education important to future livelihoods.

My familiarity with the Azena community and the consequent fruitful collaboration with local authorities and international NGOs were crucial in developing the four projects I helped implement, as described below.

Ayo River Bridge Project

Cognizant of the devastation the Ayo River during the rainy season and the importance of road transport and local infrastructure in local economic development, this project intended to solve one of the basic problems that strongly hampered community development in the Azena area (Figures 4.1 and 4.2).

Figure 4.1. Ayo River during the rainy season in 2008.

Figure 4.2. Ayo River during the dry season in April 2008.

The bridge project was beyond the financial and technical capacity of the Ankesha Guagusa W*oreda* and Azena community. When I learned that PiHA constructs bridges, I contacted the then-country representative (CR) of the charity. Subsequent discussions between the CR and PiHA's executive director, who at the time was visiting Ethiopia, resulted in an exploratory visit to the river by the CR, who interviewed some villagers crossing the river in April 2008. In the report developed by the representative, the following facts emerged:

- An estimated 60,000 villagers on both sides of the river cross the river in the main rainy, or *kiremt*, season. An estimated 11,000 people crossed the river every Saturday to go to the market in Azena Town, the only market in the area.

- As many as 600 children had to cross the river to attend the only secondary school (grades 9 and 10) in the area in Azena Town. Many students missed exams and repeated grades when the river was high and a considerable number of students drowned.

- Pregnant women in labor and people with serious illnesses could not access medical services that are found in towns on the other side of the river.

- Attending burial ceremonies and important church services, visiting family members and friends, or accessing government services such as courts and police stations were often impossible during the rainy season.

- Between 20 and 30 people drowned each year trying to cross the Ayo River and many more lives were lost due to the barrier this river posed to transporting patients to medical care.

During the site visit, the CR interviewed a farmer who was standing at the river in a depressive mood and gave the following account of a personal tragedy:

I asked him if he knew any one from his village who had died while trying to cross the river and he told me that he lost his wife, the mother of their eight children, last August. He and his wife had gone to the Azena market to sell grain and buy, among other items, new clothes for the children for the Ethiopian New Year. Having accomplished their mission, they hastened back home to show the new clothes to the kids and make them happy. However, he was the only one who was lucky enough to cross while his wife and the clothes and other items they had bought were swept away. It took him, his neighbors, and relatives four days to retrieve his wife's body. After surviving the ordeal and when he realized that his wife is no longer with him, he contemplated drowning himself (suicide) but thought of his children, who would be orphaned, and changed his mind. I asked this devastated farmer how much he could contribute if this bridge was to be built. He replied, "I have one sheep and I will give that."

Convinced there was a dire need for a bridge, I facilitated extensive discussion between PiHA and the community representatives and local government officials on issues such as bridge design, cost sharing, and the most suitable time for construction (when farmers are free to provide labor and materials and the water is low). Thus with financial support from PiHA and local engineering support, a 48 meter span steel bridge was built and inaugurated in May 2009 before the main rainy season (Figure 4.3).

I was instrumental in mobilizing the community, serving as a mediator between the community and the NGO, and facilitating the smooth implementation of the project. The bridge has been heavily used by people from *kebeles* and communities in the *woreda* for accessing education and healthcare and for social, economic, and political purposes (Figures 4.3 and 4.4). More than 60,000 people living in nine peasant associations on both sides of the Ayo River, as well as health and agricultural extension workers and non-government employees, are now using the bridge. According to local people, since completion of the bridge there has not been a single loss of human life or property due to flooding of the river. I am glad to be part of this precious project and

to have played key roles in getting the right charity involved; liaising between the charity, the community, and government officials; and facilitating the completion of the bridge on time and on budget.

Figure 4.3. The bridge under construction and during the opening ceremony in May 2009.

Figure 4.4. Daily traffic on the bridge.

The opening ceremony was proof of how crucial a safe crossing was for every villager and the local government. The attendance included priests dressed in their regalia, regular people on beautifully decorated horses, women and men in the clothes they wear only for special occasions, government officials from different zonal and *woreda* departments, and the chief administrators of the *woreda* and zone. The event was documented by the Amhara TV program. As poor as the community was, its members killed an ox and two sheep and brought local drinks. One of the sheep was killed at the entrance of the bridge, according to local custom, to protect the bridge from evil acts and to express hope for its great longevity. Some people shared their feelings about the bridge at the unforgettable ceremony. One of them expressed his appreciation as follows:

I have mixed feelings today. I cry for our children, brothers, and sisters who were carried away by the river for lack of a structure like the one we have now. On the other hand, I feel extremely happy that we will never lose any soul any more. We are grateful to PiHA, the only NGO we know of, and Canadians who gave cash to save lives in a remote part of Ethiopia. We still need your support.

The *woreda* administrator said the following:
Had we known the technology and the cost, we could have built a bridge much earlier and saved more lives.

By facilitating access of mothers and children to health services and schools and by enabling farmers to market their agricultural outputs and inputs and other social and economic necessities, the bridge solved varied and extensive problems of the community and hence helped expedite rural development. I was happy to see my lifelong dream come true with my support and to witness an event that marked the end of the loss of human lives and property. I was even happier that day and continue to be when I think of the contribution the bridge can make to local socio-economic development and, more importantly, by introducing a technology that can be replicated.

After five years of using the bridge, a woman from Azena said:
Our community had several problems. The lack of a safe crossing over the Ayo River during the main rainy season was among the major ones. From June to September, we could not get what we wanted as the farmers could not bring their produce to market. The river used to claim the lives of many humans and pack animals along with hard-earned assets. It was a constant challenge for students to go to school and for villagers to access different services and attend social events. However, since the constriction of the bridge, no life and property have been lost. Such a project could not have been possible if we hadn't had educated people who worked tirelessly to get the crucial support from the Canadian charity and we should invest a lot in educating our children.

Another man added:
As you all know, the river has been a constant menace to this community for many, many years. It has stood between brothers and sisters, between parents and their children; it kept each one of us apart from our friends, relatives, and our loved ones. It has also taken the lives of so many in our community. But thanks to a Canadian organization and Dr Getnet, we were able to build a bridge over the river and put an end to all of that. Today, we are able to pay one another a visit, we are able to take our sick ones to the hospital, we are able to go to the market as we please, celebrate our joys together, and bury our dead and mourn for them together because of that bridge. It has brought people of this community together and it has also brought the government closer to the people. I cannot put in words all the joy that this bridge has brought to this community; I can only say thank you to Dr Getnet and the Canadian organization and congratulate the community on this tremendous achievement.

While most of the cost of constructing this bridge was covered by PiHA, the community participated in different ways over the course of the life of the bridge project. It donated locally available materials (rocks and sand) and unskilled labor (villagers worked for free by turn). Members of surrounding communities participated in site selection and

the Council of the Ankesha Gugsa *Woreda* Administration assigned a focal person to mobilize the community and monitor the progress of the project. The total cash and in-kind contribution from the community was estimated at Birr 85,313 (37.1%); PiHA covered the remaining 62.9% of the total cost of the bridge (Birr 229,257)[3], and provided a cost-effective design and an experienced construction consultant.

The bridge helped increase school enrollment and improved school attendance and participation but failed to ensure the progression of students to high school and beyond. This situation led me to become involved in the school projects described below.

School Projects

Upgrading Azena Elementary School to a high school

Dogen Village, where I was born in 1968, is a 30-minute walk from Azena Town across the Ayo River. I attended the old Azena Elementary School between 1975 and 1977 and then the junior high school in Gimjabet (12 km distance) before moving to Dangila Town (65 km from Azena Town) for my high school education.[2] Many students who finished elementary school were unable to attend high school in Gimjabet or Dangila even though most of them (both females and males) had good academic standing. They stopped their education simply because their parents were too poor to pay for meals, transport, and rent for them to live far away from home. I believe that if there had been a high school in Azena, most would have graduated from it and pursued higher education.

Until 2006, Anekesha Gugsa *Woreda* had only one secondary school in its capital, Gimjabet Town. As mentioned above, I had to move to Dangila to attend high school. Lack of a high school in Azena Town meant that students had to go to Gimjabet to attend high school. Transportation and living costs were beyond the economic capacity of many parents and the majority of the students had to drop out and become subsistence farmers; females had to marry early men chosen

for them by their parents and usually much older than they. Because of sustained demand from the residents of the Azena community and through mobilization of resources from the community, the only elementary school in Azena was upgraded to a high school by construction of two buildings with ten classrooms in 2006.

In the face of abject poverty, the people around Azena are well aware of the situation in which they have to educate their daughters and sons. The fact that some of the students resumed their high school education when grade nine was opened in Azena in 2006, after having dropped out for a dozen or more years, demonstrates that education in the area is increasingly perceived as a coping strategy in an environment of abject poverty. Parents seem to understand that educating girls and boys really pays more than the value of the children's immediate labor contribution to subsistence farming in the face of dwindling land plots. By and large, parents appear to understand that the future of their children depends on education, which creates opportunities for a better life. However, in the past, the absence of a high school in the area made it difficult to get access to education.

Although the elementary school was upgraded to a high school through the efforts of the Azena community and grades 9 and 10 were opened, the condition of the school was sub-standard. It lacked essential facilities like a library and science laboratories, a situation which forced the Amhara Regional Education Bureau to issue a warning threatening to shut the school down in September 2009 unless those facilities were made available. I then had to work with the community to ensure that many girls and boys retained access to a quality high school education close to home. Once again, I asked PiHA to join hands with the community to put library and laboratory facilities in place.

In addition to the official requirement and fear of closure, we were motivated by the fact that the library and laboratory facilities were not luxury items but rather fundamental requirements for the functioning of the school and necessary for providing quality education to students.

Because of the absence of a library, there was a serious shortage of text and reference books in the school, precluding the lending of books to students. Moreover, most of the students come from rural areas and walk every day back and forth to school, creating the need for a library in which students can read during the school day. Passing exams and entering preparatory school or college/university is not easy given the increasing number of students and a nation-wide competition for admission to higher education. Therefore, a library with adequate space to accommodate many students is important for high school students to study and pass their exams.

The absence of laboratory facilities in Azena High School was dismaying also because students completed high school without any exposure to chemistry, biology, and physics experiments. Given the current government education policy, which dictates that 70% of students be enrolled in natural science at different levels, including university, the lack of laboratory facilities was not consistent with this policy and was detrimental to students trying to succeed in an increasingly competitive education system.

Against the above backdrop, we developed a project proposal and solicited support from PiHA with the ultimate objective of equipping Azena High School with a library and laboratory facilities so the school could fulfill the government requirements and properly carry out its functions, thereby enabling girls and boys from surrounding areas to pursue secondary education while living with their families.

Thus, with the financial and technical support from PiHA and active participation of the community, the library and two laboratories were built (Figures 4.5 and 4.6), supplied with books and materials, and inaugurated in 2010. Putting library and laboratory facilities in place gave girls and boys from the Azena community and beyond the opportunity to attend high school and eventually improve the livelihoods of their families and the *woreda* population at large. One of the community members (a woman) said the following regarding the importance of this project:

Access to high school was a privilege to the few whose parents had the economic means and the awareness to send their children to major urban centers where there were high schools. The opening of the high school has created equal opportunities for elementary school graduates to continue their education irrespective of their family background.

Figure 4.5. Two laboratory buildings constructed in 2010 (photo taken in November 2015).

Building library and laboratory facilities made the secondary school complete and full-fledged, thereby promoting access to and quality of education. If the high school had been closed by the Regional Education Bureau due lack of these facilities, many students would have dropped out of school for their parents could not afford to send them to the high school located 12 km from Azena Town. Access to the library and laboratory facilities encouraged school participation and reduced the dropout rate. Preventing the closure of this school saved parents substantial expenses for transportation, food and house rent for students.

Figure 4.6. The high school library built and furnished in 2010; officials visiting the library (top); the exterior of the library (bottom) (photos taken in November 2015).

Moreover, the new facilities improved the educational performance of students, thereby increasing the number of students who pass the annual grade 10 national examination. Out of the total cost of Birr 970,523, the community contributed 340,497 Birr while the remaining Birr 630,026 Birr were paid by PiHA. A male resident of Azena added:

We did not have a high school in this community. Because of that, many children were forced to abandon their education once they completed elementary school. Thanks to Dr Getnet and the development organizations that he has brought here, we were able to build a high school for our children right here. Today, we can boast for having a fully functional, well equipped high school.

Renovation of the elementary school and building a library and toilet facilities

Azena High School described above was built on the premises of the former Azena Primary School. In order to vacate some buildings and to cope with the shortage of classrooms, the community raised some funds and built five mud blocks (three each having four classrooms and two each having five classrooms) at another location.

In 2010, when I wrote the project proposal for the renovation of Azena Elementary School, it was one of 95 primary schools in Anekesha Gugsa *Woreda*. It provided services for the children of three rural *kebeles* and one urban *kebele* (Azena Town). Starting with grade 1, the school has been gradually opening new grades and accepting more students. In 2010, the school had classes for grades 1-8 and there were 2,224 students, of whom 1,114 (50.1%) were female. In spite of the large and growing student body, the poor infrastructures and absence of other facilities, including a library, and deficiencies in the building structures and furnishings were bottlenecks to delivering quality education.

Some of the problems this community-built school faced at that time were the shortage of classrooms; the sub-standard condition of classrooms; and the absence of a library, furniture, and other inventory.

Due to shortage of funds, the classrooms lacked doors, windows, and concrete floors as well as student desks (Figure 4.7). Apart from failing to reduce distractions from external noise, the lack of doors and windows also reportedly made teachers reluctant to post teaching aids on the walls. Teachers feared that some students might damage the posters and charts if the doors and windows could not be locked outside class hours.

The dirt floors made cleaning difficult and resulted in dust piling up. The dust exposed children to respiratory and other infections. Further, the mud walls of the classrooms had been eroded by rain. All of the classrooms lacked desks and chairs, forcing children to sit on the dusty floor or wooden logs, adding to the disease and accident risks inherent in these substandard building structures.

One woman from the community described the poor conditions of the classrooms as follows:

The elementary school was below standard by all measures. For lack of desks, many students used to sit on eucalyptus logs and rocks on a dusty floor. For lack of a cement floor, the pile of dust was a breeding ground for bugs, which used to attack the feet of children, many of whom were barefoot. Unable to stand the challenges, many children were forced to drop out of school. The upgrading of the school (concrete flooring, cement plastering of the walls, and furnishing them all), thanks to the tireless effort of Dr. Getnet and the generosity of Canadians, has attracted and retained many students.

The elementary school also lacked properly functioning latrines. The existing latrines were poorly maintained and the students found it too risky to use them. Boys often used the open field instead. Girls, who need more privacy and who can't use the open field for obvious reasons, found it hard to attend classes, especially during their menstruation periods. The lack of safe and proper latrines was reportedly one of the main causes of low rate of class attendance among girl students.

Figure 4.7. Two elementary school classrooms before renovation.

The school had many students eager to learn but it did not have a library that could help them develop their reading and comprehension skills as well as self-directed and lifelong learning skills and language and intellectual capacities through reading. As a result, students did not have access to any kind of book besides text books.

The main goal of the renovation project was to increase enrollment and improve the quality of primary education. The project aimed at improving the teaching and learning environment in Azena Elementary School by renovating and furnishing five classroom blocks (22 classrooms); constructing and furnishing a new library and supplying books; constructing a new latrine connected to a water system (six holes for girls, and four holes and urinals for boys), together with a hand washing basin.

To attain these objectives and in order to create a safer environment more conducive to teaching and learning and increase the school's enrollment capacity, the five sub-standard classroom blocks were rehabilitated and furnished with 18 combined desks per classroom (one desk for three students). An estimated 2,224 students (around 60 in each classroom) benefited from the improved facilities. One table and one chair were supplied to teachers in each of the renovated classrooms. The renovation work also included installing new ceilings, doors, windows, and a concrete floor. The outside walls were plastered with cement and pavement and drainage pipes were installed. The new school provides students with adequate seating, working, and recreation space (figures 4.8, 4.9).

Figure 4.8. One of the elementary school classroom blocks (top) and a classroom (bottom) renovated in 2011 (photos taken in 2015).

Figure 4.9. Surroundings of some of the renovated buildings.

Figure 4.10. Elementary school students in a renovated classroom.

A new cement block library was constructed in three months' time (Figure 4.11). The library was furnished with eight tables and 90 chairs for students and one table and chair for the full-time librarian. This made it possible for up to 90 students to read at a time in addition to those who borrow books to read at home. New latrines with water flush and hand washing basins were also constructed. Of the total cost of Birr 1,833,993, the contribution from the community was Birr 441,448 (25%); PiHA covered 75% (1,392,545 Birr) and provided an experienced construction consultant who drew up a cost-effective design. This school is now one of the best elementary schools in the *woreda* and because of its high academic performance, the annual school opening ceremony in September 2015 took place at this school in the presence of *woreda* officials.

Upgrading the general secondary school to a senior secondary/preparatory school

Recently the education system in Ethiopia was vastly expanded. The pre-university education system consists of different tiers. Primary school education comprises two cycles, grades 1 to 4 and grades 5 to 8. Secondary schools have two cycles, grades 9 to 10 and grades 11 to 12. Grades 11 to 12 are often referred to as senior secondary or preparatory school for university.

As stated above, in 2006 the Azena community built a general secondary school (grades 9 and 10) to accommodate a growing student population that would otherwise have to travel to school in Gimjabet Town and thus face economic hardship. Even if Azena High School had been able to open grades 9 and 10 and served over 1,500 students, the students badly needed a preparatory school. In the past, the absence of a preparatory school resulted in the drop-out of an estimated 40 percent of students who could have attended preparatory school and beyond; they lacked the economic means to continue their education in another town. Students from Azena were required to find accommodations in Gimjabet and other towns, a task unaffordable for most families and one that presented additional socio-cultural barriers

Figure 4.11. The new elementary school library: the exterior (top) and the reading area (bottom).

for girls. Families relying on subsistence farming also relied on the labor children provided in the household and on the farm after school hours.

I had gone through similar challenges to finish high school. I started school in 1975 at the Azena Elementary School and finished primary school before going to Gimjabet (12 km distant) to complete grades 7-8 and Dangila (65 km distant) to attend high school. Of over 50 students who passed grade. 8, only 30 (60 percent) were able to attend high school in Dangila Town. Most who did not get a high school education (both females and males) were academically prepared. They stopped their education simply because their parents were poor and could not afford meals, transportation, and room rent for their children to live away from home and could not afford for the students to not help on the farm and in the household chores. If there had been a high school in Azena, most would have finished high school and advanced further.

Thus, after finishing grade 10, students had to go to Gimjabet or other towns to complete grades 11 and 12 or drop out like Aselef and many others:

Aselef, 20, lost her father when she was young and was raised by her mother who makes a living working in different homes on a daily basis. Assisting her mother after school hours and over weekends, Aselef managed to pass the grade 10 national exam. However, because her mother could not afford paying 100 Birr a month for accommodation, providing her with meals, and losing her labor after school hours, Aselef had to stop her education in 2012. (Interview with Aselef)

The Azena community decided to upgrade the general secondary school to a preparatory school so children from destitute families like Aselef could finish grade 12. The *woreda* and zonal education departments approved the project and agreed to assign teachers if and when the community could build, furnish, and equip the required facilities.

The immediate goals of the school project were, therefore, to upgrade the existing high school to the preparatory level and improve the quality of education, reduce dropout in grades 11 and 12 for economic reasons by enabling students from Azena Town and its surroundings to attend high school while living with their parents, and increase the proportion of students passing the national exam and joining public universities.

Once again, I had to look for partner charities while encouraging the community to raise funds to make a preparatory school possible. This time, PiHA again, together with Live to Give Charitable Trust, USA, agreed to support the project and work with the community and the local government. With the support from PiHA, the community built and furnished eight classrooms in two cement block buildings. Two ICT (information, communication, technology) rooms/computer labs and one technical drawing room were also built and furnished (Figures 4.12 and 4.13). With support from Live to Give Charitable Trust, Azena community bought eight desktop computers and one laptop for the computer lab and 200 copies of reference, fiction, and self-help books (Figure 4.13). Most importantly, the community renovated eight classrooms as required by the zonal education department to permit the operation of the preparatory school.

The total cost of the construction was Birr 2,007,903, out of which Birr 602,371 (30%) was covered by the community and the remaining 70% (Birr 1,405,532) was covered by PiHA. Community participation in this project was *par excellence*. A community-based horse owners association contributed Birr 1,600; Azena Community Iddir gave Birr 35,000; the Church Association contributed Birr 40,000; the local Ethiopian Orthodox Church put in Birr 5,000; the Association of Soldiers or Militia contributed Birr 2,500; the Daily Labourers' Association gave Birr 3,000; and individuals and households contributed Birr 501,871. The Live to Give Charitable Trust donated $US 13,000, which the community used to buy books and computers and renovate old or unfinished buildings.

Figure 4.12. Azena Preparatory School: Two new classroom blocks, IT lab, and technical drawing room.

Fig. 4.13. Officials visiting the IT room in the preparatory school.

Benefits of a full-fledged high school

All 27,299 students from 53 primary schools at all grade levels in Anekesha Gugsa *Woreda*, 1,567 grade 9 and 10 students attending Azena High School in 2013/14, and more than 365 students who had dropped out after completing grade 10 were direct beneficiaries of this project. Nearly 150,000 people from 16 peasant associations in Anekesha Gugsa *Woreda* and two urban *kebeles* (in Azena and Ayo), totaling almost half the population of the *woreda*, benefited indirectly. Parents who no longer incur accommodation and meal costs when their children finish preparatory school in Azena and who will have the labor of their children during out-of-school hours benefit the most from the high school (Figure 4.14).

In 2014/15, the high school served 243 11th graders (135 female and 105 male), including those who had previously dropped out of school like Aselef. Even though Aselef was older than is typical for grade 11 (she was 20 years old in 2010), she was among the first to register when the school opened in September 2014. In the two years she was not going to school, Aselef was engaged in embroidery work and had saved enough money for her school uniform and stationery. She is confident she can continue helping her mother and doing well at school. (Interview with Aselef).

On 5 October 2014, the completion of the preparatory school was celebrated; it was a special day for children, parents, and officials alike. Zonal, *woreda*, and *kebele* officials were present and expressed their appreciation in speeches. Students read poems, played music, and presented gymnastics *(techuando*). Parents, horsemen, and the clergy from the Ethiopian Orthodox Church expressed their happiness in different ways (figures 4.15 and 4.16). Community leaders thanked those who helped them make their dream a reality. The community gave a large reception and its leaders announced its next project, a new elementary school in Azena Town. This new school can divert students from the overcrowded Azena Elementary School, which had more than 2,400 students.

Figure 4.14. High school buildings renovated with support from Live to Give Charitable Trust.

Figure 4.15. Celebration of the completion of the preparatory school; people came from Azena and surrounding areas.

Figure 4.16. The celebration of the completion of the preparatory school was started with a ceremonial blessing.

In conclusion, because preparatory schools in Ethiopia are the gateway to university education, the construction of the Azena Preparatory School constitutes a major step forward to promoting high school education in the area. Preparatory schools play a key role in making a life-long impact on students and their families by improving student performance outcomes, increasing access to publicly-funded post-secondary education, increasing life-long earning potential, increasing access to quality education for girls, and increasing community involvement in and support for education for all. The opening of Azena Preparatory School will increase access to high school-level education for local young people, especially poor and female students, and reduce the economic burden and emotional stress on parents and children due to the departure of students to far-away schools.

One preparatory school student (12th grade) who attended a substandard elementary school (before renovation) and who is now attending preparatory school while with his parents had this to say:

I attended junior and high school here in Azena and there were so many problems we had to endure in the past. We were affected by many communicable diseases because the school was untidy. We did not have a library or a laboratory. But today, we have fully equipped junior and high schools with libraries, books, laboratory facilities, and other necessary equipment. These are schools that are not just up to the standard but well and above that. The classrooms are modern, clean and really nice so they make learning all the more pleasant. When I was in elementary school, we did not have proper chairs to sit on, let alone everything else. And since we now have a preparatory school right here, we don't have to go far away to continue our education. Many students used to give up on their education because they cannot afford the cost of moving somewhere else to continue their education, but today we don't have to do that. Everyone will be able to finish their schooling here while living with their parents. So I can't thank the Canadian organization and Dr. Getnet enough. It means a lot to us.

Implementation Structures and Arrangements of All Projects

Except for the bridge project, all four projects described above had volunteer committees that mobilized resources and monitored progress. The different committees consisted of teachers, parents, people from the business community, religious leaders, *kebele* officials, and the *Iddir* chairman, who often chairs committees. The school administration facilitated the work of the contractor and inspected the construction works on a daily basis. For some of the projects, the Agew Awi Administrative Educational Office assigned an engineer to supervise the construction work free of charge. PiHA supervised the technicalities of the construction work as needed through its own construction consultant. In collaboration with the Azena School Facility Upgrading/renovation Committees, PiHA's consultant verified payment

requests presented by contractors before making payments to the contractors.

During the implementation of all projects, the Azena community played a very active role in preparing the tender document; offering bids to potential contractors; evaluating contractors' offers; selecting contractors and signing agreements with them; participating in construction work, supervision, and evaluation; and preparing the opening ceremonies.

In collaboration with the community and the NGO, I was able to substantially contribute to the success of all four projects by playing a critical role in preparing project proposals, soliciting funds, and serving as a liaison between the community and the funding agencies. There were no NGOs working in the Azena area, largely because it is not classified as food insecure. Azena is also located off the highway and the highest concentration of charities are in major urban centers where there are good facilities. It is a predominantly Orthodox Christian community with no presence of Western missionaries or faith-based NGOs. PiHA was the first in the area and I introduced this NGO to the Azena community. Although the community knows project money came from this and other outside organizations, it perceives all the projects as my solo contribution as if I had paid for them. The community recognized my parents during the opening ceremonies.

Challenges and Lessons Learned

All four projects encountered many challenges but also excitement during planning and implementation. The bridge presented more challenges than the school projects. For instance, the community agreed to provide labor for seven days (20 people per day) for the bridge project. The community was not able to fulfill its commitment as farmers were busy with seasonal chores. As a result, the contractor called and threatened to quit the job. Immediately after receiving this call I had to travel to Mexico City to attend a conference and I didn't have time to go to Azena by car to sort things out. Instead, I took a

plane to Bahir Dar, rented a car, and drove to Azena (150 km away from Bahir Dar). I was able to convince different officials and community leaders to mobilize the required labor. The bridge is outside of Azena Town and was not owned by the town community. There was only one government representative to mobilize the community and oversee the project However, the completed bridge was much celebrated and appreciated by the community as it solved many of their long standing and serious problems.

Learning from the bridge project, we dropped the idea of requiring labor contribution from farmers who are busy almost year round. Instead we agreed the community would make its entire contribution in cash and deposit the same in PiHA's account before the opening of bids for subsequent projects. This arrangement was much more effective and there has not been any serious problem with subsequent projects. We also established a committee made up of community members to be in charge of each project as opposed to having one civil servant represent the community and the government during the construction of the bridge. This suggests that we should work *with* communities and not *for* the communities in order to ensure ownership, innovative approaches, and sustainability.

Because we applied these lessons to the high school project (library and laboratory buildings), implementation of this project was easier and construction was completed in a shorter period of time than the bridge.

The elementary school project, however, was difficult to implement. I even had to call parliamentarians from Agew Awi Zone who live in Addis Ababa and ask them to put pressure on local officials to mobilize part of the community contribution fund. Overall, each project had its unique challenges and was at times painful for me. Analogous to maternal labor, I complained a lot and sometimes vowed not to become involved in any more projects. But when a project was completed (like when a baby is delivered) and I saw happiness and jubilation from the community and I realized the impact of the work on the community's future, I forgot all the hardship and started another project.

The high cost of construction materials, due to the acute shortage of hard currency and inflation, delayed on-time completion of the budgeted project components. The Azena community contributed 25-40 percent of the project costs through cash, labor, and materials but mobilizing the community and securing its share of the project was not always easy. Further, some *woreda* officials lacked enthusiasm and cooperation and the contractor delayed completion of the elementary school project as he was juggling different projects and because of high inflation, which resulted in cost overruns. Nevertheless, with persistent reminders and follow-ups from the community, PiHA, and myself, and allowing for the expected delays of completing infrastructure projects in Ethiopia, all four projects were completed in a good manner and a reasonable time frame.

Ongoing School Project

In November 2015, we were able to secure funding from the Francis G. Cosco Foundation (FGCF) for the construction of a new elementary school in Azena and we selected building contractors (Figure 4.17). This school will take pressure off the existing Azena Elementary School, which accommodated more than 2,400 students in 2015.

Azena Municipality has allocated three hectares of land and I am eager to facilitate this project as well. The Live to Give Charitable Trust has also promised to support this project. After finishing the construction of buildings, FGCF will work to increase net enrollment and reduce delayed enrollment and improve attendance, participation, achievement, and grade progression as well as acquisition of self-directed and lifelong learning skills in this new school. FGCF will maintain a presence in Azena for three to five years and gauge (through research) whether such an approach can improve quality education. It holds school-based workshops on best teaching practices, does follow-up visits, and will give personal support to each teacher in the coming years. Azena Elementary School will serve as a professional development school for teachers and administrators of nearby schools. By helping create professional learner communities, this

school will help diffuse the best teaching practices to nearby schools that are not targeted by FGCF. The Foundation will also give workshops for lower and mid-level education department administrators and experts to enable them to provide active support to schools trying to embrace best teaching practices. FGCF follows an holistic approach and plans to work on school greening and water, sanitation, and hygiene (WASH) program as well. This project is estimated to cost close to Birr 3 million, of which the community and FGCF will cover 25% and 75%, respectively.[ii] The Live to Give Charitable Trust has promised to donate $5000 to this project.

Figure 4.17. Competitive selection of contractors for constructing the new elementary school in Azena in the presence of many community members and donors. David Cosco, founder and President of FGCF (right) and Getnet Tadele translating David's speech to the community members (left).

Making the case for the relevance of this new school, a woman from the community made the following comment during the construction bid opening event:

A good quality primary education is key to our children's success in secondary and post-secondary education. Azena High School has a great library and equipped science laboratories. However, the Azena Elementary School is finding it increasingly difficult to adequately prepare its students for high school. Overcrowded classrooms coupled with the long distance some children walk to school is negatively impacting the motivation of students and the quality of education our children receive. Furthermore, the population of Azena continues to grow, in part due to migration from rural kebeles. Yet, the town has one elementary school struggling against all odds. A second elementary school was long overdue and we are all overjoyed to witness this dream becoming true today.

Conclusion

"We make a living by what we get. We make a life by what we give." Sir Winston Churchill

I hope this chapter shows how lives, dreams, and opportunities of communities can be kept alive through the realization of the potential that exists amongst us as individuals and collectively. Specifically, this chapter is about how committed individuals, having a great sense of belongingness and mission to give back, can leverage resources and network. It is about how an underprivileged community, despite having myriad challenges, can still mobilize to muster significant resources to effect that long overdue critical change with multiple positive spin-offs. The chapter is also about the role of non-governmental and development agencies in enabling and unleashing these potentials.

This chapter clearly shows that engaging the community in planning and building infrastructure, prioritizing the needs of the community, and allowing its members to exercise control over day-to-day activities

was a hallmark of the successful completion of all the projects described. Several examples show the active participation and ownership of the community. Once I went to see the bridge during the dry season and discovered that the bridge over the river was blocked so cattle could not cross it during the dry season. Farmers moved the cattle through the river rather than over the bridge in order to protect the bridge from wear and tear. This shows community ownership; the community is extremely concerned to preserve the long awaited bridge. Another time, the contractor of the elementary school renovation project did not maintain the proper ratio of sand and cement, prompting the school community to hire individuals to closely supervise the construction. In addition to their 30% contribution for the construction of the preparatory school, the community also took the initiative to contribute hides and skins following the new Ethiopian year celebration and prepared the opening ceremony in a very colorful way.

These examples show that active community participation is important for the success of community development projects. Besides having constructed school facilities and a bridge, it appears that the community and the local government also learned about the bidding process, how to select the best contractor, and how to identify cost effective construction methods. The projects also showed that with outside financial, motivational, and technical support, the community could accomplish major development projects without dependence on the government, instilling a sense of empowerment.

Further, I came from poor peasant parents and yet climbed the social ladder and contributed to community development. In addition to the bridge and school facilities that provide vital services for the Azena area, its surroundings, and beyond, I trust that my academic achievements and contribution to the community's development may inspire other young people to strive for similar accomplishments and give something back to their communities. These project activities seem to have inspired the community at large to contribute their share to solving problems in the area. Immediately after the opening of the preparatory school in 2014, about 50 young people in Azena Town

established an association and started to meet every month and make regular contributions for future projects, particularly to build a technical and vocational school in the future. They are depositing their contributions at Amahar Credit and Savings Institution.

Working with a transparent NGO (PiHA) that is able to effectively work with rural communities in an active participatory setting and genuinely strives to bring meaningful changes with ample experience in cost-effective and appropriate construction designs and in the bidding process was another factor in the success of all the projects. PiHA provided training to school teachers on student-centred teaching and other pedagogical issues. Teachers also received training on school greening and other environmental topics and provided sanitary pads to female students around Azena in order to curtail the number of students who stay at home because of menstruation. Librarians were also trained on how to handle the library and motivate students and teachers to make the best use of the library.

I learned from this experience that it is possible to accomplish much in Ethiopian communities through dedication and collaboration with committed communities and NGOs. As a full-time academic at the university, I have teaching, research, and consultancy commitments and travel extensively around the world. Despite these regular commitments, a high level of dedication to the Azena community, careful budgeting of my time, and hard work enabled me to accomplish all the above projects. It is therefore high time for academics/educated people, business men and women, and other better-off people to think seriously and act to improve the socioeconomic environment for our children. We need to internalize the famous quote from President John F. Kennedy: “Ask not what your country can do for you; ask what you can do for your country.” Giving to needy communities is highly gratifying and people who are able should commit to give and not always expect to receive. We need to give back to those who raised us and sent us to school even though the opportunities to attend school were limited.

It is not what is given that matters, but the fact that we give. Regardless of how we do it, giving back to our families and communities will touch many people's lives; even small support can ignite change and positively impact the community, providing a renewed sense of hope. To cite the immortal saying of Mahatma Gandhi, "We need to be the change agents we wish to see" in our communities and the country as a whole. Let us all aspire to change the predicament of our country and take concrete steps to translate those dreams to reality. My experience suggests that selfless good dreams will come true sooner or later.

Although our accomplishments in Azena community are extremely small compared to the problems in other parts of Ethiopia, Ethiopia would become a better place if all of us who are better off would support our immediate families and the communities from which we come.

I conclude that if I had not had the opportunity to go to school, I would have ended up as a poor farmer like many of my friends. I always feel sad when I see the peers of my teenage years who dropped out of school at different levels and remained very poor farmers in the face of dwindling land sizes because of over population. I think this is to a large extent due to a lack of primary and secondary schools close to home. We can encourage more girls and boys to go to school when we work together and make available quality primary and secondary schools close to their homes. I will continue to work with the Azena and other communities with support from charitable organizations and other potential supporters toward this goal. As the saying goes, when there is a will or commitment, there is always a way. I hope I will be able to do more in the future.

Acknowledgements

My sincere gratitude goes to Partners in the Horn of Africa for generously supporting all the projects described here. By extension, I would like to acknowledge the effort of John Baigent, former Executive Director of PiHA, and all PiH's board members for raising funds in

Canada. I enjoyed working with the humble and dedicated former country director of PiHA, Yehalem Abebe, an extraordinary person with a kind heart and beautiful mind who deserves very special thanks. I thank him for his constructive comments on this chapter as well. I would also like to thank his very committed colleague, Tesfaye Kifle, who took over the CD position while the preparatory school was being constructed. I would like to express my gratitude to other PiHA Ethiopia office staff. Getnet Mossie was instrumental in developing the Amharic version of the bridge project proposal and provided constant support throughout all the projects. Many thanks to different *woreda* and zone officials who supported me in mobilizing the community. The Live to Give Charitable Trust provided financial support for the preparatory school, and I would like to thank especially Heather Burns and Kathleen Maloy for their generous support and encouragement. People to People should also be acknowledged for channelling the money obtained from the Live to Give Charitable Trust to the Azena community. I am most grateful to members of the Azena community for their very active and enthusiastic engagement. Special thanks should go to Gedebew Kebede and other members of the Azena School Facility Upgrading Committee. Thanks to Woldekidan Kifle for his comments on this chapter. Many thanks to my wife, Medhanit Aberra, and our two children, who happily allowed me to work on these projects.

End Notes

[1] The Amhara Regional State has approved Azena community's request to be upgraded to *woreda* level as of July 2016. I was closely involved in this upgrading process.

[2] I was able to finish elementary school in three years as I passed from grade 1 to 3 and from grade 3 to 5 in what was then dubbed "double promotion."

[3] The exchange rate of the Birr gradually declined from about 9.50 Birr per 1 USD during the construction of the bridge in 2006 to about 21.00 Birr per USD during the completion of the school buildings in September 2015.

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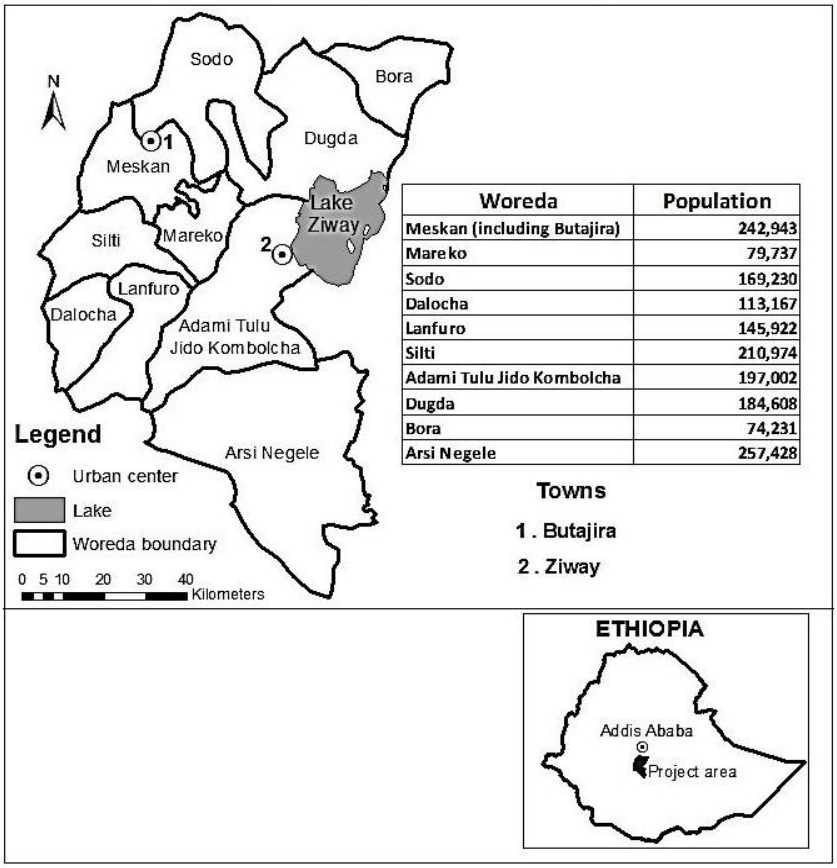
5
Grarbet Tehadiso Mahber (GTM), a Non-Governmental Organization in Central Ethiopia: Its Inception and Development over 20 Years

Redda Tekle Haimanot

Introduction

In 1983, Ethiopian researchers led by Prof. Redda Tekle Haimanot held their first discussion with their Swedish counterparts, headed by Prof. Jan Ekstedt from Umea University, Sweden, to initiate a neuro-epidemiological study in rural Ethiopia. The rest of the Ethiopia research team included Drs. Desta Shamebo, Mekonnen Abebe, and Ayele Gebremariam, and the Swedish group consisted of Prof. Gosta Holmgren and Drs. Lars Forsgren and Jan Heijbel. The neuro-epidemiology project, named Butajira Neuro Project, was to be carried out in the Meskan and Mareko *Woreda* of Gurage Zone in the Southern Nations Nationalities Peoples Regional State (SNNPRS) (Figure 5.1). The project was based in Butajira, the capital of the then-joint *woreda* of Meskan and Mareko. The research proposal was prepared by the Ethio-Swedish group and submitted to the Ethiopian Science and Technology Commission (ESTC) after approval and ethical clearance were obtained from the Faculty of Medicine of Addis Ababa University. Funds were obtained from the Swedish Agency for Research Cooperation with Developing Countries (SAREC) through ESTC.



Woreda	Population
Meskan (including Butajira)	242,943
Mareko	79,737
Sodo	169,230
Dalocha	113,167
Lanfuro	145,922
Silti	210,974
Adami Tulu Jido Kombolcha	197,002
Dugda	184,608
Bora	74,231
Arsi Negele	257,428

Figure 5.1. Grarbet operational districts *(woredas)* in the SNNPRS and Oromia Regional State.

The neuro-epidemiology project was initiated in 1984 on 60,820 persons drawn from randomly selected households from the Meskan and Mareko *Woreda's* population of about 240,000. The main aim of the project was to determine the prevalence and incidence of neurological diseases in rural Ethiopia. The attitude of the rural population towards epilepsy was also studied. Later, because of the high burden of eye diseases in the study community, the team decided to include the study of blindness,

examining its causes and public perception of the condition. Three years of door-to-door surveys revealed epilepsy to be the most prevalent neurological disorder (5.2/1,000), followed by speech disturbance (2.6/1,000) and peripheral neuropathy (1.5/1,000). The data obtained from the survey resulted in several papers published in international journals with very positive reviews (Tekle-Haimanot et al. 1990a, 1990b, 1990c, 1991, 1992, 1997; Alemayehu et al., 1996; Wondu et al., 1995) and in the PhD dissertation of Prof. Redda at Umea University (Sweden) in 1990.

Following the completion of the Butajira Neuro Project, Prof. Redda and his colleague, Prof. Ekstedt, decided to work towards the establishment of a community-based rehabilitation program for persons with epilepsy, post-polio paralysis, and visual impairment. The initiation of the proposed rehabilitation project was based on the WHO motto "No survey without service."

The rehabilitation project, initially named "Grarbet Ledekuman," was established in 1993 with support from the Swedish Vasterbotten Association of Neurological Disabled, the Swedish Organization of Disabled Persons International Aid Association (SHIA), the universities of Addis Ababa and Umea (Sweden), the Ethiopian Ministry of Health, and the administration and community leaders of the Meskan and Mareko *Woreda.* The Rotary Clubs of Umea and Addis Ababa West made significant contributions while the University Hospital of Umea donated medical equipment.

A 40,000-square meter piece of land was donated to Grarbet by the municipality of Butajira. Soon after the donation was made, construction began on a fence around the plot of land as well as buildings within the Grarbet center to be used for patient examination and physiotherapy, an operation theater, wards, and a workshop for producing aids and appliances for people with post-polio paralysis. Residential apartments were built for senior staff of Grarbet as well as a guest house to cater to volunteers with expertise both from abroad and from Ethiopia.

On the suggestion of the government, the name Grarbet Ledekuman was changed to Grarbet Tehadiso Mahber (GTM), which translates to Grarbet Rehabilitation Association. GTM developed into a charity organization dedicated to improving lives in the rural communities of central Ethiopia and was legally registered with the Ministry of Justice (Charity Registration Number 0277).

GTM Medical and Rehabilitation Services

GTM presently provides rehabilitation and treatment services to people with post-polio paralysis and epilepsy, those who are hard of hearing and those in need of comprehensive eye care service. The comprehensive eye health services include the control of trachoma, the most common infectious cause of blindness in the rural communities of GTM's catchment area of six *woredas* of the Gurage and Silti zones of the SNNPRS (Figure 5.1).

A secondary eye care center established in the town of Ziway in 2005 serves four *woredas* of East Shoa and West Arsi Zones of Oromia Region. The total population being served by GTM in the two regional states is over 1.6 million. The two Grarbet centers are located in Butajira and Ziway Towns (Figure 5.1). The major health and rehabilitation services of GTM are described below.

Comprehensive eye health

Blindness is one of the major health concerns of Ethiopia. Cataract, trachoma, glaucoma, and refractory error are the major causes of blindness in the country. Cataract and trachoma alone contribute to more than 70 percent of all blindness cases (Federal Ministry of Health 2015). Our own study revealed that the prevalence of blindness in the Grarbet catchment area is 1.2%. This high rate was the reason Grarbet got involved in eye care. In 2015, Grarbet was the only high volume eye care provider in the area it serves.

The approach to eye care services in Grarbet relies mainly on outreach programs that operate from two secondary eye care centers in Butajira and Ziway towns (Figure 5.2). These care centers provide standard hospital-based services with advanced medical facilities. The staff of the centers includes ophthalmologists, cataract surgeons, and ophthalmic

nurses. These centers screen and treat all cases of eye diseases as well as provide specialized services for eyelid and cataract surgeries, glaucoma treatment, and optometry (Figure 5.3).

The outreach services are undertaken by mobile eye care teams that regularly visit government health centers and health posts to screen and treat patients. These teams regularly visit about 140 health centers and health posts in the SNNPRS and 45 centers/posts in Oromia Regional State. At outreach clinics patients with trachoma complications undergo eyelid (tarsotomy) surgeries performed by ophthalmic nurses for free. Those with serious eye diseases and those requiring cataract and other major surgical interventions are referred to the base eye care centers.

Vision testing and eyeglasses had not been available in rural areas until these services were introduced by Grarbet. The optometry service was established with the support and guidance of Vision Aid Overseas (UK). Optometrists from the Butajira and Ziway centers provide screening for refractive errors. Low-cost eyeglasses produced in GTM optical workshops are made available for people who require eyeglasses. This service has been greatly appreciated by the community. The optometrists also visit schools, where they screen school children and provide eyeglasses free of charge to those who need them.

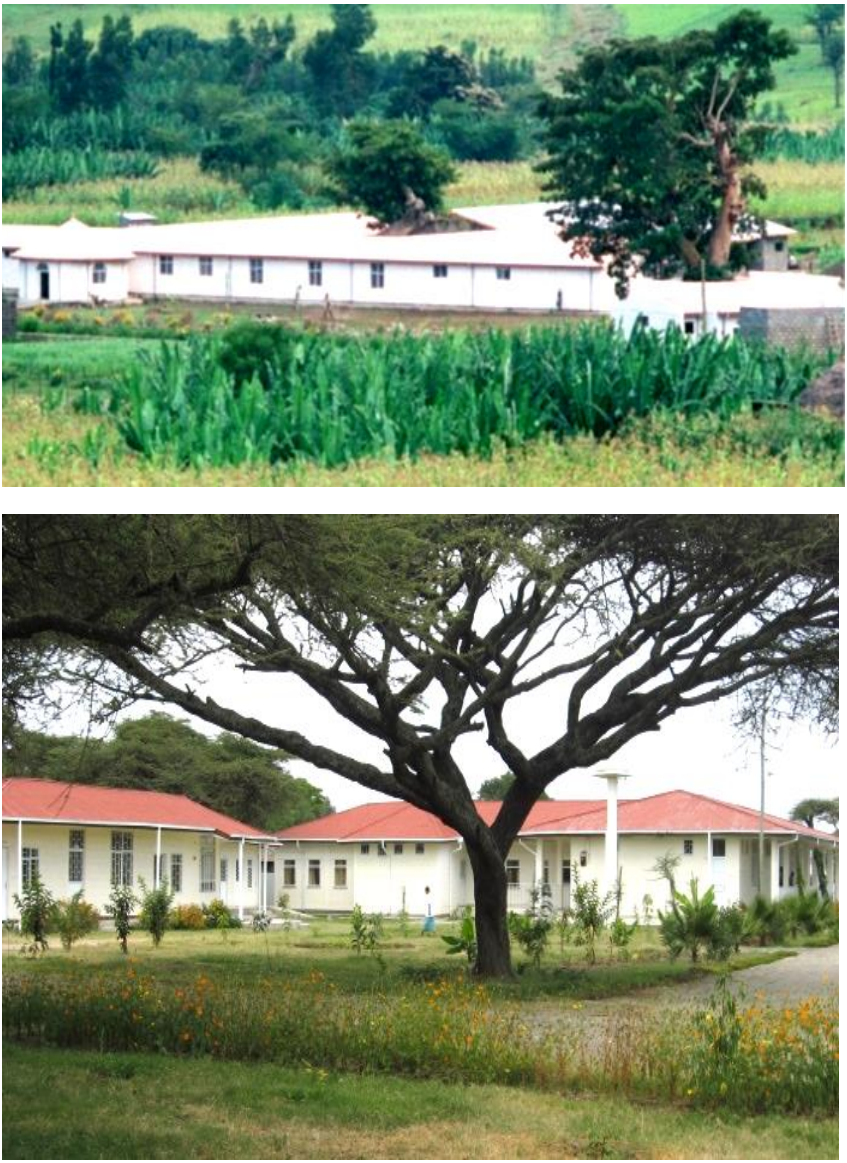


Figure 5.2. Grarbet Hospital in Butajira (top) and Grarbet Secondary Eye Center in Ziway (bottom).

Ophthalmic nurse examining a patient at a health center.

Ophthalmologist with a patient at the Grarbet Hospital in Butajira.

Ophthalmic technicians at Butajira workshop.

Figure 5.3. Different activities of GTM's comprehensive eye care services at Grarbet Hospital in Butajira.

Trachoma control initiative and WASH program

Trachoma is an infectious disease caused by the bacteria *Chlamydia trachomatis* which, if left untreated, leads to the ingrowing of eyelashes

that eventually results in opacity of the cornea and finally blindness. In the GTM operational district the disease has a prevalence ranging from 10% to 70% among children aged 0-9 years. Therefore, Grarbet is heavily involved in the prevention of trachoma using the WHO recommended SAFE strategy: S-surgery (on the eyelid), A-antibiotics (mass treatment of the community with the potent antibiotic, azithromycin), F-face washing, and E-environmental sanitation. Grarbet's implementation of the SAFE strategy has yielded very encouraging results. In the last five years there has been an 80% reduction in the prevalence of acute trachoma infection among 0-9-year-old children and a 50% drop in eyelid complications (trichiasis) among above-16-year olds.

In order to encourage and facilitate face washing and environmental sanitation, Grarbet in 2009 embarked on the WASH (water, sanitation and hygiene) program in six *woredas* with support of generous organizations and individual donors. Since then, Grarbet has developed many hand-dug wells, springs, and rainwater harvest schemes. Between April 2014 and June 30, 2015, 34 hand-dug wells and 5 springs were developed. Grarbet prefers hand-dug wells over deep wells because they are affordable and relatively simple to develop. In the Ethiopian Rift Valley, water from deep wells has high fluoride content, which is associated with serious dental and skeletal complications. Waters from shallow wells developed by GTM have fairly low fluoride concentrations. The provision of water supplies is very much appreciated by the communities, local authorities, and the regional governments.

Water supply in the rural areas is often plagued by failed schemes. Grarbet therefore initiated a water scheme maintenance program which ensures a dependable water supply. For this important activity Grarbet has created a simple but functional maintenance workshop with adequate spare parts (Figure 5.4).

Digging a well.

Discovering a good water level.

Use of a functional hand-dug well.

Workshop and spare parts store.

Figure 5.4. The development and use of a hand-dug well and water system maintenance workshop.

Grarbet is also active in promoting personal hygiene and environmental sanitation using the Community-led Total Sanitation (CLTS) approach. GTM forms CLTS committees in the villages to assist the organization with the mobilization of improved hygiene and sanitation practices. Grarbet sanitarians work with the community to popularize the WASH programs through health education at the community level and in schools. These activities are closely coordinated with the programs of the governmental w*oreda* Health and Water Offices. The collaboration has been very smooth for the last eight years.

Epilepsy treatment services

The activities of the epilepsy unit include:

- Screening and diagnosing new patients and starting them on treatment
- Regular follow-up of cases, treatment of poorly controlled cases, and checking drug side effects
- Providing anti-epilepsy drugs
- Advising parents, relatives, and the community on the disease.

GTM has also been fighting the social stigma associated with epilepsy by raising awareness and providing health education. Within the rural community there are wrong beliefs about the disease. It is often considered to be possession by "evil spirits" rather than a disease. The rural population has gradually built confidence in modern treatment of epilepsy. Significant changes have been observed regarding wrong beliefs about the disease. The superstitious beliefs that the disease is caused by evil spirits and the fear of contagion are slowly changing.

Ear and hearing care

Two thirds of the world's population with hearing impairment live in developing countries. The burden in Sub-Saharan Africa is nearly four times as high as in the rest of the world. Many countries in Africa do not have ear care programs and as a result deafness is caused by preventable diseases such as otitis media, a simple ear infection. The lack of audiology services deprives children born with severe hearing impairment of many opportunities, impacting on school attendance even in primary schools (WHO 2015). In Africa, fewer than 5 percent of those who can

benefit from hearing aids have the possibility of accessing the devices. This is the situation in rural Ethiopia. With this in mind, GTM established modest ear and hearing care services at the Butajira Center and its outreach clinics.

The ENT unit is led by general practitioners and ENT nurses who provide daily outpatient services. These include the treatment of infections such as otitis media, rhinitis, sinusitis, and other ENT problems, including foreign bodies in the ear and nose. An ENT surgeon from Addis Ababa serves as consultant, making monthly visits both to examine referred patients with complicated conditions and to perform simple surgeries. In addition, GTM organizes ENT surgical camps in Butajira, to which surgeons from the USA, Spain, and Israel come periodically to operate on pooled patients from the GTM catchment area and others who are referred from faraway places. The surgical procedures include mastoidectomy and tympanoplasty. During the surgical camps, hands-on training is given to young ENT surgeons and residents from the Faculty of Medicine of Addis Ababa University.

Physical rehabilitation services

The main objective of the physical rehabilitation unit is to provide easily accessible, high quality rehabilitation services to persons with disabilities (PWD) so their quality of life can be improved. The services include physiotherapy, provision of aids and appliances, and corrective surgery. The unit handles mainly cases of post-polio paralysis and club foot. The workshops associated with the unit produce braces, crutches, orthopedic shoes, white canes, and other devices for ambulatory patients. Maintenance of appliances is also a routine and essential activity of the unit. In 2012 GTM acquired from the International Committee of the Red Cross Society (ICRC) an oven and the necessary accessories to make plastic molds for the production of braces. This has gone a long way to improve the quality of the braces. GTM also produces white canes for the blind, which are given out free in the GTM operational districts after mobility training (Figure 5.5).

Fig. 5.5. Post-polio girl fitted with braces, mobility training of a blind person and crutches, white canes and braces for the blind.

Vocational skills training

Following the rehabilitation support they receive at GTM, many PWDs ask for opportunities to get educated and/or get employed so they can earn much needed income. Children with post-polio paralysis with improved mobility are encouraged to go to school. For adults with disabilities GTM established a need-based vocational skills training program. The village-based training program is for the blind, the deaf, and those with physically disabilities. The skills training is provided by locally recruited skilled staff with follow-up house visits by community-based rehabilitation (CBR) workers. The crafts taught in this three-month skills training include weaving and making baskets, mats, and brooms from different types of locally available raw materials. Only plastic fibers, which are used to make baskets, have to be bought in Addis Ababa. A few selected persons are also trained in making sandals from car tires (Figure 5.6).

Upon completion of their training, each graduate is given raw material for six months in order to start up her/his own production unit at home. The CBR workers make regular follow-up visits and assist graduates to maintain good quality of their products for the market. The program involves the families of the PWD throughout the training and after graduation so they can give the necessary support to the trainees.

GTM conducted a follow-up study of 1,000 skill-trained PWDs to investigate the impact and effectiveness of the skills training program. Preliminary results obtained from the survey revealed that 70 percent of the trainees have been successful in making their livelihoods from the sales of the various marketable items they produced using the skills they acquired from the training and the startup capital provided by the program. There are extraordinary stories of people who have succeeded in becoming self-supporting and are role models for many other people with disabilities in the community. The story of one such girl is attached (Figure 5.7). The whole initiative has also succeeded in changing the negative attitude of the community. As a result of their socioeconomic empowerment, PWDs are being recognized as self-supporting and productive members of the society.

Figure 5.6. Vocational training in a village (top), trainees making *jiba* (mat) from *ensete* fibers (center) and graduates carrying home raw materials and finished products (bottom).

Fig. 5.7. The rehabilitation of Abenet Abera. Abenet became paralyzed at the age of 3 years. She did not get any medical or rehabilitation support and therefore became very disabled. She used her arms and knees to crawl around as a result of polio contractures. She was unable to go to school.

Abenet was brought to Grarbet Rehabilitation Center in 2001, where she was assessed and underwent corrective surgery. She was fitted with a brace and crutches and started to walk upright. She started to work in the family shop and at the same time managed to enroll in school. In 2003 Grarbet organized for her a three week training in optic workshop initially on repairing eyeglasses. Later she began producing spectacles as a full-fledged optical technician.

Abenet is presently (at age 22) a well paid, excellent optical workshop technician, is married, and has a daughter.

The trainees of the vocational skills training program are from very poor families and lack the technical and financial resources to join existing micro finance schemes. For the majority, accessing local micro-finance institutions is a real challenge because of the requirement that PWDs have to be organized into associations to be eligible. In addition, the process of getting registered at the Regional capital of Hawassa is expensive and very difficult because that town is 400 km south of Butajira. So far, only two groups (with members of 20 and 19 graduates each) were able to form local associations in Butajira and Enseno Towns and the associations are were not running well in 2015.

Training healthcare workers and teachers

GTM offers regular training to build the capacity of government health extension workers (HEWs), community health agents (CHAs), women group leaders (WGLs), and school teachers selected from the target districts in the Oromia and SNP Regional States.

The trainees are introduced to eye health and sanitation within the concept of the SAFE strategy for the control of trachoma. Special training on measuring visual acuity and identifying refractive errors are given to teachers with the aim of enabling them to identify school children with visual impairment. GTM-trained government HEWs, CHAs, and WGLs assist in raising the awareness of the communities regarding eye and ear care as well as epilepsy. They are encouraged to promote treatment-seeking behaviors within the community.

Health education is also given by GTM sanitarians to large gatherings, especially when community mobilization is carried out during sanitation campaigns. GTM produces information, education, and communication (IEC) materials for educational purposes. Posters, fliers, and pamphlets are distributed to clinics and health posts as well as schools (Figure 5.8).

Ophthalmic nurse giving health education in an outreach clinic.

Optometrist engaging students in a rural school.

Figure 5.8. Health education at health posts and in schools.

Local, National, and International Resources

Grarbet personnel

In 2015, GTM had 120 regular employees. At the start of its operation, when recruiting junior staff, GTM depended on the big pool of daily laborers who worked on the construction of its rehabilitation and medical center in Butajira. Good mannered and hardworking high school students among the laborers were chosen and trained in health and rehabilitation related roles. These recruits have over the years become experts in fields such as eye and ear care as well as physiotherapy. Others have qualified as excellent technicians in the optic workshop and the production of assistive devices for the physically disabled. The one important quality of these personnel has been their loyalty and commitment to Grarbet and its cause. Interestingly, new recruits are molded into good employees by the old timers who consider GTM to be their institution.

Involvement of the community and local authorities

From the very start the community-based rehabilitation Project Grarbet established a committee of elders who play an advisory role. Their participation in all the activities of Grarbet has been of utmost value. They represent the commitment of the community and function as a bridge between GTM and the community. For instance, GTM provides services at minimal charges. Cataract surgery, including three days hospitalization, costs only USD 35.00. The subsidized fee was decided upon only after obtaining the consent and approval of the committee of elders. Similarly, the Board of Directors is very supportive of GTM, rendering free and devoted service to advise GTM management.

Overall Achievements of Grarbet Tehadiso Mahber

Table 5.1 shows the achievement of GTM over the five years from 2010 to 2014. The output of the different services is on the increase. These successes of GTM demonstrate that academic professionals have the capability to establish and successfully manage viable medical and rehabilitation services in rural Ethiopia with a special focus on persons who are marginalized and stigmatized because of their disabilities.

The founder of GTM has succeeded in attracting donors. These donors have come from different countries and socio-political backgrounds. It is probably correct to say that the founder has found the right approach to convince donors to participate in his project. He believes the secret to his successful fund raising endeavor lies in the demonstration of good and tangible results through well-structured and effectively implemented projects using allocated funds economically and in the most transparent way.

One additional factor the founder has found to contribute to building trust and respect with donors is the way one looks after one's own center base. The previously barren land of the GTM's center in Butajira has been transformed into a beautiful park with trees, flowers, bee hives, and a zoo, among other attractions. Many describe it as an "island of greenery." The founder says, "We have witnessed donors being sold to our cause after a visit to our compound." He gives the example of a visit to Grarbet by the Africa Regional Director of WHO, Dr. E. Samba. Dr. Samba stopped in the middle of his tour of the GTM compound. He stated that he was so overwhelmed with the beautiful and excellent layout of the medical and rehabilitation center that he decided right there and then to donate USD 10,000. Similar admirations have been expressed by many other visitors. It is as if our successful rehabilitation of the environment was taken as proof that we can also deliver good services to the rural people.

Grarbet has enjoyed and continues to enjoy an excellent relationship with governmental institutions and local authorities, which developed naturally. Successful and tangible results have convinced the governmental bodies that Grarbet is a trustworthy and reliable partner with which to work. Such a collaborative relationship is absolutely essential for the effective operation of any NGO.

Table 5.1. GTM yearly achievements of the different services, 2010-2014

	Activities	**2010**	**2011**	**2012**	**2013**	**2014**
Eye Care	Screened & treated patients	52,883	69,875	78,023	80,599	94,021
	Eyelid surgery	2,561	2,521	3,054	2,445	2,346
	Eyelid surgery	2,584	3,106	3,098	4,452	4,620
	Other surgeries			627	557	705
	Refraction	9,494	11,193	13,858	11,258	12,827
	Eye-glasses produced & dispensed	6,771	6,247	6,913	5,272	6,158
ENT	Screening & treatment	8,179	12,298	14,127	8,722	10,904
	Audio-metry	528	751	737	530	545
	Surgery	48	58	60	113	124
Epilepsy	New patient treated	790	817	1,067	1,307	1131
	Follow up	9,563	6,767	6,967	6,952	9031
Rehabilitation	Screening & treatment	1,304	1,572	1,985	1976	2322
	Assistive devices produced	706	761	1,352	535	362
	Clubfoot	147	116	310	300	341
	Surgery	-	59	33	70	63
Vocational Training	Skill training	177	240	311	344	245

Challenges and Conclusion

The challenges GTM has encountered include the following:
• The major problem the eye care program faces is the attrition of highly qualified medical personnel such as ophthalmologists, cataract surgeons, optometrists, and ophthalmic nurses.
• There is a problem convincing patients from the villages to come to the eye clinics at outreach posts. The need to get patients to come to the mobile clinics at the early stage of eye infections and deterioration cannot be overstated. Patients with conditions such as trachoma, cataract, and glaucoma that can potentially cause blindness stay at home undiagnosed. As a result there is a big backlog of trachoma and cataract cases that require surgery. GTM is doing its best to educate and mobilize the community to use the facilities.
• Getting supplies and consumables, dependency on foreign donors, cost recovery, and sustainability are additional persisting problems. For instance, scarcity of frames and lenses impedes the production of eyeglasses.
• Being dependent on foreign donors, GTM occasionally is faced with shortfalls in funding. This could be due either to an international financial crisis or changes in government policy related to administrative directives given to NGOs. This challenge is closely related to cost recovery and sustainability, which are addressed in the next section.

Cost recovery and sustainability

The global financial crisis has taught us all the vulnerability of NGOs such as ours, whose running budget is very dependent on foreign aid. Cuts in funding can easily incapacitate ongoing projects. This goes to emphasize the need to find and promote income generating approaches to ensure sustainability of the services of an organization. Grarbet has over the years seriously considered and addressed this pressing matter. However, existing government rules and regulations do not encourage NGOs to engage in income generating activities. Unless an enabling environment is created to get NGOs to stand on their own, all our investments will fall apart. It would be wrong to assume that the duties and responsibilities of a multidisciplinary NGO such as ours can be successfully taken over by the government. Grarbet runs medical and

social services as well as provides a water supply. Which governmental institution can take over, sustain, and expand the program of GTM—the Ministry of Health or the Ministry of Labor and Social Affairs?

Acknowledgments

First and foremost, Grarbet would not have developed into a successful institution without the commitment and devoted services of its personnel. They are our heroes.

GTM is indebted to the organizations and individuals who have made its work possible through financial donations, in-kind contributions, and technical assistance. GTM is also grateful to the Ethiopian Government for facilitating tax-free importation of vehicles, equipment, and consumables in past years. The collaboration of regional bureaus, zonal departments, and *woreda* offices has been highly instrumental in the success of GTM.

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6
Conclusion

Helmut Kloos and Getnet Tadele

All the community development projects described in this book can be considered to have been successful in that they achieved their objectives by virtue of the authors having intimate knowledge of the needs, priorities, and culture of the target communities because they were born or had worked in those communities for a long time. In addition, the authors' dedication, fortitude, and leadership abilities, enhanced by their university educations, their ability to work with community leaders and organizations, and other best practices in project development described in the Introduction chapter, ensured that the projects were completed or continue to operate in a satisfactory manner. The combination of these factors enabled the authors, all of whom live outside the target communities, to avoid the common pitfalls of community development projects undertaken by outside agencies, whether national governments or local or international NGOs, that have often led to their failure (Ika 2012).

Paramount among the reasons for failure of community development projects are (1) a one-size-fits-all approach, (2) lack of managerial capacity, (3) overemphasis on accountability for results, (4) inadequate community participation, and (5) cultural issues (Ika 2012, Botes and van Rensburg 2000). The independent design and implementation of all four projects discussed in this book ensured that objectives, targets, community inputs, and time lines were adapted to the needs and resources of the communities. Overemphasis on strong and impeding procedures and guidelines could be avoided by streamlining procedures and operations and by strong committee rule (Chapters 2 and 4) and managerial oversight (Chapters 3 and 5). Similarly, the authors had

either developed adequate project capacity over the years (Chapter 5) or were able to improvise the management after the initiation of projects (Chapters 2, 3, and 4). Adequate community participation could be generated overall notwithstanding minor episodes of weak participation in well water development (Chapter 3) and building of the bridge (Chapter 4). No cultural disparities and inequities were noted in program implementation in the nearly exclusive Amhara communities in Kersole (Chapter 3) and Azena (Chapter 4); the Arwa Jawi project has been able to satisfactorily address culturally related practices and beliefs in the local population (Chapter 2); and the Grarbet Tehadiso Mahber project (Chapter 5) has not identified culturally related discrepancies in services provision, utilization, or management.

The types of service and infrastructure projects undertaken and the different approaches used by the authors to achieve their objectives were largely based on local needs but also the availability of financial and material resources from the community and outside sources, type of community participation and management, and the occupational background of the authors. In Arya Jawi *Kebele* in East Wollega Zone, a family committee and a foundation founded by community leaders who were closely associated with the local Ethiopian Evangelical Mekane Yesus Church (EECMY) were formed as an organizational and managerial framework. This organizationally and socially strong arrangement enabled the development of educational, environmental conservation, female savings and credit, as well as road construction programs in that community (Chapter 2). The delegation of the planning, financing, and implementation responsibilities to the two committees functioning under the umbrella of the Arya Jawi EECMY ensures broad community support and bodes well for the sustainability of these projects. A comparative study of the Arwa Jawi and other projects carried out by EECMY churches may further guide academics interested in helping their home communities adhering to the EECMY faith.

The introduction of predominantly technical and environmental services by Worku Mulat and his five brothers in Kersole Village in

South Wollo *Woreda* was made possible largely because of their technical and scientific education, although the construction of the first Ethiopian Orthodox Tewahedo Church in this village also reveals their religious compassion for family and other villagers (Chapter 3). The trans-Atlantic links maintained by the four brothers in the diaspora illustrate a geographical link between Ethiopians in the diaspora and their rural home areas that has received little attention by researchers. Although increasing numbers of Ethiopians in the diaspora are known to have established businesses and invested in Addis Ababa (Chacko 2012) and other Ethiopian towns, no published information exists (to our knowledge) on voluntary work and small-scale investing by visitors and entrepreneurs in their rural home communities. This chapter demonstrates that development agents in the diaspora may contribute significantly to changing the home country's rural economic landscape using their own resources, calling for further studies of this particular geographical linkage. The operation of this project will need to be monitored and modified to ensure its sustainability in view of its logistically tenuous management structure. Moreover, even though all the projects except the latrine were implemented by the Mulat brothers for their family, with an anticipated spin-off effect on the whole community, there is a need to transfer more decision making and resource generation responsibilities to the community in the quest for greater community participation in up-scaling the projects and livelihood security.

The two projects involving the construction (and renovation) of schools and a bridge (Chapter 4) and providing community-based health services (Chapter 5) are the most capital intensive of the four undertakings described in this book. However, they differ in a number of ways, largely due to their management and their nature and duration. They differ also in scale and engagement of the community, as the project in Chapter 5 is run by a retired academic fully engaged in the work of the NGO he founded while the project described in Chapter 4 was initiated and liaised by a volunteer full-time academic allowing the community to be in the driver's seat to implement the projects in collaboration with the NGOs that financially supported the projects.

Getnet Tadele's childhood memories of local people drowning in the Aryo River and many of his classmates who were unable to continue their education because of lack of preparatory and high schools in Azena were a powerful factor in his decision to change those situations. As a faculty member of Addis Ababa University he had to travel frequently to his project area of Azena in Agaw Awi Zone to start the project and then to serve as a liaison between community, local officials, and NGOs. This logistic hurdle could be overcome by the establishment of a community-based committee for the purpose of project implementation, particularly dealing with day-to-day project building and supervision of construction activities. The river crossings by people and their animals before and after the construction of the bridge and the impact of the construction and renovation of the elementary, preparatory, and high schools are well documented with photos, indicating the tremendous improvements in the safety and education potential of local populations. The ramifications of the construction of the bridge and the construction or renovation of all school buildings in Azena Town go far beyond saving lives and increasing access to education because they also stimulated broadly based socioeconomic development and local livelihoods in the Azena community and beyond. Quantification of these impacts may guide policy makers and NGOs. The joyous celebrations upon completion of the projects that drew people from the whole Azena area, *woreda*, and zonal officials are rare testimony to the magnitude of these projects in the lives of the population. Transfer of the ownership and operation of the schools to the Ministry of Education upon their completion ensures that they will be staffed with teachers adhering to the national curricula and education standards.

The indigenous NGO providing health services in six *woredas* around Butajira and Ziway towns was developed over two decades by Redda Tekle Haimanot, a medical doctor and professor who retired early from Addis Ababa University to meet the health needs in some of the rural areas where he had worked since the early 1970s. The Grarbet Tehadiso Mehaber community-based rehabilitation program, established in 1993, provides comprehensive health services for selected infectious and non-

infectious eye diseases, post-poliomyelitis paralysis, epilepsy, and ENT (ear, nose, and throat) diseases. The outreach services involving collaboration with 140 government health centers and clinics ensure coverage of the six *woredas* constituting the catchment area of the NGO's hospital in Butajira and health center in Ziway. The integration of trachoma treatment with preventive face washing encouraged by the development of new domestic water sources and health education resulted in remarkable decreases in trachoma and trichiasis prevalences. Health education and awareness creation removed deep-seated superstitions about the cause of epilepsy and increased the use of treatment services. The problem of widespread ear, nose, and throat infections could be addressed through collaboration with Addis Ababa University and international surgeons. The production of low-cost eyeglasses and some of the orthopedic aids and appliances by Grarbet and physiotherapy for physically handicapped persons combined with skills training to assist them with income generation represent much needed innovative approaches to meeting the health needs of poor rural people. The training of primary healthcare workers, women group leaders, and teachers to monitor eye health, increase awareness of diseases, and increase the utilization of treatment services is another innovative and promising but rarely implemented disease prevention and control strategy in Ethiopia. Lastly, a committee of elders acting as an advisory board between Grarbet and the community can give visibility and voice to the catchment population and facilitate provision of equitable and affordable services. The sustainability of Grarbet's achievements, however, is questionable because this NGO is managed by an aging founder who is rightly concerned about the possible decline of its high standards of health service delivery if this organization is taken over by the government.

The fact that all authors/managers of the four case studies are university educated Ethiopians who planned and implemented their projects in collaboration with local communities and NGOs validates them as effective and appropriate development agents. The failure of numerous generations of imported Western development strategies and programs aimed at reducing poverty and improving livelihoods in Africa has

prompted critical examinations of the underlying concepts and methodologies and is leading to increasing interest in the potential of local knowledge, skills, and resources within the context of self-reliance and local economic development (Binns and Nef 1999). Although university-linked community outreach programs (some of them described in Chapter 1) occasionally contributed to developing community services and capacities, these achievements were incidental and could not be sustained as they were not integrated into local economies or social fabrics. The successful small-scale projects undertaken by individual university faculty members described in this book promise to be more effective in reducing poverty and disease and improving livelihoods in the long term and show that a few committed individuals can improve the lives and livelihoods of communities.

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Contributors

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Kebebew Daka holds a BA in Sociology and an LLB degree from the former Haile Selassie I University in Addis Ababa and an MSc degree in Social Work from the University of Swansea, UK. He is a retired professional who has been active as a social worker and church leader in Ethiopia for the last 45 years. Ato Kebebew has served in leadership positions, including the president of the Ethiopian Evangelical Mekane Yesus Church over a period of 35 years. He has worked with the Ministry of Labor and Social Affairs, National Children's Commission, United Nations Children's Fund (UNICEF) and Compassion International Ethiopia. He has sat on the boards of many non-governmental organizations working on socioeconomic and developmental issues in the country.

Tsegab Kebebew Daka is the Director of the Foreign Service Training Institute of the Ministry of Foreign Affairs (MFA) of the Federal Democratic Republic of Ethiopia. He is a career foreign service officer who has served in different capacities in the MFA and its missions abroad. Prior to his current position, he served at the Ethiopian Embassy in Washington DC where he was a Minister Counselor in the political section. Earlier on he served as the Chief of Cabinet, a position which entailed the main responsibility of leading the day-to-day operations of the Office of the MFA. Previously, Tsegab had been the Director of Asia and Oceania Directorate of the MFA tasked with the promotion of bilateral relations between Ethiopia and Asian countries. In addition, he has also served in the Ethiopian Embassy in Beijing, China, for five years. Tsegab is a graduate of Delhi University, India, and received a MA in Political Science from Jawaharlal Nehru University, India.

Helmut Kloos earned his PhD degree in Medical Geography from the University of California, Davis (1977) and his MA in Geography from Fresno State College (1974). From 1983 to 1991 he was an Associate Professor in the Department of Geography, Addis Ababa University, where he taught resources and conservation, biogeography, cultural geography, research methods, and medical geography. He has carried out many field and desk studies on endemic diseases, health services utilization, population movements and resettlement, water resources/sanitation, and other problems in Ethiopia, Kenya, Egypt, and Brazil. His ten books include *Studies on the Molluscicidal and Other Properties of the Endod Plant (Phytolacca Dodecandra)* (edited with the late Dr. Aklilu Lemma and Professor Donald Heyneman); *Water Resources Management in Ethiopia: Implications for the Nile Basin* (edited with Dr. Worku Legesse, 2010); *The Epidemiology and Ecology of Health and Disease in Ethiopia* (edited with Professors Yemane Berhane and Damen Haile Mariam, 2005); and *Vulnerabilities, Impacts, and Responses to HIV/AIDS in Sub-Saharan Africa* (edited with Dr. Getnet Tadele, 2013). Dr. Kloos has published many articles

in Ethiopian and international public health and social science journals and continues his research and student mentoring activities in his retirement.

Abate L. Mulat was born in Kersole Village and served as a veterinary technician for more than 15 years. After the opening of Wollo University in Dessie he enrolled in the veterinary science program and earned his BSc degree in Animal Science in 2012. He made an exceptional contribution to the development of Kersole community by introducing and planting several species of trees and making agricultural inputs, including training local farmers in selecting seeds and plants for cultivation in Kersole.

Cheru L. Mulat was born in Kersole. At age 18 he was taken to Asmara to fight in a militia in the Ethiopian-Eritrean War. He was seriously wounded and returned home to Kersole after recovering. After attending high school classes for a short time he joined the PDRF forces and served there until 2007. Despite spending much of his youth in the military and the repeated interruption of his education, he graduated from the Defense Health College in 2003 with a degree in Public Health. He currently lives in Seattle, USA, and has made modest contributions to the Kersole project.

Lakew L. Mulat was born and raised in Kersole. After completing college at Addis Ababa University he worked for two years as lecturer at Unity Community College in Addis Ababa. He then worked from 2001 to 2005 as a programmer at the UN office in Addis Ababa. In 2005, he came to the USA to pursue his studies in computer science. After graduating with an MSc in 2008 from Maharishi University Management in Iowa he joined Microsoft, where he specializes in Software Development and Testing and is involved in various large-scale internet applications, such as MSN and Visual Studio. After nine years of service he left Microsoft to establish his own company. Currently he is self-employed working on software projects targeting Ethiopia.

Worku L. Mulat was born in Kersole Village, South Wollo Zone. He earned his MSc in Environmental Sanitation from Gent, Belgium (1993) and his PhD in Applied Ecology from University College, Cork, Ireland (2001). He taught environmental science courses for two decades at Jimma University. Delegated by the Federal Ministry of Health in Ethiopia, he played a leading role in developing sanitation and water supply training modules for training 30,000 extension health workers currently serving rural communities. He pioneered the establishment of Gilgel Gibe Research Station, attracting a grant of 120 million USD from Belgium. Currently Dr Mulat is Adjunct Associate Professor at the University of Connecticut, where his research team won a more than 4 million USD National Science Foundation grant to study water security in the Blue Nile Basin. Besides his professional duties, he inspired his brothers to launch the self-help project in Kersole Village with the goal of improving the livelihood of his family and community.

Yirga L. Mulat was born in Kersole and came to the USA after obtaining his BSc degree in computer science Addis Ababa University and MSc in software engineering at Maharishi University. In 2005 he joined Microsoft to work on speech recognition software, which required him to communicate with the computer in eight languages, including Chinese. Working for Microsoft allowed him to explore new technologies, develop new personal knowledge, and experience new applications first hand. When he is not working on software, he pursues his hobbies of piano, table tennis, and reading. Much of the cost of building Kersole Church was paid for by Yirga and he also contributed to the development and operation of the projects that were launched afterwards.

Zewdu L. Mulat was also born in Kersole, attended high school in Addis Ababa, and earned a diploma from Bahir Dar University in 1995. After teaching for a number of years in high schools in several remote rural areas, he joined Addis Ababa University and earned his BSc. degree in Physics. After a short teaching career at a high school in South Wollo Zone he left his job and started his own business in 2001**.**

In Kersole he was instrumental in getting the village connected to the electric grid and overseeing the completion of the other projects.

Getnet Tadele earned a PhD (University of Amsterdam), an MS (University of Newcastle) and a BA (Addis Ababa University). He is an Associate Professor in the Department of Sociology, Addis Ababa University, Ethiopia. He has been researching and publishing extensively on child rights, adolescent health, and sexuality and HIV/AIDS. His publications include numerous articles in prestigious journals including *Culture, Health and Sexuality*; *HIV/AIDS and Social Services*; *BMC Public Health*, *International Health*; *PLOS NTD*; *American Journal of Tropical Medicine and Hygiene*; *Ethiopian Journal of Health Development*; and *IDS* and *CODESRIA Bulletins*. Dr. Getnet has published numerous chapters in books published by well known international publishers. He is also co-editor of the book *Vulnerabilities, Impacts, and Responses to HIV/AIDS in Sub-Saharan Africa* (2013). He has presented papers and attended many international conferences and workshops in Africa, Europe, US, and Latin America and received a number of fellowships, academic grants and visiting professorships, including Erasmus Mundus Scholarship for the European Master of Science Program in International Health and a Fulbright scholarship, and researched and/ or taught in Nigeria, Senegal, Netherlands, UK, Norway, Australia, US, and New Zealand.

Redda Tekle Haimanot was born in 1943 in Robi, Arsi Region. He earned his MD from Hadassah Medical School of Hebrew University, Israel, and a PhD in Neuroepidemiology from Umea University, Sweden. He specialized in Neurology at McGill University and obtained his Canadian Fellowship, FRCPC. From 1980 to 1997 he served in clinical practice and taught in the Department of Internal Medicine of Addis Ababa University while at the same time developing the Neurology Unit in that department. He has been engaged in many clinical and field research studies, notably fluoride and fluorosis, lathyrism, epilepsy and headache. Professor Redda has published numerous

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