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Using a Community-Based Monitoring System (CBMS) to Investigate Progress on the Sustainable Development Goals in Ethiopia:

Gobessa Town, Mitana Gado Kebele (Shirka Wereda), and Wereda 10 (Addis Ababa)

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Abstract

We report on progress in meeting Sustainable Development Goals in three selected sites in Ethiopia: Gobessa Town and Mitana Gado Kebele (in Shirka Wereda) and Wereda 10 (Addis Ababa), comprising a sample of about 5,108 households and a total population of 18,751 individuals. Local-level data from the implementation of a Community-Based Monitoring System census were analyzed for seventeen SDG and thirty-four targets. Aside from the analysis of the poverty status of households and population sub-groups in the study sites, CBMS data also facilitated the generation of a multidimensional poverty index that revealed differences in poverty at the local level. Based on weighted CBMS indicators, the highest proportion of multidimensionally poor was found in Mitana Gado Kebele, followed by Gobessa Town and Wereda 10. About 89.26% of the population in the study area lived below the international poverty line. The CBMS-project team recommends that the government settle rural inhabitants in one area to provide basic facilities effectively. Expanding markets to new areas, even in urban settlings, and establishing markets in rural areas are both basic to enhancing involvement in activities and increasing income.

Keywords: Community based monitoring system, Sustainable development goals, Multidimensional poverty index

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Contents

E.	Executive Summary		5
1	1 Introduction		6
	1.1 Context of the study	6	
	1.2 CBMS Implementation Objectives	7	
2	2 Literature Review		7
3	3 Methodology and Data		8
4	4 Application and Results		11
	1. NO POVERTY	12	
	4.2. SDG 3: HEALTH AND WELL-BEING	15	
	4.3 SDG 4: QUALITY EDUCATION	19	
	4.4: HOUSING STANDARDS AND SOCIAL CAPITAL	22	
	4.5. SDG5: GENDER EQUALITY	25	
	4.6. SDG 6: CLEAN WATER AND SANITATION	28	
	4.7. SDG 7: AFFORDABLE AND CLEAN ENERGY	30	
	4.8 SDG 8: DECENT WORK AND ECONOMIC GROWTH	32	
	4.11. SDG16: PEACE, JUSTICE, AND STRONG INSTITUTIONS	39	
	4.12. SDG17: PARTNERSHIPS FOR GOALS	40	
5	5 Conclusions and Policy Implications		40
6	6 Recommendations		42
R	References		44
	APPENDICES		46

List of Figures

Figure 1: Housing Standard in Gobessa Town	23
Figure 2: Housing Standard in Mitana Gado Kebele	23
Figure 3: Ownership Status of Households in Gobessa Town	
Figure 4: Social Engagement of Households in Gobessa Town	
Figure 5: Access to Toilet in Gobessa Town	
Figure 6: Access to Electricity in Mitana Gado Kebele	

Executive Summary

A Community-Based Monitoring System survey was implemented in three project sites: Wereda 10, Gobessa Town, and Mitana Gado Kebele.

Addis Ketema Subcity Wereda 10 is located in Addis Ababa, the capital city of Ethiopia. It is an urban area and its economic activity is trade. Its total population is currently 6,313 with 2,999 men and boys and 3,314 women and girls.

Shirka Wereda is located in the Arsi Zone of the Oromia Region and comprises thirty-three rural and three urban kebeles (wards). We selected two for this study: Gobessa Town (urban) and Mitana Gado Kebele (rural).

The total number of households covered by the CBMS census for this study was 5,108 with a total population of 18,751. Wereda 10 accounted for 33.67% of these households, Gobessa Town for 51.95%, and Mitana Gado Kebele for 14.38%.

The CBMS in the project sites for this study used a set of standard questionnaires designed in a local context that included a household-profile questionnaire (HPQ) and a community-profile questionnaire. The HPQ included individual- and household-level questions on dimensions of poverty and other socioeconomic characteristics. The design of the CBMS questionnaires was guided by a core set of poverty indicators and SDG indicators identified by the project team for the purposes of the objectives of the study. This SDG profile generated the indicators and corresponding disaggregation for the three areas and for our subsequent descriptive approach. Aside from the analysis of the poverty status of households and population sub-groups in the study sites, CBMS data also facilitated the generation of a multidimensional poverty index (MPI) that revealed differences in poverty at the local level.

Based on weighted CBMS indicators, the highest proportion of multidimensionally poor was found in Mitana Gado Kebele, followed by Gobessa Town and Wereda 10. About 89.26% of the population in the study area lived below the international poverty line.

The overall MPI was 0.0252, the headcount ratio was 0.0664, and poverty intensity was 0.3788. The data also showed that the proportion of the multidimensionally poor in Wereda 10 was about 0.25%. Results showed that, on average, the poor in Wereda 10 were deprived in 36.11% of weighted indicators, as indicated by the computed intensity of poverty. The highest incidence of multidimensional poverty was in Mitana Gado Kebele (the only rural kebele among the three sites).

The MPI was highest in Mitana Gado Kebele at 15%, and 11.56% of the population was multidimensionally poor. In contrast, the figure was lowest in Wereda 10 (0.1%). The international poverty line of US\$ 1.90 a day (ETB 52) was used to determine that about 89.27% of the population lived in income-poor households.

Even though the government has increased attention to agriculture and to rural populations, which are about 83% of the country, poverty in rural areas remains high, including lack of access to basic services and facilities such as schools, health centers, electricity, and roads. Obviously, it is difficult to provide these facilities in rural areas because of the lack of financing and low population density. Thus, the government should settle rural inhabitants in one area to provide basic facilities effectively. Expanding markets to new areas, even in urban settings, along with establishing markets in rural areas are basic to enhancing involvement in activities and increasing income.

1 Introduction

1.1 Context of the Study

The United Nations established an objective to ensure lives of dignity for all nations by building poverty free, peaceful, secured, healthy, and inclusive societies by 2030. This journey has promised to leave no one behind. Considering world leaders as main actors, the United Nations has determined the 2030 Agenda, which is deliberately transformational and ambitious, including a set of seventeen Sustainable Development Goals and targets to guide the world. Above all, the agenda is universal and applies to all countries; even the richest have yet to fully ensure rights to all their citizens, conquer inequality, or fully safeguard the environment (United Nations, 2017).

In 2013, Ngendahayo (n.d.), speaking at the United Nation Economic Commission for Africa, raised the key areas that Intergovernmental Authority on Development_countries, including Ethiopia, should emphasize, including poverty reduction/eradication, infrastructure development, energy development, peace, security and good governance, increasing private investments, health, and sound environmental management. Ngendahayo noted that East Africa was heavily affected by insufficient land resources; unsustainable food security and inadequate levels of food in both quantity and quality; and weak environmental sustainability in the sub region. In his recommendations, Ngendahayo stressed that Eastern Africa countries needed to commit themselves to mobilizing and allocating an increased share of public financial resources to sustainable development which could, in turn, be mainstreamed into sub-regional and national development policies, strategies, and programs.

Ethiopia accepted and approved the 2030 Agenda for Sustainable Development during the 25-27 September 2015 UN Member States meeting in New York. Subsequently, the country integrated SDG into its second Growth and Transformation Plan (hereafter, GTPII). The GTPII was designed to enable the economy to grow at an average of 11% per year to create structural transformation, stabilize the macroeconomy, keep inflation in single digits, and stabilize foreign-exchange rates.

The 2017 Voluntary National Review report showed the areas in which Ethiopia had prioritized, adopted, and mainstreamed selected SDG into the GTPII and reviewed progress in implementing them at the national and regional levels. The report also reflected Ethiopia's high level of commitment to achieving the 2030 Agenda for Sustainable Development and established Ethiopia's commitment to ending poverty and hunger in all its forms everywhere, achieving food security and improved nutrition, promoting sustainable agriculture, ensuring healthy lives and well-being for all at all ages, and achieving gender equality and empowering women and girls.

This paper provides information regarding Ethiopia's progress in meeting SDG at the local level in the context of selected sites. Our aim was to show how data required to monitor SDG at the local level could be provided through a Community-Based Monitoring System approach (hereafter, CBMS). We collected data that covered about 1,800 households and some 7,000 individuals, Our objectives were to implement CBMS methodology to generate local and disaggregated data, show its use in preparing a poverty/SDG profile of a local site, and contribute to knowledge regarding ways to monitor Ethiopia's progress toward the achievement of SDG. This report is one of the outputs of a study conducted by the CBMS Project Team of Arsi University in Addis Ketema Subcity.

1.2 CBMS Implementation Objectives

The general objective was to implement a Community-Based Monitoring System survey in Wereda 10 (Addis Ababa), Gobbesa Town, and Mikana Gado (both in Shirka Wereda).

Specific objectives were:

- Prepare of household-level poverty profile and maps of the study area.
- Provide relevant information to governmental and nongovernmental institutions that could make use of the data to develop new policies.
- Offer policy recommendations that may help to eradicate poverty.

2 Literature Review

The National Planning Commission of Ethiopia, in its 2017 report on Voluntary National Reviews on SDGs of Ethiopia, was the focal point for the SDG process in Ethiopia. Among other things, the report described the integration of GTPII with Sustainable Development Goals and reported the emphasis the government of Ethiopia had placed on six goals among the seventeen SDG. Those were:

Goal 1: End poverty in all its forms everywhere;

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture;

Goal 3: Ensure healthy lives and promote well-being for all at all ages;

Goal 5: Achieve gender equality and empower all women and girls;

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; and

Goal 14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

Scholars who have conducted studies have indicated that Ethiopia remained stagnant in eradicating poverty. For instance, the Oxford Poverty and Human Development Initiative (2014) stated that Ethiopia's national MPI was 0.564, its headcount ratio was 0.873, and the intensity of poverty was 0.646. The level of poverty vulnerability is high among youth (United Nations, 2017). The Central Statistics Agency and World Food Programme (2014) reported that two in five households in Ethiopia were food-energy-deficient with little difference between urban and rural areas. The percentage of the population living below the poverty line (set at ETB 3,781/adult/year) declined from 46% in 1995-1996 to 30% in 2010-2011 with poverty more prevalent in rural than urban areas. The National Planning Commission (2017) has also reported that the national poverty rate in 2014 was 23.40%, though the government had planned to reduce it to 16.70%.

According to the United Nations Children's Fund (2017) report, Ethiopia's maternal mortality (deaths per 100,000 live births) for the year 2016 was 412. Maternal death is defined as the death of a woman while pregnant or within forty-two days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (World Health Organization, 2018). Ethiopia has a plan to reduce maternal mortality to 199 per 100,000 live

births by 2020 (World Health Organization, 2018). Additionally, In 2014 in Ethiopia, 60% of births were attended by a health professional, a rate that was reported to have increased to 72.17% in 2015. Ethiopia's goal was to reach 90% by 2019 (National Planning Commission, 2017).

According to UNICEF, under-five mortality is the probability of dying between birth and exactly five years of age expressed per 1,000 live births. Based on data from the United Nations Children's Fund (2017) the under-five mortality rate per 1,000 live births in 2016 was 67. The under-five mortality rate in 2014 in Ethiopia was 64 and increased to 67 in 2015 (United Nations Children's Fund, 2017).

3 Methodology and Data

The primary data for the study were collected through the implementation of a CBMS in Wereda 10, Gobessa Town, and Mitana Gado Kebele in Ethiopia. In particular, the process involved a CBMS census of households using Accelerated Poverty Profiling (APP) tools for tablet-based data collection. The implementation of CBMS methodology involved preparation of an indicators system and data-collection instruments in consultation with stakeholders, training local enumerators on the use of CBMS tools, and creating contacts and partnerships with local administrators to smooth data collection. The CBMS process also involved community data validation and dissemination in order to incorporate feedback from stakeholders into our data and findings.

The CBMS in the project sites for this study used a set of standard questionnaires designed in a local context that included a household-profile questionnaire (HPQ) and a community-profile questionnaire. The HPQ included individual- and household-level questions on dimensions of poverty and other socioeconomic characteristics. In addition, information was collected by means of an addendum to the CBMS questionnaire that collected data on youth entrepreneurship and financial inclusion. The design of the CBMS questionnaires was guided by a core set of poverty indicators and SDG indicators identified by the project team for the purposes of the objectives of the study.

Data were processed and analyzed using STATA 15 software. We used descriptive analysis to explain the findings relating to CBMS-SDG indicators.

The project team selected indicators to monitor some of the sustainable development goals in the context of Ethiopia, and particularly examined the cases of Wereda 10, Gobessa Town, and Mitana Gado Kebele on their progress toward the achievement of these goals at the local level. Among the seventeen global SDG, we generated local-level indicators for eleven. Table 1 shows these goals and corresponding indicators.

The project team built upon an earlier CBMS Ethiopia Project Study that tested CBMS implementation in Ethiopia in 2015 and produced indicators of poverty at the local level. We expanded these indicators in this project, which included data on education, health and nutrition, employment, income, social capital, housing details, saving trends, asset ownership, and household infrastructure, among other characteristics. For purposes of SDG monitoring, we also collected and processed information that was not part of the 2015 CBMS implementation (e.g., questions about the household's sources of cooking fuel and sources of lighting). In terms of health and nutrition, we used CBMS data to generate and process indicators on the maternal

mortality rate,¹ the proportion of births attended by skilled health personnel, and the under-five mortality rate.²

One of the global indicators of poverty that CBMS data can generate is the multidimensional poverty index (MPI). The MPI measures a range of deprivation factors such as poor health, lack of education, inadequate living standards, lack of income, disempowerment, poor quality of work, and threat of violence (OECD Post, 2015).

The MPI is computed using the Alkire-Foster formula: MPI = $H \times A$ where, A is the intensity (or breadth) of poverty and H is a multidimensional headcount ratio.

$$A = \sum_{i=1}^{n} c_i k$$

 $c_i k$ is the censored deprivation score of individual i and q is the number of people who are multidimensionally poor

$$H = q/n$$

where q is the sum of deprived population and n is the total population.

To generate an MPI, CBMS data related to Mid Upper Arm Circumference for the 0-5-year-old population and on mortality were collected under the category of health in the CBMS household questionnaire. The education category included data regarding whether each household member was currently attending school or not and his or her highest educational level. To capture living standards, household-level data relating to such factors as floor and roof construction materials, sources of fuel, and asset ownership were gathered.

The MPI is the product of multidimensional headcount ratio and intensity of poverty and indicates the percentage of multidimensional poverty in the locality. Intensity of poverty indicates the average (weighted) deprivation experienced in the locality. Headcount ratio is the incidence of poverty, or the proportion of people (within a given population) who experience multiple deprivations.

Table 3 1. CBMS-SDGs Indicators, Ethiopia 2018

	Tuble of 1. db. 10 db indicators, Ethiopia 2010				
SDG Goal		No	CBMS Indicators		
1	No Poverty	1.	Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)		
		2.	Proportion of population living below the national poverty line, by sex and age		
		3.	Proportion of population living in households with access to		

¹ This refers to the proportion of women who died for pregnancy-related causes.

² This was operationalized by considering children below age 5 who had died in the preceding twelve months.

			basic services
3	Good Health	4.	Maternal mortality ratio
	5.		Proportion of births attended by skilled health personnel
		6.	Under-five mortality rate
		7.	Neonatal mortality rate
		8.	Mortality rate attributed to cardiovascular disease, cancer, diabetes, or chronic respiratory disease
		9.	Suicide mortality rate
		10.	Death rate due to road traffic injuries
		11.	Mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)
4	Quality Education	Quality Education 12. Participation rate of youth and adults in formal education and training in the months, by sex	
		13.	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill
5	Gender Equality	14.	Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18
		15.	Proportion of girls and women aged 15-49 years who had undergone genital mutilation/cutting, by age
		16.	Proportion of women in managerial positions
		17.	Proportion of women aged 15-49 years who make their own decisions regarding sexual relations, contraceptive use, and reproductive healthcare
		18.	Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and share of women among owners or rights-bearers of agricultural land, by type of ownership
		19.	Proportion of individuals who own a mobile telephone, by sex
6	Clean Water and	20.	Proportion of population using safely managed drinking

	Sanitation		water services		
			Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water		
7	Affordable and	22.	Proportion of population with access to electricity		
	Clean Energy	23.	Proportion of population with primary reliance on clean fuels and technology		
8	Decent Work and Economic Growth	24.	Proportion of informal employment in non-agriculture employment, by sex		
		25.	Average hourly earnings of women and men employees, by occupation, age and persons with disabilities		
		26. Unemployment rate, by sex, age and persons with disabil			
			Proportion of youth (aged 15-24 years) not in education, employment or training		
			Proportion and number of children aged 5-17 years engaged in child labor, by sex and age		
		29.	Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider		
9	Industry, Innovation and Infrastructure	30.	Manufacturing employment as a proportion of total employment		
10	Reduced Inequalities	31.	Proportion of people living below 50% of median income, by sex, age and persons with disabilities		
16	Peace and Justice	32.	Proportion of children under 5 years of age whose births had been registered with a civil authority, by age*		
17	Partnerships for Goals	33.	Fixed Internet broadband subscriptions per 100 inhabitants, by speed		
		34.	Proportion of individuals using internet		

^{*} The CBMS-SDG indicators were identified in the context of Ethiopia and in consideration of ease in collecting data at the household and/or individual level.

4 Application and Results

1. NO POVERTY

Goal 1 of the Sustainable Development Goals encompasses a broader view of poverty, recognizing it as a multifaceted and multidimensional phenomenon with a complex mix of economic, social, and environmental causes. This goal was measured at the project sites by looking at the status of households and population in terms of income, poverty (obtained from household income), and living standards (health, education, and housing characteristics).

Based on CBMS data on living standards, health, and education collected from the three study sites, measures of the proportion of the multidimensionally poor and the intensity of poverty were generated. In Wereda 10, 4% of the population experienced poverty in more than one dimension as compared to 6% in Gobessa Town and 40% in Mitana Gado Kebele.

The project team found that, on average, the poor in Wereda 10 were deprived in at least 38% of the dimensions. Similarly, in Gobessa Town the figure was 42%.

According to the Oxford Poverty and Human Development Initiative (2014), Ethiopia's national MPI was 0.564, its headcount ratio was 0.873, and the intensity of poverty was 0.646. CBMS data in all study sites showed results were lower than national figures.

Table 4 1. Multidimensional Poverty Index (Wereda 10, Gobessa Town, and Mitana Gado Kebele), Ethiopia, 2018

Indicators	Overall	Wereda 10	Gobessa Town	Mitana Gado Kebele
Multidimensional headcount ratio	0.0664	0.0025	0.0437	0.2978
Intensity of poverty	0.3788	0.3611	0.3617	0.3882
MPI	0.0252	0.001	0.0158	0.1156

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 2 shows that an overall MPI of 0.0252, a headcount ratio of 0.0664, and a poverty intensity of 0.3788. The data also showed that the proportion of the multidimensionally poor in Wereda 10 was about 0.25% (see the generated headcount ratio in Table 6). Results showed that, on average, the poor in Wereda 10 were deprived in 36.11% of weighted indicators, as indicated by the computed intensity of poverty. The highest incidence of multidimensional poverty was in Mitana Gado Kebele.

The MPI was highest in Mitana Gado Kebele at 15%, and 11.56% of the population was multidimensionally poor. In contrast, the figure was lowest in Wereda 10 (0.1%).

The international poverty line of US\$ 1.90 a day (ETB 52) was used to determine the income-poor population. As shown in Table 7, about 89.27% of the population lived in income-poor households.

Table 4 2: Population below the International Poverty Line, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Men	Women	Total
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	Magnitude	Proportio n (%)	Magnitud e	Proporti on (%)	Magnitude	Proportion (%)
Income-Poor	8,035	89.25	8,678	89.29	16,713	89.27

SDG Goal 1, Indicator 1.1.1 assesses poverty disaggregated by sex. Based on CBMS data from the project sites, of the total population of men, 89.25% lived in households with income below the international poverty line (\$1.90 per day). On the other hand, 89.29% of the population of women lived in households with income below the international poverty line.

Table 4 3: Population below the National Poverty Line (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Project Site	Magnitude	Proportion (%)
Wereda 10	613	9.74
Gobessa Town	1055	10.84
Mitana Gado Kebele	888	32.94

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

In Ethiopia, two in five households were food-energy-deficient with little difference between urban and rural areas. The percentage of the population living below the poverty line (set at ETB 3,781/adult/year) declined from 46% in 1995-1996 to 30% in 2010-2011 with poverty more prevalent in rural than urban areas (Central Statistics Agency and World Food Programme, 2014).

The National Planning Commission (2017) report stated that the national poverty rate in 2014 was 23.40%, and the government planned to reduce it to 16.70%.

Based on our study, 9.74% of the total population of Wereda 10 had incomes below the national poverty line, compared to 10.84% in Gobessa Town and 32.94% in Mitana Gado Kebele. The minimum income level used as an official standard for poverty in Ethiopia is ETB 3,781/year.

Table 4 4: Population below the National Poverty Line, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Gender	Wereda 10		Gobessa Town		Mitana Gado Kebele	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Men	318	51.88	542	51.37	450	50.68

Women	295	48.12	513	48.63	438	49.32

As Table 6 shows, among the total poor population in Wereda 10, 51.88% were men and 48.12% were women (51.37% and 48.63% in Gobessa Town and 50.68% and 49.32% in Mitana Gado Kebele).

Table 4 5: Population in Households with Access to Basic Services across CBMS Sites (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Magnitude	Proportion (%)
Access to basic services	11048	58.97
Electricity and energy	16648	88.86
Waste disposal	12323	65.77
Sanitation	11302	60.32
Safe water	17998	96.06

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 6 indicates differences in access by location. Access to electricity and energy was highest in Wereda 10 (99.83%) and lowest in Mitana Gado Kebele (34.27%). Access to waste-disposal services was the most critical problem among all services monitored in Mitana Gado Kebele. Generally, services in Mitana Gado Kebele were provided at a low rate as compared to the other study sites.

The most common source of electricity in Wereda 10 and Gobessa Town was hydro power, while solar energy was the most common in Mitana Gado Kebele.

Table 4 6: Population in Households with Access to Basic Services, by Project Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa To	wn	Mitana Gado Kebele	
	Magnitude	Proportion	Magnitude	Magnitude Proportion		Proportion
		(%)		(%)		(%)
Access to	6079	96.43	4842	49.73	127	4.71
basic						
services						
Electricity	6293	99.83	9431	96.87	924	34.27
and energy						

Service						
Waste disposal service	6184	98.10	5295	54.39	844	31.31
Sanitation Service	6081	96.46	4903	50.36	318	11.80
Safe Water Service	6300	99.94	9719	99.83	1979	73.41

4.2. SDG 3: HEALTH AND WELL-BEING

Today people live longer in both developing and developed countries, which has led to significant changes in demographic patterns and has brought important implications for the length of working lives, pensions, and access to healthcare. The importance of physical health has been long recognized, but increasing attention has been given recently to improving understanding of subjective well-being and the factors that influence it.

To measure health and well-being among the population in the project sites, we examined CBMS data on malnutrition among children, maternal deaths, and other common causes of death.

Table 47: Deaths Related to Pregnancy in the Preceding Twelve Months in CBMS Sites (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Project Site	Magnitude	Proportion
All Sites	1	100.00
Wereda 10	0	0
Gobessa Town	1	100.00
Mitana Gado Kebele	0	0

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

The CBMS results in Table 4.7 indicate only one incident of pregnancy-related death in the study area. All the other deaths recorded were due to other causes (Table 19). Data showed respiratory diseases such as pneumonia and bronchitis, along with hypertension, were highly implicated in deaths reported by households in the preceding twelve months.

Table 9 shows CBMS data on causes of deaths by sub-location. Among known causes of death, the highest proportion was attributed to respiratory illnesses in Gobessa Town. In Wereda 10, the most common cause of death was hypertension and, in Mitana Gado Kebele, fever. In Gobessa Town, a large percentage of deaths were caused by gastritis and duodenitis.

Table 48: Causes of Death in the Preceding Twelve Months (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Tov	vn	Mitana Gado Kebele	
Cause of	Magnitude	Proportion	Magnitude	Proportio	Magnitud	Proportio
Death	8	•		n	e	n
Respiratory	3	6.67	6	12.24	1	16.67
Cough	1	2.22	2	4.08	0	0.00
Gastritis and	2	4.44	7	14.29	0	0.00
duodenitis						
Head and neck	3	6.67	1	2.04	0	0.00
STDs	2	4.44	1	2.04	0	0.00
Malaria	0	0	1	2.04	0	0.00
Eye disease	1	2.22	0	0.00	0	0.00
Skin infection	3	6.67	0	0.00	0	0.00
Amoeba and	2	4.44	0	0.00	0	0.00
waterborne						
diseases						
Mental	1	2.22	1	2.04	0	0.00
disorder						
Accident	2	4.44	3	6.12	0	0.00
Pregnancy-	0	0.00	1	2.04	0	0.00
related						
Suicide	1	2.22	0	0.00	0	0.00
Heart disease	6	13.33	2	4.08	1	16.67
Hypertension	7	15.56	3	6.12	1	16.67
Diabetes	3	6.67	1	2.04	0	0.00
Cancer	4	8.89	5	10.20	0	0.00
Fever	0	0.00	5	10.20	2	33.33
Kidney failure	2	4.44	1	2.04	0	0.00
Conflict	0	0.00	1	2.04	1	16.67
Bacterial	0	0.00	2	4.08	0	0.00
infection						
Evil spirit	0	0.00	1	2.04	0	0.00
Infant death	0	0.00	1	2.04	0	0.00
Rabies	0	0.00	1	2.04	0	0.00
Unknown	1	2.22	2	4.08	0	0.00

Table 4 9: Births Attended by Skilled Health Personnel in the Preceding Twelve Months, by Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Project Site	Magnitude	Proportion (%)
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Wereda 10	163	98.19
Gobessa Town	391	66.72
Mitana Gado Kebele	57	35.40
All Sites	611	66.92

SDG Goal 3, Indicator 3.1.2 emphasizes the importance of births being attended by skilled health personnel.

CBMS data in Table 4.9 show that, among total births in the study areas, 40.73% were not attended by a health professional, meaning midwives, nurses, and health officers. The highest proportion of births attended by health professionals was found in Wereda 10 (98.19%), followed by Gobessa Town (66.72%) and Mitana Gado Kebele (35.40%).

Table 4 10: Mortality Rate Attributed to Cardiovascular Disease, Cancer, Diabetes, or Chronic Respiratory Disease, Selected Sites (Wereda 10, Gobessa Town, and Mitana Gado Kebele). by Sex

	Wereda 10		Gobessa Tov	wn	Mitana Gado Kebele	
Sex	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Men	16	72.73	7	43.75	1	33.33
Women	6	27.27	9	56.25	2	66.67

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

The 2017 report of the National Planning Commission showed that deaths attributed to heart disease, cancer, diabetes, and respiratory problem (hereafter, HCDR) were 476 per 10,000 cases. In accordance with SDG Goal 3, Indicator 3.4.1, as shown in Table 4.10, of 100 deaths in the preceding twelve months in the study area, 41 (41%) were due to heart disease, cancer, diabetes, or respiratory diseases, and more than 50% of deaths were not related to these issues. Specific to the study sites, of total HCDR deaths reported in Wereda 10, more men died than women; in Gobessa Town and Mitana Gado Kebele, in contrast, HCDR-related deaths affected women more than men.

Table 4 11: Under-Five and Neonatal Mortality Rate, by Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Overall		Wereda 10		Gobessa Town		Mitana Gado Kebele	
Sex	Magnit ude	Proportio n (%)	Magnit ude	Proportio n (%)	Magnit ude	Proportion (%)	Magni tude	Proportion (%)
Men	5	62.50	0	0.00	5	71.43	0	0.00
Women	3	37.50	0	0.00	2	28.57	1	100.00

As Table 4.11 indicates, however, 8% of 100 (80 of 1000) deaths in the study area in the preceding twelve months were under-five deaths).

Of the total under-five mortality, 62.50% were baby boys. In Wereda 10 there were no records of under-five mortality in the preceding twelve months. The under-five mortality was higher in Gobessa Town than elsewhere in the project sites.

According to National Planning Commission (2017), Ethiopia established a target for under-five mortality of 30 per 1,000 live births.

Table 4 12: Mortality Rate Attributed to Unsafe Water, Unsafe Sanitation, or Lack of Hygiene (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Freq.	Percent
Death related to sanitation	3	3.00

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks. Table 4.12 shows that among every 100 deaths in the project sites in the preceding twelve months, 3% were attributed to unsafe water, unsafe sanitation, and lack of hygiene.

Table 4 13: Proportion of Children Aged Younger than 5 Who Were Malnourished, by Project Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

		Wereda 10	Gobessa Town	Mitana Gado Kebele	Total
Severely malnourished	Magnitude	18	1	0	19
	Proportion	3.77	0.08	0.00	0.87

Moderately malnourished	Magnitude	52	13	4	69
mamourished	Proportion	10.88	0.98	1.02	3.14
Not malnourished	Magnitude	408	1308	390	2106
mamourished	Proportion	85.36	98.94	98.98	95.99
Total		478	1322	394	2194

As illustrated in Table 4.13, among total under-five children, 19 (0.87%) were severely malnourished, 69 (3.14%) were moderately malnourished, and the majority (2,124 or 95.99%) had no nutritional problems. Severe malnutrition was prevalent in Wereda 10.

4.3 SDG 4: QUALITY EDUCATION

Education is critical to self-reliance and self-determination as well as to good decision-making, accountability, and understanding. From it grow ethics, cooperation, development, and health. But education is more than the key to overcoming hunger; it is also the key to overcoming baseless superstition and illogical argument. Table 26 shows some of the indicators under Goal 3:

Table 4 14: Participation Rate of Youth and Adults in a Formal and Non-Formal Education and Training (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Not Youth/adult (Not 15-49)		Youth/adult (15-49)		Total	
	Magnitud e	Proportion	Magnitud e	Proporti on	Magnitud e	Proportio n
Educ/training	6	0.07	236	2.30	242	1.29
No educ/training	8472	99.93	10037	97.70	18509	98.71
Total	8,478	100.00	10,273	100.00	18751	100.00

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.14 shows the percentage of youth involved in formal or informal education or training. From the total youth and adult population, only 2.30% were involved in a formal or informal education or training in the preceding twelve months.

Table 4 15: Participation Rate of Youth and Adults in Formal or Informal Education or Training by Project Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

_		0 - 7	 		,		
	Sex			Wereda 10	Gobessa Town	Mitana	Gado
						Kebele	

Men	Magnitude	58	51	1
	Proportion	38.67	60.00	100.00
Women	Women Magnitude		34	0
	Proportion	61.33	40.00	0.00

Based on the CBMS results shown in Table 4.15, there were more women (61.33%) than men (38.67%) engaged in education and training in Wereda 10. On the other hand, there were more men engaged in education and training in Gobessa Town (60.00%) and in Mitana Gado Kebele (100.00%).

Table 4 16: Information and Communications Technology (ICT) Skills, Disaggregated by Age Group and by, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Youth/adult (1	.5-49)	Sex					
			Men		Women			
	Magnitude Proportion		Magnitude	Proportion	Magnitude	Proportion		
ICT	750	7.30	430	8.84	320	5.92		
No ICT	9522 92.70		4,434	91.16	5,088	94.08		
Total	10272 100.00		4,864	100.00	5,408	100.00		

Source of data: CBMS-Census in Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia 2018

Table 4 17: Type of Information and Communications Technology (ICT) Skills, Disaggregated by Age (Youth/Adult) and Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Type of ICT	,	lt with ICT	Sex				
skill	Skill (15-49	9)	Men		Women		
	Magnitud e	Proportion	Magnitude	Proportion	Magnitud e	Proportio n	
Basic	736	98.13	419	97.44	317	99.06	
Advanced	14	1.87	11	2.56	3	0.94	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

SDG Goal 4, Indicator 4.4.1 concerns the proportion of youth and adults with skills in

information and communications technology (hereafter, ICT), by type of skill. To assess actual ICT skills in the study site, we generated Table 4.16. As the table shows, 7.30% of the total youth and adult population had ICT skills whereas 92.70% of same age group did not.

With regard to the type of skill (Table 4.17), almost all were confined to basic computer skills (736 or 98.13%) and 14 (1.87%) had advanced ICT skills. Software program coding was considered an advanced ICT skill, but browsing the internet or using applications like Microsoft Office were considered basic skills.

Table 4 18: Proportion of Children Aged 7 to 14 Who Did Not Attend Elementary Education by, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Men		Women		Total		
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion	
Attending school	1159	94.23	1295	94.73	2454	94.49	
Not attending school	71	5.77	72	5.27	143	5.51	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.18 shows school attendance among children aged 7-14 years in the study sites. Based on the Ethiopian Ministry of Education strategy, children within this age range should attend primary education. Our findings indicated that, among the total children in the age range, 5.51% of them did not attend. The sex distribution of children who did not attend school was almost the same for boys and girls (5.77 and 5.27%, respectively).

Table 4 19: Proportion of Children Aged 7-14 Who Did Not Attend Elementary School by Project Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Tov	wn	Mitana Gado Kebele	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Attending school	546	97.15	1436	94.47	472	91.65
Not attending school	16	2.85	84	5.53	43	8.35
Total	562	100	1520	100	515	100

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.19 shows the proportion of children who did not attend primary education in the three study areas: 2.85%, 5.53%, and 8.35% in Wereda 10, Gobessa Town, and Mitana Gado Kebele, respectively. (Among total youth, 17.24% had not attended primary education.) This indicates that access to primary education was lower in rural areas than in urban areas.

Table 4 20: Proportion of Youth Aged 15 to 18 Who Did Not Attend Secondary Education, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Men		Women		Total	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Attending school	260	83.33	340	82.32	600	82.76
Not attending school	52	16.67	73	17.68	125	17.24

The CBMS data in Table 4.20 show the proportion of youth from 15-18 who did not attend secondary school, though the Ethiopian Ministry of Education has established that youth of this age should be enrolled. Young men and young women who did not attend secondary school were 16.67% and 17.68%, respectively.

Table 4 21: Proportion of Children 15-18 Who Did Not Attend Secondary Education, by Project Site (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Tov	wn	Mitana Gado Kebele	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Attending school	237	83.45	325	83.12	38	76.00
Not attending school	47	16.55	66	16.88	12	24.00

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.21 shows the proportion of 15-18-year-old youth who did not attend secondary education in the three study sites: 16.55%, 16.88%, and 24.00% in Wereda 10, Gobessa Town, and Mitana Gado Kebele, respectively.

4.4: HOUSING STANDARDS AND SOCIAL CAPITAL

Kind of housing and involvement of the household in community issues are among the core poverty indicators in the CBMS.

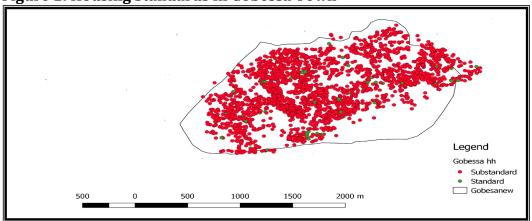
Table 4 22: Proportion of Households Whose Members Lived in Substandard Housing (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 1	Wereda 10				Mitana Gado Kebele		Total	
	Magnitu de	Proport ion	Magnit ude	Proport ion	Magnit ude	Proport ion	Magnit ude	Propor tion	
Standard housing	1083	59.74	437	16.34	8	1.30	1528	29.93	

Substandar d housing	730	40.26	2238	83.66	609	98.70	3577	70.07
Total	1813	100	2675	100	617	100	5105	100

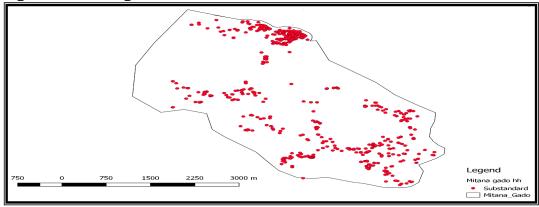
A standard house is characterized by walls constructed using stone and mud, stone and cement, cement block, or clay brick. Improvised housing units are independent makeshift shelters or structures built of waste materials, without a predetermined plan for habitation but used as living quarters. Table 4.22 shows that substandard housing was found in 70.07% of households in the study area. This percentage was higher in Mitana Gado Kebele where all houses were substandard. Figures 1 and 2 show, in red, the locations of households with substandard housing in Gobessa Town and Mitana Gado Kebele.

Figure 1: Housing Standards in Gobessa Town



Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Figure 2: Housing Standards in Mitana Gado Kebele



Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

A permanent housing unit may be expected to maintain its stability for ten years or more.

The project team found that among total households, 49.38% did not own their housing (meaning they rented either from governmental agencies or private owners or were homeless). Wereda 10 had the largest percentage (64.37%) of such households, and Mitana Gado Kebele had the lowest (13.94%).

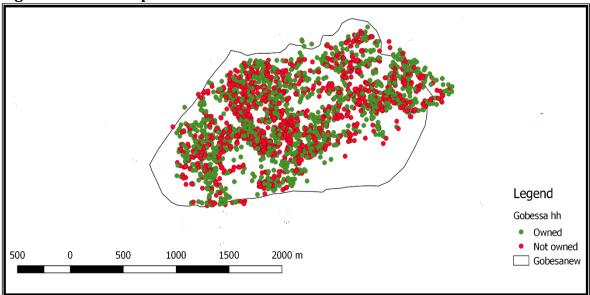


Figure 3: Ownership Status of Households in Gobessa Town

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4 23: Proportion of Households Whose Members Were Socially Engaged (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Town		Mitana Kebele	Gado	Total	
	Magnitu	Proporti	Magnitu	Proporti	Magnitu	Proporti	Magnitu	Proporti
	de	on	de	on	de	on	de	on
Sociall	1430	78.83	2093	78.18	555	89.95	4078	79.84
у								
engag ed								
Not	384	21.17	584	21.82	62	10.05	1030	20.16
sociall								
у								
engag								
ed								
Total	1,814	100	2,677	100	617	100	5,108	100

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Social capital is a form of capital in which social networks are central; transactions are

marked by reciprocity, trust, and cooperation; and market agents produce goods and services not mainly for themselves, but for a common good. The project team measured social capital in Ethiopia at the individual or household level and by membership in three associations: iddir, equb, and work parties (Dodd, 2012). Table 4.23 shows that members of 79.84% of households were engaged in social activities, a figure that was particularly high (89.95%) in Mitana Gado Kebele. Figure 4 shows the households that were engaged and not engaged in social activities in Gobessa Town.

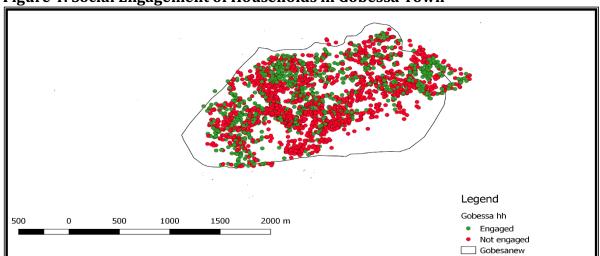


Figure 4: Social Engagement of Households in Gobessa Town

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

4.5. SDG5: GENDER EQUALITY

Article 1 of the 1948 Universal Declaration of Human Rights states: "All human beings are born free and equal in dignity and rights." But gender equality is also a precondition for development and poverty reduction. Empowered women contribute to the health and productivity of families, communities, and nations.

Table 4 24: Women Aged 20-24 Who Were Married before Age 15 and before Age 18 (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Not 20-24 y	ears old	20-24 years old		Total	
	Magnitud e	Proportio n	Magnitud e	Proportio n	Magnitud e	Proportio n
Not Early marriage	2,173	24.68	346	37.45	2,519	25.89
Early marriage	6,632	75.32	578	62.55	7,210	74.11
Total	8,805		924		9,729	

According to the United Nations (2017) report, in 2000, nearly one in three women between 20 and 24 reported having been married before 18. In 2015, the ratio had declined to roughly one in four. As Table 4.25 indicate, of total women aged 20-24, 74.11% married before age 18, though 25.89% did not face early marriage.

Table 4 25: Girls and Women Aged 15-49 Who Had Undergone Genital Mutilation/Cutting,

by Age (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Magnitude	Proportion
Mutilated	1827	33.78
Not mutilated	3581	66.22
Total	5408	100.00

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

According to surveys undertaken around 2015 in thirty countries in which the practice of genital mutilation of women was concentrated, over a third (35%) of girls between the ages of 15 and 19 had been subjected to the procedure (United Nations, 2017). Genital mutilation is globally recognized as a human rights violation.

Current estimates (from surveys of women older than 15) indicate that around 90% of genital mutilation cases include either Types I (clitoridectomy, which is removal of the prepuce with or without excision of all or part of the clitoris); Type II (excision, which is removal of the prepuce and clitoris along with all or part of the labia minora); or Type IV ("nicking" without flesh removal), and about 10% (over eight million women) undergo Type III (infibulation). Infibulation, the most severe form of FGM, involves removal of all or part of the external genitalia, followed by joining together of the two sides of the labia minora using threads, thorns, or other materials to narrow the vaginal opening (World Health Organization, 2018). It is practiced mostly in the north-eastern region of Africa: Djibouti, Eritrea, Ethiopia, Somalia, and Sudan. In West-Africa (Guinea, Mali, Burkina Faso, etc.), the tendency is to remove flesh (clitoridectomy and/or excision) without sewing the labia minora and/or majora together (World Health Organization, 2017). CBMS results in Table 26 show the prevalence of genital mutilation in the three study areas. Among total women aged 15-49, 33.78% had been genitally mutilated.

Table 4 26: Women Aged 15-49 Who Made Their Own Decisions Regarding Sexual Relations, Contraceptive Use, and Reproductive Healthcare (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Magnitude	Proportion
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Own decision	1409	26.05
No own decision	3999	73.95
Total	5408	

Based on the United Nations Children's Fund (2017) report, 81.4% of women aged 15-49 years in Ethiopia made their own decisions regarding their health. About 78.2% made decisions on major household purchases, and 83.8% decided on visits to family or relatives. Of women aged 15-49, those who made decisions concerning sexual relations, contraceptive use, and reproductive healthcare were 26.05%. However, 73.95% of women aged 15-49 did not make their own decisions in these three areas.

Table 4 27: Proportion of Women in Managerial Positions (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Position	Magnitude	Proportion (%)
Non Manager	2496	98.19
Manager	46	1.81
Total	2542	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

As indicated in Table 4.27, only 1.81% total women were engaged in managerial positions vs. 98.19% not in managerial activity. The majority of women managers were in wholesale and retail trade or repair of motor vehicles and motorcycles. The smallest proportion of them held managerial positions in agriculture, forestry, or fishing.

Table 4 28: Ownership of (or Access to) Mobile Phones (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	dudo heberej										
Mobile Ownership	Overall		Wereda 10		Gobessa Town		Mitana Gado Kebele				
status	Magnitu de	Proport ion	Magnit ude	Propor tion	Magnit ude	Propor tion	Magnit ude	Proport ion			
Own Mobile	14524	77.49	5491	87.01	7776	79.87	1257	46.62			

No mobile	4219	22.51	820	12.99	1960	20.13	1439	53.38

SDG Indicator 5.b.1 concerns mobile-telephone ownership by sex. Table 4.28 shows the level of ownership of mobile telephones in the study area. As it indicates, from the total population of men in the study area, 77.49% had a mobile cell phone and the remaining 22.51% individuals did not.

4.6. SDG 6: CLEAN WATER AND SANITATION

The 2017 United Nations report stated that everyone on earth should have access to safe and affordable drinking water, which is also the goal for 2030. Water scarcity affects more than 40% of people around the world, and that number is projected to rise as a result of climate change. If no change is made, at least one in four people is likely to be affected by recurring water shortages by 2050.

Table 4 29: Access to Safely Managed Drinking Water (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Access	Wereda 10		Gobessa Tow	7 n	Mitana Gado Kebele		
	Magnitude Proportion (%)		Proportion (%) Magnitude Proportion (%)		Magnitude	Proportion (%)	
Not safe water	4	0.06	17	0.17	717	26.59	
Safe water	6,300	99.94	9719	99.83	1979	73.41	
Total	6,304	100.00	9736	100.00	2696	100.00	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

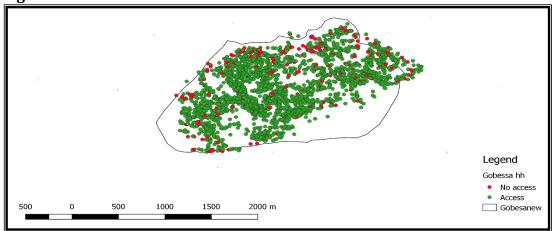
Indicator 6.1.1 of SDG Goal 3 is safely managed drinking-water services, meaning an improved water source that is located on the premises, available when needed, and free of pathogens or elevated levels of toxic substances In 2015, 5.2 billion people (71% of the global population) used a "safely managed" drinking-water service (United Nations, 2017). Based on the CBMS census data of Gobessa Town, 99.83% of the total population used safely managed drinking-water services, and the remaining 0.17% did not. In Wereda 10, the proportion of safe water users was 99.94%. The problem of safe water prevailed in the remote rural area of Mitana Gado Kebele where 26.59% of the population did not have access to safe water. Based on the CBMS data, the most common source of water in the area was plumbing that delivered water to outlets through pipes.

Table 4 30: Access to Own Toilet Facility (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Access	Wereda 10		Gobessa Tov	vn	Mitana Gado Kebele		Total	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Not own toilet	887	48.98	258	9.64	322	52.19	1467	28.75
Own toilet	924	51.02	2417	90.36	295	47.81	3636	71.25
Total	1,811		2675		617		5103	

Based on data collected from the project sites, 28.75% of the households did not have their own toilet facility. In Mitana Gado Kebele, in particular, 52.19% of households did not have their own toilet. Figure 5 shows households with and without access to toilets in Gobessa Town.

Figure 5: Access to Toilet Facilities in Gobessa Town



Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4 31: Access to Safely Managed Sanitation Services, Including a Hand-Washing Facility with Soap and Water (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10 Magnitude Proportion (%)		Gobessa Town		Mitana Gado Kebele		
			Magnitude	Proportion (%)	Magnitude	Proportion (%)	
Without Access	424	6.75	4899	50.32	2386	88.70	
With Access	5856	93.25	4837	49.68	304	11.30	

Total	6280	9736	2690	

In 2015, 2.9 billion people (39% of the global population) used a "safely managed" sanitation service—a basic facility that safely disposed of human waste. Open defecation, practiced by 892 million people (12% of the global population) as of 2015, continues to pose serious health risks. Table 4.31 reflects SDG Indicator 6.2.1 and shows that, in Mitana Gado Kebele, access to a sanitation facility with soap was challenging. The situation was different in Wereda 10 where 93.25% of the population had access to a safely managed sanitation facility. The most common type of toilet in Wereda 10 was a private flush toilet. In contrast, the most common type of toilet in Gobessa Town and Mitana Gado Kebele was an unventilated pit latrine.

There are three main ways to meet the criteria for safely managed sanitation services: improved sanitation facilities, facilities are not shared with other households, and excreta are treated and disposed of, stored temporarily and then emptied and transported to treatment offsite, or transported through a sewer system and treated off-site.

4.7. SDG 7: AFFORDABLE AND CLEAN ENERGY

Universal access to affordable, reliable, and sustainable energy services requires expanding access to electricity and clean cooking fuels and technologies, as well as improving energy efficiency and increasing the use of renewable energy. To achieve this goal, bolder financing and policies will be needed, along with the willingness of countries to embrace new technologies on a much more ambitious scale.

The status of SDG Goal 7 in our study areas was measured using access to electricity and access to clean fuel technology. Table 33 shows the findings related to this Goal.

Table 4 32: Proportion of Population Living in Households with Access to Electricity by Location (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Tow	n	Mitana Gado Kebele	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Access to electricity	6,293	99.83	9431	96.87	924	34.27
Low-voltage electricity grid	493	7.83	0	0.00	0	0.00
Medium or high- voltage grid	2008	31.91	2	0.02	0	0.00
Electricity from a generator	2	0.03	12	0.13	0	0.00
Electricity from solar cells, wind turbine or small,	3790	60.23	9417	99.85	924	100.00

hydroelectric dam			

SDG Indicator 7.1.1 dictates that households should have access to electricity. The United Nations (2017) reported that, while 96% of urban residents across the globe could access electricity in 2014, the share was only 73% in rural areas.

As indicated in Table 4.32, among the population of Wereda 10, 99.83% had access to electricity. However, 0.17% was still disconnected from an electrical grid. The most common source of electricity in Wereda 10 was hydro power. In Gobessa Town, 96.87% of the population had access to electricity, and the most common source of electricity was hydro power. In Mitana Gado Kebele, 34.27% of the population had access to electricity. The most common source of electricity was solar power. Figure 6 shows the geopoints of households with access to electricity.

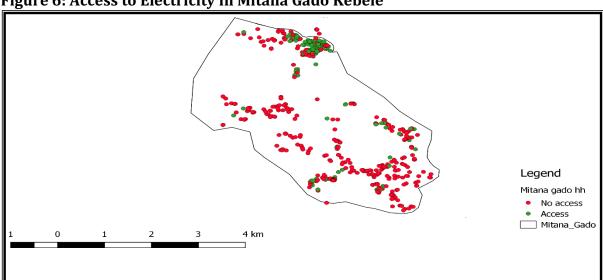


Figure 6: Access to Electricity in Mitana Gado Kebele

Source of data: CBMS Census in Mitana Gado Kebele, Ethiopia, 2018.

Access by type of cooking	Wereda 10		Gobessa Town		Mitana Gado Kebele	
fuel used	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Not clean fuel (charcoal, petrol, wood)	734	11.64	8997	92.41	2691	99.81
Clean fuel (electricity)	5,570	88.36	739	7.59	5	0.19

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4 33: Proportion of Population (Individual) with Primary Reliance on Clean Fuels and Technology (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Clean technology refers to any process, product, or service that reduces negative effects on the environment through significant energy-efficiency improvements, the sustainable use of resources, or environmental-protection activities. Clean technology includes a broad range of technologies related to recycling, renewable energy (wind power, solar power, biomass, hydropower, biofuels, etc.), information technology, green transportation, electric motors, green chemistry, lighting, and grey water.

Access to clean fuels and technologies for cooking climbed to 57% in 2014, up from 50% in 2000. Still, more than three billion people, most of them in Asia and sub-Saharan Africa, lack access to clean cooking fuels and technologies and are exposed to high levels of household air pollution (United Nations, 2017).

Based on CBMS data for Wereda 10, shown in Table 4.33, most of the population (88.36%) was reliant on clean fuels and technology whereas only 11.64% was not. In the three study areas, the problem of using non-clean fuel energy was highest in Mitana Gado Kebele (99.81% used charcoal, petrol, or wood as fuel). The study considered electricity to be a clean source and charcoal, petrol, and wood as non-clean sources.

4.8 SDG 8: DECENT WORK AND ECONOMIC GROWTH

Economic growth is a principal driver of sustainable development. When growth is sustained and inclusive, more people can escape poverty as opportunities for full and productive employment expand. To allow future generations to benefit from today's economic growth, such growth should be environmentally sound and not the result of unsustainable exploitation of resources.

A casual employee has no guaranteed hours of work, usually works irregular hours (but can work regular hours), receives no sick or annual leave, and can end employment without notice (unless notice is required by a registered agreement, award or employment contract; see Fairwork Ombudsman, 2018). For our purposes, casual employees were considered informal employees. Table 47 shows CBMS results in the study area on the status of employment by industry and type of employment.

Table 4 34: Employed Population by Industry and Type of Employment

Type of employment	Agriculture		Other Industrie	Other Industries		All Industries	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)	
Formal Employment	1023	98.46	4812	87.17	5835	88.96	
Informal Employment	16	1.54	708	12.83	724	11.04	
Total	1039		5520		6559		

CBMS data revealed that 11.04% of respondents were in informal work, and 88.96% were in formal employment. About 98.46% of employment in agriculture was formal, while 1.54% of workers in the non-agricultural sector were informal. This includes the proportion of the population that was at least temporarily engaged in agricultural activities.

Table 4 35: Proportion of Informal Employment in Non-Agriculture Employment, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Sex	Formal Employme	ent	Informal Employment		
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	
Men	3006	61.76	444	62.71	
Women	1861	38.24	264	37.29	
Total	4867		708		

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.35 shows CBMS results regarding employment according to sex. In general, the majority of the population in non-agricultural industry, employed in either formal or informal terms, were men. About 62.71% of those engaged in informal employment in non-agricultural industries were men (37.29% were women). Ethiopian law does not prescribe a minimum wage, and wages are usually fixed by the employer, through collective agreements, or by the employee's employment contract (International Labour Organization, 2018).

According to Trading Economics (2019), the total labor force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

Table 4 36: Average Hourly Wage, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Gender	Overall	Wereda 10	Gobessa Town	Mitana Gado Kebele
Men	22.24	27.16	20.83	12.45
Women	12.57	16.40	10.59	6.22

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.36 indicates the average hourly wage disaggregated by sex. SDG Goal 8, Indicator 8.5.1 concerns the hourly wage of residents. As the table suggests, the average hourly wage of men workers was ETB 22.24, and the average hourly wage of women workers was ETB 12.57.

Table 4 37: Average Hourly Wage among Disabled Workers (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Status	Overall	Wereda 10	Gobessa Town	Mitana Gado Kebele
Disabled	9.98	6.69	10.62	15.63
Non-disabled	18.70	22.99	17.17	10.34

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Indicator 8.5.1 also required disaggregation of average hourly wage by disability status. Accordingly, those who were disabled generated a mean hourly income of ETB 9.98 while non-disabled workers earned ETB 18.70.

The average hourly wage for disabled workers was higher in Mitana Gado Kebele than elsewhere in the project sites, and it was highest for non-disabled workers in Gobessa Town (ETB 22.99).

In keeping with the 1982 definition of the International Labor Organization, an unemployed person is a person of working age (15 or over) who meets three conditions simultaneously: being without employment, meaning having not worked for at least one hour during the reference week; being available to take up employment within two weeks; and having actively looked for a job in the preceding month or having found one that starts within the following three months. The ILO included individuals aged 15 or older in the labor force (International Labour Organization, 2018), and the minimum working age has been raised to 15 in Ethiopia. We therefore considered 15 the minimum working age in computing the figures in Table 39.

Table 4 38: Unemployment Rate, by, by Sex, Age, and Disability Status (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Status	Sex		Sex Disability		Age		
	Men	Women	Disabled	Non- disabled	Youth (Unemployed Population aged 15-29)	Non youth (Unemployed Population older than 29)	

Employed	73.35	39.44	26.44	55.96	40.02	65.66
Unemployed	26.65	60.56	73.56	44.04	59.98	34.34

SDG Indicator 8.5 deals with disaggregation of the unemployed population by sex, disability status, and age. As Table 4.38 makes clear, of the total labor force of men, 26.65% were unemployed; this rate was 60.56% for women in the labor force.

In the case of disaggregation by disability, unemployment was higher among those who were disabled (73.56%) than among those who were not (44.04%). In addition, the unemployment rate was extremely high among youth (59.98%) compared to non-youth (34.34%).

Table 4 39: Type of Employment by Location (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Town		Mitana Gado Kebele	
Type of Employment	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Permanent employee	1351	57.03	2275	80.82	581	85.57
Temporary employee	268	11.31	333	11.83	82	12.08
Contract employee	218	9.20	31	1.10	0	0.00
Casual worker	527	22.25	174	6.18	16	2.36
Other (self- employed, farmer)	5	0.21	2	0.07	0	0.00
Total	2369		2815		679	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.39 shows CBMS results on the type of employment in our study sites. Type of employment was classified as permanent, temporary, contract, casual, or other (self-employed or working their own farm land). Most employment in all sites was permanent, though large

casual employment existed in Wereda 10.

Table 4 40: Proportion of Youth (Aged 15-29 Years) Not in Education, Employment, or Training (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Non-youth (older than 29)	Youth (15-29 years old)		
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	
Either (employed, training, or education)	4641	61.32	3415	69.30	
Neither (employed, training, or education)	2928	38.68	1513	30.70	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

With regards to SDG Goal 8, Indicator 8.6.1, the study found that about 30.70% of youth were not involved in employment, education, or training. CBMS data revealed that the major reason for not attending school, particularly among youth, was the need to make a living.

Child labor refers to work that is mentally, physically, socially, or morally dangerous and harmful to children and interferes with their schooling by depriving them of the opportunity to attend school, by obliging them to leave school prematurely; or by requiring them to combine school attendance with long and heavy work. Global reports reveal that around 1 in 10 children worldwide was engaged in child labor in 2012; more than half of these (eighty-five million) were exposed to hazardous work (United Nations, 2017).

Table 4 41: Proportion and Number of Children Aged 5-17 Years Engaged in Child Labor (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Town		Mitana Gado Kebele	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Child Labor	21	1.93	53	1.79	20	1.94
Not child Labor	1067	98.07	2902	98.21	1012	98.06
Total	1088		2955		1032	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Table 4.42 above shows the incidence of child labor across the CBMS study sites. The

child-labor rate among those aged 5-17 was 1.93% in Wereda 10, 1.79% in Gobessa Town, and 1.94% in Mitana Gado Kebele.

Table 4 42: Children Aged 5-17 Who Were Employed, by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Sex	Wereda 10		Gobessa Town		Mitana Gado Kebele	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Men	14	35.00	55	67.07	17	53.13
Women	26	65.00	27	32.93	15	46.88

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

The data in Table 43 show child labor in the study sites, disaggregated by gender. To monitor SDG 8.7.1, we examined disaggregated CBMS data on working children by sex. Based on CBMS census results in Wereda 10, among those working children aged 5-17, 35% were boys and 65% were girls. In Gobessa Town, 67.07% were boys and 32.93% were girls in contrast to Mitana Gado Kebele (53.13% were boys and 46.88% were girls).

Table 4 43: Child Employed by Education Status (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Magnitude	Percent
Attending school	32	46.38
Not attending school	37	53.62
Total	69	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Child employment was examined along with educational status. In the study sites, of those children who were employed, 53.62% had not attended school in the preceding twelve months.

Table 4 44: Proportion of Adults (15 Years and Older) with an Account at a Bank or Other Financial Institution or with a Mobile-Money-Service Provider (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Town	n	Mitana Gado Kebele	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Men	1782	48.43	2230	49.33	182	53.69
Women	1840	51.57	2291	50.67	157	46.31

Indicator 8.10.2 of SDG Goal 8 monitors the proportion of adults (15 years and older) who either held an account at a bank or other financial institution or used a mobile-money provider. Based on CBMS results from the study sites, 48.43% of account-holders in Wereda 10 were men and 51.57% were women. In Mitana Gado Kebele, 53.69% of account holders were men and 46.31% were women.

4.9 SDG 9: INDUSTRY, INNOVATION, AND INFRASTRUCTURE

Infrastructure, industrialization, and innovation are three drivers of economic growth. When inclusivity, resilience, and sustainability are factored into the implementation of these driving forces, economic growth can support sustainable development.

Table 4 45: Proportion of Employed Population by Industry of Employment (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Industry	Wereda 10		Gobessa Town		Mitana Gado Kebele	
	Magnitude	Proportion (%)	Magnitude	Proportion (%)	Magnitude	Proportion (%)
Manufacturing	260	10.33	9	0.27	0	0.00
Non-manufacturing	2258	89.67	3272	99.73	747	100.00
Agriculture	22	0.97	593	18.12	559	74.83
Transportation	176	7.79	102	3.12	2	0.27
Others	2060	91.23	2577	78.76	186	24.90

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

In terms of Goal 9 of the SDG (Industry, Innovation, and Infrastructure), we monitored Indicator 9.2.2 (manufacturing employment as a proportion of total employment). Our results in all study sites indicated a large portion of employment was in the non-manufacturing sector. In Mitana Gado Kebele, the most common source of livelihood was agriculture, which sustained 74.83% of the population. In Wereda 10, 91.23% of employment was in trade.

4.10. SDG10: REDUCED INEQUALITIES

To monitor reduction inequality, this CBMS study measured only one indicator—Indicator 10.2.1 Proportion of people living below 50% of median income, by sex, age, and persons with disabilities.

The median annual income across all study sites was ETB 36,000. This value was computed as the 50th percentile of the income of the entire population in the study area. 40.19%, 49.61%, and 74.81% earned an annual income of less than or equal to the median income in Wereda 10, Gobessa Town, and Mitana Gado Kebele, respectively.

Though the SDG indicator required us to compute the proportion in terms of the national median household income, information about Ethiopia's national median income was not available. Hence, we confined our analysis to the study sites only. These results showed that the proportion of the population below 50% of the median income was 22.64%.

4.11. SDG16: PEACE, JUSTICE, AND STRONG INSTITUTIONS

Peace, justice, and effective, accountable, and inclusive institutions are at the core of sustainable development. Progress in promoting peaceful and inclusive societies remains uneven across and within countries. Violent conflicts have increased in recent years, and a number of high-intensity armed conflicts have caused large numbers of civilian casualties and driven millions of people from their homes.

Table 4 46: Proportion of Individuals with Registered Birth, Disaggregated by Sex (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

	Wereda 10		Gobessa Town		Mitana Gado Kebele	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Men	166	50.61	204	50.25	62	53.91
Women	162	49.39	202	49.75	53	46.09

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Data reported for 147 countries from 2010 to 2016 indicated that 71% of the births of children under age 5 worldwide were registered; the birth registration rate in sub-Saharan Africa stands at just 46% (United Nations, 2017). According to Trading Economics (2019) birth registration was at 6.6% nationally, 28.9% in urban areas, and 4.9% in rural areas.

Based on the CBMS data from the study sites, 50.61% of those whose births were registered in Wereda 10 were men. In Gobessa Town 50.25% of registered births were men, alongside 53.91% in Mitana Gado Kebele.

4.12. SDG17: PARTNERSHIPS FOR GOALS

In order to achieve SDG, a stronger commitment to partnership and cooperation, coherent policies, an enabling environment for sustainable development at all levels and by all actors, and a reinvigorated global partnership for sustainable development are needed. Meeting implementation targets is key to realizing the 2030 Agenda, as is the full implementation of the Addis Ababa Action Agenda. Incremental progress has been made in these areas, but more is needed (United Nations, 2017).

One of the indicators monitored under this Goal was access to the internet. The finding is presented on Table 48.

Table 4 47: Access to Internet by, by Sex and Age Group (Wereda 10, Gobessa Town, and Mitana Gado Kebele)

Project Site	Sex		Age group			
	Men	Women	Youth (15 to 29)	Adult (30 to 64)	Old age (Above 64)	
Wereda 10	49.00	51.00	37.05	54.43	8.52	
Gobessa Town	51.29	48.71	50.00	47.00	3.00	
Mitana Gado	42.55	57.45	48.98	48.98	2.04	

Source of data: 2018 CBMS Census of Wereda 10, Gobessa Town, and Mitana Gado Kebele, Ethiopia.

Goal 17, Partnerships for Goals, Indicator 17.8.1 is about the percentage of population with access to the internet. In 2016, about 80% of the population in developed regions had internet access, compared to 40% in developing regions and 15% in least-developed countries (United Nations, 2017).

In Wereda 10, 51.06% of those with internet access were women, but 51.35% of those with internet access in Gobessa Town were men. In Mitana Gado Kebele, 57.45% of those with internet access were women.

Age disaggregation showed that older residents had the least access to the internet: 8.48%, 3.08%, and 2.04% for Wereda 10, Gobessa Town, and Mitana Gado Kebele, respectively.

5 Conclusions and Policy Implications

- High multidimensional poverty was observable in Mitana Gado Kebele (i.e., an MPI of 0.1156). The lowest was in Wereda 10. The MPI of Gobessa Town was 0.0158.
- Almost 89.27% of the population lived below the international poverty line of \$1.90 per day. Among total women, 89.24% were poor. The proportion of poor men among total men was 89.25%. This percentage rose to 97.07% in the rural area in our study, Mitana Gado Kebele.
- · There was a small difference in poverty status between the employed and

- unemployed in all study sites.
- The proportion of the population that lived below national poverty line was 13.65%, quite a bit lower than the international percentage of poor individuals (89.26%). This is because the poverty threshold in Ethiopia is less than the international poverty threshold. Still, the percentage of the population that lived below the national poverty line in our rural area was higher (32.94%) than in our urban area (9.74%).
- As per the CBMS data, the income-poor, based on the national poverty threshold, varied between men and women in all study sites.
- Common causes of death in the area were heart disease, cancer, diabetes, and respiratory ailments. From the total deaths recorded in the twelve months preceding the survey, 41% were due to heart, cancer, diabetes, or respiratory infections. Of total HCDR deaths reported in Wereda 10, men were affected more significantly than were women. In Gobessa Town and Mitana Gado Kebele, however, HCDR affected women more than men.
- Of the total population who involved in education and training, 45.53% were men and 54.47% were women in Wereda 10. Similarly, the figures were 54.47% and 45.53% in Gobessa Town for men and women, respectively.
- From the total youth and adult population, 92.70% had no ICT-related knowledge. Of those who did have ICT skills 98.13% had such basic skills as operating Microsoft applications, browsing the internet, and transferring files using external devices like a flash drive. Few, however (1.87%) possessed skills related to software development and coding. From the total population of men, 91.16% had no ICT knowledge; the figure among women was slightly higher (94.08%).
- Of total women aged 15-49, 33.78% had been genitally mutilated. This percentage was very low (4.58%) among girls younger than 15. This implies policy makers should continue to intervene to totally eradicate the problem.
- We found that 74.11% of those aged 15-49 could not make their own decisions regarding sexual relations, contraceptive use, and reproductive healthcare.
- The percentage of women holding managerial positions was very small (only 1.28%). Among women who were employed only 1.81% held managerial positions.
- The problem of non-clean sources of fuel such as gasoil, firewood, dung, and kerosene could be observed in Gobessa Town and Mitana Gado Kebele
- Women's average daily wage was quite a bit lower than men's (by ETB 9.67). As our findings showed, the hourly wage of men was almost twice that of women.
- The study also found that those who were disabled earned a daily wage of ETB 4.70 less than those who were non-disabled. Disability clearly affects earnings.
- Unemployment was 26.65% for men and 60.56% for women. A disaggregation on the basis of disability status showed that 73.56% of the disabled were unemployed.
- Unemployment disaggregation by age indicated that 33.09% of youth in the study area were unemployed.
- Specific to those 15 and older, marked differences existed across study sites among men and women in terms of holding accounts with formal financial-service providers.
- In all study sites, half of births in the preceding twelve months had not been registered

• We also showed critical problems related to access to the internet. In the study area, the majority of the population did not have access. In Wereda 10 and Mitana Gado Kebele, most internet users were women. In Gobessa Town, however, the proportion of men internet users exceeded women users.

Generally, poverty in the project sites was high, and the proportion of the population below the international and national poverty lines increased significantly from urban to rural areas.

6 Recommendations

The targets of these recommendations are: 3.4.1, 17.8.1, 16.9.1, 8.5.1, 5.3.2, and 4.4.1.

- Wereda-level health bureaus should give more emphasis to non-communicable diseases such as heart problems, diabetes, and cancer because their incidence was relatively high.
- The majority of the population in the study still had no internet access. In Ethiopia, there is a single telecom services that is under the full control of the government and is located at the center of the capital city. We recommend a policy change to expand both the network and access to coverage.
- Birth registration is vital for welfare planning. We found, however, that the births of 61.30% of the population under five years old were not registered. We recommend an intensive campaign to increase awareness of the significance of birth registration.
- Stakeholders should conduct further research on why being disabled results in lower daily incomes and find solutions accordingly.
- Women's participation in managerial positions was quite low. To improve this, specific quotas for women's managerial positions should be set by local administrative governments.
- The study finds that genital mutilation continues to be practiced. Awareness campaigns regarding the negative effects of mutilation are needed. Health bureaus at the wereda level should take the initiative to implement these programs.
- ICT training centers should be established in localities to reduce technology illiteracy and should include training in intermediate skills.
- Increase household members' capacity to earn income and provide social protection for those with seasonal employment (mostly in the agriculture sector).
- Promote healthy lifestyles to reduce the prevalence of diabetes, cancer, and hypertension.
- It is vital to increase awareness of women's reproductive health.
- Encourage or even force youth to enter practical job training.

General Recommendations

Even though the government has increased attention to agriculture and to rural populations, which are about 83% of the country, poverty in rural areas remains high, including lack of access to basic services and facilities such as schools, health centers, electricity, and roads. Obviously, it is difficult to provide these facilities in rural areas because of the lack of financing and low population density. Thus, the government should organize the population and settle rural

inhabitants in one area to provide basic facilities effectively.

Expanding markets to new areas, even in urban settings, along with establishing markets in rural areas are basic to enhancing involvement in activities and increasing income.

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APPENDICES

Table 1: Summary Matrix of Operational Definitions of Some of the Indicators					
Indicators	Operational Definition				
Maternal mortality	Proportion of women who died as a result of pregnancy-related causes				
Under-five mortality	Proportion of children below five years old who died in the preceding twelve months				
Neonatal mortality	Proportion of children who died within 28 days in the preceding twelve months				
Suicide	Proportion of population who died due to suicide				

Table 2: Summary of Descriptive Statistics

No.	Indicator	Wereda 10	Gobessa	Mitana Gado	Aggregate
			Town	Kebele	
1.	Households	1814	2,677	617	5108
2.	Population	6313	9742	2,696	18751
3.	Youth (15-29)	1,805	2623	500	4632
4.	Income Poor based on	77.60	94.65	97.07	89.27%
	International Poverty Level				
5.	Income Poor based on National Poverty Level	9.74	10.84	32.94	13.65%
6.	No access to Basic service	3.57	50.27	95.29	39.16%
7.	Maternal mortality ratio				1
8.	Births attended by skilled health personnel	98.19	66.72	35.40	66.92
9.	Heart disease, cancer, diabetes, and respiratory ailments				41
10.	Death Due to traffic accident				4
11.	Death related to lack of sanitation				3
12.	Youth and Adult not in education, employment or training				27.07
13.	7-14 years old not attending school	2.85	5.53	8.35	
14.	15-18 years old not attending school	16.55	16.88	24.00	
15.	Substandard housing	40.26	83.66	98.70	70.07
16.	Did not own house	64.37	47.40	13.94	49.38

17.	Not socially engaged	21.17	21.82	10.05	20.16
18.	Women aged 20-24 years				62.55
	who were married before				
	age 15 and before age 18				
19.	Girls and women aged 15-				33.78
	49 years who had				
	undergone genital				
	mutilation				
20.	Women in managerial				1.81
	positions				
21.	Individuals with no own	12.99	20.13	53.38	22.51
	mobile phone				
22.	Safe water	99.94	99.83	73.41	
23.	Own toilet	51.02	90.36	47.81	71.25
24.	Access to electricity	99.83	96.87	34.27	
25.	No Clean fuel	11.64	92.41	99.81	
26.	Average hourly wage				
	disaggregated by gender				
	Men	27.16	20.83	12.45	22.24
	Women	16.40	10.59	6.22	12.57
27.	Population without access				
	to the internet				
	Men	49.00	51.29	42.55	
	Women	51.00	48.71	57.45	