# working paper CBMS-2020-11

# Community Response to Localization of Sustainable Development Goals: A Profile of Relevant Indicators in Uganda

Johnson L. Kagugube Margaret Banga John Nsubuga

June 2020





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#### Abstract

The SDG are clear on ending hunger and poverty in all forms, achieving food security, improving nutrition, promoting sustainable agriculture, ensuring healthy lives and well-being for all, providing inclusive and equitable high-quality education and lifelong learning opportunities, reaching gender equality, and empowering all women and girls. Uganda's Second National Development Plan (NDP) II integrated the SDG. Using the Community Based Monitoring System methodology, we were able to generate information on the SDG indicators to monitor the progress for the localities which were covered. The localities covered were still lagging behind on the implementation of the SDGs considering the a number of indicators. The findings of the study can also be utilized to inform planning, monitoring and evaluation of programs at the lowest administrative units, is one way to report on progress toward SDG. There is a need for Government to put in place strategies aimed at improving the standard of living of the people especially for the residents in the rural communities.

JEL: 1310, 1320

**Keywords**: Poverty, Welfare, Well-being, Basic needs, General welfare, Human development, Living standards, Standard of living, Impoverishment, Low income, Poor, Poverty analysis

#### **Authors**

Johnson Kagugube	Margaret Banga (PHD)		John Nsubuga	
Consultant	Senior	Lecturer,	Makerere	Statistician
Kampala, Uganda	University, School of Statistics,		Kampala, Uganda	
jkagugube@gmail.com.	Kampala, Uganda		jjohnnsubuga@gmail.com.	
	margaretjbanga@gmail.com.			

### **Acknowledgements**

This research work was carried out with financial and scientific support from the Partnership for Economic Policy (PEP) (<a href="www.pep-net.org">www.pep-net.org</a>) with funding from the Department for International Development (DFID) of the United Kingdom (or UK Aid), and the Government of Canada through the International Development Research Centre (IDRC).

The authors are also grateful to Dr. Celia Reyes, Ms. Steffie Calubayan, Ms. Anne Bernadette Mandap Mr. Aron Gregorio and Ms. Jas Quilitis, the staff of Community Based Monitoring System (CBMS) Network Office De La Salle University (DLSU) Angelo King Institute for Economic and Business Studies, Manila, Philippines for technical support and guidance, as well as to Ms. Marie Celeste Diouf from PEP for valuable comments and suggestions.

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### List of abbreviations

APP- Accelerated Poverty Profiling	PEP- Partnership for Economic Policy
CBMS- Community Based Monitoring System	SACCO- Savings and Credit Cooperative
	Organisation
CPQ- Community Profiling Questionnaire	SDG- Sustainable Development Goals
DFID- Department for International Development	UBOS- Uganda Bureau of Statistics
DLSU- De La Salle University	UDHS- Uganda Demographic and Household Survey
DRT- Development Research and Training	UNCST- Uganda National Council for Science and
	Technology
FGD- Focus Group Discussion	UNDP- United Nations Development Programme
GBV- Gender Based Violence	UNHS- Uganda National Household Survey
HLP- High Level Panel	VSLA- Village Saving and Lending Association
IDRC- International Development Research Center	WASH- Water Sanitation and Hygiene
MFI- Micro Finance Institution	
NDP- National Development Plan	

#### **Executive summary**

A Community-Based Monitoring System (hereafter, CBMS) study was conducted in 2018 in the sub-counties of Akoboi and Katakwi in the Katakwi District in Eastern Uganda. The aim of the study was to fill the information gap with regard to understanding household livelihoods and financial inclusion and how individuals and households made decisions among the various options for saving money. Two data collection modules, the quantitative and qualitative, were employed to achieve meaningful results.

The respondents were 5,201 households in the two sub-counties. Out of the total, 2,767 households were in Katakwi sub-county, and 2,434 were in Akoboi sub-county. Overall, 24,314 people were surveyed. An average household size of 4.7 persons per household was recorded, similar to the figure obtained from the 2014 National Population and Housing Census.

The findings revealed that close to 50% of the population was under 15 years of age and, of these, 51% were boys and 47.8% were girls. We computed the age-dependency ratio by comparing the number of dependents (zero to 14 and over 65) to the total population (15-64), which indicated more people were of nonworking age than of working age. At the sub-county level, the dependency ratios were 126.1 and 127.2 for Akoboi and Katakwi, respectively.

The analysis of the socioeconomic conditions of households in the CBMS project site in the context of local monitoring the Sustainable Development Goals revealed a range of achievement levels. The common assets that households owned, for example, were mobile phones, houses, land, and radios.

The analysis also considered Water Sanitation and Hygiene (WASH) indicators. The majority of the households used covered pit latrines without slabs (34% overall. The percentage of households using covered pit latrines without slabs was higher in Akoboi (44.5%) than in Katakwi (24.6%). The majority of the households lacked hand-washing facilities: only 3.1% of households had hand-washing facilities with water and soap. On the other hand, access to safe water was almost universal.

High levels of poverty were revealed despite government efforts to reduce poverty. The proportion of the population below the international poverty line of USD \$1.90 was 93.6% of households headed by men and 96.0% of households headed by women. Overall, 55.5% of the population lived below the National Poverty Line in the project sites. The study area had benefited from a number of government programs aimed at ensuring better standards of living, including Operation Wealth Creation, Expanded Programme for Social Protection, and regional development programs. Much remains to be done to alleviate poverty in both rural and urban areas countrywide.

The SDG are clear on ending hunger and poverty in all forms, achieving food security, improving nutrition, promoting sustainable agriculture, ensuring healthy lives and well-being for all, providing inclusive and equitable high-quality education and lifelong learning opportunities, reaching gender equality, and empowering all women and girls. Uganda's Second National

Development Plan (NDP) II integrated the SDG. The CBMS approach, which facilitates the generation of data to inform planning process, monitoring and evaluation of programs at the lowest administrative units, is one way to report on progress toward SDG.

Our policy recommendations, based on the study findings, are:

- 1) Intensify hand-washing education in rural communities;
- 2) Because inequality is one of the major barriers to reaching the SDG, the government of Uganda should address disparities that restrict opportunities in education, access to incomegenerating activities, and access to information as well as find ways to reduce travel time from home to services;
- 3) Strengthen capacity to measure, monitor, and assess progress on SDG as part of the data revolution; and
- 4) Establish strategies to enable unemployed persons to obtain adequate and accessible income support.

The recommendations regarding improvement of CBMS methodology are:

- 1) Regularly update data to assess progress on SDG at all levels and ensure that results are shared with concerned communities and partners to promote change and better results as part of the data revolution;
- 2) Expand the CBMS study to cover more sub-counties and districts; and
- 3) Secure engagement of political leaders and technical team members in reflecting on the results and implementing programs that respond to identified needs.

#### 1 Research overview

The Sustainable Development Goals, adopted in January 2016, were built on Millennium Development Goals. The SDG are seventeen goals and 169 targets of the universally applicable 2030 Agenda for Sustainable Development. Uganda has actively pursued the sustainable development agenda since the early 90s with three distinct transition phases: post-war reconstruction (1986-1997); poverty eradication (1997-2009); and social economic transformation (2010-2020). The country remains steady in its commitment to the sustainable development agenda.

Between 1991 and 2014, life expectancy in Uganda rose from 48.1 to 63.3 years; infant and under-five mortality rates dropped from 122 and 203 deaths per 1,000 live births to 53 and 80, respectively. Levels of orphanhood dropped from 11.6% to 8.0%; literacy levels rose from 54.0% to 72.2%; and income poverty declined from 56% to 19%. Access to electricity, a factor that has a heavy impact on the environment in Uganda, increased from 5.6% to 20.4%. Despite this good progress, improvements in sustainable-development-agenda programs are still required because, for example, high dependence on agriculture, high dependency ratios, and income inequalities remain, among other issues.

The second National Development Plan (NDP-II 2015-2016 through 2019-2020), Uganda's current medium-term plan, is also the framework for implementing the 2030 Agenda and SDG. NDP-II is intended to strengthening Uganda's competitiveness in order to foster sustainable wealth creation, employment, and inclusive growth that will bring Uganda to middle-income status by 2020 (i.e., a per-capita annual income of US\$ 1,039.00), NDP-II integrated the SDG, aligning more than 69% of its targets to the plan and ensuring they would continue to trickle down to sector and local planning frameworks. The application of SDG in local governments required establishing data-generation strategies to inform the monitoring process. This is in line with the call for a data revolution by the United Nations High Level Panel (UN-HLP) on the post-2015 Sustainable Development Agenda. A data revolution is required to provide a foundation for transformational shifts that would lead to sustainable development in Uganda.

The data revolution also entails increasing access to data through much more openness and transparency, ultimately empowering people for better policies, better decisions, and greater participation and accountability. In order to design and make informed policies and decisions, real-time data are needed that would facilitate conclusions about various sections of the population. Policy makers currently lack regular, up-to-date information regarding household livelihoods and the status of financial inclusion at the local government level.

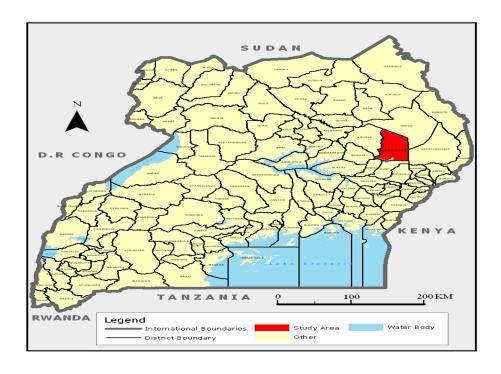
A CBMS is one of the most effective ways of generating real-time data for evidence-based decision making. In 2016, Development Research and Training (DRT), a local non-governmental organization in Uganda, conducted a CBMS Research Project with financial and technical support from the Partnership for Economic Policy (PEP) and the Asia-Community-Based Monitoring System Network (CBMS-N). The grant enabled DRT to pilot test a CBMS in the two lower local governments of the Katakwi Town Council and the Kapujani sub-county of Katakwi district in Eastern Uganda (Kagugube et al., 2016). The research findings enriched understanding regarding

the coping strategies among unemployed youth (Banga et al., 2016) and informed policies on youth, planning processes at various levels, and the creation of household registers for villages. The creation of village registers responds to a call from the decentralized governments for disaggregated data/information up to the lowest level of planning (village).

During 2018, a CBMS study was conducted in two lower local governments of Akoboi and Katakwi sub-county of Katakwi district in Eastern Uganda. The aim of the survey was to fill in gaps in information with regard to household livelihoods, financial inclusion, and the ways in which individuals and households made decisions about the various options for saving money. Such information is vital the planning process at both the local and national levels. Up-to-date data will enable individuals, community leaders, businessmen, and non-profit organizations to plan more effectively.

In the context of SDG monitoring, we also collected data on some SDG indicators, and we present those findings.

#### Map of Uganda Showing the Study Area



### 2 Methodology

#### 2.1 Data Collection

A quantitative and a qualitative data-collection module were employed. The CBMS module generated quantitative data and was administered in all households of the project sites using Android tablets and CBMS accelerated poverty profiling (APP) tools. This was the second CBMS project by DRT that collected local data with a tablet-based system. Enumerators visited respondents in their homes (Kagugube et al., 2019).

A checklist was developed for qualitative information that could guide Focus Group Discussions (FGD) at the village and sub-county levels to generate information to enrich and complement the quantitative findings. FGD meetings were held in village centers for village participants and at the Sub-County Council Hall for sub-county level participants.

DRT sought assistance from the Community-Based Monitoring System (CBMS) Network Office<sup>1</sup> to provide technical support for further development of mobile applications for data generation, including development of data collection applications (CBMS APP), procurement of a STATA statistical package, training on the generation of poverty maps, and database development.

The enumerators were recruited from Katakwi district in order to minimize or avoid language barriers. Senior secondary six (high school) graduates who were residents of the subcounty or a nearby one with knowledge of the local language (Ateso) were hired for the job. Given the high-level of experience required for the job, conversely, supervisors and editors were recruited from the headquarters (Kampala). The recruitment process of the fieldworkers ensured a gender balance. Overall, a total of twenty enumerators, five editors and three supervisors were recruited for CBMS data collection. Field workers were trained at the district level by DRT trainers, and the training of the trainers was conducted at the DRT offices before deployment to the field.

Data collection was a door-to-door data household census that covered all households in the study area. The enumerators used tablets, equipped with CBMS APP tools, to collect data which was uploaded on the servers (CBMS Portal) every day. Data collection was carried out during the day, and supervisors and editors supervised the process. The editing of the data on the tablets was carried out in the evening after the day's fieldwork. In addition, supervisors were in charge of facilitating FGD at both the village and sub-county level.

#### 2.2 Coverage

At the time of data collection, Katakwi District was divided into Usuk and Toroma Counties with a total of seventeen lower local governments (sixteen sub-counties and one town council). According to the 2014 Population and Housing Census, Katakwi district had a total of 30,791

<sup>&</sup>lt;sup>1</sup> Based at De La Salle University in Manila, the Philippines.

households with an average household size of 5.4 persons. During the second phase, two lower local governments of Akoboi and Katakwi were covered. The study surveyed 5,201 households in the two lower local governments. Of these, 2,767 were in Katakwi sub-county and 2,434 were surveyed in Akoboi sub-county, covering 24,314 individuals. We recorded an average household size of 4.7 persons per household, similar to the Figure from the 2014 National Population and Housing Census.

#### 2.3 Limitations of the Study

Some of the limitations of the study included the following:

- 1) Delayed programming of the Community Profile Questionnaire (CPQ) tool: The electronic version of the CPQ tool was not used because of programming challenges. Hard copies of the CPQ tool were used during data collection.
- 2) Delayed approval of the CBMS research by the Uganda National Council for Science and Technology (UNCST): The approval process delayed CBMS data collection for about three months.
- 3) High expectations from respondents in terms of individual hand-outs. The fieldworkers had to explain the objectives of the study to minimize expectations.
- 4) Limited financial resources that could not support every issue that arose during data collection.
- 5) Because households were very distant from each other, moving between them consumed a great deal of time.
- 6) Data collection was carried out during the rainy season. The rain affected the movement of enumerators in the villages.

### 3 Study Indicators

The CBMS key indicators cover such thematic areas as demographics, socioeconomic status, material well-being, and participation of communities in the implementation of development programmed.

#### 3.1 CBMS Core Indicators

The CBMS core indicators cover various dimensions of poverty, including material well-being (such basic needs of life as nutrition, good health, sanitation, shelter, education, etc.); lack of human rights; citizenship; and social networks. Economic factors such as low income, lack of assets, and limited access to markets or public services can lead to poverty. For purposes of this study, proxy indicators were derived to assess socioeconomic conditions in the study sites. Tables 3.1 to 3.3 present the core indicators for the study at individual, household and community levels.

**Table 3.1: CBMS Core Indicators: Individual Level** 

Sector	Indicators: Individual	Official Definition	Operational Definition
Education	Proportion of children aged 10 years and over who were illiterate	Proportion of children aged 10 years and older who were not able to read and write in any language expressed as a percentage of the total population in the census area(s) (Uganda Bureau of Statistics, 2010).	Total number of those aged 10 years and older who cannot read and write meaningfully divided by the total population aged 10 years and older multiplied by 100
	Proportion of children aged 6-12 who did not attend primary school.	The percentage of primary-school-aged children than were not currently attending school.	Population of primary-school- aged children currently not in school expressed as a percentage of the total population of primary-school- aged children who were supposed to be in school.
	Proportion of children aged 13- 18 who do not attend secondary school.	The percentage of the secondary-school-aged children who were not currently attending school.	Population of secondary-school-aged children currently not in school expressed as a percentage of the total population of secondary-school-aged children who were supposed to be in school.
	Proportion of persons aged 6-24 currently not in school.	The proportion of persons (6-24 years) for each schooling status.	The current schooling status for 6-18 year olds. Included never attended, left school, and currently in school
Socioeco nomic	Proportion of youth who were unemployed	Youth unemployment rate is the proportion of the working-age population aged 18- 30 that was without work, was looking for work, and was available for work during a specified reference period of one week, (Uganda Bureau of Statistics, 2010).	The number of youth persons unemployed divided by the total youth in the lower local government multiplied by 100
	Proportion of the working-age population that is unemployed	Unemployment rate refers to the proportion of the working-age population without work, looking for work, and available for work during specified reference period (one week). (Source:	The total number of persons unemployed divided by the working-age population multiplied by 100

		National Statistical Meta Data Dictionary, 2010)	
	Proportion of the population not in employment, education, or training.	Inactivity rate refers to the proportion of the working-age population that is neither employed nor unemployed (Uganda Bureau of Statistics, 2010).	The part of the labor force that is not active divided by the working-age population multiplied by 100. The labor force is the total of the employed and the unemployed population
Participati on in the Financial Sector	Proportion of the adult population without a bank account	The proportion of the adult population that did not own a bank account.	The total population aged 18 and over without bank accounts out of the total adult population
	Proportion of the adult population without mobile phones	The proportion of the adult population that did not own mobile phones.	The total population aged 18 and over that did not own mobile phones out of the total adult population
	Proportion of the adult population without access to a mobile phone	This refers to the proportion of the adult population that did not have access to a mobile phone.	The total population aged 18 and over who did not have access to a mobile phone out of the total adult population.
	Proportion of persons reporting not using a mobile phone for financial operations.	Methods of saving personal or household financial resources	List of financial savings techniques employed by a person or the household
	Proportion of the adult population unwilling to save money on a mobile phone.	The proportion of the population aged 18 and older that were not willing to save money on a mobile phone	The total population aged 18 and over that was willing to save money on a mobile phone account out of the total adult population.

Table 3.2: CBMS Core Indicators—at the Household Level

Sector	Indicator	Official Definition	Operational Definition
Health	Proportion of households with unsafe sanitation facilities.	Percentage of households that had unsafe toilet facilities, including those without toilet facilities and those that used uncovered pit latrines (Uganda Bureau of Statistics, 2010).	Number of households that had unsafe toilet facilities divided by the total number of households multiplied by 100. Safe toilet facilities include: covered pit latrine, ventilated improved pit latrine, or flush toilets.
Water	Proportion of the households that obtain drinking water from a far distance (beyond 1.0 km for rural areas and 0.2 km for urban areas)	The percentage of the population within easy reach of a safe water source in rural and urban areas: -1.0 km radius for rural and -0.2 km for urban or thirty minutes, total round-trip time (Uganda Bureau of Statistics, 2010).	Number of rural households within a 1.0 km and urban households with 0.2 km radius from a safe water source divided by total population. Safe drinking water is clean water supplied from an improved water source, such as a borehole/shallow well fitted

	Proportion of households that use unsafe	The percentage of households whose main source of water for	with a hand pump, a protected spring or gravity flow scheme, or treated piped water, subject to maintenance of a safe drinking-water chain. Bottled water packed by approved companies is considered safe water (Uganda Bureau of Statistics, 2010). Unsafe water sources include spring wells shared with animals, ponds, swamps, lakes, and rivers  Number of households whose main source of water for domestic use is unsafe
	drinking water	domestic use is unsafe (Uganda Bureau of Statistics, 2010).	divided by total number of households
Nutrition	Proportion of children below 5 years who eat non-nutritious meals	The percentage of children aged 0 to 4 within the households who had eaten non-nutritious meals the previous day.	Number of children under 5 within the different households in the study area who had eaten non-nutritious meals the previous day divided by the total number of children 5 years old or younger in the study area times 100.
	Proportion of children aged 5- 13 who eat non- nutritious meals	The percentage of children aged 5-13 within the different households who ate non-nutritious meals the previous day.	Number of children aged 5- 13 within households in the study area who had eaten non-nutritious meals the previous day divided by the total number of children aged 5-13 in the study area times 100
Agriculture	Proportion of households not involved in growing any crop	The proportion of households that did not grow any kind of crop during a specified season.	The number of households that did not grow any kind of crop divided by the total number of households in the study area.
	Proportion of households not involved in the raising of any livestock	The proportion of households that were not involved in the raising of any kind of animal during the specified period.	The number of households that did not raise any livestock divided by the total number of households in the study area.
Informatio n	Proportion of households/you th without access to jobrelated information.	The proportion of households/youth that were ignorant about information that had the potential to yield employment opportunities.	Proportion of households/youth without access to job information.
Financial services	Proportion of the adult population with	The percentage of the population aged 18 and over without access to	The total population aged 18 and over without bank accounts out of the total

no	access to	financial institutions.	adult population
fina	ncial		
inst	itutions.		

**Table 3.3: CBMS Core Indicators—Community Level** 

Sector	SD G	Indicator	Definition (Official)	Definition (Operational)
Health	3	Number of health facilities	Structures that have a roof and walls and stand more or less permanently in one place with in-patient services they include hospitals and health centers II, III, and IV (Uganda Bureau of Statistics 2010).	Summation of all health facilities by category
Education	4	Number of Schools	All schools considered.	Summation of all schools by level (primary/seconda ry)
Water	6	Water sources that were functional	The percentage of improved water sources that were functional at the time of a spot check.	Number of functional water sources divided by the total number of water sources
Financial	1	Availability of financial institutions that offer services to youth.	Percentage of financial institutions that assisted youth	Number of financial institutions assisting youth divided by the total number of financial institutions.
Agricultura I facilities	1 and 2	Proportion of youth without access to agricultural extension services, cooperative societies, inputs, markets, etc.	Percentage of the youth that used such services.	Number of the youth who used services divided by the total number of youth.

Labor	1	Number of job- recruitment notices.		Number of job notices that corresponded to youth qualifications by type of media.
Other social and — economic amenities —		Availability of social centers, membership clubs, investment clubs, sports clubs, etc.	Number available	Summation

#### 3.2 CBMS-Based SDG Indicators

The Sustainable Development Goals built on the successes of the Millennium Development Goals and included such new areas as climate change, economic inequality, innovation, sustainable consumption, peace and justice. They provide clear guidelines and targets for all countries to adopt in accordance with their own priorities and the environmental challenges of the world at large. The SDG address the root causes of poverty and unite us to make a positive change for both people and planet. Poverty eradication is at the heart of the 2030 Agenda as is the commitment to leave no-one behind. The SDG focus on such crucial areas as poverty alleviation, democratic governance and peace building, climate change and disaster risk, and economic inequality. The Government of Uganda received support from UNDP to integrate the SDG into the second National Development Plan (NDP). National indicators that were matched with SDG indicators included NDP indicators, National Standard Indicators, and National Priority Gender Equality Indicators.

Table 3.4. SDG Indicators-Generated from CBMS Data, Uganda

No.	Goals/Indicators	Explanation regarding localization of indicators
Goal 1. Er	nd poverty in all its forms everywhere	
1	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)	The international poverty line used in determining the population below the poverty line is USD \$1.90/day. The poverty headcount indices of the Uganda Bureau of Statistics were considered and compared with CBMS proxy indicators.
2	1.2.1 Proportion of population that lived below the national poverty line, by sex and age.	The Uganda Bureau of Statistics regularly conducts a National Household Survey which is the main basis for poverty statistics. A poverty line is constructed based on household consumption expenditure.
3	1.2.2 Proportion of men, women, and children (of all ages) that lived in poverty in all its dimensions according to national definitions	This indicator was derived from the Multidimensional Poverty Index (MPI) approach of the United Nations Development Programme.

4	1.3.1 Proportion of population covered by	
	social protection systems, distinguished by sex, adults or children, unemployed persons, older persons, disability status, pregnant women, newborns, work-injury victims, and the poor and the vulnerable	Supplemental indicator: Percentage of senior citizens covered by social pension.
5	1.4.1 Proportion of population living in households with access to basic services.	Basic services included were basic education, drinking water, sanitation, and shelter.
Goal 2. Er	nd hunger, achieve food security and improved nutrition, an	nd promote sustainable agriculture
6	2.1.1 Prevalence of undernourishment	
Goal 3. Er	nsure healthy lives and promote well-being for all at all ages	;
7	3.1.1 Maternal mortality ratio, per 100,000	Instead of using live birth data as a denominator, which was not available, we used the number of children 0 to 1 year plus the total number of women who died due to pregnancy-related causes.
8	3.2.1 Under-five mortality rate, per 1,000	Instead of using the live birth data as denominator, which was not available, we used the number of 0-to-5-year-olds plus the total number of children aged 0-5 who died.
Goal 4. Er	sure inclusive and equitable education and promote lifelor	ng learning opportunities for all
11	4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary that have achieved at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.	The following were used as a supplemental indicator: Net and gross enrolment rates in primary and secondary education.
12	4.2.1 Proportion of children under 5 who are developmentally on track in health, learning and psychosocial well-being, by sex	Proxy indicator to 4.2.1 Number of children in child development centers/daycare centers
13	4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex	Proxy indicator to 4.2.2 Enrolment Rate in kindergarten: (a) Net Enrolment Rate (b) Gross Enrolment Rate
Goal 5. Ad	chieve gender equality and empower all women and girls	()
14	5.b.1 Proportion of individuals who own a mobile telephone, by sex.	This was computed as proportion of households with at least one member who owned a mobile telephone.
Goal 6. Er	sure availability and sustainable management of water and	sanitation for all
15	6.1.1 Proportion of population that used safely managed drinking water services.	The national definition for safe drinking water was used. Safe water sources in Uganda are piped, protected wells/springs, boreholes, and rain water.
16	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	The national definition for safe sanitation was used. Safe sanitation is mainly flush toilets and covered pit latrines. In addition, a hand-washing facility with soap and water should be available.
Goal 7. Er	sure access to affordable, reliable, sustainable and modern	n energy for all
17	7.1.1 Proportion of population with access to electricity	This includes the percentage of households that were connected to electricity, the national grid, generators, or solar power.
Goal 8. Pr for all	romote sustained, inclusive and sustainable economic grov	<u> </u>
18	8.5.2 Unemployment rate, by sex, age and disability status	The proportion of the working-age population that was not employed. The statistics were

		disaggregated by sex, age, and disability status.			
19	8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training	The youth inactivity rate was the percentage of persons aged 15-24 who were not in school or employed.			
20	8.7.1 Proportion and number of children aged 5-17 years engaged in child labor, by sex and age	"Child labor" refers to work that deprives children of their childhood, their potential, and their dignity, and that is harmful to physical and mental development. The children who were not at school but were working at the time of data collection were considered to be child laborers.			
Goal 10. Red	duce inequality within and among countries.				
22	10.2.1 Proportion of people living below 50% of median income, by age, sex and disability status	The median income was derived. Analysis was carried out by age, sex, and disability status.			
Goal 11. Ma	ke cities and human settlements inclusive, safe, resilient,	and sustainable			
24	11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status, and place of occurrence, in the twelve months prior to the survey.	Data collection tools included questions on Gender Based Violence (GBV). The findings facilitated the computation of the proportion of persons who were victims of GBV.			
	omote peaceful and inclusive societies for sustainable de countable and inclusive institutions at all levels	evelopment, provide access to justice for all, and build			
26	16.1.3 Proportion of population subjected to physical, psychological, or sexual violence in the twelve months prior to the survey.	Data collection tools included questions on Gender Based Violence (GBV). The findings facilitated the computation of the proportion of persons subjected to physical, psychological, or sexual violence.			
27	16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	Children under 5 with a birth certificate.			
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development					
Goal 17. Stre	enginen ine means of implementation and revitalize the g	global partitership for sustainable development			

### 4 Application and results

The second CBMS collected information from 5,201 households in the two sub-counties of Akoboi and Katakwi. Overall, 24,314 people were surveyed, of which 11,675 were men and boys, and 12,639 were women and girls (a sex ratio of 92.4). In addition, the average household size was 4.7, similar to the national average household size (4.7 persons per household), obtained from the 2014 Uganda Population and Housing Census. The findings of the CBMS II with regard to selected socio-demographic, household and housing characteristics are presented below.

#### 4.1 Socio-demographic and economic characteristics

The examination of socio-demographic factors is necessary since they affect the people's ability to function normally in their everyday life. The findings presented below are in relation to selected demographic characteristics, household, and some of the socioeconomic variables which are

relevant in the assessment of the progress on the SDG. The results are summarized by locality, gender of the head of household, and age of the head of household.

#### Demographic characteristics

The household size by category is presented in Table 4.1 and the map below. The majority of the households presented six persons or less per household. There were no major marked differences when the comparison was carried out by sub-county.

**Table 4.1: Household Size by Sub-County** 

Household Size		<b>Sub-County</b>		Total
		Akoboi	Katakwi	
	One Person	10.8	10.1	10.4
	Two Persons	9.5	10.1	9.8
	Three Persons	14.1	14.1	14.1
	Four Persons	17.2	16.7	16.9
	Five Persons	15.0	15.5	15.3
	Six Persons	11.6	11.7	11.6
	Seven Persons	8.8	8.5	8.6
	Eight Persons	6.2	6.5	6.4
	Nine Persons	3.2	3.0	3.1
	Ten or more persons	3.7	3.9	3.8
	Total	100.0	100.0	100.0

Map 4.1: Average Household Size

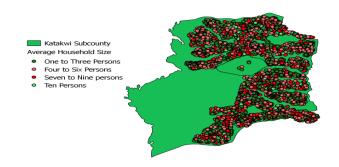


Table 4.2 presents the distribution of the population in five-year age groups by sex and locality. Close to 50% of the population was less than 15 years old, of whom 51% were boys, and 47.8% were girls. Women were a higher proportion of the overall population and among those aged 65 and older, irrespective of the locality. An analysis of the age-dependency ratio, which is a measure of proportion of dependents aged zero to 14 and over the age of 65 in the total population of individuals aged 15-64, indicated that there were more people of nonworking ages than in the working ages (Figure 4.1). At the sub-county level, the dependency ratios were 126.1 and 127.2 for Akoboi and Katakwi, respectively.

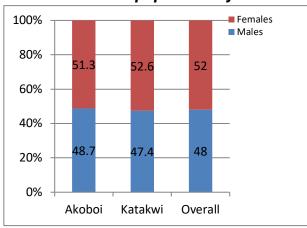
The survival status of parents by household members' age was an inverse relationship. The number of surviving parents decreased significantly as household members' age increased, and more fathers than mothers were likely to die as household members' age increased.

Table 4.2: Distribution of the Population in 5-Year Age Groups, by Sex

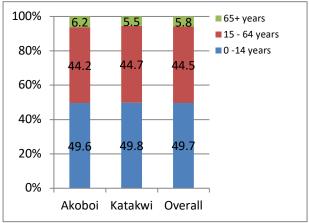
Age, in	n Akoboi Katakwi											
increments of 5 years	Men/boy	rs	Wome s	n/girl	Total		Men/	boys	Wome Is	en/gir	Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0-4	899	16.2	895	15.4	179 4	15.8	100 4	16.4	101 7	14.9	2021	15. 4
5-9	936	16.9	897	15.4	183	16.1	105	17.3	105	15.4	2109	6 16. 3
10-14	1006	18.2	1004	17.2	201 0	17.7	114 3	18.6	116 9	17.2	2312	17. 9
15-19	417	7.5	403	6.9	820	7.2	464	7.6	510	7.5	974	7.5
20-24	334	6.0	405	7.0	739	6.5	349	5.7	481	7.1	830	6.4
25-29	206	3.7	251	4.3	457	4.0	200	3.3	311	4.6	511	4.0
30-34	425	7.7	497	8.5	922	8.1	582	9.5	631	9.3	1213	9.4
35-39	282	5.1	333	5.7	615	5.4	324	5.3	346	5.1	670	5.2
40-44	220	4.0	233	4.0	453	4.0	238	3.9	261	3.8	499	3.9
45-49	207	3.7	169	2.9	376	3.3	206	3.4	211	3.1	417	3.2
50-54	133	2.4	149	2.6	282	2.5	111	1.8	141	2.1	252	2.0
55-59	114	2.1	95	1.6	209	1.8	106	1.7	123	1.8	229	1.8
60-64	59	1.1	97	1.7	156	1.4	77	1.3	112	1.6	189	1.5
65+	305	5.5	402	6.9	707	6.2	270	4.4	445	6.5	715	5.5

Figure 4.1: Analysis of Parents' Age and Survival Status

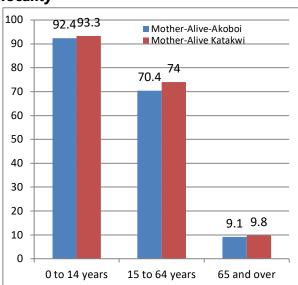
#### Distribution of the population by sex



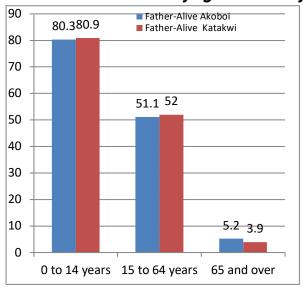
# Distribution of the population by functional age groups—



# Survival status of mother by age and locality



### Survival status of father by age and locality



Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

Figure 4.2 presents the findings on survival status of parents according to household members' ages (in five-year increments). The findings confirm that the probability of losing a parent increases with respondents' age, and more fathers than mothers were reported dead among every age group.

120 100 80.7 84.180 ■ Mother 80 Dead 65.5 60.4 60 ■ Father 44.7 31.5 36.1 39. Dead 40 23.3 20 0 to 45 to 9 10 to 15 to 20 to 25 to 30 to 35 to 40 to 45 to 50 to 55 to 60 to 65+ 14 19 24 29 34 39 49 54 59 64 44 Age (in years)

Figure 4.2: Parents' Survival Status, by Age Group of Household Member



Household interview in Katakwi district

The distribution of the household population by relationship to the head of household and sex is presented in Table 4.3. The majority of the household members were related to the head of household as sons and daughters. The male heads of household formed 68.5% of the total, while the female heads constituted 31.5%. It is worth noting that some of the female spouses were identified as heads of household due to separate eating arrangements especially for the polygamous families. A household is defined as a group of people eating and living together. For the polygamous families several households could be determined based on the eating arrangements.

Table 4.3: Distribution of Household Members, by Relationship to Head of Household

Relationship to Head of	Sex		Total
Household	Men/Boys	Women/Girls	
Head	29.3	12.4	20.5
Spouse	0.8	23.4	12.6
Son/daughter	54.0	46.9	50.3
Son/daughter in law	0.9	3.2	2.1
Grandchild	9.1	7.9	8.5
Parent	0.7	1.8	1.2
Other relative	2.5	2.5	2.5
Domestic worker	0.5	0.1	0.3
Other specify	2.3	1.8	2.0
Total	100.0	100.0	100.0

#### **Social Characteristics**

We considered marital status, possession of a birth certificate, religion, education, and health status to be social characteristics.

Table 4.4 presents the distribution of household members aged 18 years and over by locality. Over a half of the population aged 18 years and over was married, while about one-fifth of members in the same population category were single. The widowed formed about one-tenth of the entire population.

Table 4.4: Marital Status of Population Aged 18 and Over, by Locality

Marital Status	Akoboi	Katakwi	All
Single	19.4	21.6	20.6
Legally married	57.7	53.6	55.5
Widowed	10.8	10.0	10.4
Separated	4.8	4.5	4.6
Divorced	0.7	0.8	0.8
Co-habiting	6.5	9.3	8.0
Unknown	0.0	0.3	0.2
Total	100.0	100.0	100.0

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

An analysis of religion showed that the majority of household members were Catholics (about 60% of the total; see Figure 4.3). The other important religions were Protestants and Born Again Christians.

100% Other 6:3 6:3 ရု.နွ ■ Born again 16.2 80% Muslim 33 47.7 Protestant 60% Catholic 40% 77.1 59.9 44.8 20% 0% Akoboi Katakwi Total

Figure 4.3: Religion by Locality (%)

The CBMS 2018 collected information pertaining to literacy. The findings revealed that men's literacy levels were higher than women's (Figure 4.4). Overall, 55% of the population was literate.

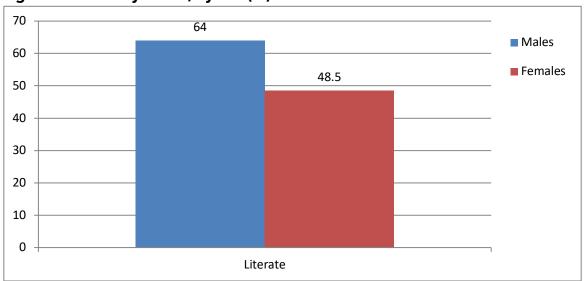


Figure 4.4: Literacy Status, by Sex (%)

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

Household members were requested to indicate school attendance. Overall, 37.6% reported that they were still attending school. Men were 39.5% of the population still attending school vs. 35.9% of women. Respondents who reported that they were not attending school were asked to state their highest level of education (Table 4.5). Those with no grade of completed education were 26.3% of the population in Akoboi, Katakwi, and overall. The proportion of the women with no formal school (29.8%) was higher than among men (22.5%). Most of the people in the two localities who were not attending school had ended their education before reaching secondary school.

Table 4.5: Distribution of the Population, by Highest Level of Education (%)

Highest level	Loca	ality	Se	ex		Age g	roup	
of Education	Akoboi	Katakwi	Men	Women	10-17	18-30	31-60	Over 60
					yrs.	yrs.	yrs.	yrs.
No education	26.3	26.3	22.5	29.8	4.4	3.7	18.7	57.2
Nursery	2.8	3.9	3.6	3.1	1.0	0.1	0.1	0.2
Primary	59.9	54.7	56.9	57.4	90.4	62.6	58.8	32.6
Senior	8.1	9.8	10.9	7.3	3.8	24.5	13.5	6.9
secondary								
Higher	0.6	1.1	1.4	0.4	0.2	2.6	1.5	0.4
secondary								
College	0.8	1.6	1.6	0.9	0.1	1.9	3.0	1.1
University	0.3	0.9	0.9	0.3	0.0	1.1	1.5	0.5
Post graduate	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.2
Tertiary	1.1	1.6	2.1	0.7	0.1	3.4	2.6	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figure 4.5 presents the distribution of the population in the study area according to whether or not they possessed a birth certificate. The relationship between age and possession of a birth certificate was inverse: the greater the age, the lower the proportion of persons with a birth certificate.

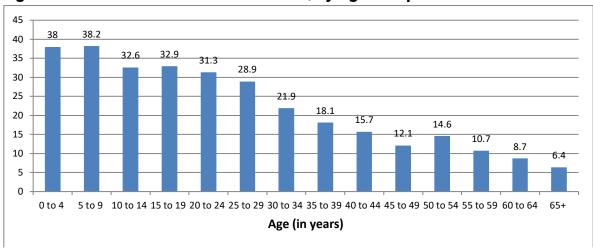


Figure 4.5: Possession of a Birth Certificate, by Age Group

#### **Economic characteristics**

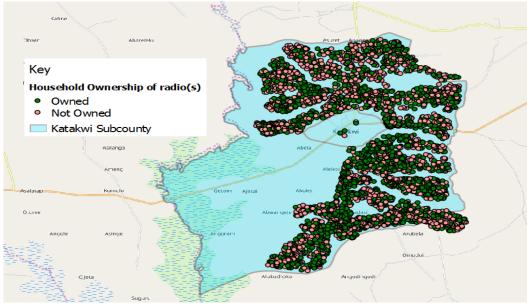
Households' economic situation was assessed by analyzing a number of variables including ownership of assets, sources of income, total annual income, poverty levels, standard of living, and coping strategies the household used when faced with scarcity of basic needs.

Table 4.6 presents the proportion of households whose members owned assets, the most common of which were mobile phones, houses, land, and radio. Those assets were either individually or jointly owned. Additional information is presented in Maps 4.2 to 4.4.

Table 4.6: Distribution of Households by Ownership of Assets and Sub-County (%)

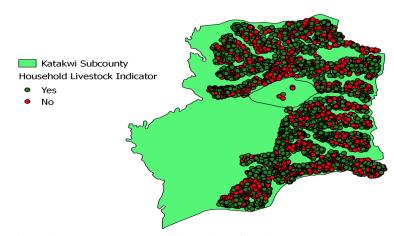
Asset		Akoboi	Kata	akwi
	Yes, individually	Yes, jointly	Yes, individually	Yes, jointly
Bicycle	18.	2 35.2	18.7	29.1
Car	0.		0.3	1.8
Land	31.	5 61.3	28.6	57.4
Mobile phone	38.	0 10.9	42.9	8.4
Other buildings	6.	4 9.3	4.3	8.1
Motorcycle	3.	1 3.1	2.8	3.8
Owner-occupied house	35.	5 30.3	32.1	29.7
Computer	0.	6 1.3	0.9	1.0
Radio	19.	6 32.0	19.3	26.9
Sewing machine	0.	7 1.0	0.7	1.1
Wheel chair	0.	5 0.7	0.8	0.5
Television	0.	3 0.8	0.8	1.1
Refrigerator	0.	0 0.2	0.3	0.8

Map 4.2: Ownership of Radio



Subsistence farming was the most important source of earnings followed by wage employment (Table 4.7). Some variations were noted in comparisons of the proportions of subsistence farming vs. wage employment in the two sub-counties. The total annual income by sub-county is presented in Figure 4.6. About half of households were categorized in the 1,000,001-5,000,000 Uganda shillings total annual income group. Households earning more than five million Uganda shillings formed 19% of the total.

Map 4.3: Ownership of Livestock



Map 4.4: Households Whose Members Owned a radio, TV, or phone

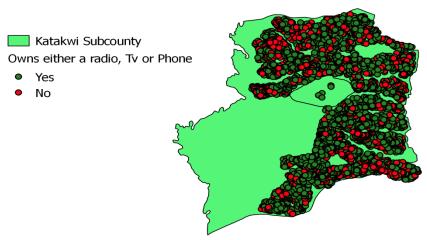


Table 4.7: Distribution of Households, by Main Source of Income and Locality

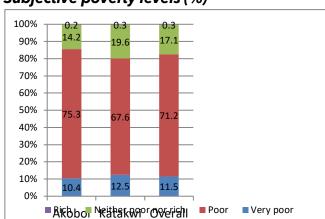
Important Source of Earnings	Sub-C	Sub-County		
	Akoboi	Katakwi		
Subsistence farming	73.3	67.6	70.3	
Commercial farming	0.5	0.7	0.6	
Wage employment	6.8	9.4	8.2	
Non-agricultural enterprises	4.9	7.0	6.0	
Property income	0.2	0.1	0.1	
Transfers	1.7	1.5	1.6	
Remittances	0.3	1.1	0.7	
Organizational support	0.0	0.1	0.1	
Other	12.4	12.4	12.4	
Total	100.0	100.0	100.0	

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

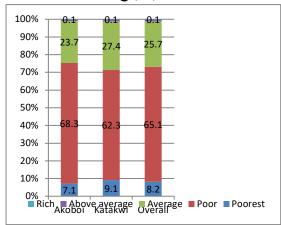
Respondents were asked to indicate the poverty status of the household (Figure 4.7). Over two thirds of the total households indicated that they were poor. Households in the categories of neither poor nor rich and rich formed less than 20% of the total. A similar trend in the reporting was observed for standard of living (Figure 4.6). Income was reported as very unstable in the majority of households. Only a few households stated that their income was stable (about 2%). Notably, close to half of households indicated that their living standards stayed the same over the twelve-month period. The distribution of households by selected poverty characteristics is presented in Maps 4.5 to 4.7.

Figure 4.6: Assessment of Poverty and Standard of Living

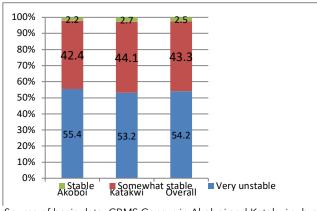
#### Subjective poverty levels (%)



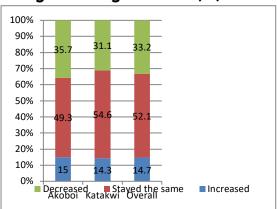
#### Standard of living (%)



#### Stability of household income (%)

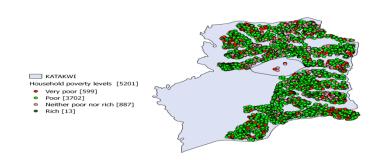


#### Changes in living standards (%)

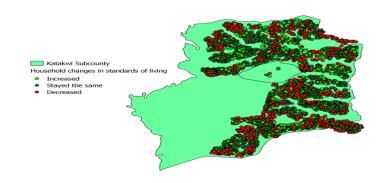


Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

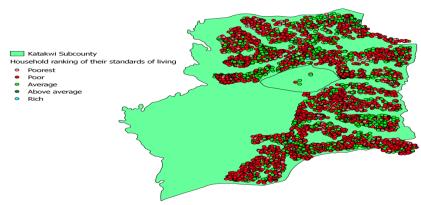
Map 4.5: Distribution of Households, by Subjective Poverty Levels



Map 4.6: Distribution of Households by Changes in Standard of Living



Map 4.7: Household ranking of the standard of living



Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

When faced with challenges in meeting the needs of the household, most of the heads of household reported seeking assistance from neighbors and extended family members (Table 4.8). Notably, 6.4% of households lacked any form of coping strategy when members needed assistance.

Table 4.8: Distribution of Households, by Coping Strategy (%)

Depend on to provide	Sub-Co	Total	
Assistance	Akoboi	Katakwi	
Neighbors	40.4	43.2	41.9
Religious organizations	0.7	1.1	0.9
Professional associations	0.2	0.3	0.2
Friends	7.0	9.1	8.1
Extended family	31.2	29.1	30.1
Government	4.6	3.3	3.9

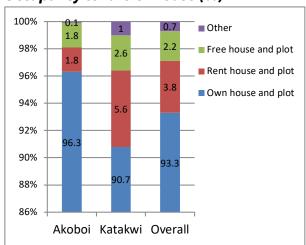
None	7.3	5.7	6.5
Other	8.6	8.3	8.4
Total	100.0	100.0	100.0

#### Housing and Household Characteristics

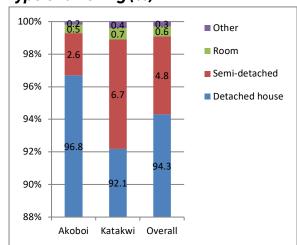
Figure 4.7 presents a breakdown of households according to occupancy tenure, type of dwelling, type of roof, and type of wall. The members of most households lived in a house they owned. The houses were mainly detached dwellings with corrugated iron roofs and constructed with unfired unburnt bricks made with mud.

Figure 4.7: Housing Characteristics, by Locality (%)

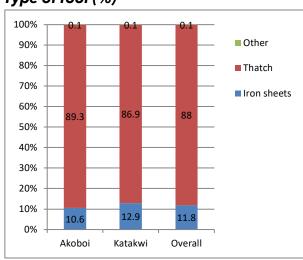
#### Occupancy tenure of house (%)



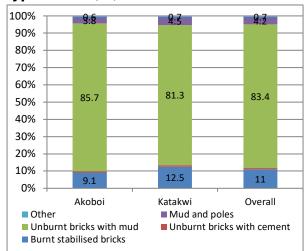
#### Type of dwelling (%)



#### Type of roof (%)



#### Type of wall (%)



As shown in Figure 4.8, the majority of households used hand torches as a source of energy for lighting. The other important sources of energy were electricity and paraffin.

Electricity Overall 89.4 3.1 Paraffin Hand torch Other Katakwi 4.5 4 87.7 3.8 Akoboi 3.43.2 91.3 0% 20% 40% 60% 80% 100%

Figure 4.8: Source of Energy for Lighting (%)

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

Figure 4.9 clearly shows that drawing water from boreholes is almost universal. More households from Akoboi (98.6%) drew water from boreholes than did their counterparts in Katakwi sub-county.

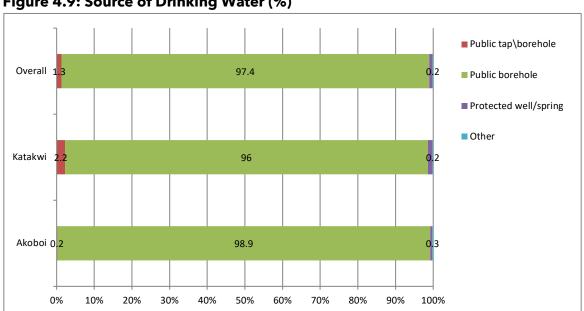


Figure 4.9: Source of Drinking Water (%)



Public boreholes/swallow wells are the main source of drinking water

The CBMS study collected information on the type of toilet facilities households used and whether a hand-washing facility existed. The findings are presented in Table 4.9 and Figure 4.10 below. The majority of the households used covered pit latrines without slabs (34% overall). The percentage of households that used covered pit latrine without slabs was higher in Akoboi subcounty (44.5%) than in Katakwi (24.6%). Notably, a substantial proportion of households lacked toilet facilities. Similarly, the majority of the households lacked h hand-washing facilities with water and soap (only 3.1% of the total).

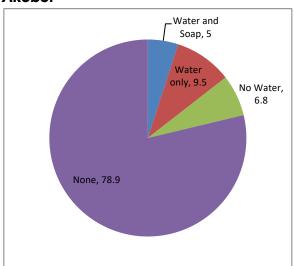
Table 4.9: Distribution of Households, by Toilet Type and Sub-County

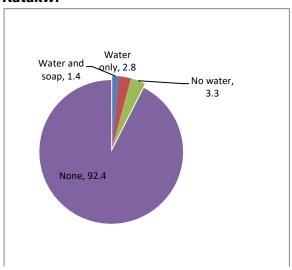
Toilet Type	Sub-C	Total	
	Akoboi	Katakwi	
Flush toilet	0.0	0.0	0.0
Ventilated improved pit toilet	2.7	2.7	2.7
Covered pit latrine with slab	11.5	10.7	11.0
Covered pit latrine without slab	44.7	24.7	34.0
Uncovered pit latrine with slab	5.1	5.9	5.5
Uncovered pit latrine without slab	14.8	11.2	12.9
Ecosan	0.2	0.1	0.2
No facility	21.1	44.7	33.7
Other	0.0	0.0	0.0
Total	100.0	100.0	100.0

Figure 4.10: Availability of Hand-Washing Facilities (%)

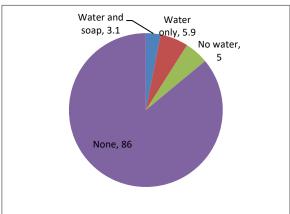
## Availability of hand-washing facilities, Akoboi

#### Availability of hand-washing facilities, Katakwi





# Availability of hand-washing facility, Overall



The majority of households lacked their own toilet facilities

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

#### 4.2 CBMS Core Indicators

The results for the CBMS Core indicators that we investigated are presented in Tables 4.10a, 4.10b, and 4.10c at the individual, household, and community level. Map 4.7 presents the location of community facilities in the two sub-counties of Akoboi and Katakwi.

Table 4.10a: Results of CBMS Core Indicators at the Individual Level

Indicator	Locality (%)		
	Akoboi	Katakwi	Overall
Proportion of children aged 10 and older who were illiterate.	39.0	38.2	38.6
Proportion of children aged 6-12 who did not attend primary school.	9.7	11.1	10.4
Proportion of children aged 13-18 who did not attend secondary school -Not attending at all	27.6	29.0	28.3
Proportion of persons aged 6-24 who were currently not in school	29.5	29.5	29.5
Proportion of youth (18-30) who were unemployed.	32.2	43.9	38.4
Proportion of the working-age population (15-64) that was unemployed.	33.8	38.1	36.1
Proportion of the population not in employment, education, or training (those aged 15-64).	22.2	23.2	22.7
Proportion of the adult population without a bank account (for the population aged 15 to 30).	97.1	96.7	96.9
Proportion of the adult population without mobile phones (for the population aged 15 to 30).	75.8	73.0	74.3
Proportion of persons reporting not using a mobile phone for financial operations (for the population aged 15 to 30).	62.9	51.2	56.8
Proportion of the population aged 15-30 unwilling to save money on a mobile phone (not registered for mobile-money services)	81.0	78.0	79.4
Proportion of the population aged 15-30 with no access to financial institutions/no bank accounts	97.1	96.7	96.9

Table 4.10b: Results of CBMS Core Indicators at the Household Level

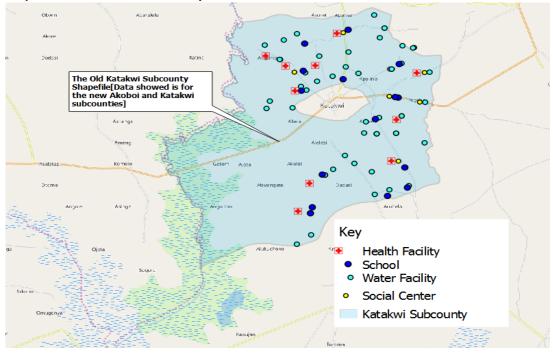
Indicator	Locality (%)		
	Akoboi	Katakwi	Overall
Proportion of households with unsafe sanitation facilities. (Safe sanitation facilities are flush toilets, ventilated improved pit latrines, and covered pit latrines.)	41.2	61.9	52.3
Proportion of the households that obtained drinking water from a far distance (more than 250 meters from the house)	62.9	60.2	61.5
Proportion of households that used unsafe drinking water. (Unsafe water sources include open wells, rivers, lakes, and dams).	0.3	0.2	0.2
Proportion of households in which children (0-4 years) ate a non- nutritious breakfast, which included of children who were not fed anything, those who were served tea/drink with sugar only, those who were served tea/drink without sugar with solid food, those who were served porridge without sugar, other, and don't know.)	87.8	817	84.4
Proportion of households in which children (aged 5-13) ate non- nutritious meals, which included children who were not fed anything, those who were served tea/drink with sugar only, those who were served tea/drink without sugar with solid food, those who were served porridge without sugar, other, and don't know.	99.2	91.6	95.34
Proportion of households/youth without access to information (i.e., did not own any of the following, radio, phone, or and television).	28.4	30.1	29.4

Table 4.10c: Results of CBMS Core Indicators at the Community Level

Indicator		Locality		
		Akoboi	Katakwi	Overall
Number of health facilities (clinics, health cente	rs, pharmacies)	10	14	24
Number of schools (primary-government and primary-government)	rivate)	6	9	15
Proportion of water sources that were for boreholes)	74.1%	69.2%	71.8%	
Number of financial institutions that offered set MFIs, and group association)	ervices to youth (SACCOs, VSLA,	12	22	34
Proportion of youth without access to age cooperative societies, inputs, markets, etc. Development Officer).	•	-	-	64%
Number of job recruitment notices		-	-	9
Availability of social centers, membership	Social centers	13	25	38
clubs, investment clubs, sports clubs, etc.	Membership clubs	36	32	68
	Sports clubs	13	22	35
	Investment clubs	27	39	66

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

**Map 4.8: Location of Community Facilities** 



## **4.3 CBMS SDG Indicators**

Although there are seventeen Sustainable Development Goals, we collected data on eleven for the purposes of our study: Goal 1—end extreme poverty in all forms by 2030; Goal 2—end hunger, achieve food security and improved nutrition, and promote sustainable agriculture; Goal 4—ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5—achieve gender equality and empower all women and girls; Goal 6—ensure availability and sustainable management of water and sanitation for all; Goal 7—ensure access to affordable, reliable, sustainable, and modern energy for all; Goal 8—promote sustained; inclusive and sustainable economic growth; Goal 10—reduce inequality within and among

countries; Goal 11—make cities and human settlements inclusive, safe, resilient, and sustainable; Goal 16—promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels; and Goal 17—strengthen the means of implementation and revitalize the global partnership for sustainable development.

Uganda was among the first UN member states to integrate SDG into its national development planning framework, which was achieved through a variety of new government social programs intended to ensure that no one would be left behind. These included Operation Wealth Creation, Improving Quality of Universal Primary and Secondary Education, and Youth Livelihood Programmes, among others. In addition, Uganda has made efforts to formulate and implement development policies.

The findings of the study with regard to the SDG are presented below.

#### Goal 1: End extreme poverty in all forms by 2030

According to the United Nations, "eradicating poverty in all its forms remains one of the greatest challenges facing humanity." While the number of people living in extreme poverty in Uganda dropped by more than half between 1990 and 2015, many people still struggle to meet the most basic human needs. The Government of Uganda embarked on the fight against poverty in the 1990s, guided by the Poverty Eradication Action Plan (PEAP). The PEAP was based on four major pillars: 1) a framework for economic growth and transformation that ensured all Ugandans access to free education, thereby making it possible for them to take advantage of employment opportunities; 2) good governance and security; 3) a direct increase in the ability of the poor to raise their incomes through government soft loans; and 4) a direct increase in the quality of the life for the poor.

Table 4.11a presents results of the indicators generated using CBMS data. To compute poverty levels, we employed two approaches: the International Poverty Line of USD \$1.90 per person per day and the national poverty line. We computed an exchange rate of 3,700.00 Uganda shillings for every U.S. dollar. Generally, the findings show that poverty levels in the study area were higher than the national average, though most households had access to basic services (Maps 4.7, 4.8, and 4.9).

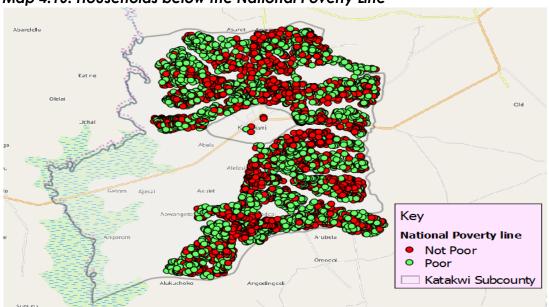
Table 4.11a: Relevant Indicators for Goal 1: Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results			
Goal 1. End poverty in all its forms everywhere							
1	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)	The international poverty line used in determining the population below the poverty line was USD \$ 1.90 per person per day. Every three years, the Uganda Bureau of Statistics conducts a Uganda National Household Survey (UNHS). The poverty head-count index is based on the household consumption expenditure	Poverty Head Count—UNHS 2016-2017 National-27.0% Eastern region- 42.7%	Based on the international poverty line of USD 1.90 per capita per day  Akoboi-94.5% Katakwi-93.9%  Gender of head of household: Men-93.6% Women-96.0%  Age of Head of Household Below 18 Years-100.0% 18-30 Years-96.0%			
				31-60 Years-93.5% Over 60 Years-96.1%			

2	1.2.1 Proportion of population living below the national poverty line, by sex and age	The Uganda Bureau of Statistics regularly conducts a National Household Survey which is the main source of data poverty statistics. A poverty line is constructed based on household consumption expenditure.	Poverty Head Count—UNHS 2016-2017 National-27.0 Eastern region-42.7	Based on the National Poverty Line of 29,505 Uganda shillings per person per month Akoboi-54.4 Katakwi-56.5 Overall-55.5
4	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, disability status, pregnant women, newborns, work-injury victims, and the poor and the vulnerable	Supplemental indicator: Percentage of senior citizens covered by the Expanded Social Protection (ESP) program. The beneficiaries are persons aged 65 and over.	Not available	Akoboi: 17.6 Katakwi: 16.6 Overall: 17.0
5	1.4.1 Proportion of population living in households with access to basic services	Basic services include: basic education, drinking water, sanitation, and shelter.	77 (Uganda Bureau of Statistics, 2016).	Enjoy some basic services. Akoboi-99.9 Katakwi-99.8 Enjoy all basic services. Akoboi-7.1 Katakwi-7.5

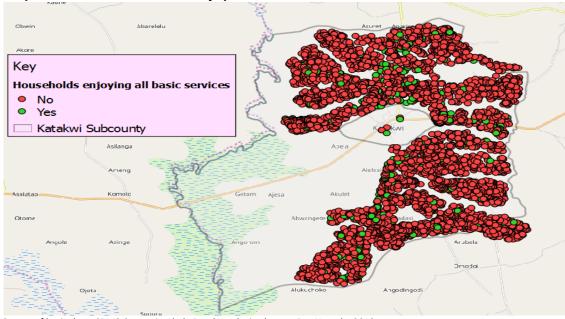
Map 4.9: Households below the International Poverty Line

| Key | International Poverty Line at USD1.90 |
| Not Poor |
| Poor |
| Katakwi Subcounty |
| Annang |
| An



Map 4.10: Households below the National Poverty Line

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.



Map 4.11: Households that Enjoyed All Basic Services

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

### **Derivation of the Multidimensional Poverty Index (MPI)**

The Multidimensional Poverty Index (MPI) is an extension of the one-dimensional class of decomposable poverty measures proposed by Foster, Greer, and Thorbecke (1984) and emerged from the dimensionadjusted poverty headcount ratio proposed by Alkire and Foster (2007). The index includes two components: the poverty headcount (H) and an adjustment measure (A), which represents the number of deprivations suffered, on average, by the poor. Table 4.11b present the weights used for the MPI, while Table 4.11c shows the results. Poverty levels were slightly high for the residents of Katakwi Sub-County when compared with those of Akoboi. Poverty levels also increased according to household size and decreased according to the age

of the head of household. Households with many people were likely to be impoverished in comparison to smaller households. In addition, people who were illiterate revealed higher poverty levels than their literate counterparts.

Table 4.11b: Weights for the Multidimensional Poverty Index Indicators and Magnitude of Poor Individuals/Households, by Indicator

Dimension	Indicators	Dimension weights	Magnitude	Weight X CH Ratio	Contribution
Health	Children under 5 who died	1/3	58	0.000	0.01
	Malnourished children 0-5 ( <i>Proxy considered</i> the type of breakfast)		733	0.005	0.15
Education	Children 6-12 not attending school	1/3	596	0.004	0.15
	Children 13-18 not attending school	•	841	0.006	0.17
Living Conditions	Households without electricity		2,204	0.005	0.15
	Households without access to clean drinking water		2	0.000	0.00
	Households without access to adequate sanitation (uncovered pit, no facility, and other)		1,294	0.003	0.09
	Households with dirt floor		2,143	0.005	0.14
	Household uses dirty cooking fuel: firewood, charcoal, or dung		2,221	0.005	0.15
	Household has no access to information and has no assets related to mobility or livelihood (lacks mobile phone, radio, or bicycle)		549	0.001	0.04
Total population	24,314				
MPI poor population	2,221				
headcount ratio	0.0913465				
Intensity (A)	0.3776				
MPI	0.0344954				

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

Table 4.11c: Relevant Indicators for Goal 1—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results
Goal 1	. End poverty in all its forms	everywhere		
3	1.2.2 Proportion of men, women and (children of all ages) living in poverty in all its dimensions according to national definitions	This indicator was derived from the Multidimensional Poverty Index (MPI) approach of the United Nations Development Programme.	70.3 based on the 2009/10 UNHS data: Uganda Human Development Report (United Nations Development Programme, 2016).	3.45  MPI poor by selected characteristics (percent)  Lower local governments: Akoboi: 9.01; Katakwi: 9.24 Average Household Size: Three persons: 9.05; Five persons: 16.16; 10+ persons: 10.56 Marital status: Legally married: 25.09; Widowed: 1.03; Separated: 2.41; Divorced: 0.0; Co habiting: 11.68

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

#### Goal 2: End hunger

In Uganda, hunger has largely fallen in most areas that once suffered from famine. This has been addressed through the country's implementation of the National Food and Nutrition Policy, which provides an important framework for addressing food and nutrition issues as they relate to sustainable development. The policy focuses on such crucial areas as food supply, access to good-quality food for human consumption, and food processing and preservation that promote adequate, safe, high-quality, and nutritious foods.

Table 4.11d: Relevant Indicators for Goal 2—Generated from CBMS Data

No.	Goals/I	ndicators		Explanation localization indicators	regarding of	National Indicator	CBMS Results
Goal 2	. End hun	ger, achieve fo	od sec	urity and impr	oved nutritio	on and promote sustainable a	agriculture
6	2.1.1 undern	Prevalence ourishment	of	The Demographic Health Survive measures nutritional comparing health weight mea against international reference states.	ey (UDHS) children's status by neight and surements an	Children under five who were stunted: 29%  Children under: five who were wasted: 4%  Children under five who were underweight: 11%	Proportion of children below 5 who ate non-nutritious meals, which included children who were not fed anything, those who were served tea/drink with sugar only, those who were served tea/drink without sugar with solid food, those who were served porridge without sugar, and other.)  Akoboi: 87.8% Katakwi: 81.7% Overall: 84.4%

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

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

Under Goal 3, the study gathered proxied information on two indicators: maternal mortality and under-five mortality. Due to the complexity associated with computing these two indicators, we used the numbers derived (as shown below) as a proxy for the indicators. Out of 137 deaths reported in households in the twelve months preceding data collection, four were connected to complications during child birth; eighteen were children below five years.

The major causes of death for children younger than five years were: diseases of the heart, pneumonia, measles, complications at the time of birth, malaria, loss of blood, and accidents.

Go	Goal 3. Ensure healthy lives and promote wellbeing for all at all ages							
7	3.1.1 Maternal mortality ratio, per 100,000	Instead of using live birth data as a denominator, which was not available, we used the number of children 0 to 1 year plus the total number of women who died due to pregnancy-related causes.	Death of a family member reported in connection to complications during pregnancy or child birth in the twelves months preceding data collection  4 out of 137 deaths					
8	3.2.1 Under-five mortality rate, per 1000	Instead of using live birth data as a denominator, which was not available, we used the number of children aged 0 to less than 5 plus the total number of children 0 to less than 5 who died.	Overall, 18 children younger than five died out of the total 137 deaths in the twelve months preceding data collection					

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

### Goal 4: Ensure inclusive and equitable quality education

According to the 1995 Constitution of Uganda, all-school-aged children have a right to a basic education, which is a shared responsibility of the state and parents. The Ugandan Parliament approved Universal Primary

Education (UPE) in 1997 to ensure that the right to education was fully enjoyed. In addition, Uganda's constitution indicates that persons with disabilities have the right to respect and human dignity.

Table 4.11d: Relevant Indicators for Goal 4—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results				
	Goal 4. Ensure inclusive and equitable education and promote lifelong learning opportunities for all							
11	4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of	The following were used as a supplemental indicator: net and gross enrolment rates in primary and	UNHS Literacy rates— Overall: 74% Girls: 70%	GER Primary: 131.0 NER Primary: 88.4				
	primary; and (c) at the end of lower secondary achieving at	secondary education	Boys: 78%	GER Secondary: 16.2				
	least a minimum proficiency level in (i) reading and (ii) mathematics, by sex		NER Primary Rural: 78 NER Secondary Rural: 23	NER Secondary: 11.0				
12	4.2.1 Proportion of children under 5 who are developmentally on track in health, learning, and psychosocial well-being, by sex	Proxy indicator to 4.2.1  Number of children in child development centers/daycare centers		7.4%				
13	4.2.2 Participation rate in organized learning (one year	Proxy indicator to 4.2.2		NER: 7.4				
	before the official primary entry age), by sex	.Enrolment Rate in kindergarten: (a) Net Enrolment Rate (b) Gross Enrolment Rate		GER: 9.6				

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

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

Uganda's Gender Policy guides the country toward achieving gender equality and women's empowerment. The policy has led to awareness and acceptance of equal opportunities and gender equality in employment and allocation of resources.

Table 4.11e presents the proportion of households in which at least one member had a mobile phone, by locality and gender of the head of household.

Table 4.11e: Relevant Indicators for Goal 5—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results
Goal 5	5. Achieve gender equality and em	power all women and girls		
14	5.b.1 Proportion of individuals who own a mobile telephone, by sex	The proportion of households with at least one member who owned a mobile telephone.	UNHS 2016-2017: Ownership of mobile phone individually or jointly-73%	Akoboi: 47.8% Katakwi: 50.3% Overall: 50.1%  Households headed by men: 54.9% Households headed by women: 38.2%

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

### Goal 6: Ensure availability and sustainable management of water and sanitation for all

The government has invested significant resources to ensure universal access to safe and affordable drinking water for all by 2030. Access to safe drinking water was one of the targets that Uganda achieved under the Millennium Development Goals.

The results regarding SDG indicators generated with CBMS data are presented in Table 4.11f. Access to safe drinking water in the two localities was almost universal. Notably, few households had access to safe sanitary facilities.

Table 4.11f: Relevant Indicators for Goal 6—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results
Goal 6	5. Ensure availability and sustainal	ole management of water and sanitation fo	r all	
15	6.1.1 Proportion of population using safely managed drinking water services	The proportion of households that had access to water from the safe sources.	UNHS: 2016-2017 National: 80% Urban: 92% Rural: 75%	Akoboi: 99.7% Katakwi: 99.8% Overall: 99.8%
16	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	The proportion of households using safe sanitary facilities will be determined; and The availability of hand-washing facilities with water and soap	UNHS: 2016: 2017  National: 6.2%  Regional (Teso): 2.1%	Akoboi: 4.9% Katakwi: 1.4% Overall: 3.0%  Households headed by men: 3.3% Households headed by women: 2.4%

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

#### Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

In fulfilling the 2030 development agenda, the government of Uganda, through its Ministry of Energy and Mineral Development, designed an energy policy for the country with a goal of meeting the energy needs of the Ugandan population in an environmentally-friendly and sustainable manner. At the time of our study, the percentage of households with access to electricity was low (Table 4.11g).

Table 4.11g: Relevant Indicators for Goal 7—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results				
	Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all							
17	7.1.1 Proportion of population with access to electricity	Grid electricity and solar for lighting	Rural: 29%	Akoboi: 3.2% Katakwi: 4.5% Overall: 3.9%				
			2012-2013 UNHS	Households headed by men: 4.4% Households headed by women: 2.5%				

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

# Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

In achieving this goal by 2030, the government of Uganda developed a policy intended to produce decent employment for all in line with the National Development Plan (NDP) 2010-2011 and 2014-2015. The theme of the policy is "Growth, Employment and Socio-Economic Transformation for Prosperity." The national employment policy has improved the creation of employment opportunities, leading to stable incomes, savings, improved livelihoods, and economic growth that supports sustainable development.

Table 4.11h: Relevant Indicators for Goal 8—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results				
	Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all							
18	8.5.2 Unemployment rate for persons aged 15 to 60 years, by sub-county, sex and disability status	Those attending school were excluded. Included were those who had no job in the three months previous to the survey	Census 2014  Not working population: -28.9%	Men: 10.1% Women: 12.5% PWDs: 16.4% Non PWDs: 11.2% Akoboi: 10.8% Katakwi: 11.8% Overall: 11.3%				
19	8.6.1 Proportion of youth (aged 15-24 years) not attending school or working	The population aged 15 to 24 (youth)	**	Men: 2.5% Women: 3.4% Akoboi: 2.5% Katakwi: 3.4% Overall: 3.0%				
20	8.7.1 Proportion and number of children aged 5-17 years engaged in child labor, by sex and age	The term "child labor" is often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development.	**	Children currently studying were excluded. Men: 1.4% Women: 0.9% Akoboi: 1.1 Katakwi: 1.3 Overall: 1.2				

<sup>\*\*</sup> Not available

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

#### Goal 10: Reduce inequality within and among countries

The Uganda National Financial Inclusion Strategy was launched on October 26, 2017 by the Bank of Uganda together with the Ministry of Finance, Planning, and Economic Development. The strategy ensures access to financial services to all. In addition, the Bank of Uganda provides financial consumer protection and financial literacy within the country through financial-inclusion working groups.

Table 4.11i presents the proportion of the households whose members lived below 50% of the median income. Households headed by women or individuals who were illiterate were more highly represented among households that lived below 50% of the median income.

Table 4.11i: Relevant Indicators for Goal 10—Generated from CBMS Data

	Table 11211 No. Count I I I I I I I I I I I I I I I I I I I					
No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results		
Goal 1	.0. Reduce inequality within and	d among countries.				
22	10.2.1 Proportion of people living below 50% of median income, by age, sex, and disability status	The analysis was carried out by sex, literacy status of head of household, and locality.	**	Akoboi: 26.3% Katakwi: 27.4% Overall: 26.9%  Men: 26.5% Women: 27.2% Literate: 24.6%		
				Illiterate: 25.4%		

<sup>\*\*</sup> Not available

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

#### Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

According to the UN, the rapid growth of cities in the developing world, coupled with increasing rural-to-urban migration, has led to a boom of mega-cities. In 1990, there were ten mega-cities with ten million inhabitants or more. In 2014, there were 28, which were home to 453 million people. Extreme poverty was concentrated in urban places, and making cities safe by providing safe and affordable housing and upgrading slums was identified as a need, as was investment in public transportation, the creation of green public spaces, and improvement of urban planning and management in ways that were both participatory and inclusive.

In response to rapid urbanization in Uganda, the government has embarked on a process of developing a national urban policy to develop better cities. The pace at which urbanization is picking up in Uganda is currently 4.5% per year, and it is likely to accelerate with rising incomes. The policy was launched in 2010 to increase attention to urban planning, and it included such programs as Transforming the Settlements for the Urban Poor in Uganda (TSUPU), which targets Uganda's secondary cities to align urban development efforts at the national level.

Table 4.11j: Relevant Indicators for Goal 11—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators		CBMS Results
	11. Make cities and human se inable	ettlements inclusive, safe, resilient and		
24	11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the twelve months prior to the survey	As a proxy, the proportion of households that reported murder, theft, rape, sexual harassment, and physical injury was derived	**	Households headed by men: 14.3% Households headed by women: 14.3%  Akoboi: 13.1% Katakwi: 15.1% Overall: 14.3%

<sup>\*\*</sup> Not available

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

# Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels

This goal aims to reduce all forms of violence and create peaceful societies. This can be done through maintaining the rule of law, reducing the in-flow of illegal arms, and influencing developing countries to adopt systems of good governance. Uganda, in its struggle against violence and conflict, developed a number of strategies to address the unique challenges of each of its sub-regions based on conflict status and the extent of vulnerability.

Table 4.11k: Relevant Indicators for Goal 16—Generated from CBMS Data

No.	Goals/Indicators	Explanation regarding localization of indicators	National Indicator	CBMS Results
	16. Promote peaceful and inclusive, accountable and inclusive inst	sive societies for sustainable develop titutions at all levels	oment, provide access	s to justice for all, and build
26	16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months	As a proxy, the proportion of households that reported rape and physical injury were derived	**	Households headed by men: 3.6% Households headed by women: 3.8% Akoboi: 2.4% Katakwi: 4.6% Overall: 3.6%
27	16.9.1 Proportion of children under 5 whose births had been registered with a civil authority, by age	Considered children aged less than 5 with birth certificates	**	Akoboi: 35.1% Katakwi: 40.2% Overall: 37.8% Men: 38.8% Women: 36.8%

<sup>\*\*</sup> Not available

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

# Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Uganda has received external assistance to help sustain development through its cooperation with other governments. The Government of Uganda has adopted the Uganda Partnership Policy (UPP). The UPP guides the country's interactions with other states and is intended to increase the effectiveness of the development assistance that arrives in support of Uganda's goals and objectives, ensuring transparency and accountability to development partners and citizens.

Table 4.11I: Relevant Indicators for Goal 17—Generated from CBMS Data

No.	Goals/Indicators	Explanation localization indicators	regarding of	National Indicator	CBMS Results
Goal :	17. Strengthen the means of	implementation	n and revitali	ze the global partnership for susta	inable development
28	17.8.1 Proportion of individuals using the internet	Proxied by operation households the acomputer	using the of aat owned	Census 2014  Proportion of households that owned a computer: 3.8	Akoboi-1.9% Katakwi-2.0% Overall-1.9%  Households headed by men: 2.1% Households headed by women: 1.3%  Literate heads of household: 2.3% Illiterate heads of household: 1.4%

Source of basic data: CBMS Census in Akoboi and Katakwi sub-counties, Uganda, 2018.

## 5 Conclusions and recommendations

In the context of monitoring Sustainable Development Goals at the local level, an analysis of the socioeconomic conditions of households in our CBMS project site revealed varying achievement levels. Access to safe water was almost universal in the study area, but households lacked access to safe sanitation, clean energy, and nutrition. Furthermore, high levels of poverty were revealed despite government efforts. The study areas of Akoboi and Katakwi sub-counties benefitted from a number of government programs intended to ensure that households enjoyed better standards of living. Our findings revealed slightly higher poverty levels for residents of Katakwi than for those in Akoboi sub-county. A direct relationship between poverty levels and household sizes was revealed. On the other hand, an inverse relation between poverty and the age of the head of household was discovered.

The SDG clearly state the objectives of ending poverty and hunger in all forms; increasing food security; improving nutrition and promoting sustainable agriculture; ensuring healthy lives and well-being for all; providing inclusive, equitable high-quality education and lifelong learning opportunities for all; achieving gender equality; and empowering women and girls. The Second National Development Plan (NDP) II integrated the SDG indicators. CBMS surveys are one way of reporting on progress in realizing the SDGs. The CBMS approach facilitates the generation of disaggregated data that can inform planning, monitoring, and evaluation of programs at the lowest unit of administration.

Currently, decentralized governments lack the information that would enable them to plan for lower local governments. The CBMS responds to the ever-growing need for accurate, regular, and reliable data to facilitate evidence-based planning, implementation, monitoring, and evaluation of government and other programs at all levels of administration. Moreover, it provides community- and village-level information regarding household welfare that is meaningful to local governments and promotes the efficient use of information at a grassroots level.

Our recommendations are based on results from the study area. As an aspect of CBMS implementation, comparisons with findings from areas with similar characteristics can inform policy makers and others about whether specific issues occur in all areas. Our main recommendations are:

- 1) Intensify hand-washing education in rural communities;
- 2) Because inequality is one of the major barriers to reaching the SDG, the Government of Uganda should create strategies to address disparities that restrict opportunity in education, access to income generating activities, and access to information as well as reduce travel time from home to service delivery points;
- 3) Strengthen capacity to measure, monitor, and assess progress on SDG as part of the data revolution; and
- 4) Establish strategies to enable unemployed persons to obtain adequate and accessible income support.

The recommendations regarding improvement of CBMS methodology are:

- Regularly update data to assess progress on SDG at all levels and ensure that results are shared with concerned communities and partners to promote change and better results as part of the data revolution;
- 2) Expand the CBMS study to cover more sub-counties and districts; and
- 3) Secure engagement of political leaders and technical team members in reflecting on the results and implementing programs that respond to identified needs.

## References

- Alkire, S. and Foster, J. (2008). Counting and Multidimensional Poverty Measurements. Oxford Poverty and Human Development Initiative Working Paper 7. University of Oxford, UK: OPHI.
- Banga, M., Kagugube, J., Mubiru, J.B, and Nsubuga, John (2016). Youth Employment and Entrepreneurship Strategies in Katakwi District, Uganda. Development Research Training (DRT), Uganda. Available at https://www.africaportal.org/contributors/john-bosco-mubiru.
- Foster, J., Greer, J., and Thorbecke, E. (1984). A Class of Decomposable Poverty Measures. Econometrica 3(52), 761-766.
- Kagugube, J., Banga, M., Nsubuga, J., Nampewo, L., and Kyebambe, A. (2019). Availing Data for Evidence-Based Decision-Making: The Expanded Community-Based Monitoring System (CBMS) in Katakwi District, Eastern Uganda. Development Research Training (DRT), Uganda.
- Kagugube, J., Banga, M., Nsubuga, J., and Nampewo, L. (2016). Implementation of the Community-Based Monitoring System to Inform Youth Employment and Entrepreneurship Strategies in Katakwi District, Uganda. Development Research Training (DRT), Uganda. Available at: https://www.pep-net.org/cbms.
- Uganda Bureau of Statistics (2016). National Service Delivery Survey 2015 Report. Kampala, Uganda: UBOS.
- Uganda Bureau of Statistics (2010). National Statistical Meta Data Dictionary. Kampala Uganda: UBOS.
- United Nations Development Programme (2016). Uganda Human Development Report, Kampala, Uganda: UNDP.