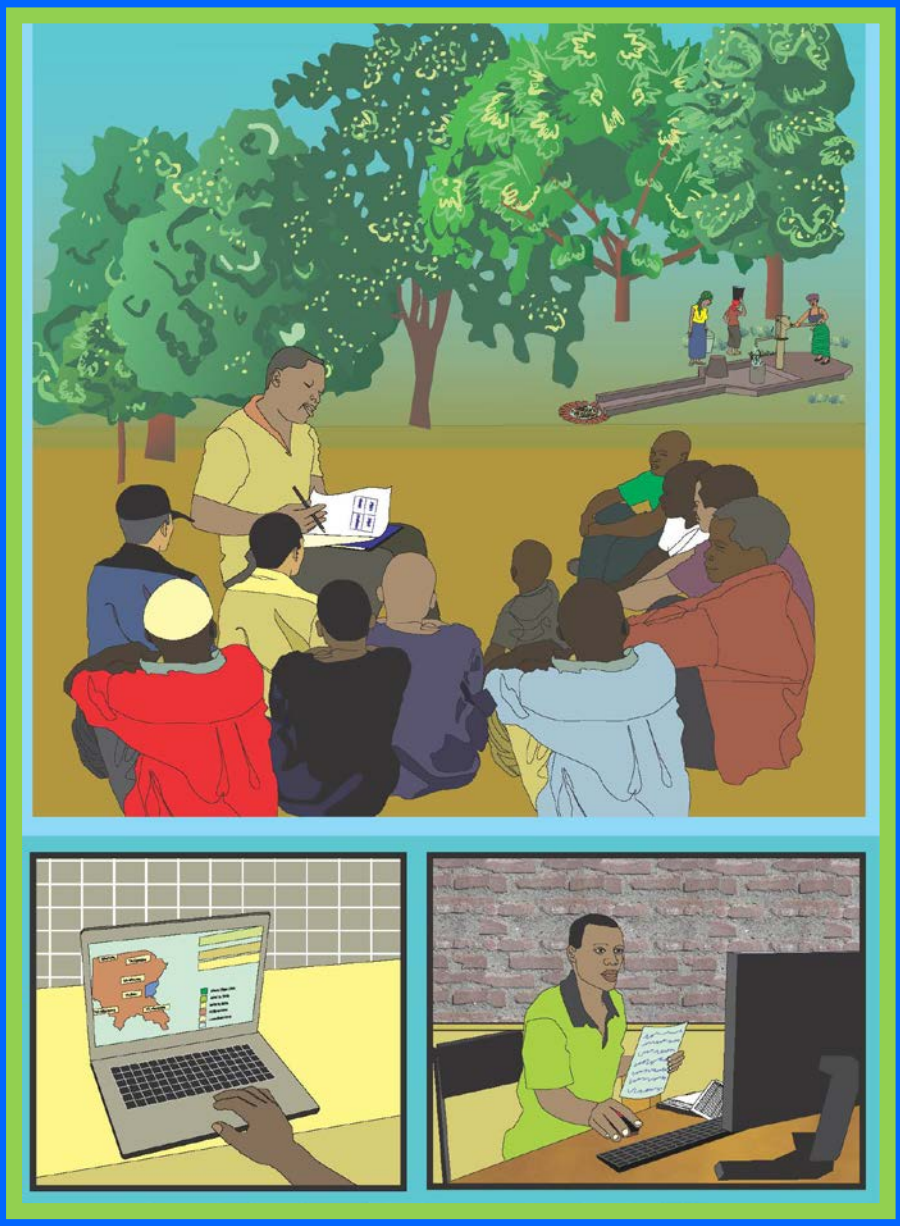
Government of Malawi

Rural Water Supply Operation and Maintenance Series 11

User Guide Manual on Monitoring and Evaluation Database for Water Points



Ministry of Agriculture, Irrigation and Water Development

March 2015

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Rural Water Supply Operation and Maintenance Series 11

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PREFACE

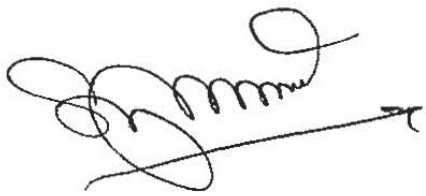
The National Decentralization Policy, instituted in 1998 by the Malawi Government, emphasizes community empowerment through the transfer of power and responsibility to the local authorities. Since then, there has been an increasing emphasis on developing community ownership through the adoption of practices like Community Based Management (CBM) training.

However, many district government offices are facing limited operating budgets allocated from central government, and financial assistance from donor agencies is not always guaranteed. This often limits the ability of the district to effectively support the community-led operation and maintenance (O&M) activities on a wider scale. The key strategies in overcoming this challenge are both to use available resources effectively, and to leverage additional funds for O&M.

Monitoring activities are often carried out by a range of different actors at the national level, including the Ministry, NSO, Donor Agencies and Non-Governmental Organizations with the aim of coming up with a sector wide information system that could provide vital data and information for programme/project planning and implementation as well as resource allocation and prioritization in the sector. Regular data collection and analysis will provide a robust monitoring and evaluation (M&E) and management information system (MIS) systems that inform performance of the sector.

Malawi has through the M&E Technical Working Group built a National WASH M&E Framework since the beginning of 2014 which included the WASH M&E database tool at the district level. This tool was further tested in Mchinji district in late 2014 and additional indicators related to the O&M for water points such as CBM training, Area Mechanics and spare parts supply chain were incorporated into this tool based on the O&M framework developed through the "the Project for Enhancement of O&M for Rural Water Supply in the Republic of Malawi".

It is hoped that the experiences compiled in this manual may provide useful information all over Malawi as the districts continue to develop strategies and plans for the effective O&M service delivery.
Any substantive comments for improvement of the manual are welcome and should be directed to the secretary responsible for Water Development.



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SECRETARY FOR IRRIGATION AND WATER DEVELOPMENT

ACKNOLEDGEMENT

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A series of workshops were held in the project, and a lot of stakeholders in Malawi technically contributed in the formulation of the manual. The Ministry of Agriculture, Irrigation and Water Development therefore, extends special thanks to these stakeholders for allowing their personnel to participate in the elaboration of this manual.

The Ministry is also indebted to JICA and Engineers without Borders Canada (EWB) for assisting in the development of the manual, and many who have not been mentioned here but who have contributed in different ways.

ACRONYMS

AEHO	Assistant Environmental Health Officer
AM(s)	Area Mechanic(s)
CBM	Community Based Management
CLTS	Community-led total sanitation
DCT	District Coordination Team
DDEHO	Deputy District Environmental Health Officer
DEHO	District Environmental Health Officer
DHC	Drop Hole Cover
DMEO	District Monitoring and
DWDO	District Water Development Officer / District Water Development Office
DWO	District Water Officer
Ecosan	Ecological Sanitation
EHO	Environmental Health Officer
EWB	Engineers Without Borders
GVH	Group Village Head
HSA	Health Surveillance Assistant
JICA	Japan International Cooperation Agency
M&E	Monitoring and Evaluation
MEO	Monitoring and Evaluation Officer
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoH	Ministry of Health
MS	Microsoft
NGO	Non-Governmental Organization
O&M	Operation and Maintenance
ODF	Open-Defecation Free
RWSS	Rural Water Supply and Sanitation
SHSA	Senior Health Surveillance Assistant
SPR	Sector Performance Report
SWG	Sector Working Group
TA	Traditional Authority

TWG	Technical Working Groups
VHWC(s)	Village Health and Water Committee(s)
WASH	Water Sanitation and Hygiene
WES	Water and Environmental Sanitation
WMA	Water Monitoring Assistant

Introduction

This manual has been developed to support the M&E component related to the operation and maintenance (O&M) for water points at district level which is harmonized with a National Water Sanitation and Hygiene (WASH) Monitoring and Evaluation (M&E) framework developed through M&E Technical Working Group (TWG) in the beginning of 2014.

The contents of the manual include materials regarding the M&E data collection system[1], and WASH M&E indicators[1] including the additional ones related to the O&M for water points such as CBM training, area mechanics and spare parts supply chains, M&E data templates, and definitions of these indicators, as well as guidelines on how to:

- Use the WASH M&E database[1] including the additional indicators related to the O&M for water points
- Use the basic Excel and Pivot table skills for data analysis and advanced WASH M&E database[1]
- Prepare the hands on WASH database training

In this manual, a CD is also attached at the end of the book which includes the following materials:

- WASH M&E database (original version for 28 districts as a national standard)
- WASH M&E database including the additional indicators related to the O&M for water points (revised version for Mchinji district as a example)
- Area mechanic and spare parts retail shop database
- Data collection templates and tally sheets
- Definitions of the WASH indicators
- Introduction of the National WASH M&E Framework

[1] These contents are re-edited based on National WASH M&E Framework developed through M&E TWG in beginning of 2014.

Part I M&E data collection system

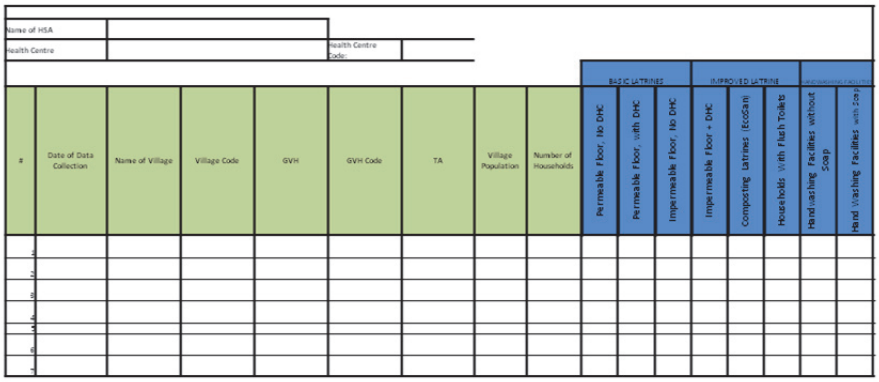
A. What is the Rural Water Supply and Sanitation (RWSS) M&E System?[2]

The Rural Water Supply and Sanitation M&E system is a joint approach shared by the Ministry of Health and the Ministry of Water Development and Irrigation to collect and analyze basic data on WASH that can help improve service delivery in Malawi. The data is stored in an MS Excel database where it is analyzed and used to produce a simple map of district coverage rates as shown below figures. This approach has been rolled out for use across all districts in Malawi.

This data is collected using recurring government resources and is freely available to organizations that request it from districts.

Step 1.

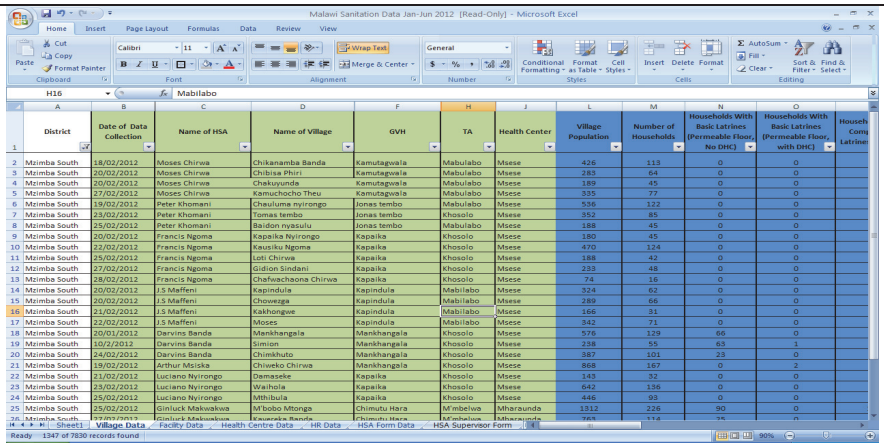
HSA completes community data form in their villages of responsibility.



Name of HSA				Health Centre Code:														
Health Centre										BASIC LATRINES			IMPROVED LATRINE			HANDWASHING FACILITIES		
#	Date of Data Collection	Name of Village	Village Code	GVH	GVH Code	TA	Village Population	Number of Households	Permeable Floor, No DHC	Permeable Floor, with DHC	Impermeable Floor, No DHC	Impermeable Floor + DHC	Composting Latrines (Ecosan)	Households With Flush Toilets	Hand washing Facilities without Soap	Hand Washing Facilities with Soap
1																
2																
3																
4																
5																
6																

Step 2.

Data is entered into a simple MS-excel spreadsheet.



Malawi Sanitation Data Jan-Jun 2012 [Read-Only] - Microsoft Excel

	District	Date of Data Collection	Name of HSA	Name of Village	GVH	TA	Health Center	Village Population	Number of Households	Households With Basic Latrines (Permeable Floor, No DHC)	Households With Basic Latrines (Permeable Floor, with DHC)
2	Mzimba South	18/02/2012	Moses Chirwa	Chikanamba Banda	Kamutagwala	Mabulabo	Msese	426	113	0	0
3	Mzimba South	20/02/2012	Moses Chirwa	Chibisa Phiri	Kamutagwala	Mabulabo	Msese	283	64	0	0
4	Mzimba South	20/02/2012	Moses Chirwa	Chakuyunda	Kamutagwala	Mabulabo	Msese	189	45	0	0
5	Mzimba South	27/02/2012	Moses Chirwa	Kamuchocho Theu	Kamutagwala	Mabulabo	Msese	335	77	0	0
6	Mzimba South	19/02/2012	Peter Khomani	Chauluma nyirongo	Jonas tembo	Mabulabo	Msese	536	122	0	0
7	Mzimba South	23/02/2012	Peter Khomani	Tomas tembo	Jonas tembo	Khosolo	Msese	352	85	0	0
8	Mzimba South	25/02/2012	Peter Khomani	Baidon nyasulu	Jonas tembo	Mabulabo	Msese	188	45	0	0
9	Mzimba South	20/02/2012	Francis Ngoma	Kapaika Nyirongo	Kapaika	Khosolo	Msese	180	45	0	0
10	Mzimba South	22/02/2012	Francis Ngoma	Kausiku Ngoma	Kapaika	Khosolo	Msese	470	124	0	0
11	Mzimba South	25/02/2012	Francis Ngoma	Loti Chirwa	Kapaika	Khosolo	Msese	188	42	0	0
12	Mzimba South	27/02/2012	Francis Ngoma	Gidion Sindani	Kapaika	Khosolo	Msese	233	48	0	0
13	Mzimba South	28/02/2012	Francis Ngoma	Chafwachaona Chirwa	Kapaika	Khosolo	Msese	74	16	0	0
14	Mzimba South	20/02/2012	J.S Maffeni	Kapindula	Kapindula	Mabilabo	Msese	324	62	0	0
15	Mzimba South	20/02/2012	J.S Maffeni	Chowezga	Kapindula	Mabilabo	Msese	289	66	0	0
16	Mzimba South	21/02/2012	J.S Maffeni	Kakhongwe	Kapindula	Mabilabo	Msese	166	31	0	0
17	Mzimba South	22/02/2012	J.S Maffeni	Moses	Kapindula	Mabilabo	Msese	342	71	0	0
18	Mzimba South	20/01/2012	Darvins Banda	Mankhangala	Mankhangala	Khosolo	Msese	576	129	66	0
19	Mzimba South	10/2/2012	Darvins Banda	Simion	Mankhangala	Khosolo	Msese	238	55	63	1
20	Mzimba South	24/02/2012	Darvins Banda	Chimkhuto	Mankhangala	Khosolo	Msese	387	101	23	0
21	Mzimba South	19/02/2012	Arthur Msiska	Chiweko Chirwa	Mankhangala	Khosolo	Msese	868	167	0	2
22	Mzimba South	21/02/2012	Luciano Nyirongo	Demaseke	Kapaika	Khosolo	Msese	143	32	0	0
23	Mzimba South	23/02/2012	Luciano Nyirongo	Waihola	Kapaika	Khosolo	Msese	642	136	0	0
24	Mzimba South	25/02/2012	Luciano Nyirongo	Mthibula	Kapaika	Khosolo	Msese	446	93	0	0
25	Mzimba South	25/02/2012	Ginluck Makwakwa	M'bobo Mtonga	Chimutu Hara	M'mbelwa	Mharaunds	1312	226	90	0
26	Mzimba South	27/02/2012	Ginluck Makwakwa	Kwacoka Banda	Chimutu Hara	M'mbelwa	Mharaunds	748	114	0	0

Sheet1 | Village Data | Facility Data | Health Centre Data | HR Data | HSA Form Data | HSA Supervisor Form

Ready 1347 of 7830 records found

Step 3.

Data automatically populates an analysis template built using pivot tables in MS-excel.

Values												
Row Labels	Population	Households	Basic Latrine [Permeable Floor, No DHC]	Basic Latrine [Permeable Floor, w/ DHC]	Basic Latrine [Impermeable Floor, No DHC]	Total Basic Latrine Coverage	Total Improved Latrine Coverage	Total Latrine Coverage	Handwashing Facility Coverage	Triggered in CLTS	ODF	Water Coverage [Functional w/Clean Surroundings]	Water Coverage [Functional WPs]
Chadza	75240	15048	16%	15%	13%	44%	66%	57%	47%	27%	61%	70%	113%
Chimutu	64595	12919	18%	18%	17%	53%	79%	68%	43%	30%	49%	87%	134%
Chiseka	59081	11816	20%	21%	17%	58%	82%	75%	50%	33%	39%	94%	153%
Chitekwele	71878	14376	16%	17%	14%	47%	73%	61%	44%	30%	52%	72%	118%
Chitukula	78727	15745	15%	15%	13%	43%	66%	56%	45%	30%	55%	67%	111%
Kabudula	79411	15882	14%	14%	12%	40%	65%	53%	46%	33%	60%	77%	120%
Kalolo	72378	14476	16%	17%	15%	48%	72%	62%	47%	30%	61%	77%	127%
Kalumba	77301	15460	15%	15%	13%	43%	68%	56%	47%	34%	48%	67%	112%
Kalumbu	75981	15196	16%	15%	13%	45%	66%	58%	41%	28%	57%	61%	107%
Khongoni	69307	13861	15%	16%	15%	46%	73%	60%	46%	42%	62%	69%	122%
Maili	68183	13637	17%	17%	14%	48%	69%	62%	43%	36%	50%	73%	121%
Mazengera	80102	16020	15%	15%	12%	42%	62%	54%	50%	42%	42%	67%	110%
Mtema	63272	12654	18%	18%	16%	53%	78%	69%	45%	42%	53%	87%	140%
Njewa	64325	12865	18%	19%	16%	53%	74%	69%	45%	44%	47%	90%	145%
Tsabango	69156	13831	16%	16%	14%	46%	73%	61%	46%	24%	42%	81%	128%
Grand Total	1068937	213787	16%	16%	14%	47%	71%	61%	46%	34%	52%	75%	123%

[2] This section is re-edited based on "Guide to the National Rural Water Supply and Sanitation M&E System, May 2014".

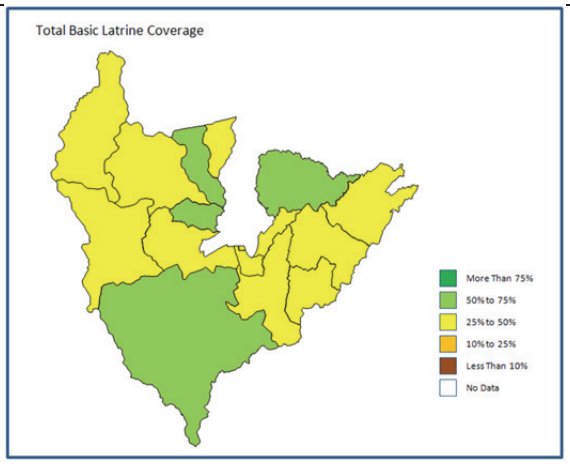
Step 4. Data calculated using the templates can be visualized on a district map outline directly within the MS-excel program. Each block represents a Traditional Authority within the District. A map can be generated for each indicator using a drop down menu.	

Figure I-1: Data collection, analysis and visualisation tools

B. What data does it include?

The approach collects data at the community level, as well as some information on public premises, learning institutions, health centres as National WASH M&E indicators and some additional data such as Area Mechanic and spare parts supply chain for the management of the operation and maintenance of water points. Details of these indicators are described as follows.

In addition, data collection templates and definition of each indicator is shown in **Appendix 1** and **Appendix 2** respectively.

B.1 Community indicator

(1) National WASH M&E indicators

General		Sanitation/Hygiene and Waste		Water Supply		CLTS and ODF	
Date of Data Collection	TA	Unsatisfactory Latrines	Hand Washing Facilities without Soap	F BHs With Clean Surroundings	NF Individual Taps	Triggered in CLTS (Yes = Y, No = N)	Awaiting Verificiation? (Yes = Y, No = N)
Name of HSA	TA Code	Basic Latrines (Permeable Floor, No DHC)	Hand Washing Facilities with Soap	F BHs Without Clean Surroundings	F Protected Shallow Wells With Clean Surroundings	Date Triggered	Verified ODF (Yes = Y, No = N)
HSA Phone Number	Health Center	Basic Latrines (Permeable Floor, with DHC)	Number of Households with Properly Functioning Waste Management System	NF BHs	F Protected Shallow Wells Without Clean Surroundings	Triggering Funded by:	Date Declared ODF
Name of Village	Health Center Code	Basic Latrines (Impermeable Floor, No DHC)		F Communal Taps/Kiosks With Clean Surroundings	NF Protected Shallow Wells	Date of Follow-up 1	Verified ODF ++ (Yes = Y, No = N)
Village Code	Village Population	Improved Latrines (Impermeable Floor, with DHC)		F Communal Taps/Kiosks Without Clean Surroundings	F Protected Springs With Clean Surroundings	Date of Follow-up 2	Date Declared ODF ++
GVH	Number of Households	Composting Latrines (EcoSan)		NF Communal Taps/Kiosks	F Protected Springs Without Clean Surroundings	Date of Follow-up 3	
GVH Code		Households With Flush Toilets		F Individual Taps	NF Protected Springs	Date of Follow-up 4	

General	Sanitation		Hygiene and Waste	Water Supply	ODF
Village Population	Total Basic Latrines	Improved Latrines (Impermeable Floor, with DHC) coverage	Handwashing Facilities without soap coverage	Water Coverage (Functional w/ Clean Surroundings)	Triggered in CLTS
Number of Households	Total Improved Latrines	Composting Toilet (EcoSan) coverage	Handwashing Facilities with soap coverage	Water Coverage (Functional)	Awaiting Verification
	Total Latrines	Flush Toilet coverage	Total Handwashing Facilities	Water Point Functionality Rate (w/ Clean Surroundings)	Verified ODF
	Unsatisfactory Latrines Coverage	Total Basic Latrine coverage	Total Handwashing Facilities coverage	Water Point Functionality Rate	Verified ODF++
	Basic Latrine (Permeable Floor, no DHC) coverage	Total Improved Latrine coverage	Waste Management System Coverage		
	Basic Latrine (Permeable Floor, with DHC) coverage	Total Latrine coverage			
	Basic Latrine (Impermeable Floor, no DHC) coverage				

(2) Additional indicators under O&M framework

CBM		AM
35. No. of WPC/VHWC	38. Year trained in initial CBM	41. No.of preventive maintenance contract between AM and WPC
36. No. of functioning and/or active WPC/VHWC at this moment	39. No. of WPC/VHWC trained in CBM refresher	42. Year.of preventive maintenance contract between AM and WPC
37. No. of WPC/VHWC trained in initial CBM	40. Year trained in CBM refresher course	

B.2 Learning Institutions Indicators

(1) National WASH M&E indicators

General		Sanitation				Hygiene	Water and Waste
		Male Students	Female Students	Male Teachers	Female Teachers		
Date of Data Collection	School Number	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Handwashing Facilities without Soap	Number of Functioning Protected Water Sources
Name of Data Collector	School Name	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Handwashing Facilities with Soap	Main Source of Water (Pick from List)
Position of Data Collector	Total Boys Enrolment	Number of Urinals	Number of Urinals	Number of Urinals	Number of Flushing Toilets		Is there a Clean Surrounding Area for the Main Water Source?
Zone Name	Total Girls Enrolment	Number of Flushing Toilets	Number of Flushing Toilets	Number of Flushing Toilets			Main Solid Waste Disposal Method (Pick from list)
Traditional Authority	Total number of Male Teachers	Number of Toilets with access for the Physically Challenged	Number of Toilets with access for the Physically Challenged				
	Total number of Female Teachers						

Water Source List
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

Solid Waste Disposal List
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

General	Sanitation		Hygiene and Waste	Water Coverage
Number of Schools	Schools with Total Sanitation	Boys per Latrine	Waste Disposal Technologies	Waterpoint Technologies
Total Boys Enrolment	Schools with access for the Physically Challenged	Girls per Latrine	Schools without Handwashing Facilities	
Total Girls Enrolment	Schools with Urinals			

B3. Indicators for Public Premises

(1) National WASH M&E indicators

General	Sanitation and Hygiene			Water Supply and Waste
	MALE	FEMALE		
Date of data collection	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Handwashing Facilities without Soap	Number of Functioning Protected Water Sources
Name of Data Collector	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Handwashing Facilities with Soap	Main Source of Water
Traditional Authority	Number of Urinals	Number of Flushing Toilets		Is there a Clean Surrounding Area for the Main Water Source? (Yes=1, No=0)
Name of Public Premises	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged		Main Solid Waste Disposal Method
Type of Public Premises	Number of Toilets with access for the Physically Challenged			If there is animal waste, Properly Functioning Animal Waste Pit
Approximate Number of Patrons per Day				

Public Premesis List
1. Market
2. Bus Depot
3. Fishing Dock
4. Church
5. Other

Water Source List
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

Solid Waste Disposal List
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

General	Sanitation		Hygiene and Waste	Water Coverage
Patrons per Day	# Male Latrines	% Female Latrines - Basic	Totals for Waste Disposal Methods	Water Coverage Rate
Number of Public Premises	# Female Latrines	% Female Latrines - Improved	# With a Properly Functioning Animal Waste Pit	% Waterpoints with Clean Surroundings
	Patrons per Latrine	% Female Latrines - Flush	# HWF with soap	
	% Male Latrines - Basic	# Toilets (M) w/ Access for the Physically Challenged		
	% Male Latrines - Improved	# Toilets (F) w/ Access for the Physically Challenged		
	% Male Latrines - Flush			

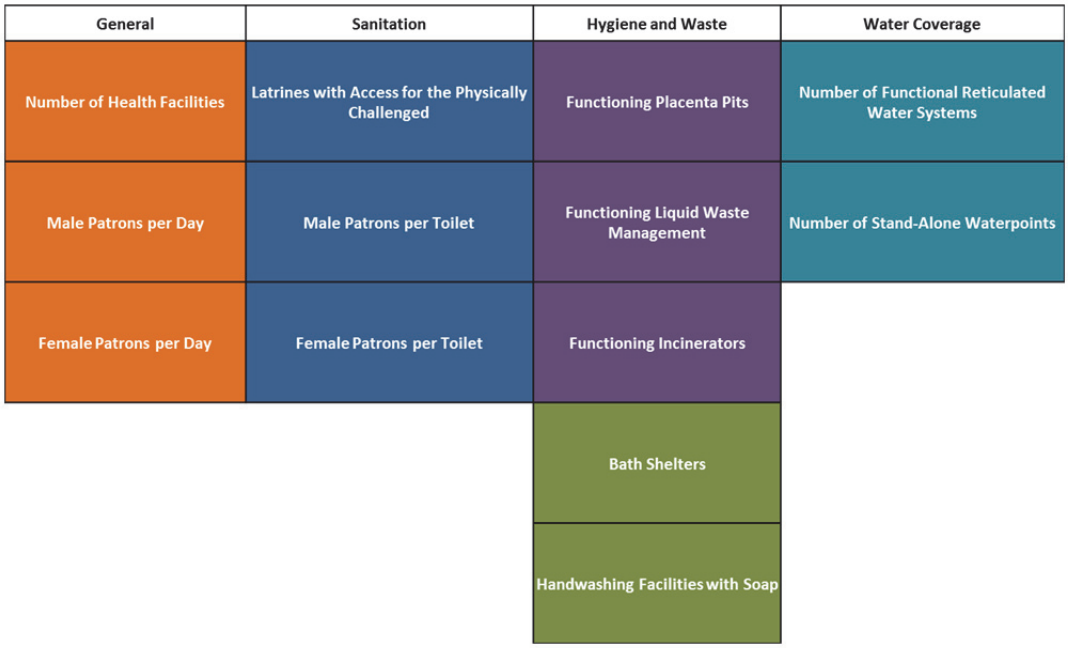
B4. Health Centres indicators

(1) National WASH M&E indicators

General		Sanitation				Hygiene	Water Supply and Waste
		Male Patrons	Female Patrons	Male Staff	Female Staff		
Date of Data Collection	Type of Facility (Health Center, Dispensary)	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Functional Basic Latrines	Number of Handwashing Facilities without Soap	Functional Reticulated Water System Available? (Yes=1, No=0)
Name of Data Collector	Operator (Gov't, Private, CHAM)	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Functional Improved Latrines	Number of Handwashing Facilities with Soap	Functioning Stand-Alone Water Point (Yes=1, No=0)
TA	Aproximate Number of Female Patrons per Day	Number of Urinals	Number of Flushing Toilets	Number of Urinals	Number of Functional Flushing Toilets	Number of Bath Shelters in a usable state	Stand Alone Water Source (Pick from List)
Name Health Facility	Aproximate Number of Male Patrons per Day	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged	Number of Functional Flushing Toilets			Is there a Clean Surrounding Area for the Stand Alone Water Source?
Health Facility Code	Total number of Male Staff	Number of Toilets with access for the Physically Challenged					Main Solid Waste Disposal Method (Pick from list)
	Total number of Female Staff						Functioning Incinerator (Yes=1, No=0)
							Properly Functioning Placenta Pits (Yes=1, No=0)
							Properly Functioning Liquid Waste Management System (Yes=1, No=0)

Water Source List
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

Solid Waste Disposal List
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other



B5. Area mechanic database

Area No.	Name	Sex	Village	Traditional Authority	Contact	Date of Registration
1	Eftone ****	Male	Mikundi	Mduwa	0991 *** ***	1/1/2013
2	Edward ****	Male	Chakhalira	Mduwa	0996 *** ***	1/1/2013
3	Andrew ****	Male	Mkanda	Mkanda	0999 *** ***	1/6/2012
4	Fanuel ****	Male	Gumba	Mkanda	0884 *** ***	1/6/2012
5	George ****	Male	Chimombo	Mkanda	0993 *** ***	1/10/2013
6	Nelson ****	Male	Chipumi	STA Kapondo	0993 *** ***	1/10/2013

B6. Spare parts retail shop database

NO.	NAME OF SHOP	VILLAGE	TRADITIONAL AUTHORITY	Contact	CURRENT SITUATION
1	Pagwanji Enterprise	Bua Trading Centre	Mlonyeni	0991 *** ***	Selling
2	R.K. Hardware	Matutu Trading Centre	Mduwa	0996 *** ***	Selling
3	Angoni Grocery	Kaigwazanga	Mkanda	0999 *** ***	Stopped selling
4	Zuze General Suppliers	Waliranji Trading Centre	Mavwele	0884 *** ***	Selling
5	Give and Take	Mikundi Trading Centre	Mduwa	0993 *** ***	Selling
6	Yanu Yanu	Kapiri	Dambe	0993 *** ***	Selling

C. How is data collected?[3]

Data is collected by district government extension agents, primarily Health Surveillance Assistants (HSAs) with support from Water Monitoring Assistants (WMAs).

Data is aggregated in Health Centres and passed up to the District Coordinating Team (DCT) where data is entered in the database and shared across members of the district.

[3] This section is re-edited based on "Guide to the National Rural Water Supply and Sanitation M&E System, May 2014".

District Environmental Health and Water Development Offices then communicate this information to their respective line Ministries.

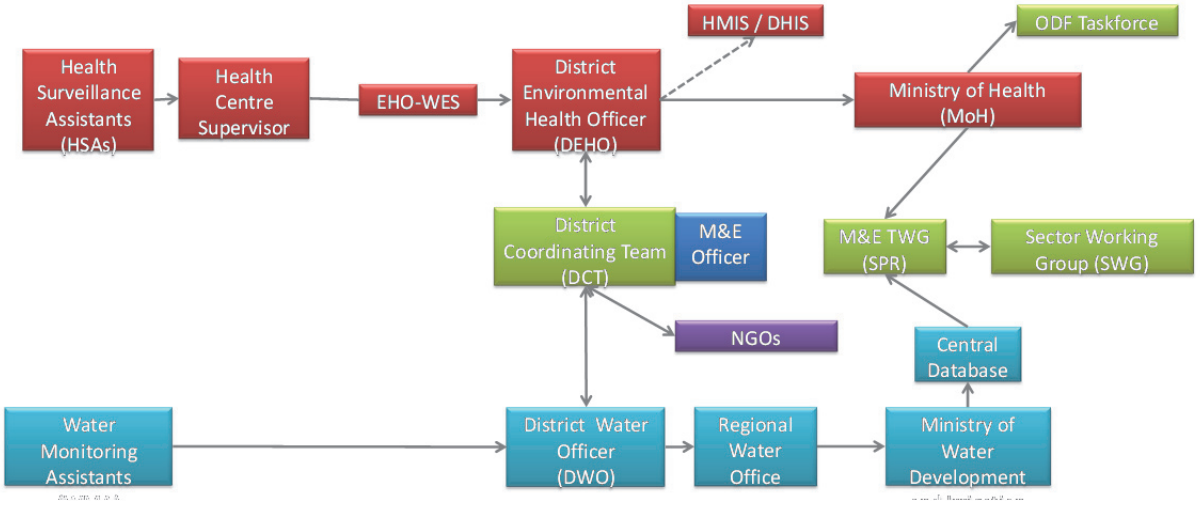


Figure I-2: M&E Information Flow Diagram

Box 1: Pilot test in Mchinji district in 2014

Mchinji district tried to carry out the data collection excise in late 2014. The district environmental health office and district water development office took full responsibility for all processes such as below.

No.	Work process	Responsible person/office	No.	Work process	Responsible person/office
1	Data collector orientation	AEHOs	6.	Data validation	AEHOs
2	Distributing forms	AEHO	7.	Data compilation	DDEHO
3.	Data collection		8.	Data analysis	
3.1	Data collection for community indicators	HSAs	8.1	Data analysis- Local	AEHOs
3.2	Data collection for Learning Institutions	HSAs	8.2	Data analysis-District	DDEHO
3.3	Data collection for Public Premises	HSAs	9.	Present to DCT	DDEHO, DWDO
3.4	Data collection for health centres indicators	SHSAs and/or AEHOs	10	Keep official version of database	DDEHO, MEO
3.5	Data collection for area mechanic database	WMAs	11.	Report data	
3.6	Data collection for spare parts supply chain	WMAs	11.1	Report data to RWDIO / MoAIWD	DWDO
4.	Collecting Forms at HC	AEHOs	11.2	Report data to MoH	DEHO
5.	Entering data	AEHOs			

Abbr.: Assistant Environmental Health Officers (AEHOs), Water Monitoring Assistants (WMAs)
Health Surveillance Assistants (HSAs), District Water Development Officer (DWDO)
Senior Health Surveillance Assistants (SHSAs), Deputy District Environmental Health Officer (DDEHO)
District Environmental Health Officer (DEHO), Monitoring and Evaluation Officer (MEO)
Ministry of Agriculture, Irrigation and Water Development (MoAIWD), Ministry of Health (MoH)

D. How frequently is it updated?[4]

Verification exercises have found that data collected presents a good overall picture of a district that can highlight areas for more targeted follow up. While not perfect, accessing this existing and freely available information can help interventions to more efficiently and effectively prioritize their efforts.

E. Reporting

Field reports help the responsible Sector to build a bigger picture of what is happening in the sub-sector. It also helps the Sector to learn which strategies and methods are helpful or not, what is working and what is not working.

The information in the reports goes into Management Information Systems (MIS). It is added to and compared with information from the other reports. This information helps the Sector to improve the understanding of how the project is running at the district level. The information in reports should be numerically aggregated with other information to compile statistics. While numerical information is not enough, it gives a wider picture of the programme to guide decision making.[5]

Sample report format is shown in **Appendix 3** as a reference**.**

[4] This section is re-edited based on "Guide to the National Rural Water Supply and Sanitation M&E System, May 2014".

[5] This description is re-edited based on "Water Supply and Sanitation District Operational Manual、July 2010, Ministry of Irrigation and Water Development".

Part II WASH M&E Database

Note: These contents are re-edited based on National WASH M&E Framework developed through M&E TWG in beginning of 2014.

Part II – 1 Basic Microsoft Excel 2007

A. Introduction

This section is an introduction to the basic functions in Microsoft Excel 2007.

It covers the following topics:

- Basic Parts of the Excel Screen
- Moving Around a Worksheet
- Office Button Menu
- Entering and Changing Data
- Basic Formatting
- Formulas
- Sorting Data
- Filtering Data

A1. Common Keyboard and Mouse Commands

Throughout this manual, the following terminology and notation is used to represent commands using the keyboard or mouse.

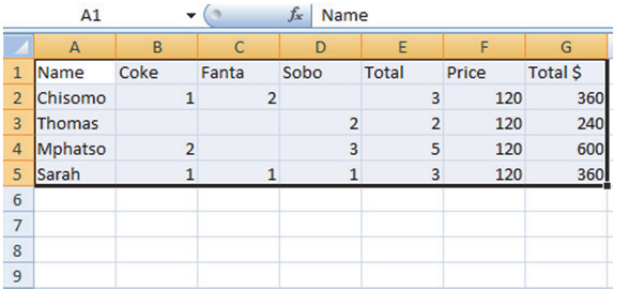
Click: Press the left button of the mouse.

Right-click: Press the right button of the mouse.

Double-click: Press the left button of the mouse twice. This should be a quick motion of two taps in a row.

Click and drag: Press the left button of the mouse and keep holding it as you drag the mouse in the direction you wish to go.

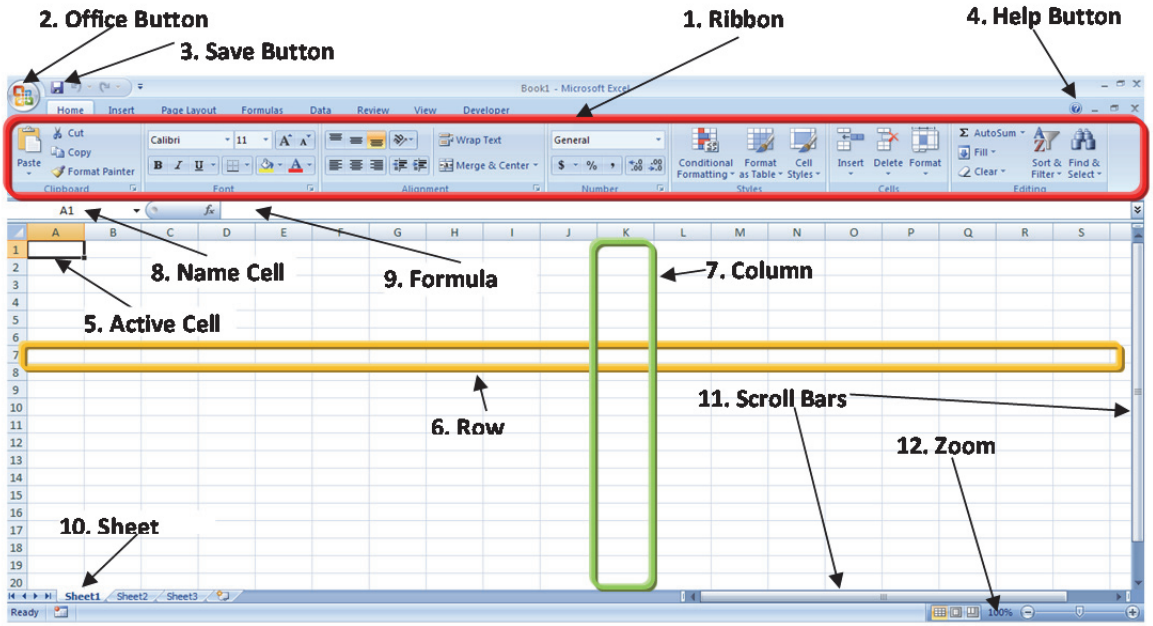
Select: For one cell, click on the cell. For multiple cells, click on the cell in the top-left part of the range that you wish to select, hold the mouse, and drag across the remaining cells to the bottom-right part of the range. The selected data will be highlighted in a thick black box and shaded in grey. An example of a selected range of cells is shown below.



	A	B	C	D	E	F	G
1	Name	Coke	Fanta	Sobo	Total	Price	Total $
2	Chisomo	1	2		3	120	360
3	Thomas			2	2	120	240
4	Mphatso	2		3	5	120	600
5	Sarah	1	1	1	3	120	360
6							
7							
8							
9							

<Enter>, <Tab>, <←>, etc.: Press the key indicated within the <> brackets.
<Ctrl+__>, <Alt+__>, <Shift+__>, etc.: Press and hold the key shown left of the + sign, then press the key after the + sign. E.g. <Ctrl+s> means press and hold the Ctrl key, then press the s key.

B. Basic Parts of the Excel Screen



1. **Ribbon:** Highlighted in the red box in the above, this is where you can find a menu of functions for Excel. There are different tabs, such as Home, Insert, Page Layout, etc. Each tab has a different set of functions. You can access the tabs by clicking on them.

2. **Office Button:** When you click on this button, it will open up a menu of common functions, such as opening, saving, and printing files.

3. **Save Button:** Click on this button to save your work (see more detailed description in the Office Button Menu section).

4. **Help Button:** If you want to look up how to perform a task, or have a problem, click on this button to access a help menu. You can search in the help menu for answers about how to use Excel.

5. **Active Cell:** This shows up as a thick black box around a cell. In Excel, a cell is a single box of the spreadsheet that can store data. The Active Cell is the cell that you are currently on, and can manipulate the data inside of it.

6. **Row:** One row of data is a horizontal set of cell (see yellow box). Rows are labelled with numbers (e.g. row 7).

7. **Column:** One column of data is a vertical set of cells (see green box). Columns are labelled with letters (e.g. column K).

8. **Name Cell:** This tells you where your active cell is. In this case, it is A1. This means it is in Column A, Row 1.

9. **Formula Bar:** This displays the data or formula that is stored in the Active Cell. You can type in this formula bar to add, change, or remove the data or formula in the Active Cell.

10. **Sheet Name:** This is the name of the worksheet in Excel. In each Excel workbook (the name for an Excel file), you can have multiple worksheets. Each tab is a different worksheet. You can access each sheet by clicking on the tab.

11. **Scroll Bars:** The scroll bar on the right hand side moves up and down. The scroll bar at the bottom moves side to side.

12. **Zoom:** Click on the + or – to zoom in (make text on screen appear bigger) or zoom out (make text on screen appear smaller).

C. Moving Around a Worksheet

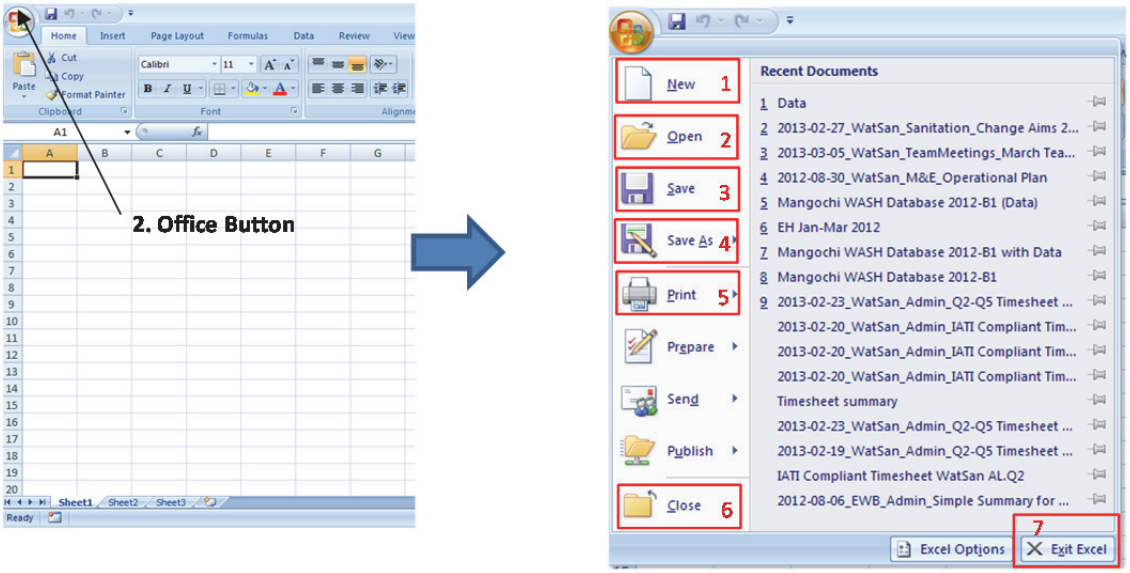
There are different ways to move around a worksheet in Excel.

Using your mouse: Move the mouse pointer around the screen to the cell that you wish to change and then click on that cell to make it the Active Cell.

Using scroll bars: If you need to see parts of the worksheet not shown on the screen, you can move around the worksheet by clicking on the arrows on the ends of the scroll bars to go in the direction you wish. You can also click and drag the grey box inside the scroll bar to move around the worksheet.

Using arrow keys: Starting from the current Active Cell, use the arrow keys (↑, ↓, ←, or →) to move around the worksheet. If you press the key once, it will move the Active Cell up, down, left, or right by one position. If you hold down the arrow key, then it will keep moving in that direction.

D. Office Button Menu

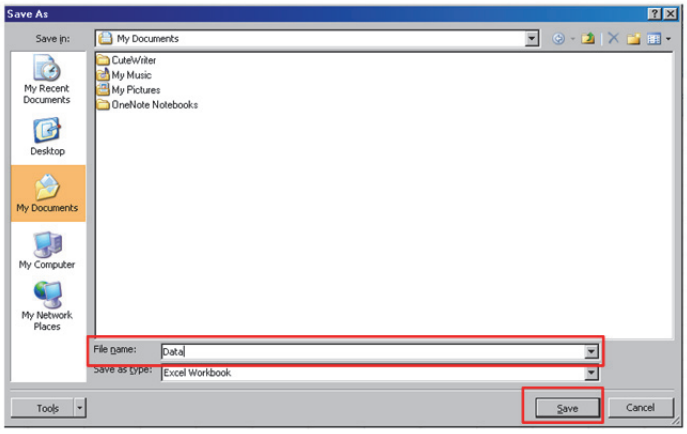


When you click on the Office Button, it will show a menu of common functions and a list of Recent Documents. The Recent Documents are the most recent files that were opened. These files can be accessed by clicking on them. The basic functions are:

1. **New:** Create a new, blank Excel workbook.

2. **Open:** Open an existing Excel workbook. Find the file that you wish to open in the file explorer window that pops up and double-click to open it.

3. **Save:** Save the current workbook. The **first time** you save, a file explorer window will pop up (see below).



You need to give the worksheet a file name and a location. Find and click on the folder that you want to save to in the file explorer.

Type a name into the Filename box and **<Enter>** or press the **Save button**. After the first time, when you press the Save button, it will save the workbook under the filename assigned to it. You can also use the Save button at the top of the screen, or **<Ctrl+s>**.

Save frequently, about every 10 minutes so you do not lose your work when the computer fails or power is lost.

4. **Save As:** Save the current workbook under a different name. This will take you through the same process as if you were saving a workbook for the first time. This function is helpful if you wish to have multiple versions of a file. For example, you have changed some data and want to keep the old and new version of the file.

5. **Print:** Print the workbook file. This will open a Print menu with multiple options, such as number of copies, sections to print, etc. Print menus change depending on the type of printer you have.

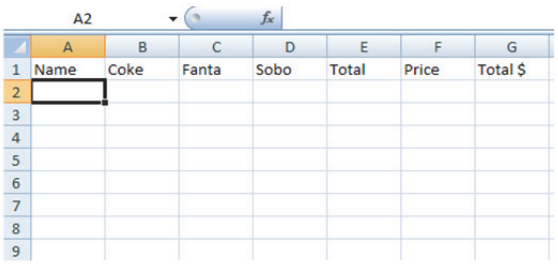
6. **Close:** Close the current workbook.

7. **Exit Excel:** Close Excel.

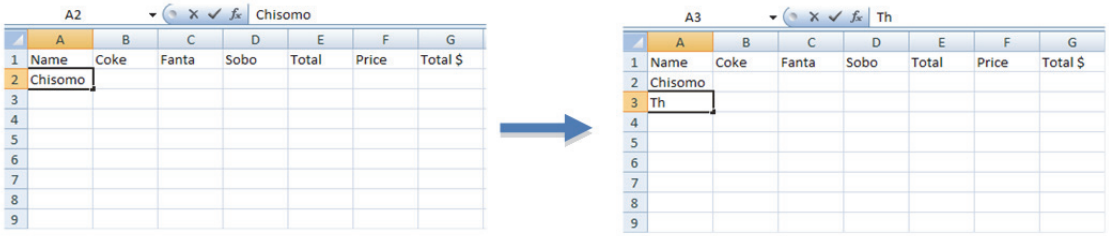
E. Entering and Changing Data

The following example will demonstrate how to enter and change data in a workbook.

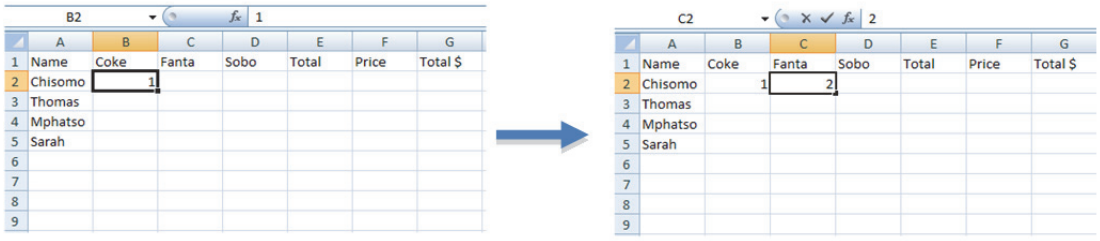
1. Go to the cell where you want to enter data. It will become highlighted with a thick black box. In this case, we are starting with A2.



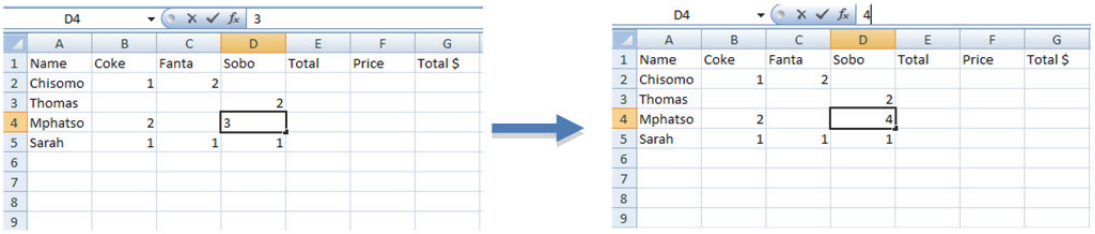
2. Type in your data. You will see this appear in the cell, as well as the formula bar. Press <Enter> when you have completed entering the data. This will take you to the next row, where you can continue to enter data.



3. Optionally, you may use **<Tab>** to move to the right, instead of down, if you want to enter data across the row.



4. To change data, go to the cell that you want to change. Either double-clicks on the cell or on the formula bar. Type in your change, then <Enter> or **<Tab>**.

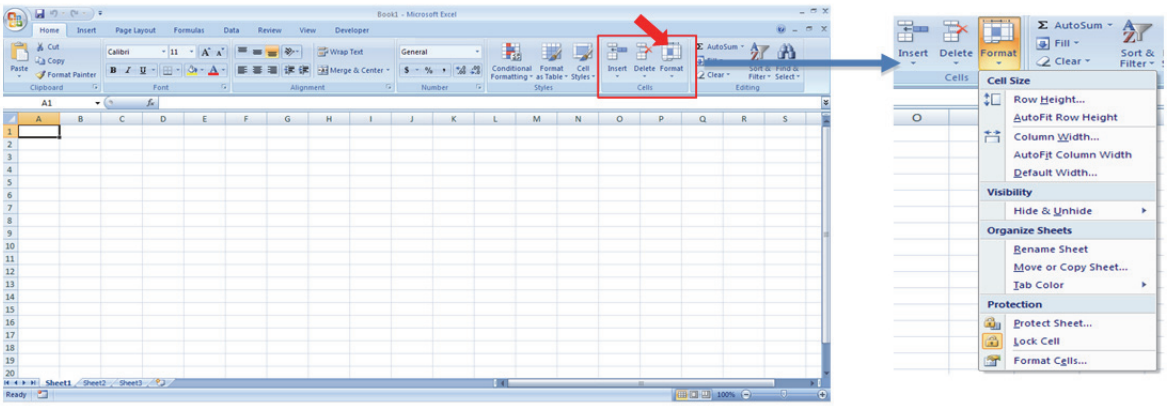


F. Basic Formatting

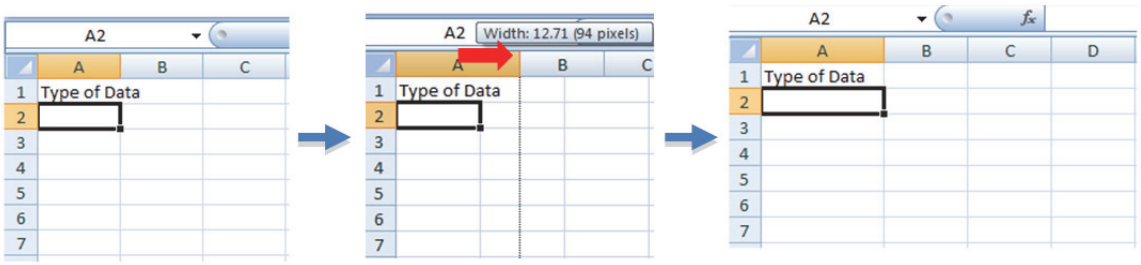
In Excel, the look of the worksheet can be customized using different types of formatting. Basic formatting options are located under the Home tab, in the groups Cells, Number, Alignment, and Font. These groups will be described with examples to demonstrate some common basic formatting options. More advanced formatting options are available in the Style group.

F1. Cells

This group includes options to modify the look of each cell. The key button is the Format button. Click on this button to see the drop down menu. Under Cell Size, you may set a row height or column width, or let Excel automatically fit the size of the row or column according to the data.

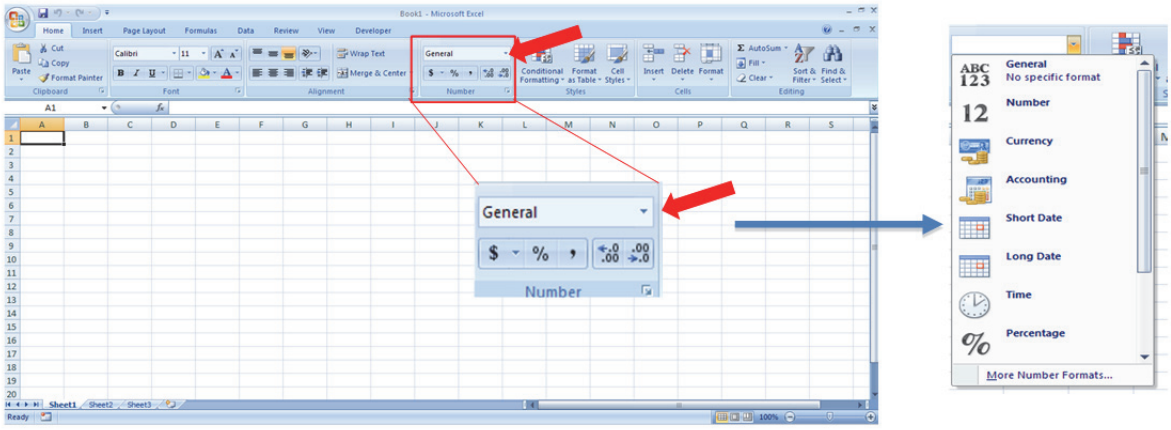


Column widths and row heights can also be set by clicking and dragging the edge of the column or row to the desired size. In the example below, the text in cell A1 is too big to fit in the column width, so it was adjusted to make it wider.



F2. Number

Data may be formatted in different ways, depending on the data type. In the Number group, there are different options for how data will be presented. There are options for currency ($), percentages (%), and to add a comma (,) for thousands separator. There are also options to add or take away decimal places. In the drop down menu in the Number group, there are more formats and advanced options. To assign or change the number formatting for data, select the cells that you wish to apply the format to. Then select a format with one of the buttons or selecting from the drop-down menu.



Some key types of number formats are:

Number: General numeric data. By default, it will assign two decimal places.

Percentage: For percentages. The data needs to be entered as the decimal number (e.g. 0.85), and will be automatically formatted into a percent (85%). Do not enter the percent number (e.g. 85), as that will result in it being multiplied by 100 in the display (e.g. 8500%).

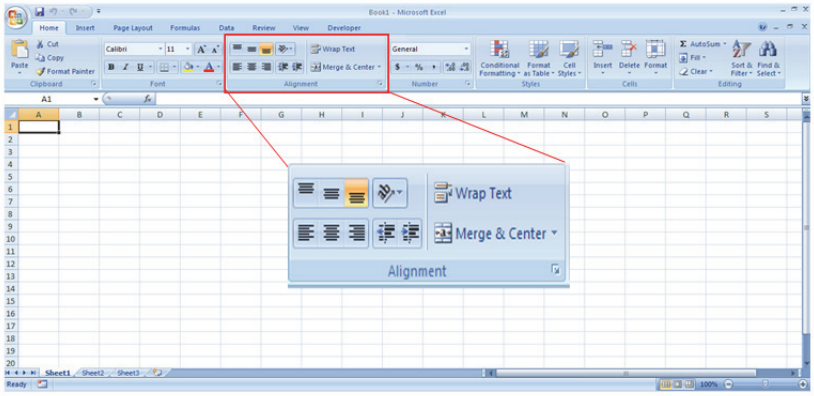
Short Date or Long Date: For automatic formatting of dates. These will put dates into a specific format, depending on the setting of the computer.

Text: For normal text (e.g. names, villages).
Examples of these formats in an Excel worksheet:

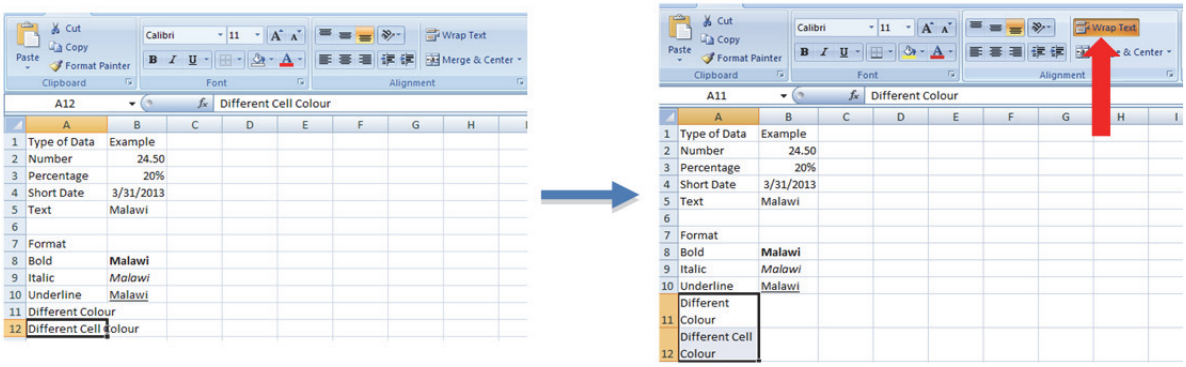
	A	B
1	Type of Data	Example
2	Number	24.50
3	Percentage	20%
4	Short Date	3/31/2013
5	Text	Malawi

F3. Alignment

This group contains options to change how the text is aligned inside the cell. It can be aligned in different ways vertically (top, middle, bottom), and horizontally (left, centre, right). The text in a cell can also be wrapped. This means that if the data typed in the cell takes up more space than one line, it will automatically go to the next line. By default, numbers are aligned to the right, while text is aligned to the left.

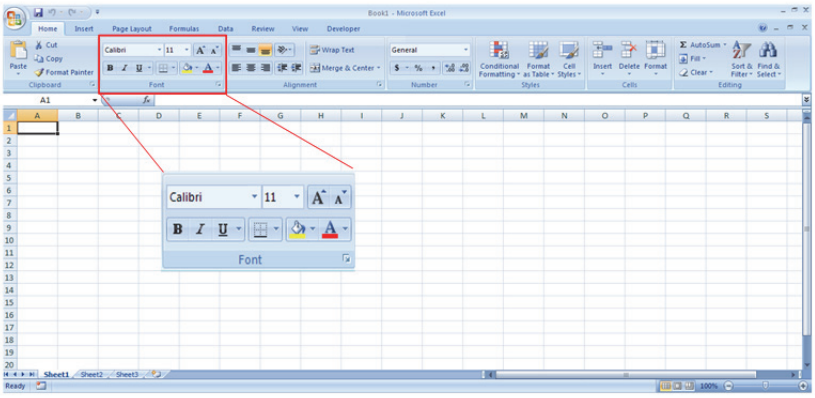


An example of wrapping text for cells A11 and A12 because the text is too long for the column width and we don't want to make the column too wide.

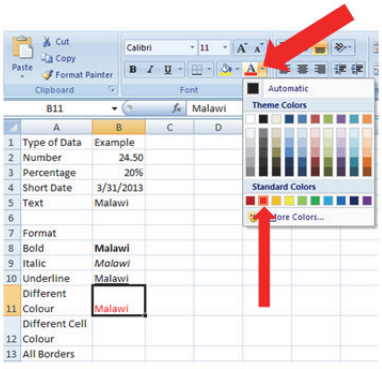


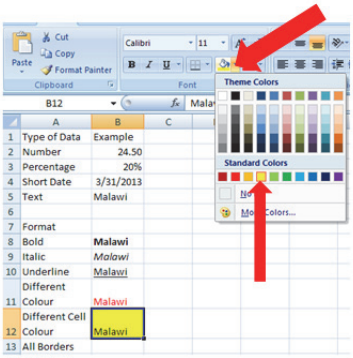
F4. Font

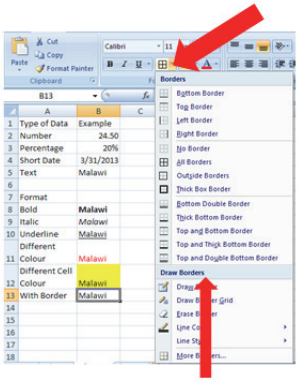
Fonts are different styles of text. This group contains options to change the look of the text. , and they each have a name. In this spreadsheet, the font name is Calibri. The font size is 11, which is how big the font appears. The bigger the number, the larger the font. Underneath the font name and size boxes are options for formatting the font, borders, colour of the cell, and colour of the font.



Examples of changing the font colour, cell colour, and border:





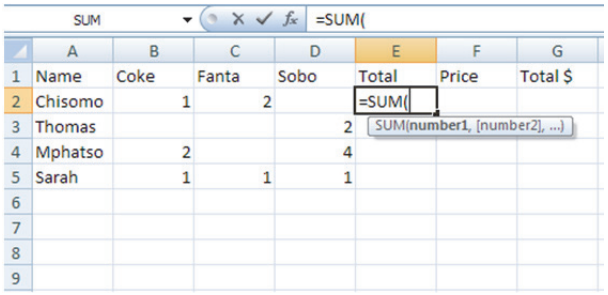


G. Formulas

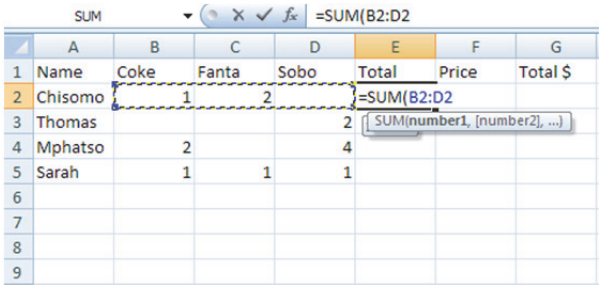
You can do calculations, similar to using a calculator, inside of a cell. These are called formulas. The following example will show how to use basic formulas in Excel.

If you wish to add together multiple cells to get a total, you can use the SUM function. In this case, we want to know how many bottles each person has ordered.

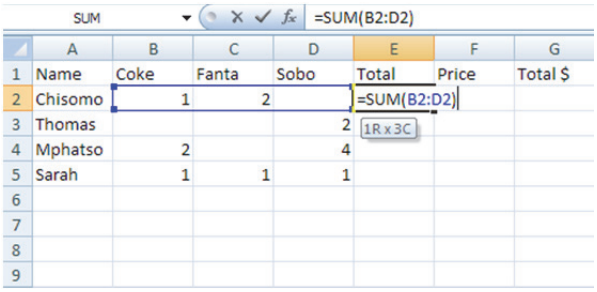
1. Go to the cell where you wish to calculate the sum. In this case, it is E2.
2. Type =**SUM** (in the cell or in the formula bar.



3. Click on the cells you want to sum together, they will be highlighted and you see something like the picture below. Optionally, you may type in the locations of the cells yourself. The way it works is to type in the location of the first cell (B2), then :, then the location of the last cell (D2). B2:D2 means "from B2 to D2", so it includes B2, C2, and D2.

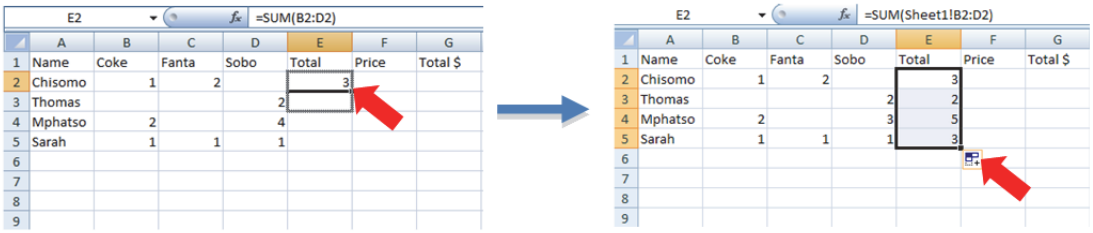


4. Type) so that the formula reads =SUM (B2:D2), then **<Enter>** or **<Tab>**.



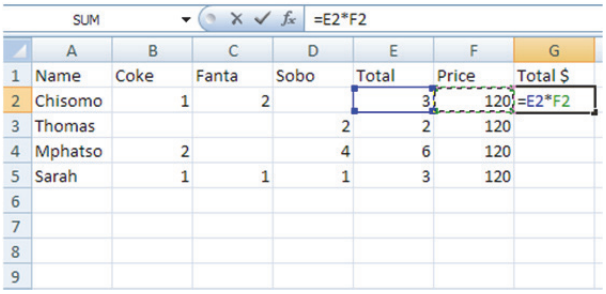
5. Rather than typing the same formula for the rest of the rows, you may copy the formula by clicking on the + at the bottom right corner of the Active Cell, then dragging it down the column. In this case, you click and drag from E2 to E5. Excel automatically changes

the formulas to refer to the cells in the same row as the formula. So for row 3 is **=SUM (B3:D3)**, row 4 is **=SUM (B4:D4)**, and so on.



You can do a basic calculation by typing **"="** and then numbers and symbols. Use brackets to group calculations. Excel follows order of operations brackets, exponents, division, multiplication, addition, subtraction. The signs used are: **+ for addition**, **- for subtraction**, *** for multiplication**, **/ for division**, and **( ) for brackets**.

In this example, to calculate the total price for all drinks for Chisomo, the formula is **=E2*F2**.

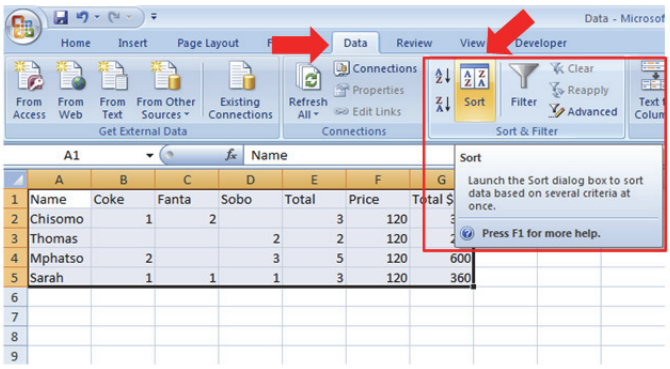


	A	B	C	D	E	F	G
1	Name	Coke	Fanta	Sobo	Total	Price	Total $
2	Chisomo	1	2		3	120	=E2*F2
3	Thomas			2	2	120	
4	Mphatso	2		4	6	120	
5	Sarah	1	1	1	3	120	
6							
7							
8							
9							

H. Sorting Data

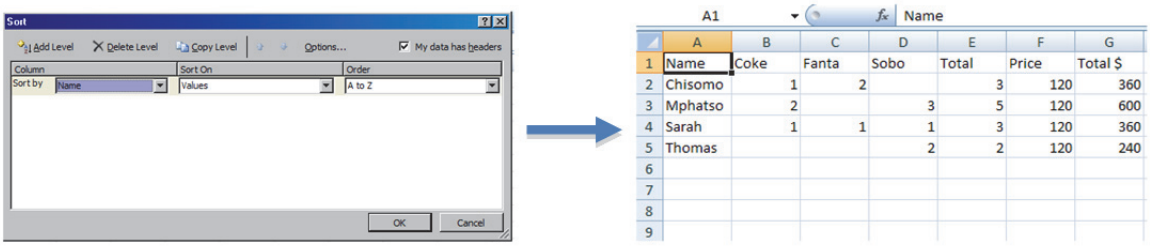
The sort function is used to arrange data based on the values presented. Sort can be used on numeric data, dates and times, or text. Sorting data helps you quickly visualize and understand your data better, organize and find the data that you want, and ultimately make more effective decisions. The following example will show how to use the sort function in Excel.

1. Select the data in the worksheet that you wish to sort.
2. Click on **Data tab** of the Ribbon, then click on **Sort**.

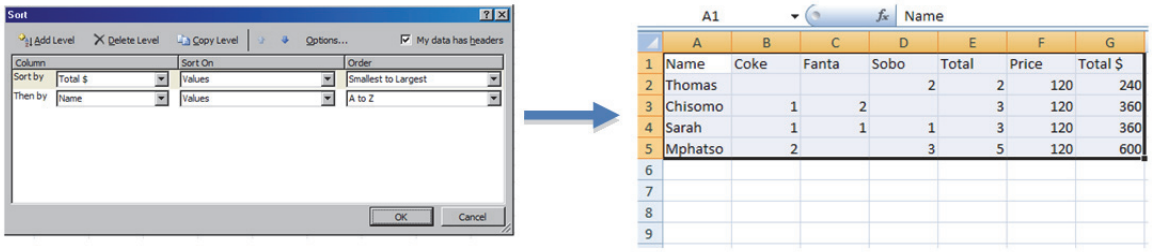


3. A pop up window will appear. Make sure the box that says "My data has headers" is checked so that your header row (i.e. Name, Coke, etc.) is not included with the data to sort.

4. Do one of the following (in this example, we choose option c for the Name column):
   a. To sort from low numbers to high numbers, click **Sort Smallest to Largest**.
   b. To sort from high numbers to low numbers, click **Sort Largest to Smallest.**
   c. To sort in alphabetical order, click **Sort from A to Z**.
   d. To sort in reverse alphabetical order, click **Sort from Z to A**.



5. To sort by multiple columns, click **"Add Level"**, then use the **"Then By"** fields in the sort window to select additional rows and orders. For example, we can first sort by ascending order of Total $, then ascending order for Name.

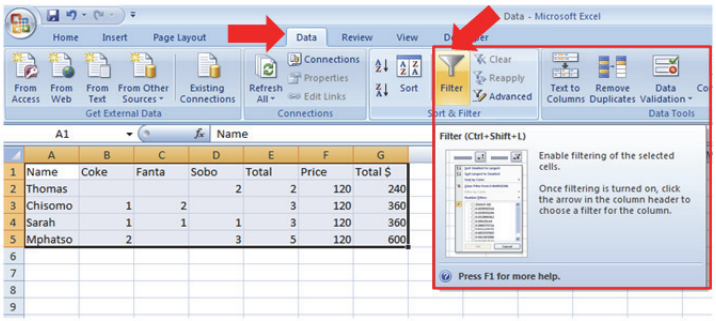

Sort
Add Level
Delete Level
Copy Level
Options...
My data has headers
Column
Sort On
Order
Sort by
Total $
Values
Smallest to Largest
Then by
Name
Values
A to Z
OK
Cancel
A1
Name
A B C D E F G
1 Name Coke Fanta Sobo Total Price Total $
2 Thomas 2 2 120 240
3 Chisomo 1 2 3 120 360
4 Sarah 1 1 1 3 120 360
5 Mphatso 2 3 5 120 600
6
7
8
9

I. Filtering Data

Filtered data displays only the rows that meet criteria that you specify and hides rows that you do not want displayed. You can filter by more than one column to produce a smaller subset of data. The following example will show how to use the filter function in Excel.

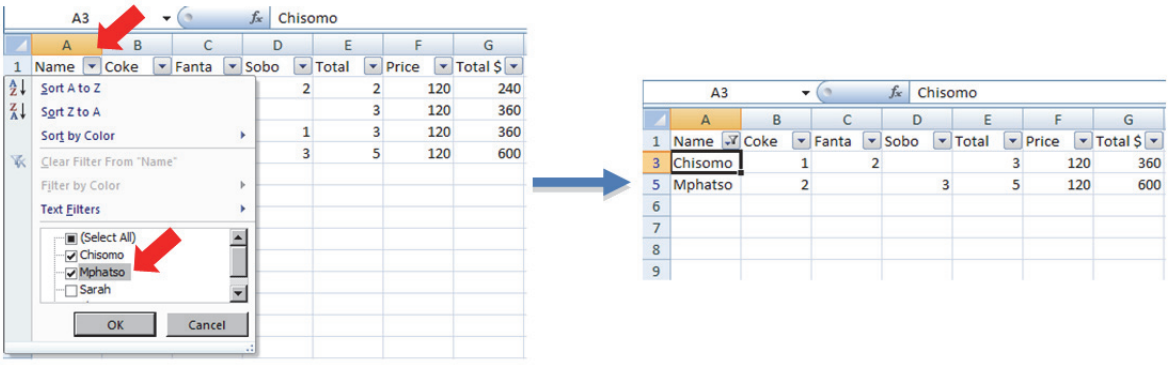
1. Select the data in the worksheet that you wish to **filter**.

2. Click on the **Data tab of the ribbon**, then click on **Filter**.

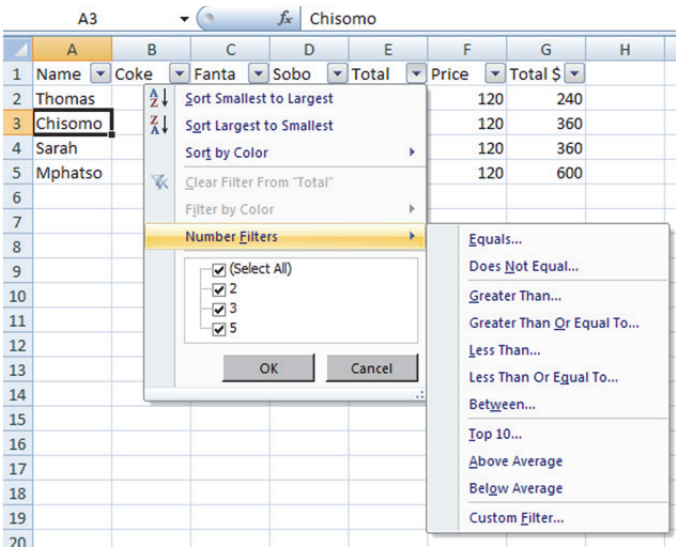


3. Click the arrow in the column header that you wish to **filter**.

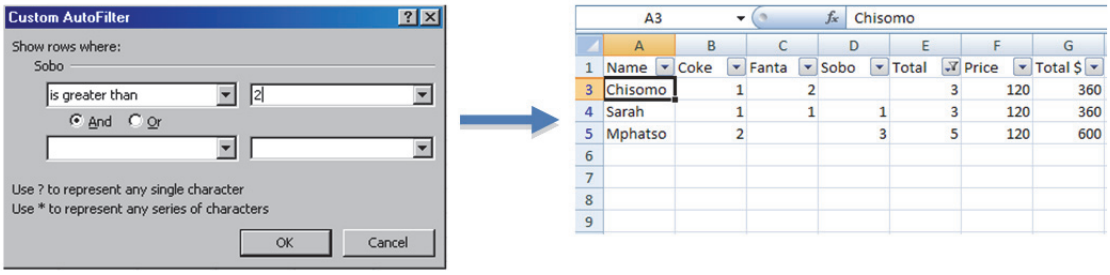
4. Select the criteria that you wish to filter by. Use the check boxes to select or unselect values that you wish to include. For more advanced functions (see below), you can set criteria, such as **"equals"**, **"does not equal"**, **"is greater than"**, etc. Click OK to apply the selected filter.



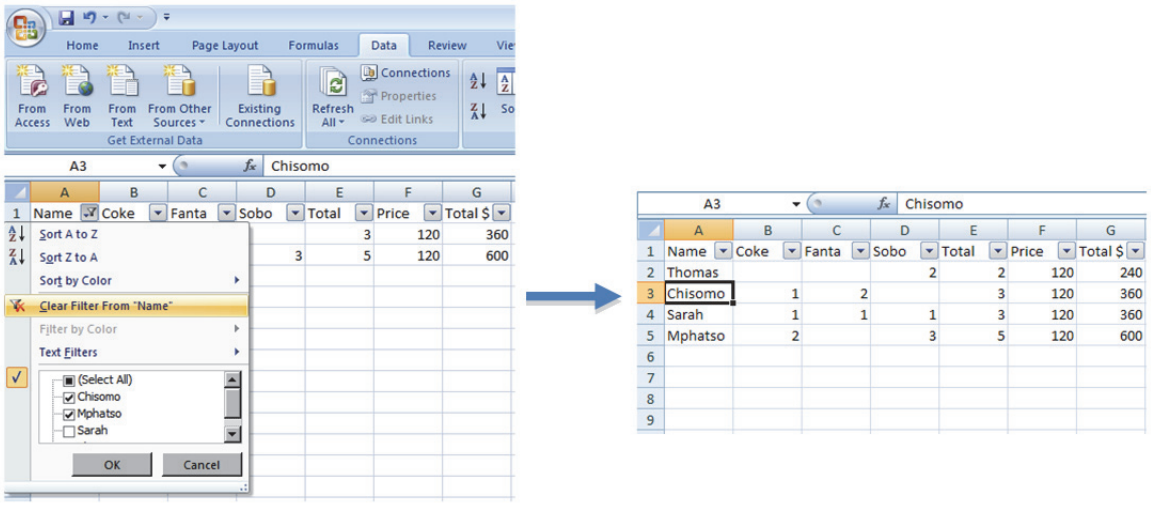
5. To use criteria to filter, click the drop-down menu that says **"_____ Filters"**. If it is text, it will say **"Text Filters"**, if it is numbers it will say **"Number Filters"**. In this example, we will use the number filters for the Total column.



6. Click the criteria that you want. A pop-up box will appear. Set the **criteria** accordingly and click **OK**. In this case, we are setting the filter for Total greater than 2.



7. To remove a filter, click the arrow in the column heading that you wish to remove the filter from, and select **"Clear Filter From …"**.



Part II – 2 PivotTables in Microsoft Excel 2007

A. Introduction

This manual is an introduction to PivotTables in Microsoft Excel 2007. It covers the following topics:

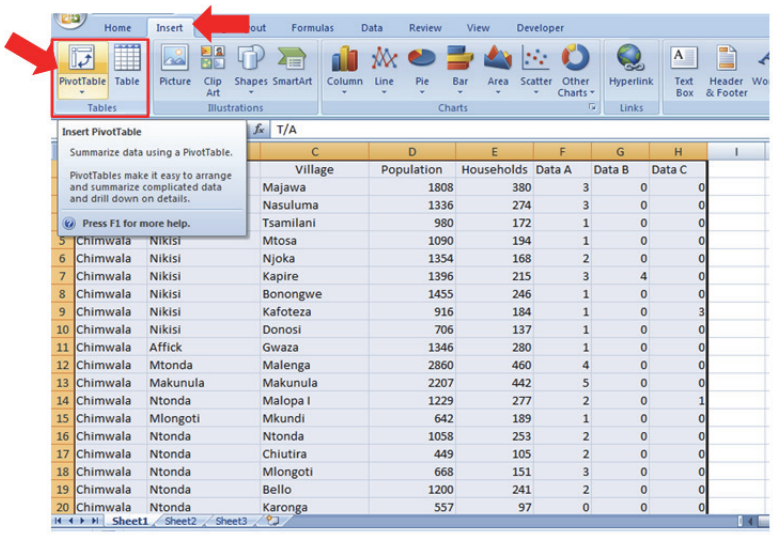
- Background on PivotTables
- Creating a PivotTable
- Manipulating a PivotTable
- Performing Calculations in a PivotTable

B. Background on PivotTables

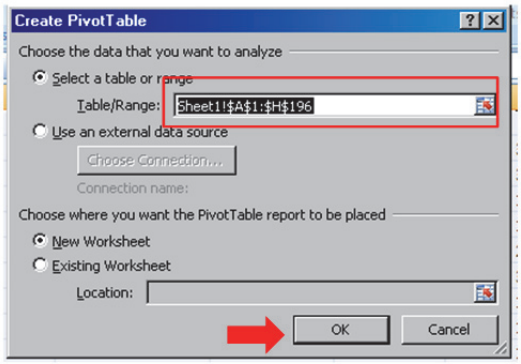
A PivotTable report is an interactive way to quickly summarize large amounts of data. Use a PivotTable report to analyze, explore, and present data. PivotTable reports enable you to make informed decisions about critical data. A PivotTable report is generated based on a set of data in an Excel worksheet. Different categories of data from the Excel worksheet can be displayed in the PivotTable report, and arranged in different ways, such as counting, summing, or averaging values.

C. Creating a PivotTable

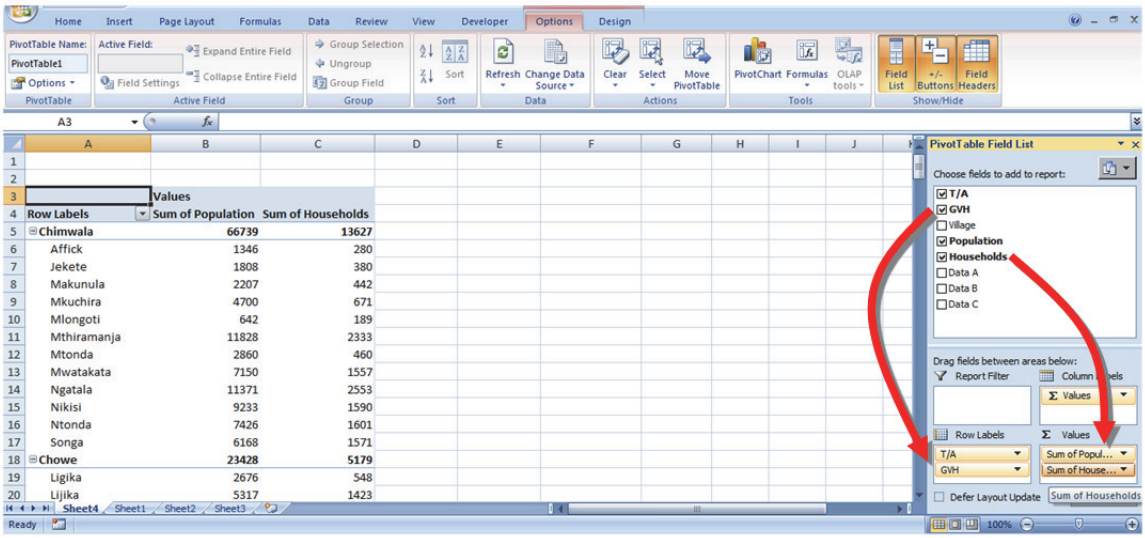
1. Select the data you wish to summarize in the **PivotTable report**, or the entire worksheet.
2. On the **Insert tab**, in the Tables group, select **PivotTable**.



3. In the Create **PivotTable window**, verify that the range is correct, and that New Worksheet is selected as the location for the PivotTable report to be placed, and click **OK**.



4. In the new sheet, **drag PivotTable fields** to the desired locations to create your PivotTable.



	A	B	C
3		Values	
4	Row Labels	Sum of Population	Sum of Households
5	Chimwala	66739	13627
6	Affick	1346	280
7	Jekete	1808	380
8	Makunula	2207	442
9	Mkuchira	4700	671
10	Mlongoti	642	189
11	Mthiramanja	11828	2333
12	Mtonda	2860	460
13	Mwatakata	7150	1557
14	Ngatala	11371	2553
15	Nikisi	9233	1590
16	Ntonda	7426	1601
17	Songa	6168	1571
18	Chowe	23428	5179
19	Ligika	2676	548
20	Lijika	5317	1423

5. To change the way that values are calculated, click on the desired **field in the Values area** and select **Value Field Settings**. In the Value Field Setting window, select how you want the values to be summarized, and click **OK**. A few common types of Value Field Settings are:

   a. **Sum:** Adds together the values of each field within that category

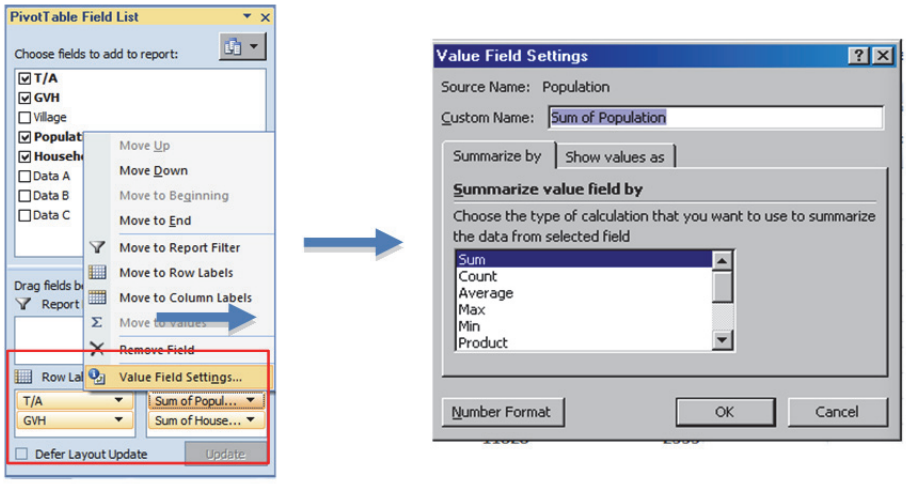
      (e.g. Sum of Population for GVH = 100 from village A + 200 from village B + 300 from village C+ 80 from village D = 680).

   b. **Count:** Counts the number of values that exist within that category

      (e.g. Count of Population for GVH is 4 because 4 villages are within that GVH).

   c. **Average:** Average of the values of each field within that category

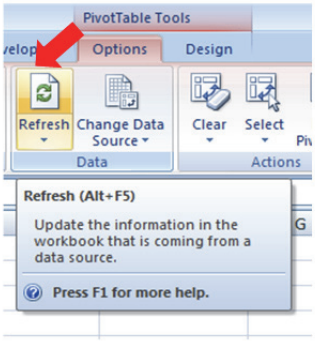
      (e.g. Average of Population for GVH = (100+200+300+80)/4 = 170).



Tip: Check your Value Field Setting is set to the correct type of value. Otherwise, your summarized data may be incorrect (e.g. having a Count of Population instead of a Sum).

6. If you click outside of the PivotTable, or go to another worksheet, the PivotTable Field List will automatically disappear. To view the PivotTable Field List at anytime, simply click in a cell on the PivotTable.

Important Reminder: If you change the source data after the pivot table is created, remember to refresh data in the pivot table, by clicking the Refresh button on the PivotTable Toolbar.

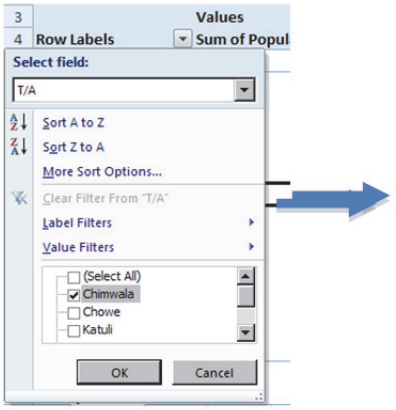


D. Manipulating a PivotTable

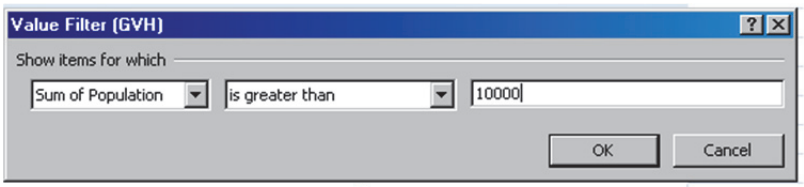
Once a PivotTable is created, you can change how data is displayed by functions such as sorting, filtering, and expanding or collapsing according to different fields.

To access sorting or filtering functions, click on the arrow beside Row Labels. A drop-down menu will appear. Select the field that you wish to apply this to (in this case, it can be the T/A or GVH). Sorting and filtering options in PivotTables are the same as the standard Sort and Filter functions in Excel (see **Part II -1**).

In the first example, the T/A is filtered for Chimwala, so only Chimwala will appear. In the second example, the Sum of Population of GVH are filtered for values greater than 10,000. Note that for Label and Value Filters, only one filter can be applied at a time.



	Values				
Row Labels	Sum of Population	Sum of Households	Sum of Data A	Sum of Data B	Sum of Data C
Chimwala	**66739**	**13627**	**94**	**5**	**4**
Affick	1346	280	1	0	0
Jekete	1808	380	3	0	0
Makunula	2207	442	5	0	0
Mkuchira	4700	671	5	0	0
Mlongoti	642	189	1	0	0
Mthiramanja	11828	2333	16	0	0
Mtonda	2860	460	4	0	0
Mwatakata	7150	1557	6	1	0
Ngatala	11371	2553	13	0	0
Nikisi	9233	1590	13	4	3
Ntonda	7426	1601	14	0	1
Songa	6168	1571	13	0	0
Grand Total	**66739**	**13627**	**94**	**5**	**4**



	Values				
Row Labels	Sum of Population	Sum of Households	Sum of Data A	Sum of Data B	Sum of Data C
Chimwala	**23199**	**4886**	**29**	**0**	**0**
Mthiramanja	11828	2333	16	0	0
Ngatala	11371	2553	13	0	0
Chowe	**15435**	**3208**	**11**	**542**	**0**
M'baluku	15435	3208	11	542	0
Katuli	**10312**	**2108**	**29**	**0**	**23**
Katuli	10312	2108	29	0	23
Nankumba	**10315**	**1954**	**30**	**0**	**14**
Mwalembe	10315	1954	30	0	14
Grand Total	**59261**	**12156**	**99**	**542**	**37**

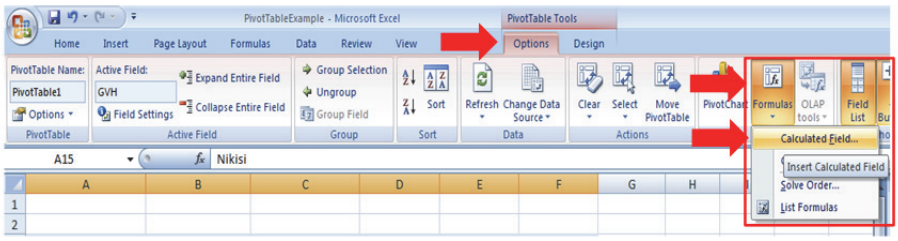
The Row Labels can be expanded or collapsed to show more or less detail in the PivotTable using the **+** or **–** signs to the left of the label. Click on the **+ signs to expand, and the - signs to collapse**. In this case, the PivotTable can be expanded to show GVHs (e.g. in Katuli, Makanjira, and Mponda), or collapsed to only show the T/As (e.g. in Chimwala and Chowe).

		Values				
4	Row Labels	Sum of Population	Sum of Households	Sum of Data A	Sum of Data B	Sum of Data C
5	**Chimwala**	**66739**	**13627**	**94**	**5**	**4**
6	**Chowe**	**23428**	**5179**	**27**	**554**	**0**
7	**Katuli**	**29188**	**6626**	**101**	**0**	**47**
8	Katuli	10312	2108	29	0	23
9	Kwitunji	2806	669	10	0	3
10	Mpita	5400	1512	19	0	9
11	Msalule	2270	494	8	0	1
12	Mtelera	3586	770	15	0	2
13	Nsalule	4814	1073	20	0	9
14	**Makanjira**	**20307**	**4013**	**41**	**1**	**1**
15	Hamisi Makanjira	8157	1509	20	0	0
16	Lulanga	9425	1914	15	0	1
17	Mambo	2725	590	6	1	0
18	**Mponda**	**21156**	**4071**	**48**	**3**	**0**
19	John Mapata	5189	1010	10	0	0
20	Kalino	8339	1652	16	0	0

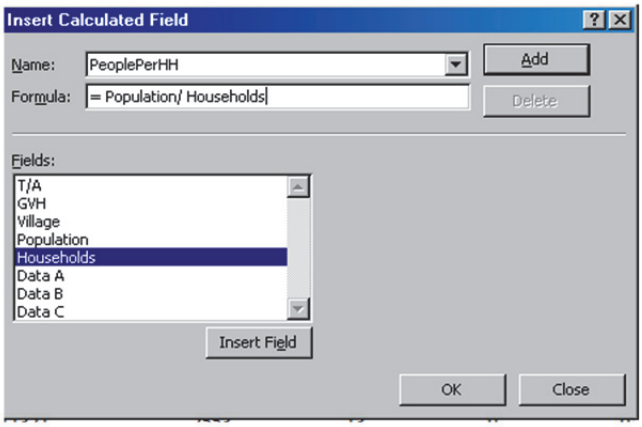
E. Performing Calculations in Pivot Tables

If summary functions in a Pivot Table don't provide the data that you need to make a decision, you can create your own formulas in calculated fields. Use a calculated field when you want to use the data from another field in your formula. The PivotTable report would then automatically include this rate in the subtotals and grand totals. For example, you could add a calculated item with the formula for number of people per household, using the population, and the number of households. This example is used in the steps below.

1. Click the PivotTable report
2. On the Options tab, in the Tools group, click Formulas, and then click Calculated Field.



3. In the Name box, type a name for the field. In the Formula box, enter the formula for the field. To use the data from another field in the formula, click the field in the Fields box, and then click Insert Field. Click Add.



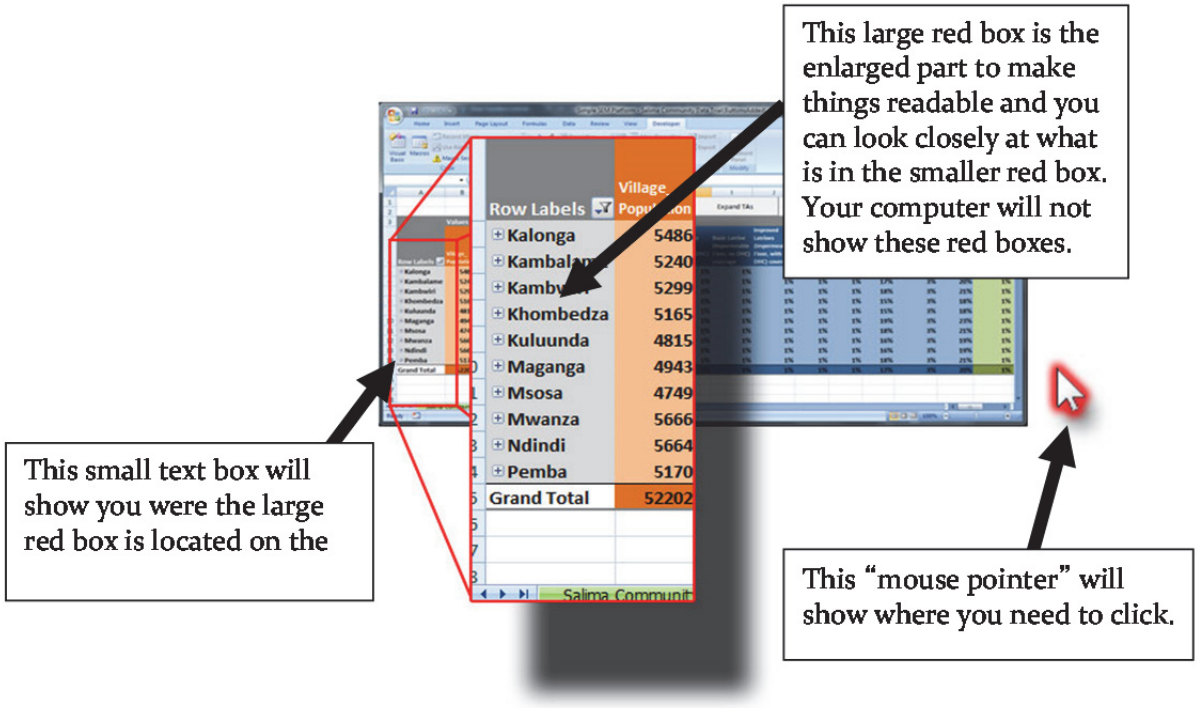
Row Labels	Values: Sum of Population	Sum of Households	Sum of Data A	Sum of Data B	Sum of Data C	Sum of PeoplePerHH
Chimwala	**66739**	**13627**	**94**	**5**	**4**	**4.897556322**
Affick	1346	280	1	0	0	4.807142857
Jekete	1808	380	3	0	0	4.757894737
Makunula	2207	442	5	0	0	4.99321267
Mkuchira	4700	671	5	0	0	7.004470939
Mlongoti	642	189	1	0	0	3.396825397
Mthiramanja	11828	2333	16	0	0	5.069867124
Mtonda	2860	460	4	0	0	6.217391304
Mwatakata	7150	1557	6	1	0	4.592164419
Ngatala	11371	2553	13	0	0	4.453975715
Nikisi	9233	1590	13	4	3	5.806918239
Ntonda	7426	1601	14	0	1	4.638351031
Songa	6168	1571	13	0	0	3.92616168
Chowe	**23428**	**5179**	**27**	**554**	**0**	**4.523653215**
Ligika	2676	548	7	12	0	4.883211679
Lijika	5317	1423	9	0	0	3.736472242

4. You may change the look of the number format in the Calculated Field by selecting the column with the Calculated Field, going to the Home tab, then selecting a number format in the Number group. In this example, the Calculated Field is rounded to one decimal place.

	Values					
Row Labels	Sum of Population	Sum of Households	Sum of Data A	Sum of Data B	Sum of Data C	Sum of PeoplePerHH
Chimwala	**66739**	**13627**	**94**	**5**	**4**	**4.9**
Affick	1346	280	1	0	0	4.8
Jekete	1808	380	3	0	0	4.8
Makunula	2207	442	5	0	0	5.0
Mkuchira	4700	671	5	0	0	7.0
Mlongoti	642	189	1	0	0	3.4
Mthiramanja	11828	2333	16	0	0	5.1
Mtonda	2860	460	4	0	0	6.2
Mwatakata	7150	1557	6	1	0	4.6
Ngatala	11371	2553	13	0	0	4.5
Nikisi	9233	1590	13	4	3	5.8
Ntonda	7426	1601	14	0	1	4.6
Songa	6168	1571	13	0	0	3.9
Chowe	**23428**	**5179**	**27**	**554**	**0**	**4.5**
Ligika	2676	548	7	12	0	4.9
Lijika	5317	1423	9	0	0	3.7

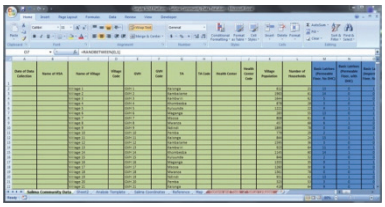
Part II – 3 Malawi National WASH M&E Database Guide

A. Notes on Graphics Used In This Guide



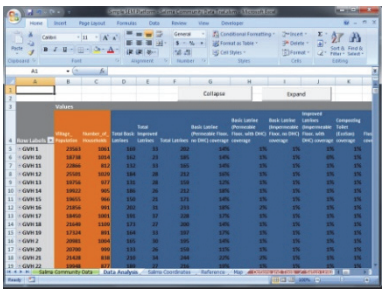
B. System Overview

The 3 parts of this M&E program:



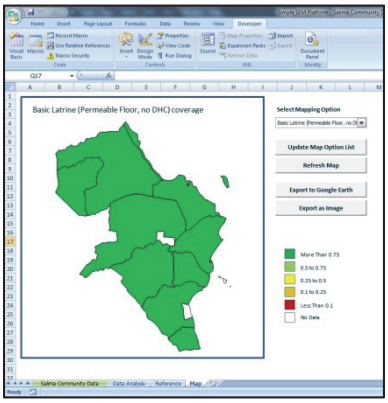
Data:

Contains all the information or data regarding each village



Analysis:

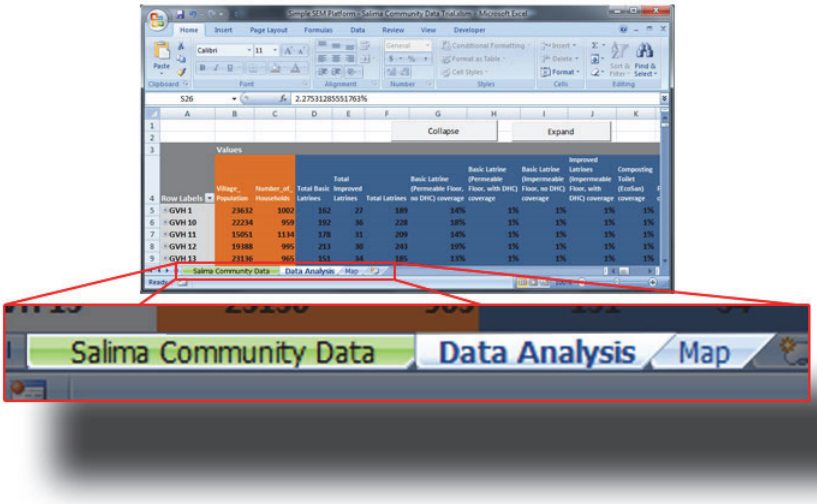
Summarized information in a table



Map:

Displays a map of the district. Colours change depending on the data collected.

All three sections can be accessed using the tabs at the bottom of the screen:



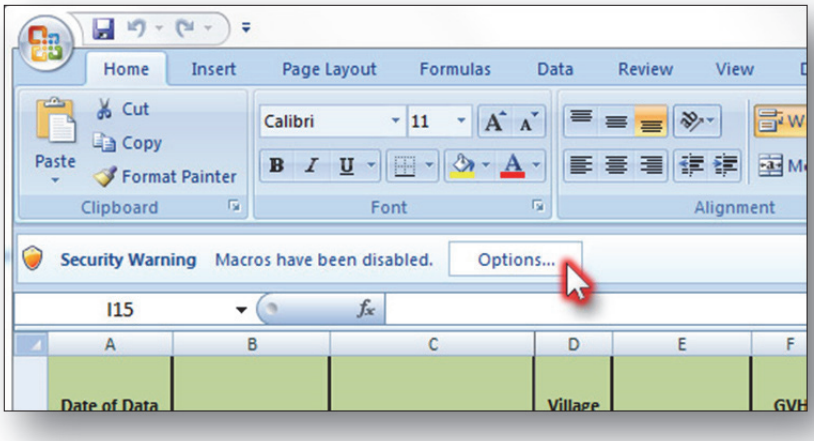
C. Enable Macros

First please check to see if Macros are enabled. The database will not work unless Macros are enabled.

Step 1

If you see the "security warning" at the top of the screen:

a. **Click** the **Options** Button



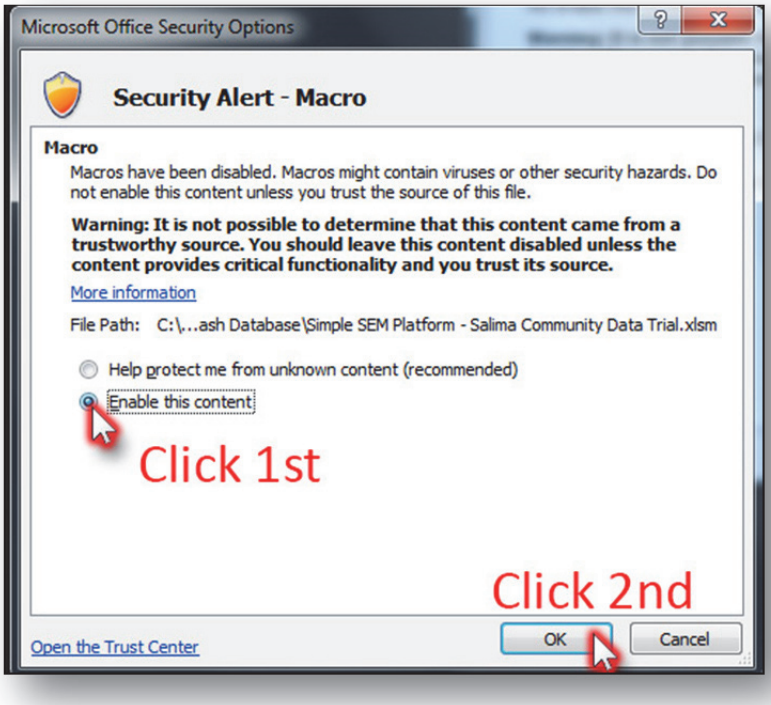
Step 2

After clicking the Options Button this window should show up.

Click "**Enable this content**"

Click the **OK** button

This window should close and the security warning should disappear.

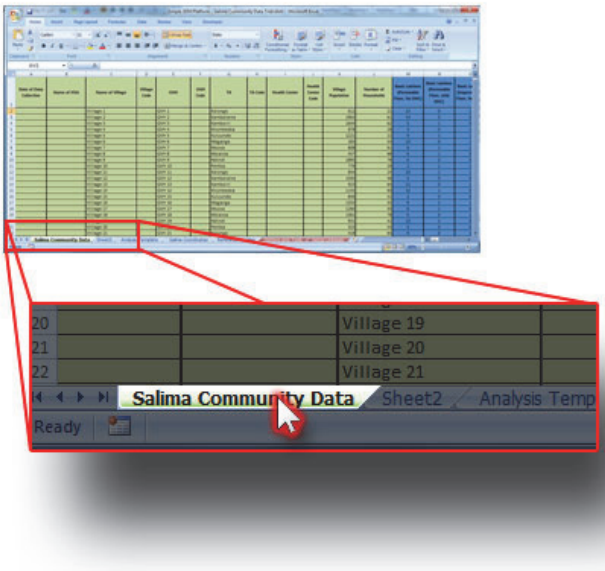


D. Data Entry

D.1 Finding the Datasheet and Its Important Parts

Step 1

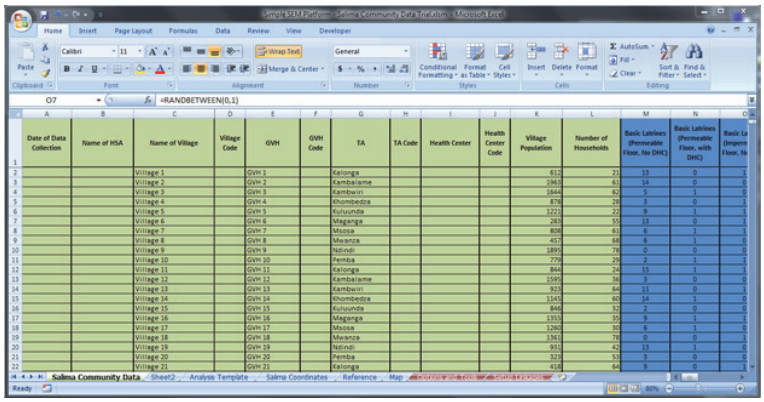
Click on the tab that says:
"*[District Name]* Data"



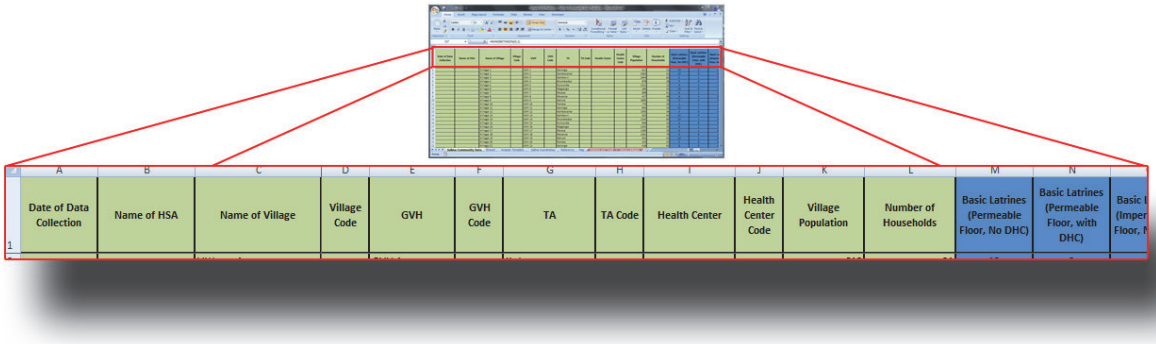
Note

The data sheet will now be shown.

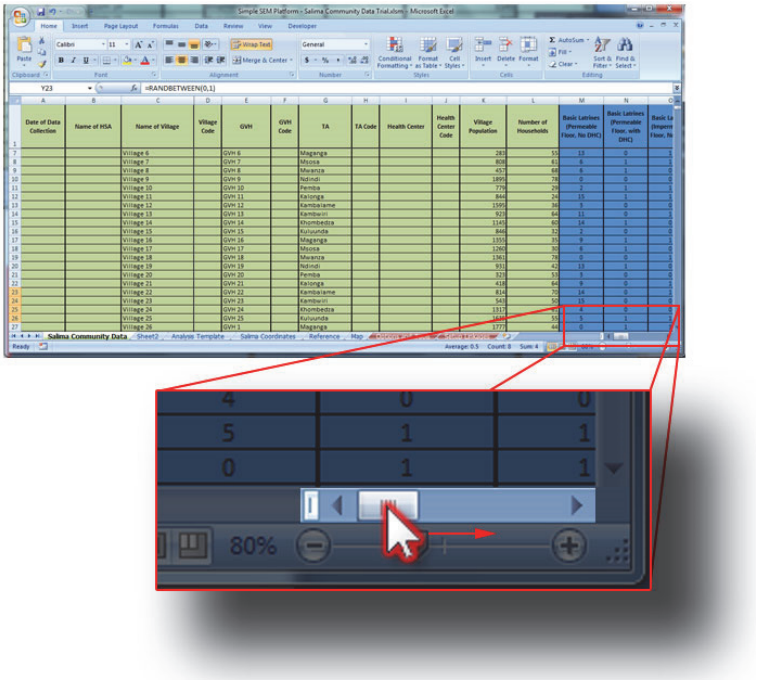
This is where you will see and enter village data



Note
The "headings" of the sheet should look similar to this:



Not all headings will be on your screen. Additional headings can be seen by “scrolling” to the right.



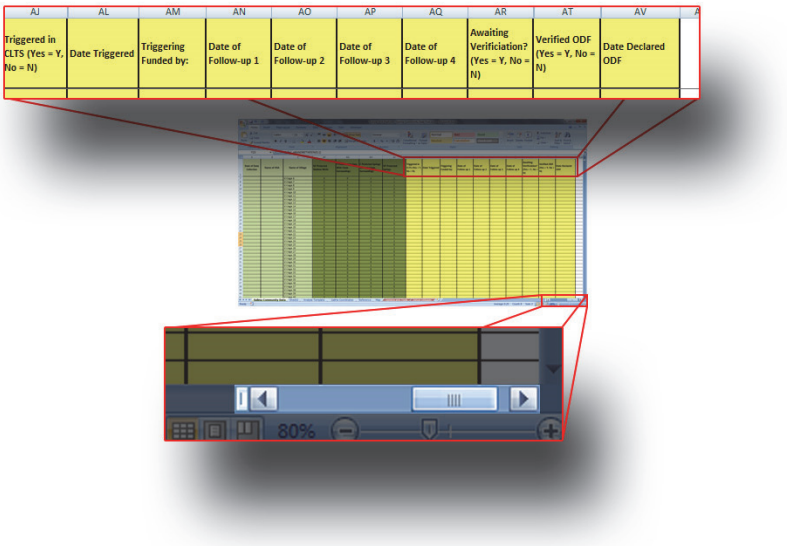
Step 2

Click and hold the mouse onto the **rectangle** (or bar) and move the **mouse left and right**.

This is called “click and dragging”

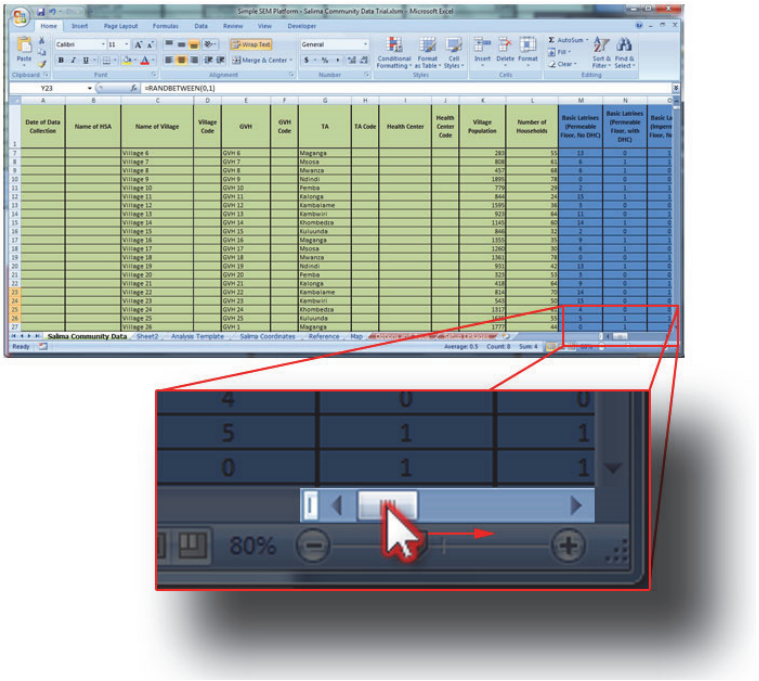
Note

More Headers become available after the scroll bar has been moved to the right



Step 3

Return to the beginning of the data by **scrolling** the bar back to the **left**

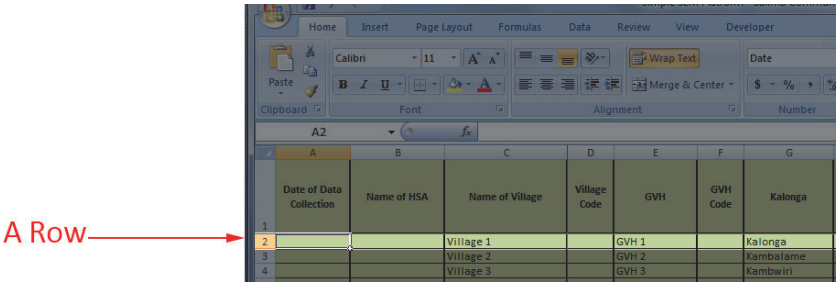


D.2 Data as rows

Note

Each row of the datasheet represents 1 village.

When entering data for one village, it should all be in one row

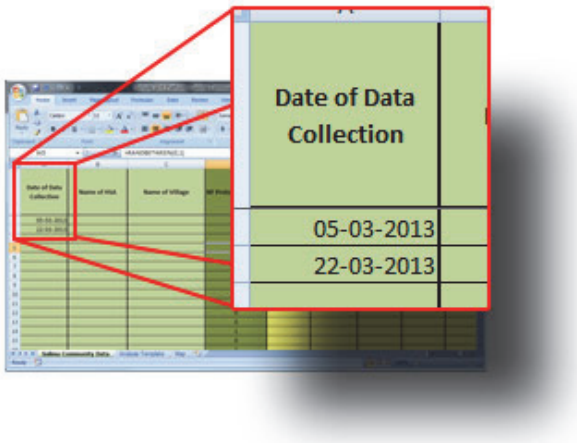


D.3 Tips for Entering Data for a Village

D.3.1 Enter the Date

Step 1

To enter the date first **click** on **the box** (or cell) where you want to enter it.



Step 2

Type in the date using the following format:

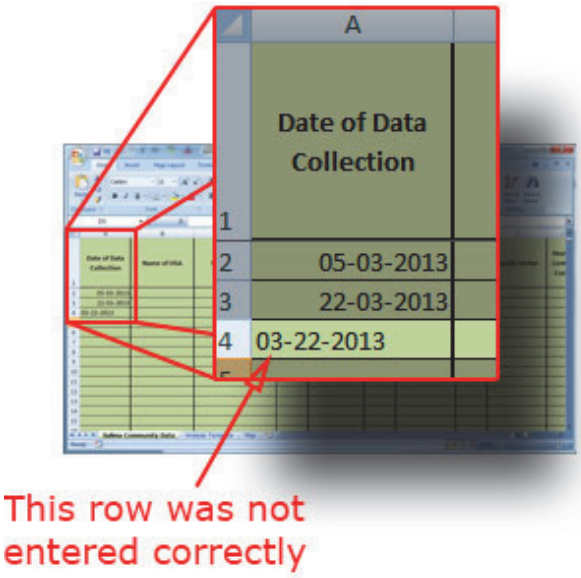
DD-MM-YYYY

Note

If you **correctly** enter the date you will see it shift to the **right** side of the box as shown.

Note

If the date was entered **incorrectly** it will remain on the **left** of the box

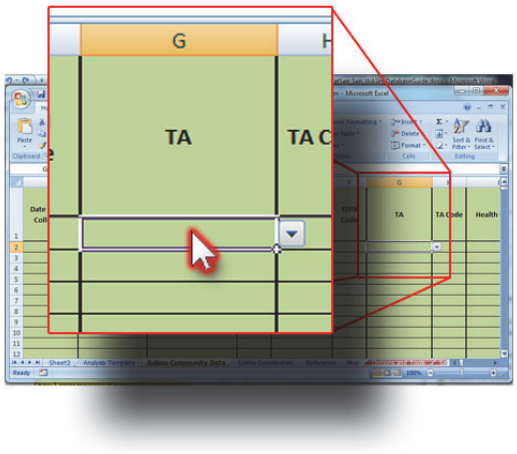


D.3.2 Enter a TA

Step 1

To enter a TA you must first **click** the **cell** (also known as a box) **where you would like to enter** the TA info.

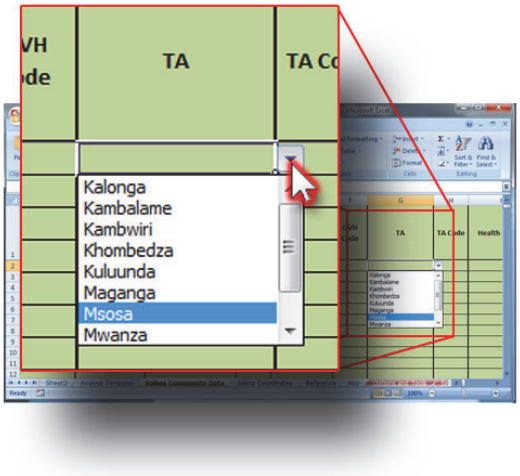
You will see a button with the arrow pointing down appear right beside the box where you clicked.



Step 2

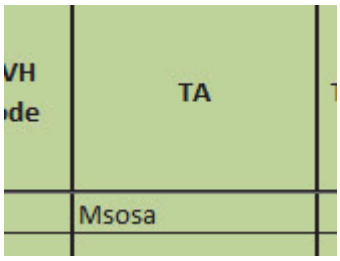
Click on the **button with the arrow pointing down** and a menu of TA's will appear.

If you click on Msosa afterward, it will enter it into the cell.



Note

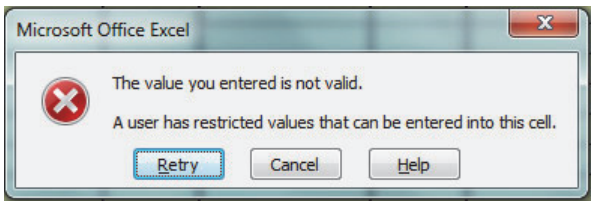
After clicking on Msosa you will see it entered into the cell



Note

If you try to enter a name that is not in the list or do not spell the TA correctly you will see this error.

Click on **Cancel** and try to enter again.



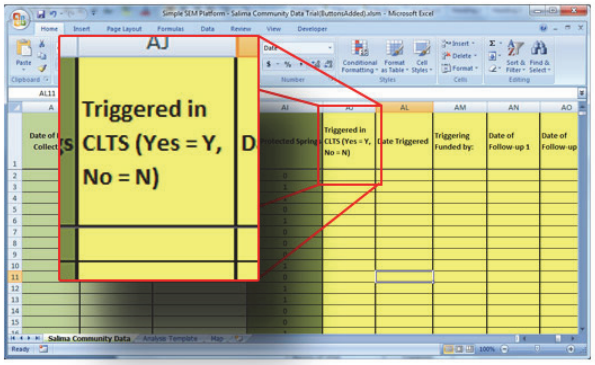
D.3.3 Entering data into a Yes or No (Y/N) Column

Note

Some columns will ask you to enter a Yes or No in the form of a “Y” or “N”

They will always have a “(Yes = Y, No = N)” note as part of their Name

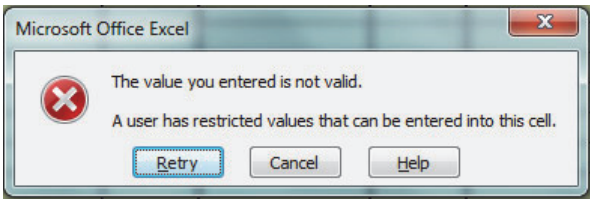
The Y or N must be capital letters



Note

If you enter a value that is not a capital Y or N, you will see this error message.

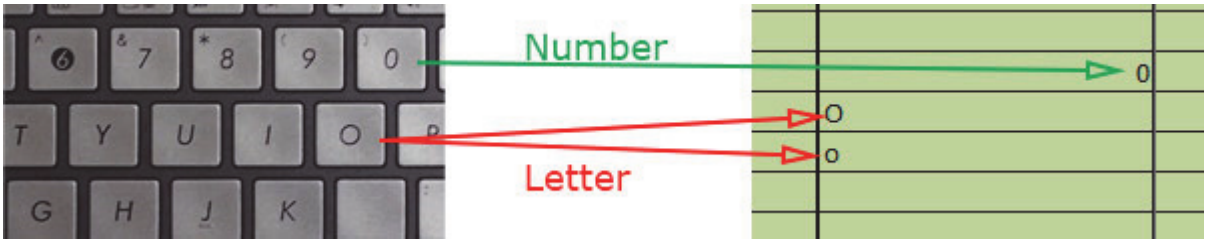
Click on **Cancel** and try to enter again.



D.3.4 Note on the Number “0” vs. The Letter “O”

Note

Watch for the mistake of the letter “O” or “o” being entered instead of the number 0. The letter and number keys are very close together.
You will see letters shifted to the left side of the box or cell. Numbers will be on the right.



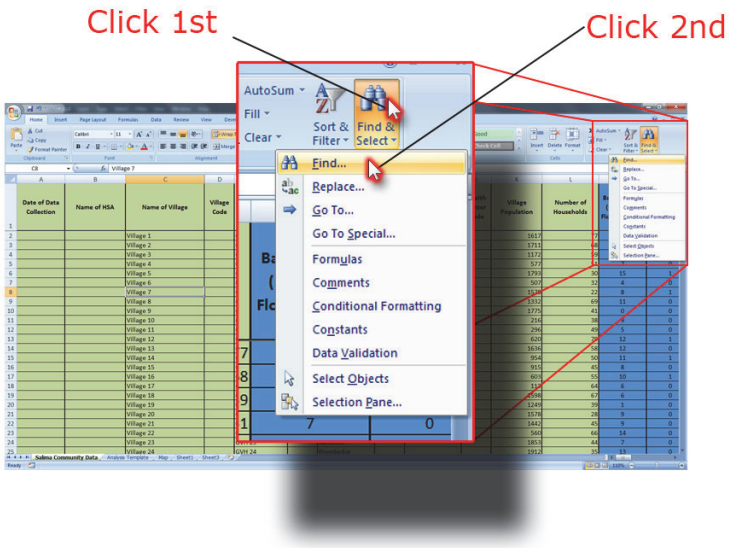
D.4 Entering New Data to a Village Already In the List

As an example, we have received the following information:

Date of Data Collection	21-01-2013
Name of HSA	Luyando
Name of Village	**Village 37**
Village Code	222
GVH	GVH 12
GVH Code	111
TA	Msosa
TA Code	222
Health Center	Chipata
Health Center Code	444
Village Population	1203
Number of Households	80

Step 1

Click on the **"Find and Select"** button on the top left



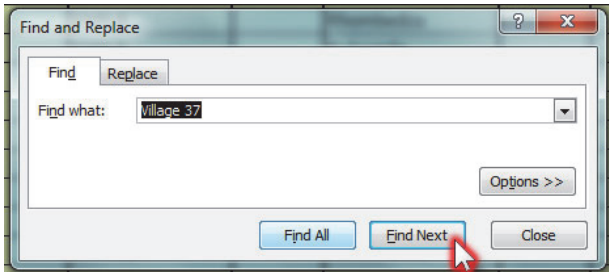
Step 2

Click on "**Find**"

Step 3

Find the row that matches the data we have. *For this example we will assume the villages have already been filled in.*

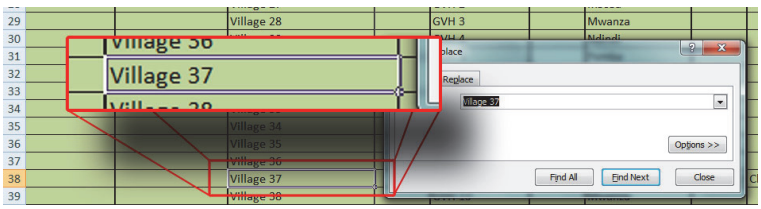
Type in "**Village 37**" and click "**Find Next**"



Note

After clicking "Find Next" it will bring you to where it matches.

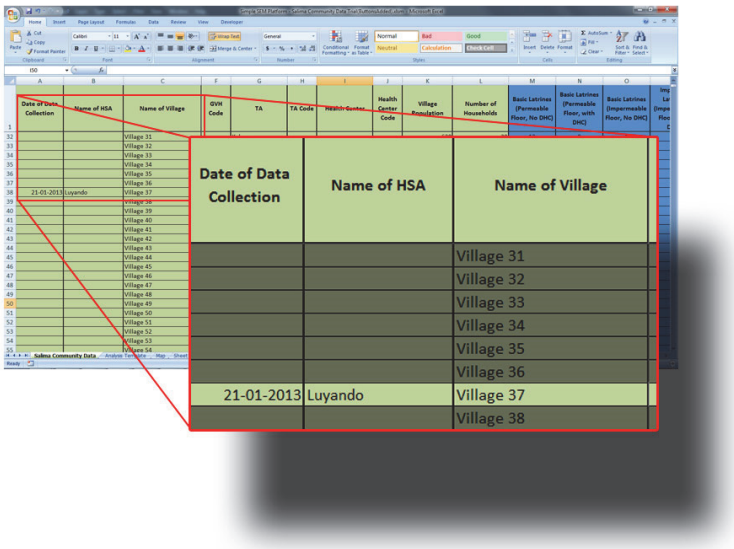
Otherwise it will tell you that there is nothing that matches



what you were looking for.

Step 4

On the same row as Village 37, enter the **appropriate values** under the **corresponding columns.**



For example:

Under **Date of Data Collection**, type: **21-01-2013**

Under **Name of HSA**, type**: Luyando**

Step 5

Continue entering data for this village across the row

D.5. Copy and Paste Data from another workbook

Step 1

Open spreadsheet that currently holds the data for WASH in the district

Step 2

Highlight cells to be copied into the WASH database analysis template. (**Do not include the title cell**). Copy cells (**Ctrl+C**)

Step 3

Return to the WASH Database you want to copy to, on the '*District*' Data tab.
Select first cell in the row where the data will be pasted by left clicking on the cell

Step 4

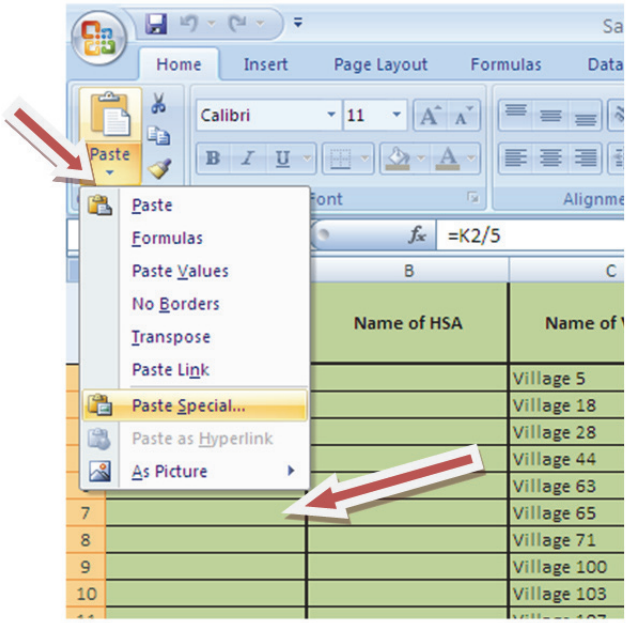
Go to the Home tab.

Click the arrow under the paste option.

Select Paste Special

Select Values and press the Enter Button.

Note: Do not paste directly or the data validation features will not function



Step 5

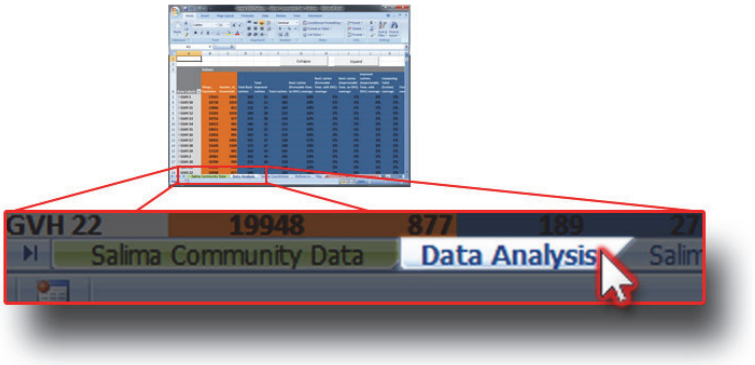
Repeat steps 1-4 for each row to be copied and pasted until all data have been transferred to the District WASH database spreadsheet

E. Data Analysis

To view the table to analyse data:

Step 1

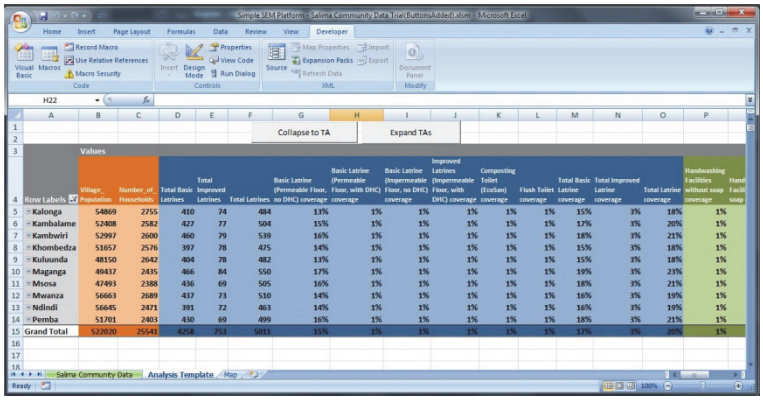
Click on the **Data Analysis** tab at the bottom of the spreadsheet



Note

You can now see the data analysis sheet. It should look similar to this.

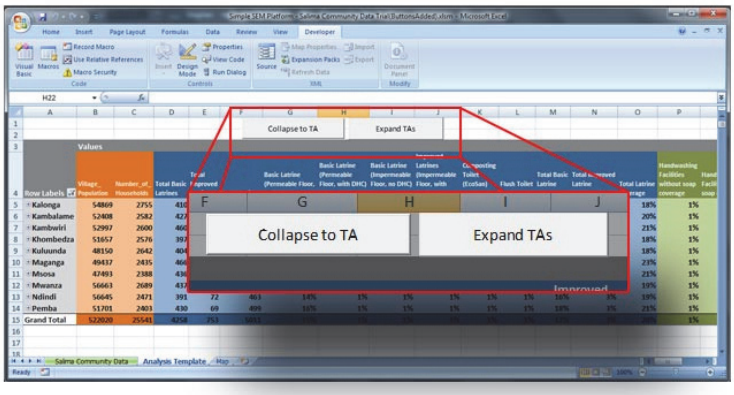
Here you'll see data for all Traditional Authorities and villages.



Step 3

Change between "**Expanded**" "Collapsed" views

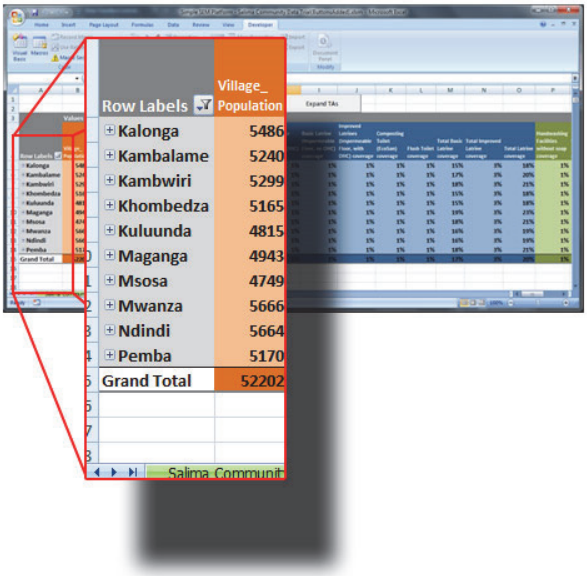
Click on the **buttons at the top** to show different views.



Step 4: Collapse to TA

Click the "**Collapse to TA**" button.

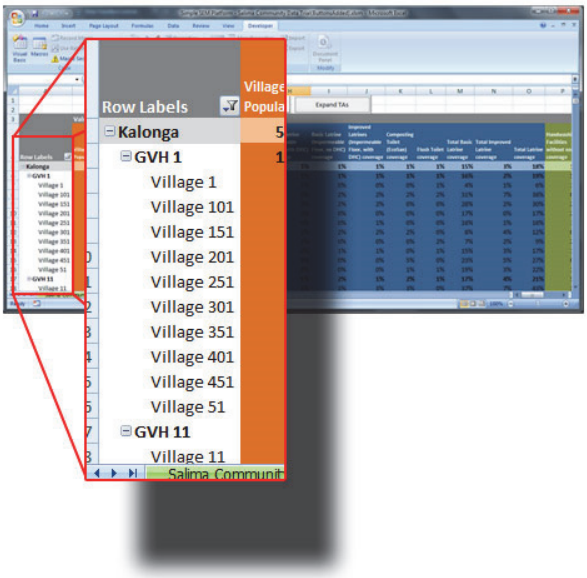
Summarized information for each TA will be shown.



Step 5: Expand each TA

Click "**Expand TAs**" button.

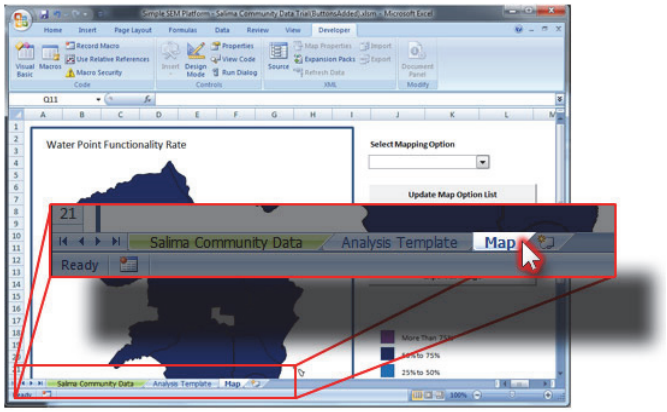
Detailed information of each village under each TA will be shown.



F. Maps

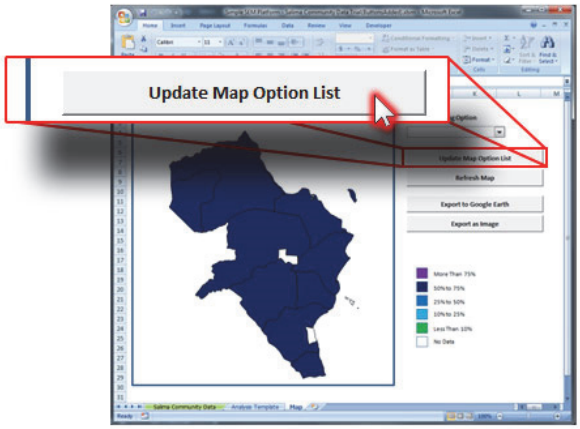
Step 1

Click on the "**Map**" tab at the bottom of the sheet



Step 2

Always **click** on the "**Update Map Option List**" button first

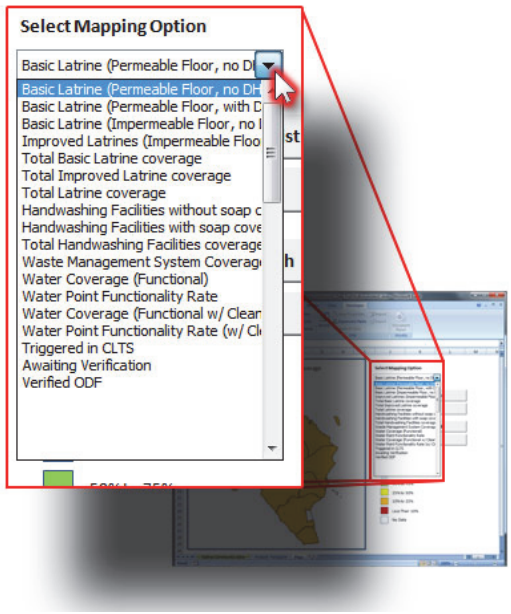


Step 3

Click on the **button with the arrow pointing down** under "Select Mapping Option"

This will open a **drop-down menu**, where you can click on a map to see the data.

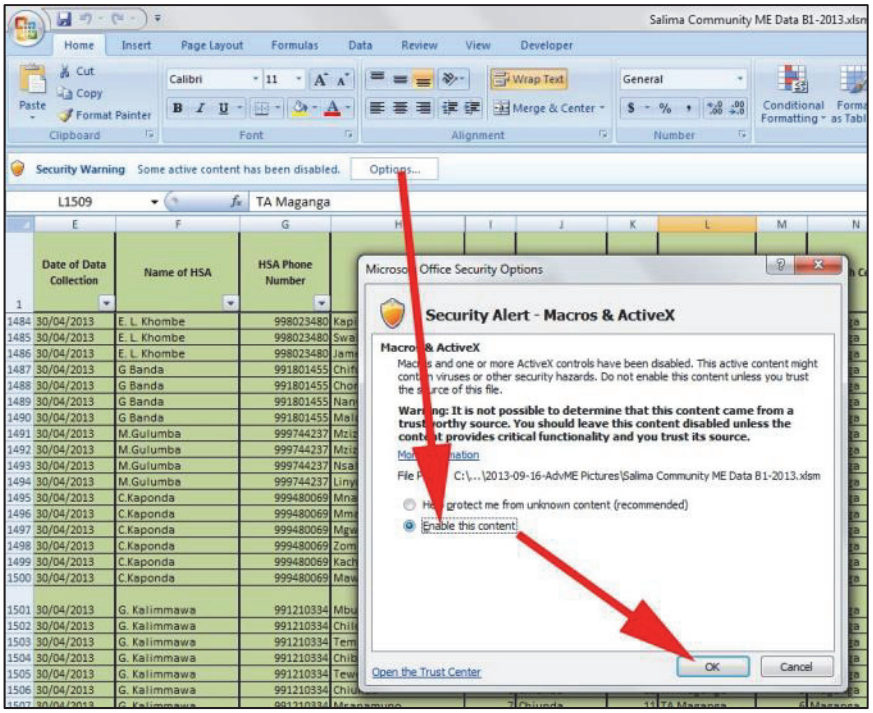
After **clicking** on **the menu** the map will update to show the information you clicked on.



Part II – 3 Malawi National WASH M&E Advanced Database Guide

A. Reminders:

Always Enable **Macros**



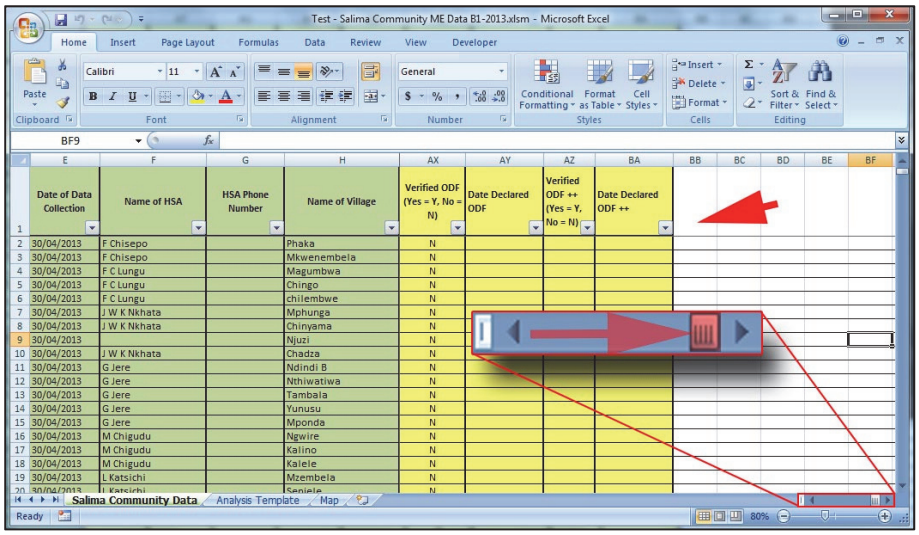
B. Inserting a new indicator

In this example we will be adding the indicator "**Non-Functional Water Source (Broken)**" This is from the definition:

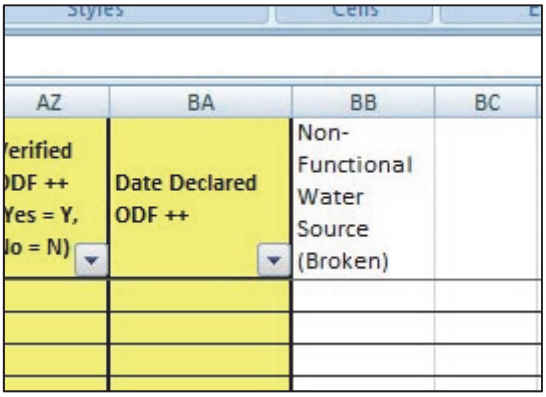
> Non-Functional**:** A water point is considered non-functional if it is not providing water at the time of a spot check. There are several possible reasons for non-functionality which should be used for standard reporting;
>
> **i.** ***Broken:*** The water point is not producing water but could be repaired or rehabilitated.
> **ii.** ***Disconnected:*** The water point has been disconnected due to other factors, but could be reconnected.
> **iii.** ***Vandalized:*** The water point is not producing water because of vandalism or theft but could be repaired or rehabilitated.
> **iv.** ***Abandoned:*** The water point is not producing water or is not being used due to water quality reasons and should not be repaired or rehabilitated.

B1. Adding the New Data

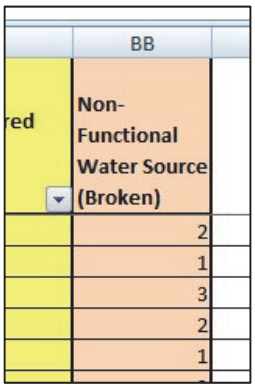
1. Move to the right of the spreadsheet. All new indicators must be placed **on the right side of the table**. In this example we will be adding the indicator to column BB.



2. Type in **"Non-Functional Water Source (Broken)"** as the header.



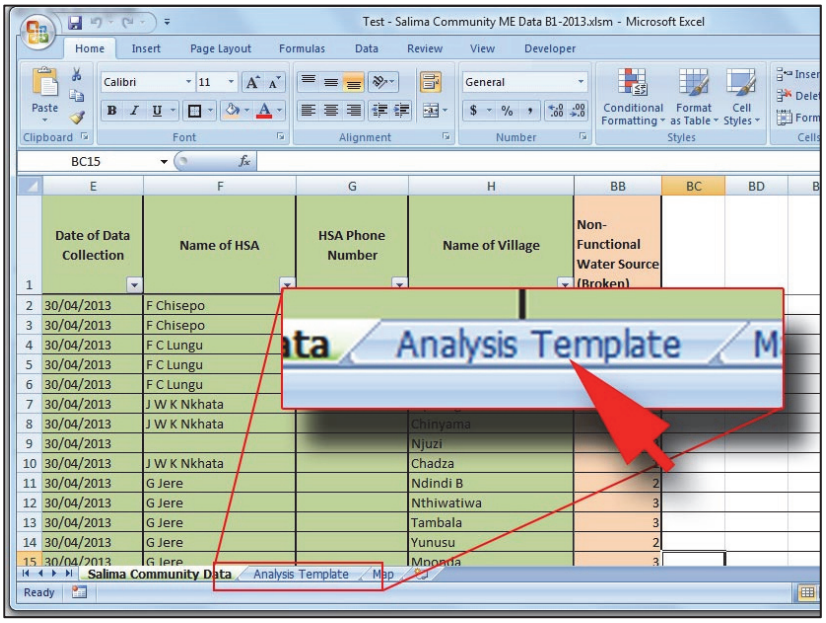
3. Enter data and format the colour and borders of the column. Data here is not real and used only as an example.



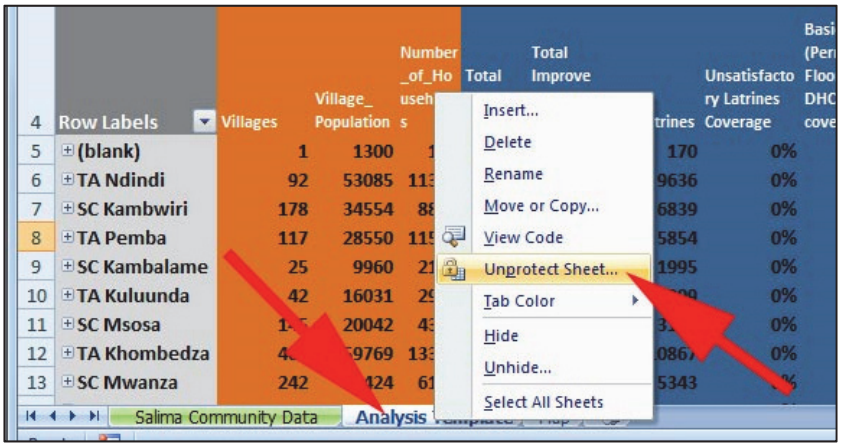
	BB
red	Non-Functional Water Source (Broken)
	2
	1
	3
	2
	1

B2. Adding New Data to the Pivot Table

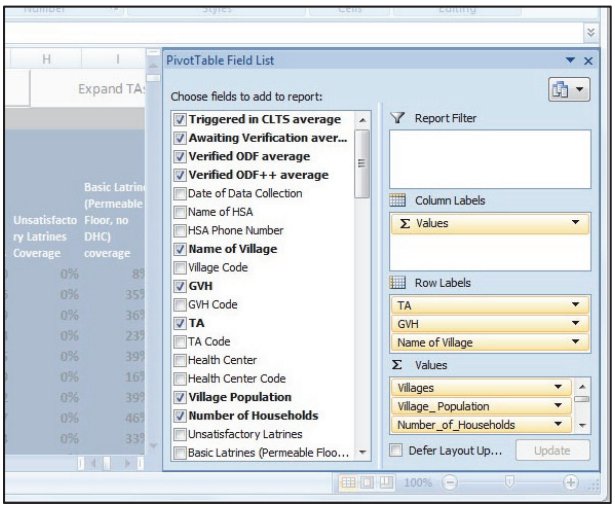
1. Select the **Analysis Table**



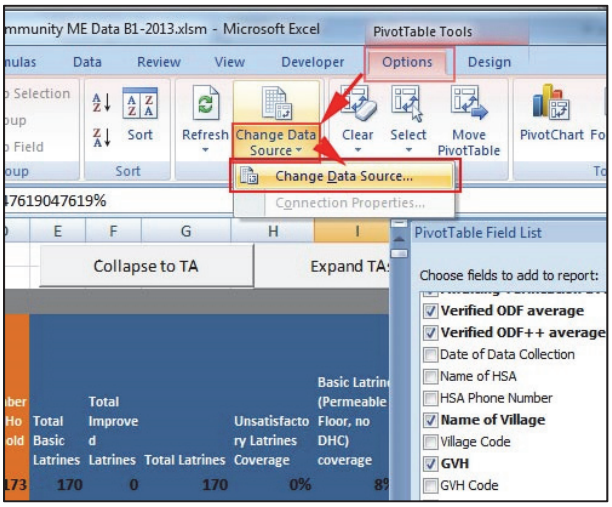
2. Right-click the **Analysis Table** then select **Unprotect sheet**



3. Now the **Pivot Table fields pane** should appear on the right side.

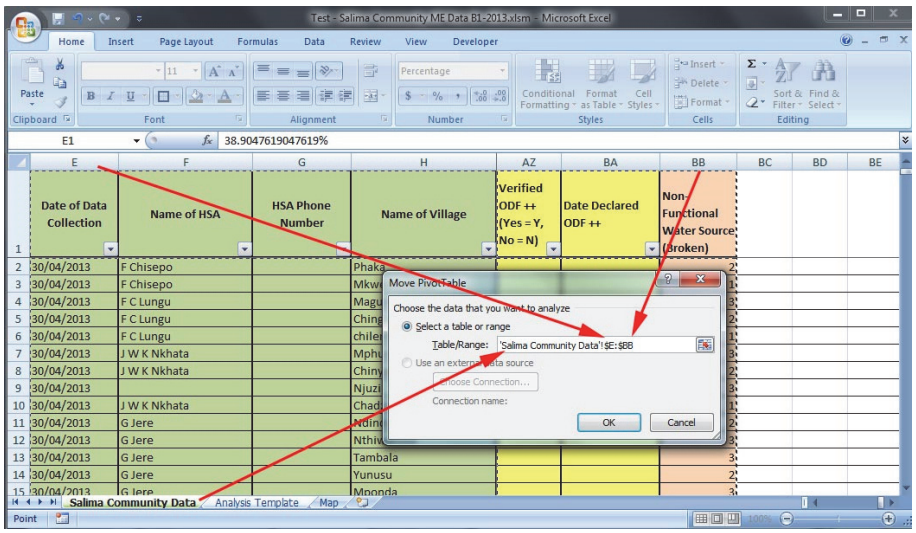


4. Click **Options**, **Change Source Data**, **Change Data Source**.

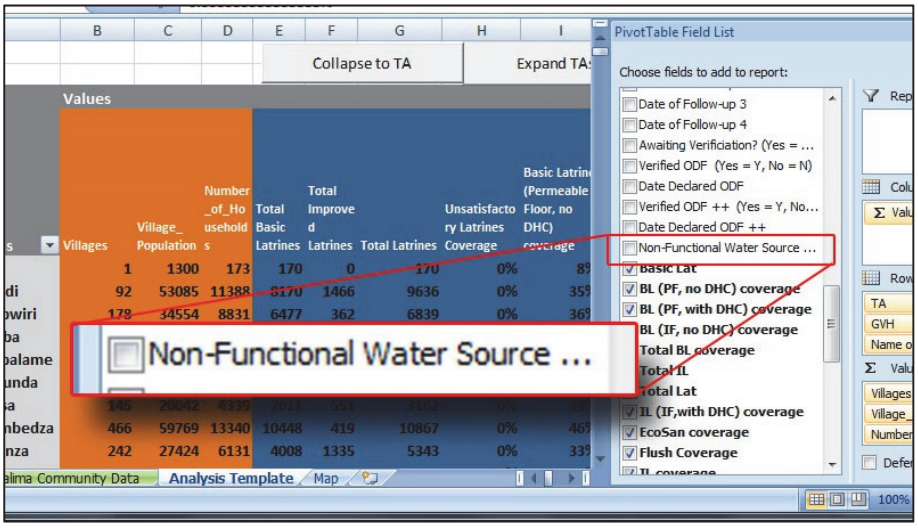


5. Make sure that the range selects **all data in your community data sheet** and includes the indicator you just added. In our example our new column is BB.
You can select all columns with the mouse or change the equation below:

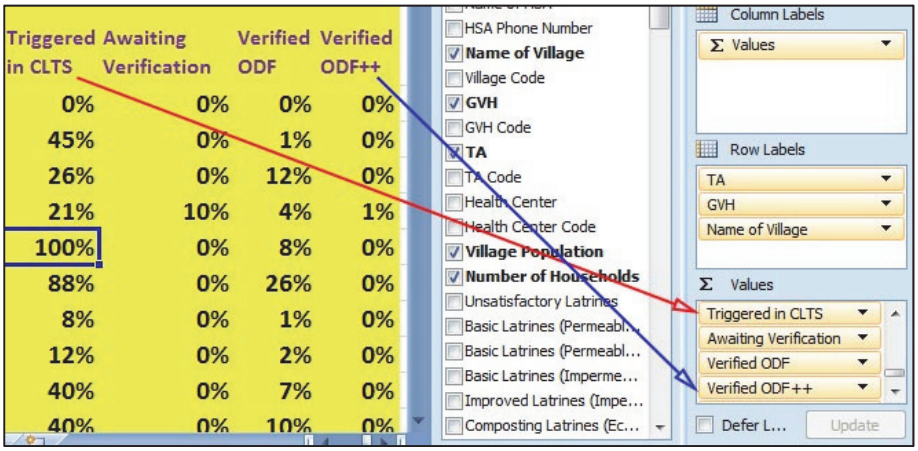
'Salima Community Data'!$A:$BB



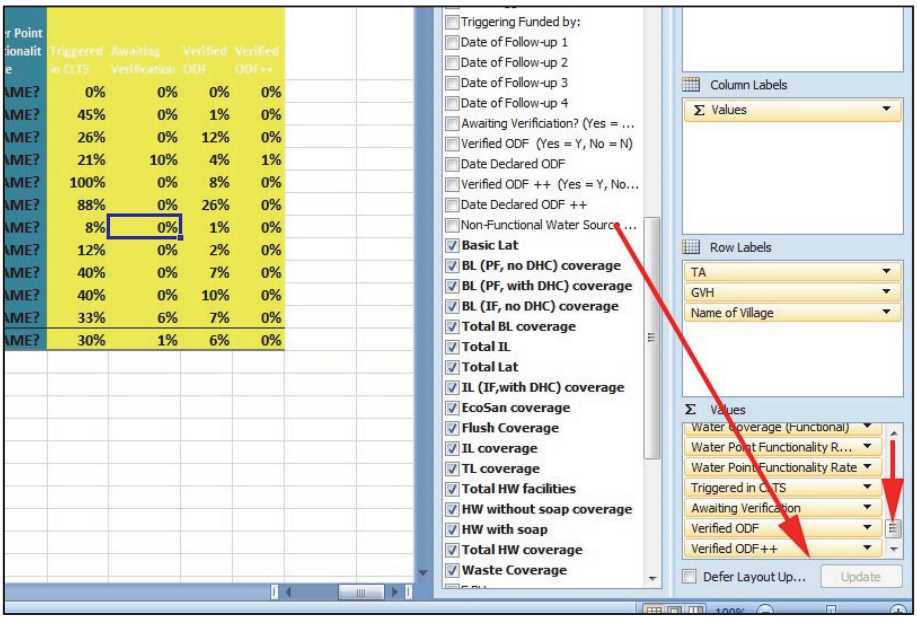
6. Now the new indicator should be available in the **Pivot Table field list.**



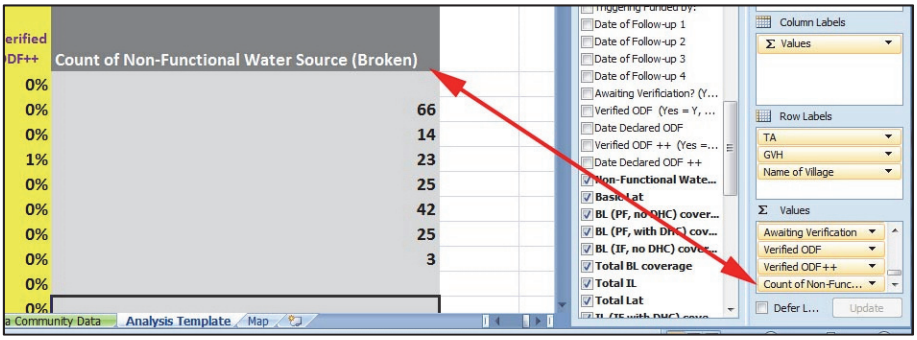
7. Scroll down in the list showing Values. Notice how the order matches the order of the pivot table.



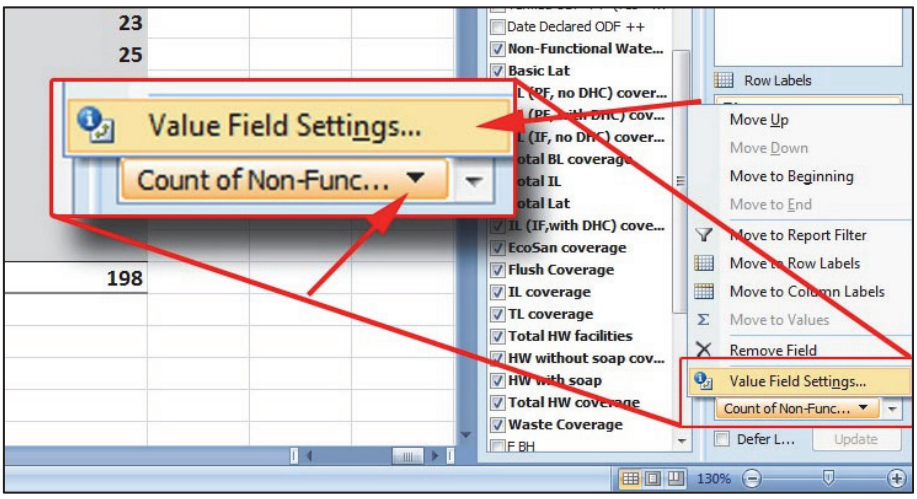
8. Drag the Non-Functional Water Source field into the bottom of the values field.



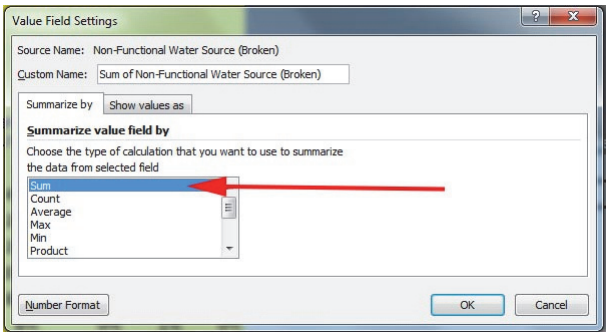
9. The field will show up at the end of the table and set to "**Count**" the values entered in that field.



10. We want to change this to add the number of Broken water sources. So we will click the "**down-arrow**" beside the field on the right. Then click **Value Field Settings**.



11. Change the field from **count** to **sum**.



12. You will now see the table adding the total broken water sources in the table

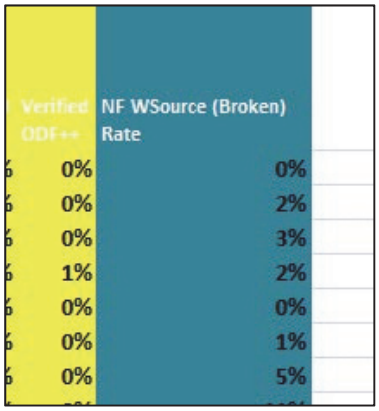
fied ++	Sum of Non-Functional Water Source (Broken)
0%	
0%	125
0%	28
1%	45
0%	47
0%	91
0%	57
0%	6
0%	
0%	
0%	
0%	399

13. You can modify the title and formatting to improve appearance.

	Verified ODF	Verified ODF++	Non-Functional Water Sources (Broken)
%	0%	0%	
%	1%	0%	125
%	12%	0%	28
%	4%	1%	45
%	8%	0%	47
%	26%	0%	91
%	1%	0%	57
%	2%	0%	6
%	7%	0%	
%	10%	0%	
%	7%	0%	
%	6%	0%	399

C. Adding Formulas to the Pivot Table

This will allow you to have the Analysis Table perform calculations like this image below:



Verified ODF++	NF WSource (Broken) Rate
0%	0%
0%	2%
0%	3%
1%	2%
0%	0%
0%	1%
0%	5%

We will calculate this **NF WSource (Broken) Rate** by the following Equation:

= 'Non-Functional Water Sources (Broken)'/('Total Borehole'+ 'Total Tap'+ 'Total SW'+ 'Total PS')

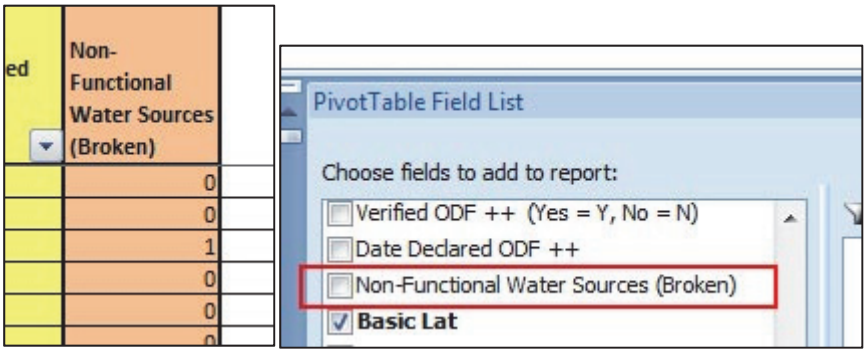
*Note that the data used in this example will be fake and thus, not reflective of reality.

In this example we will be using the indicator "**Non-Functional Water Source (Broken)**" This is from the definition:

Non-Functional**:** A water point is considered non-functional if it is not providing water at the time of a spot check. There are several possible reasons for non-functionality which should be used for standard reporting;

i. ***Broken:*** The water point is not producing water but could be repaired or rehabilitated.
ii. ***Disconnected:*** The water point has been disconnected due to other factors, but could be reconnected.
iii. ***Vandalized:*** The water point is not producing water because of vandalism or theft but could be repaired or rehabilitated.
iv. ***Abandoned:*** The water point is not producing water or is not being used due to water quality reasons and should not be repaired or rehabilitated.

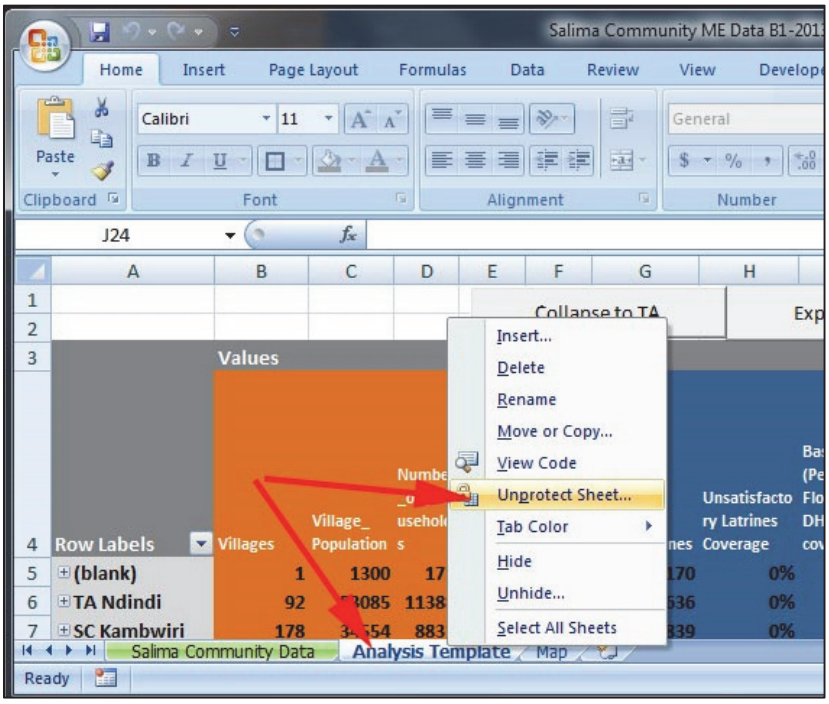
The Data should already be entered like the following and the field should be available in the **pivot table.**



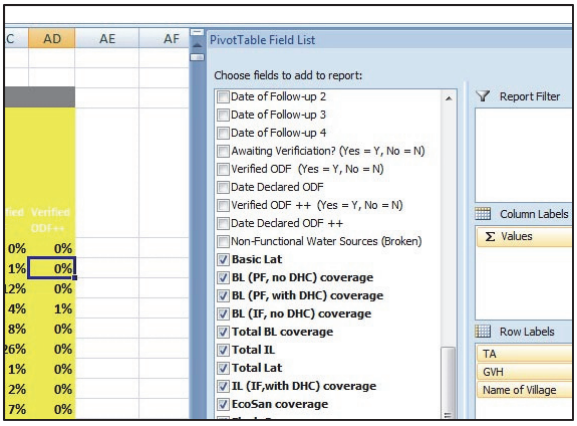
ed	Non-Functional Water Sources (Broken)
	0
	0
	1
	0
	0

C1. Adding the formula to the Pivot Table (Analysis Template)

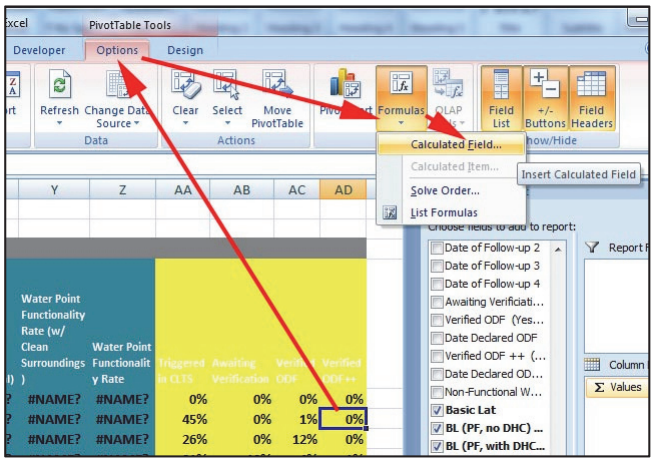
1. Right click the **"Analysis Template"** Tab and select **unprotect sheet**.



2. Click anywhere on the pivot table so the field list will appear on the right side of the screen.

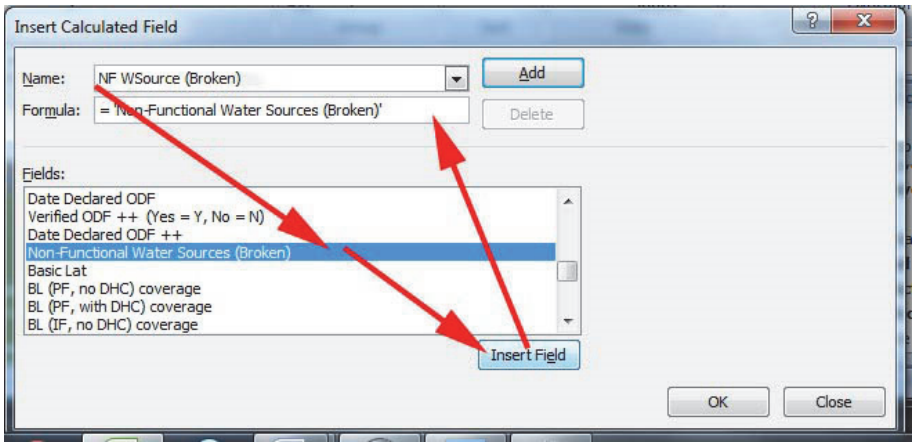


3. Click anywhere on the table, then go to **Options Tab**, **Formulas**, **Calculated Field**.

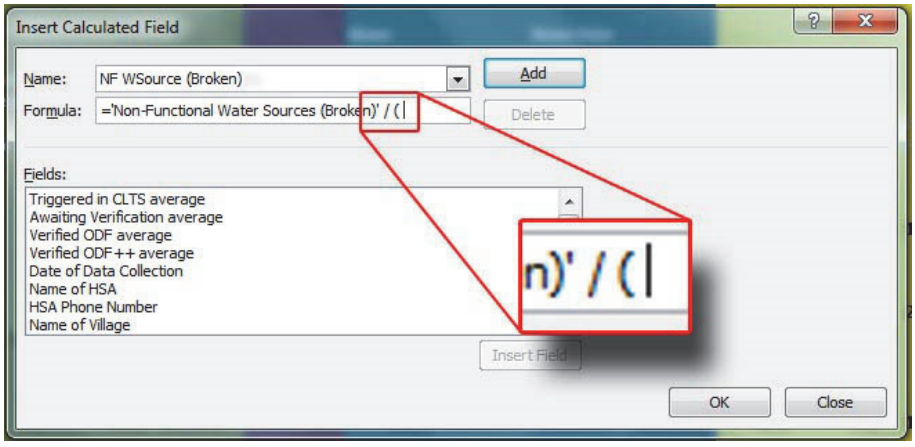


4. Name the field **NF WSource (Broken)** and build the formula. You will first insert the "**Non-Functional Water Sources (Broken)**" Field.

   The full equation should read:
   = 'Non-Functional Water Sources (Broken)'/('Tot BH'+ 'Tot Comm Tap'+ 'Tot SW'+ 'Tot PS')

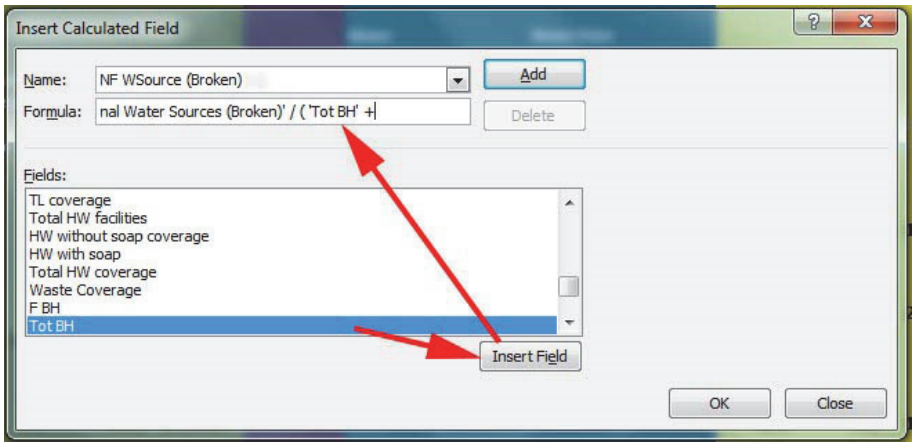


5. Since you will be dividing by a sum of a few fields now enter a **"/"** and an open bracket **"("**

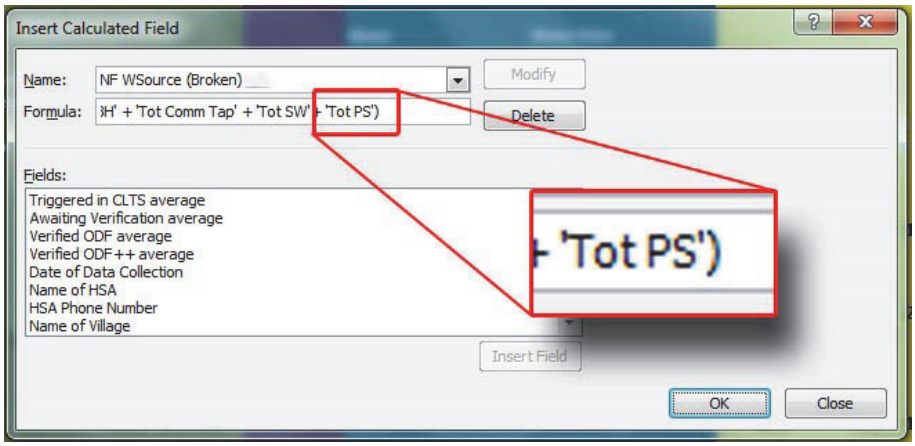


6. You can now add the first field as 'Total Boreholes' , and at a plus sign **"+"** before adding the next field.

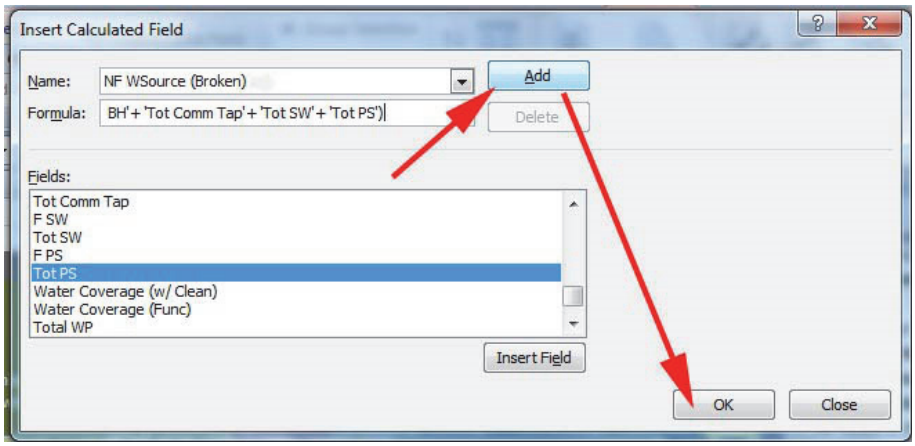
The full equation should read:
= 'Non-Functional Water Sources (Broken)'/ ('Total Borehole'+ 'Total Tap'+ 'Total SW'+ 'Total PS')



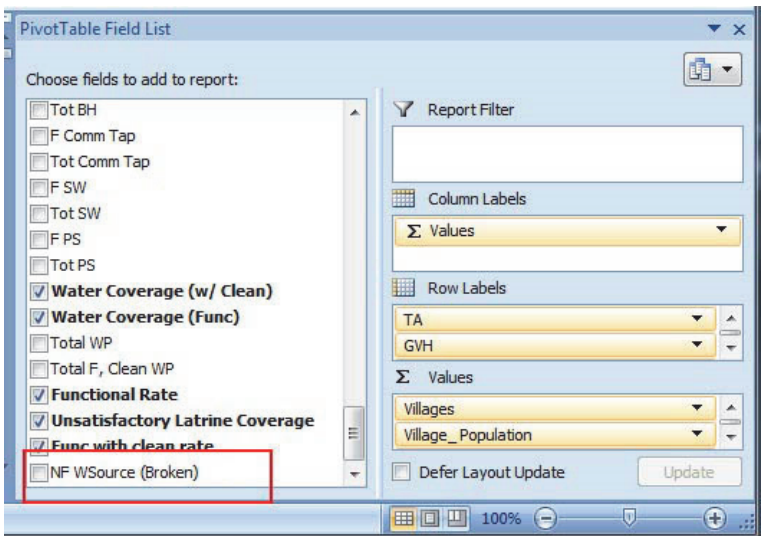
7. After adding the 'Total Tap'+ 'Total SW'+ 'Total PS' fields, you can **close the bracket**.



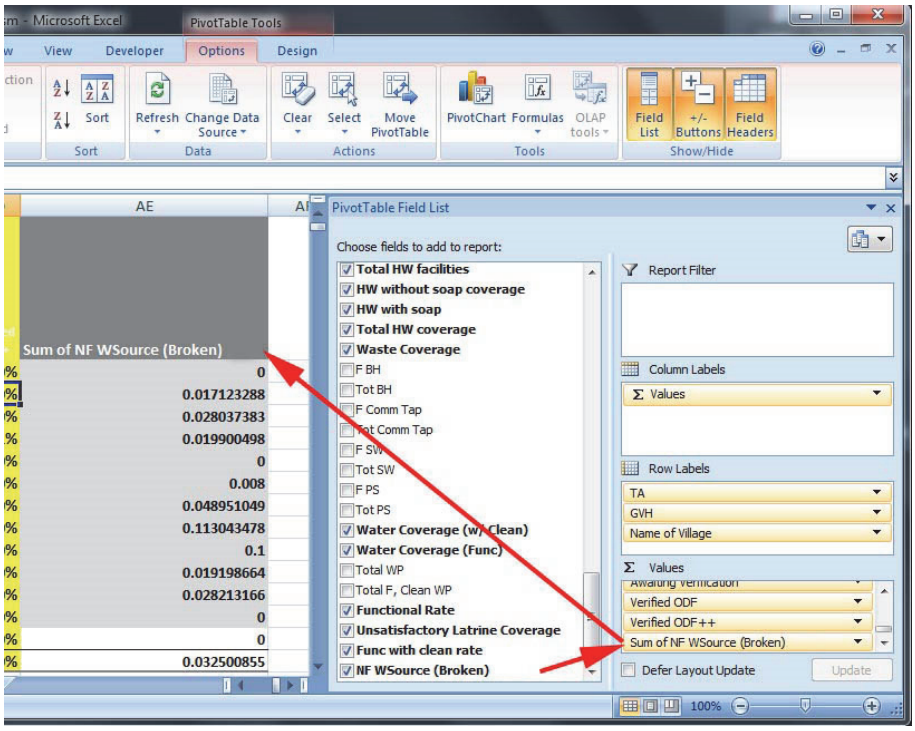
8. Now select **add**. After adding, you can press the **OK** Button.



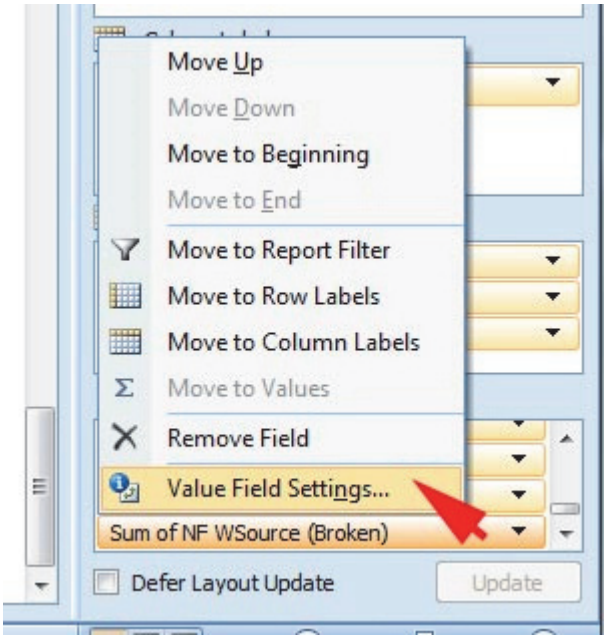
9. Now the field should appear in the pivot table Field list



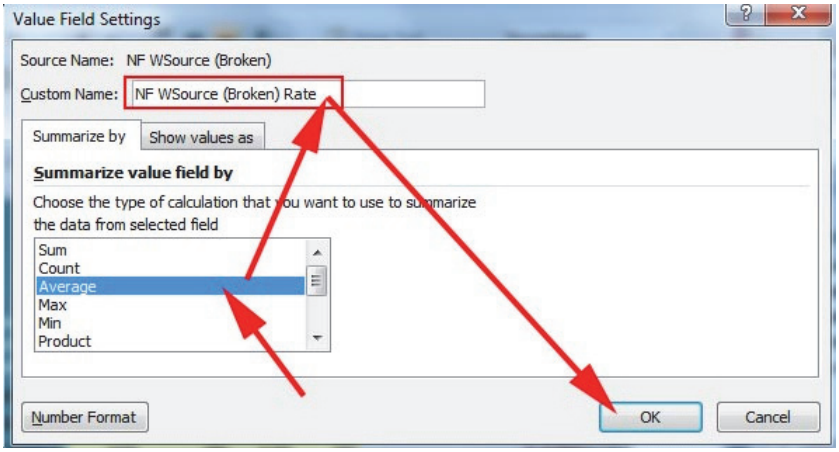
10. Drag the field to the bottom of the "**Values**" box. It will automatically display it as a sum.



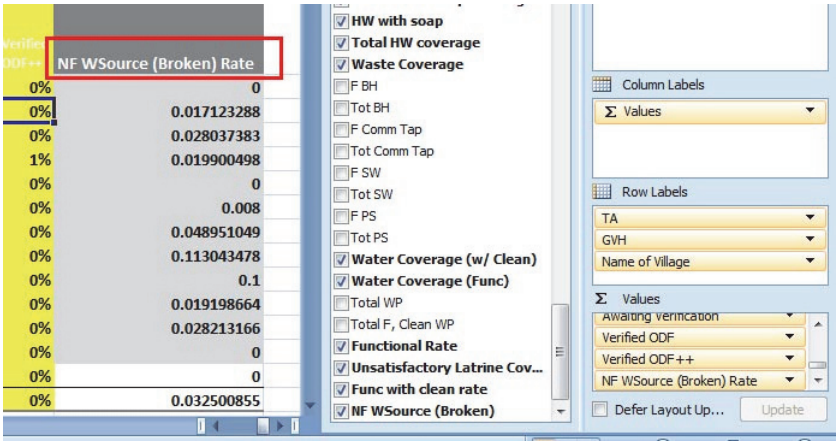
11. For this field we would like to display it as an average instead of sum.
    Click the "**Sum of NF WSource (Broken)**" field in the bottom of the Values box and click **value field settings**.



12. In the **value field settings**, select **Average** under Summarize value field and change the name to "**NF WSource (Broken) Rate**"

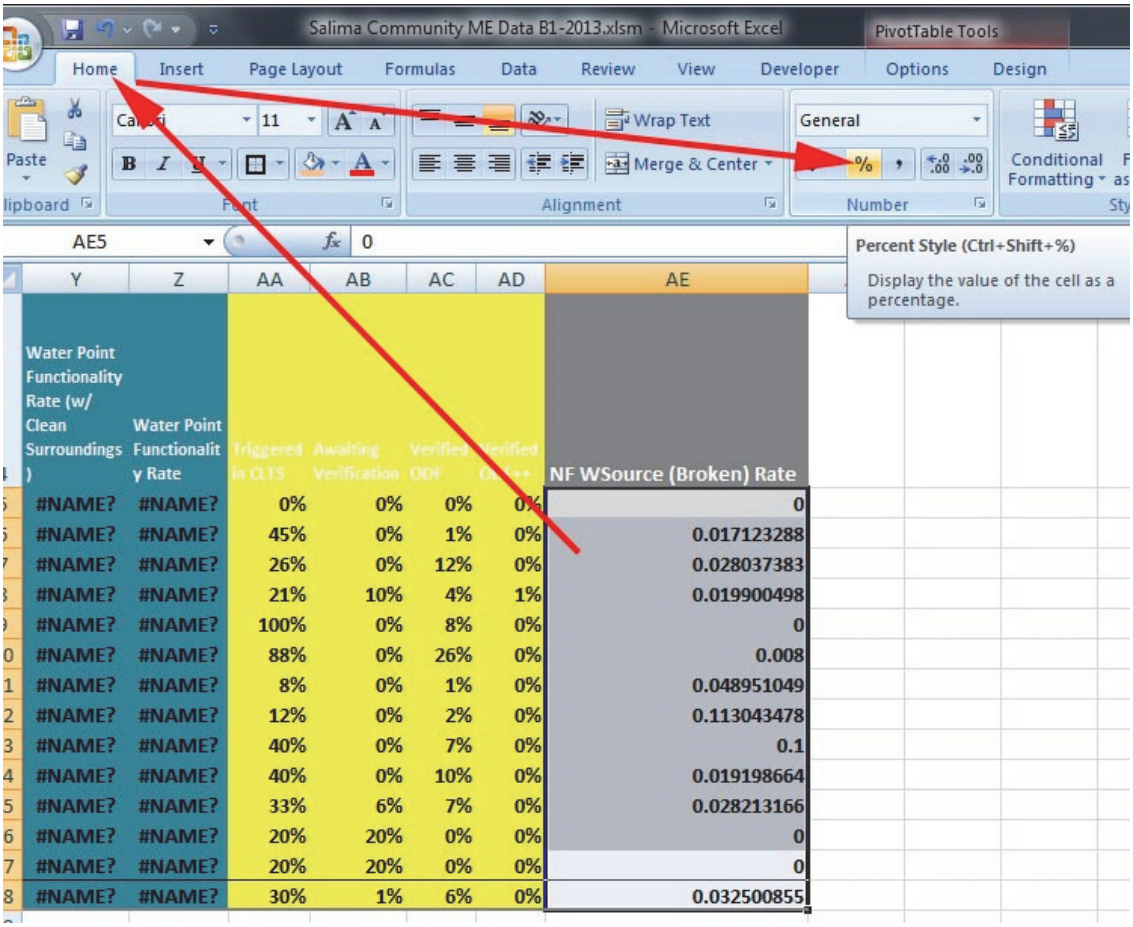


13. You will see the table updated to show the average.



C2. Formatting the Pivot Table

1. To display these as percents and not decimals, highlight all the data and select **Percent Style** under the **Home tab**.

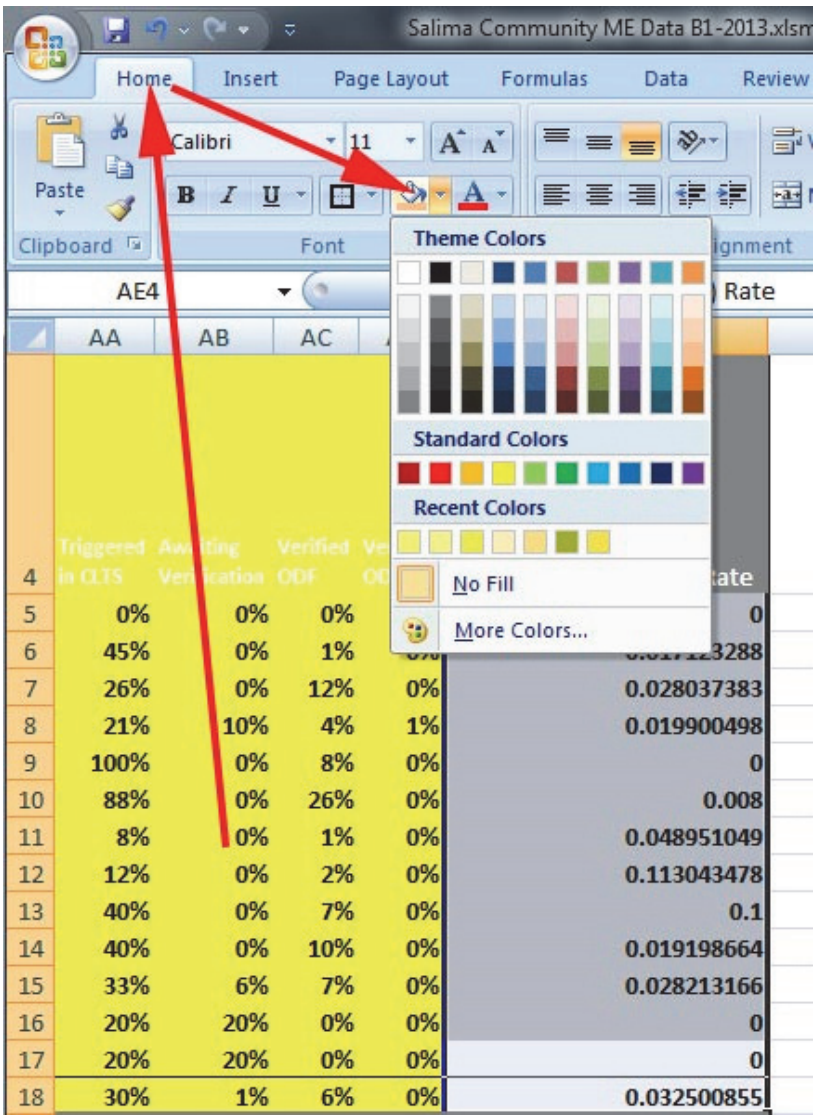


Water Point Functionality Rate (w/ Clean Surroundings)	Water Point Functionality Rate	Triggered in CLTS	Awaiting Verification	Verified ODF	Verified	NF WSource (Broken) Rate
#NAME?	#NAME?	0%	0%	0%	0%	0
#NAME?	#NAME?	45%	0%	1%	0%	0.017123288
#NAME?	#NAME?	26%	0%	12%	0%	0.028037383
#NAME?	#NAME?	21%	10%	4%	1%	0.019900498
#NAME?	#NAME?	100%	0%	8%	0%	0
#NAME?	#NAME?	88%	0%	26%	0%	0.008
#NAME?	#NAME?	8%	0%	1%	0%	0.048951049
#NAME?	#NAME?	12%	0%	2%	0%	0.113043478
#NAME?	#NAME?	40%	0%	7%	0%	0.1
#NAME?	#NAME?	40%	0%	10%	0%	0.019198664
#NAME?	#NAME?	33%	6%	7%	0%	0.028213166
#NAME?	#NAME?	20%	20%	0%	0%	0
#NAME?	#NAME?	20%	20%	0%	0%	0
#NAME?	#NAME?	30%	1%	6%	0%	0.032500855

2. The data is now displayed as a percent.

	NF WSource (Broken) Rate
0%	0%
0%	2%
0%	3%
1%	2%
0%	0%
0%	1%
0%	5%
0%	11%
0%	10%

3. Finally to change **colours**, Select the **column**, then under the **home tab**, select **fill**.



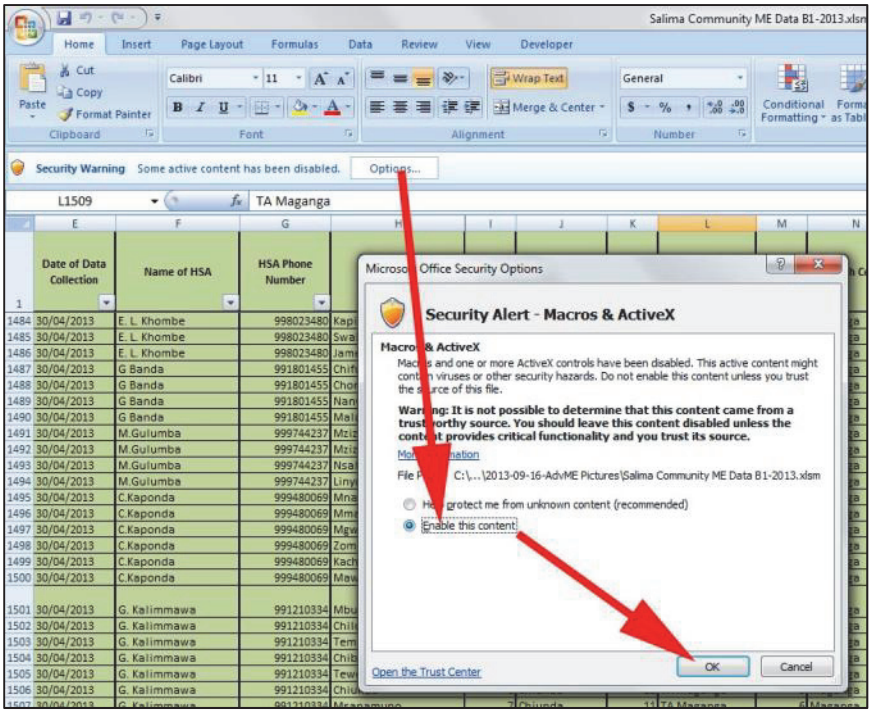
Your column should look similar to the following.

D. Adding a TA to the Map

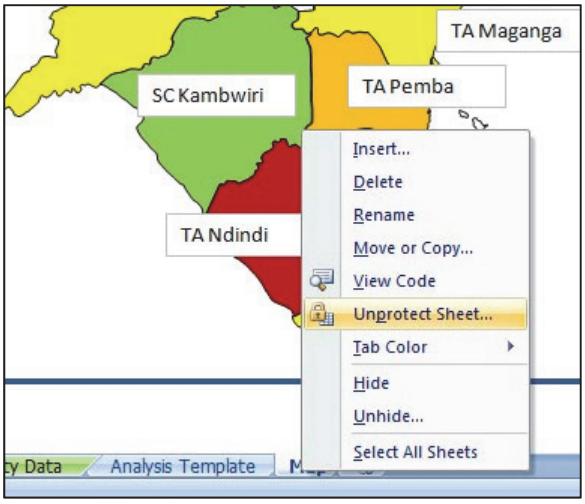
In this example we will be splitting TA Maganga into two parts. TA Maganga will remain south; TA Maganga2 will be the north.

D1. Reminders:

Always Enable **Macros**

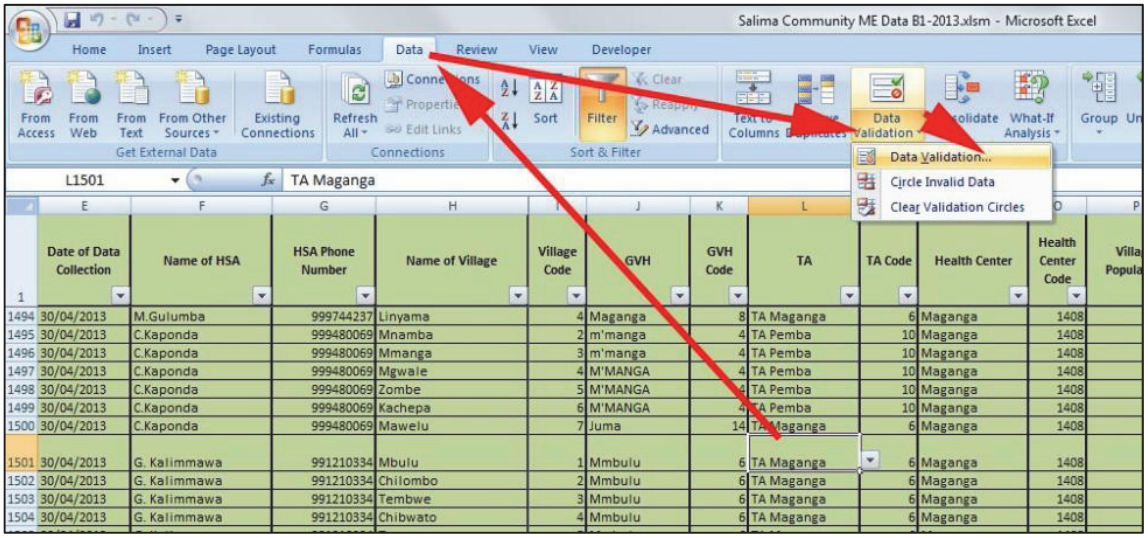


To edit the map you will need to unlock the map sheet, by right-clicking the tab that says map and selecting **unprotect sheet**.

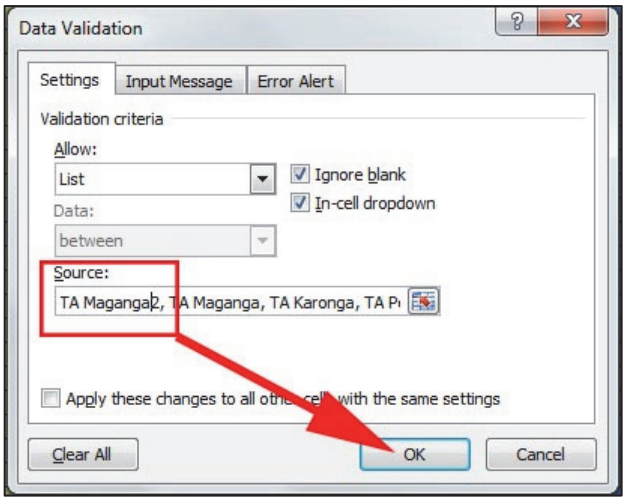


D2. Setting up the TA Maganga2 Data

1. Click any cell in the TA column. Go to the **Data Tab**, then Click **Data Validation** then again click **Data Validation**.

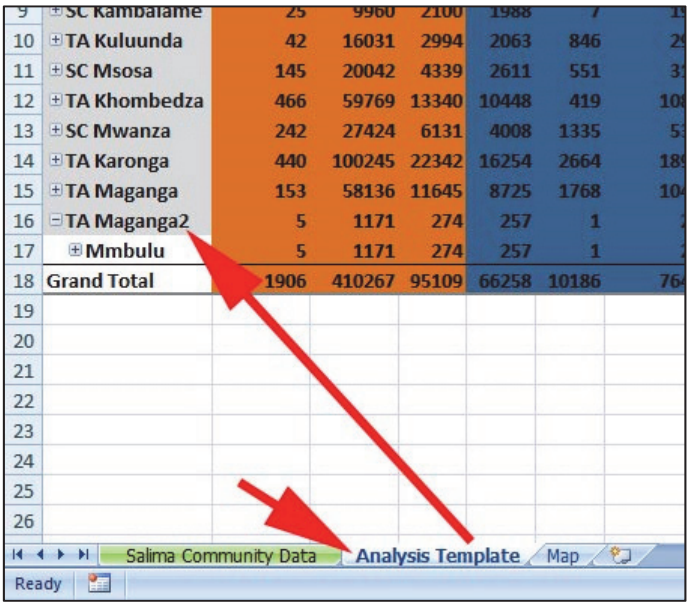


2. Under Source, Type in **TA Maganga2**. Now change the villages that belong to TA Maganga2 to TA Maganga2.



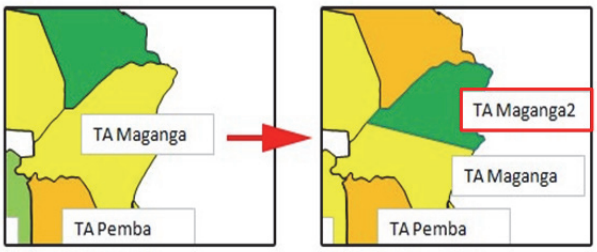
You can now add data under TA Maganga2, or switch villages to the new TA.

3. Check the **Analysis Template** to see if TA Maganga2 appears.



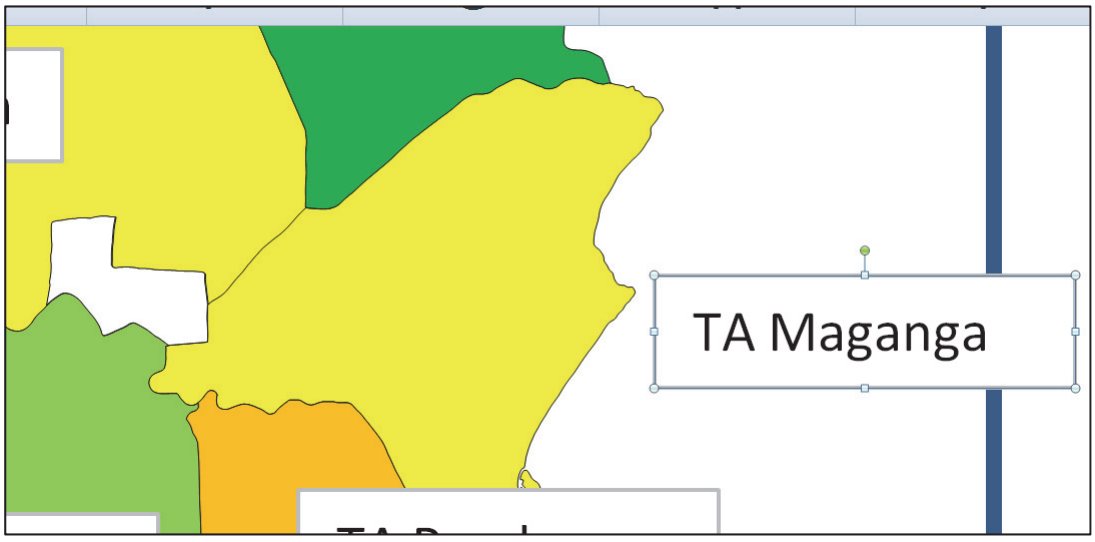
D3. Setting up the Map

For this example we will be splitting TA Maganga into two TAs.

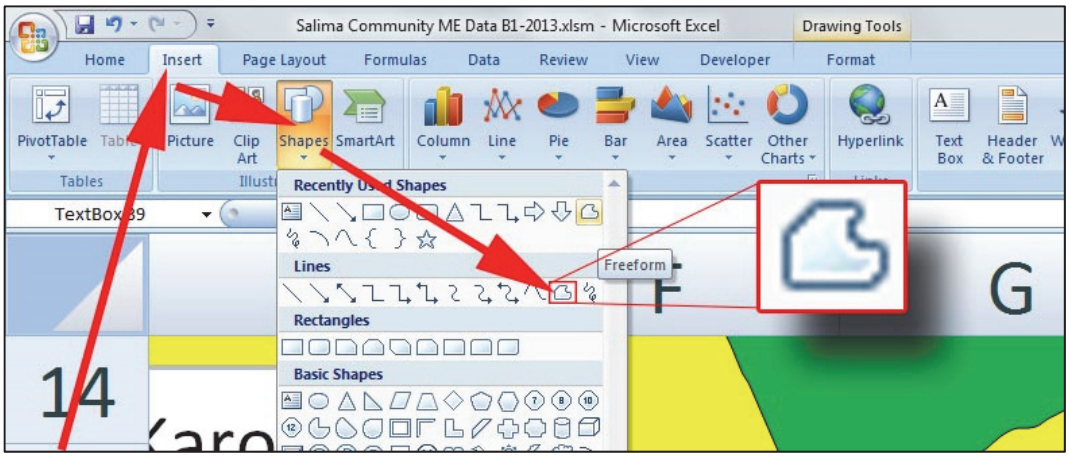


*Before setting up the map be sure to unprotect the map sheet (see above)

1. For this example, move the **TA Maganga Text Box** so we can create the split.

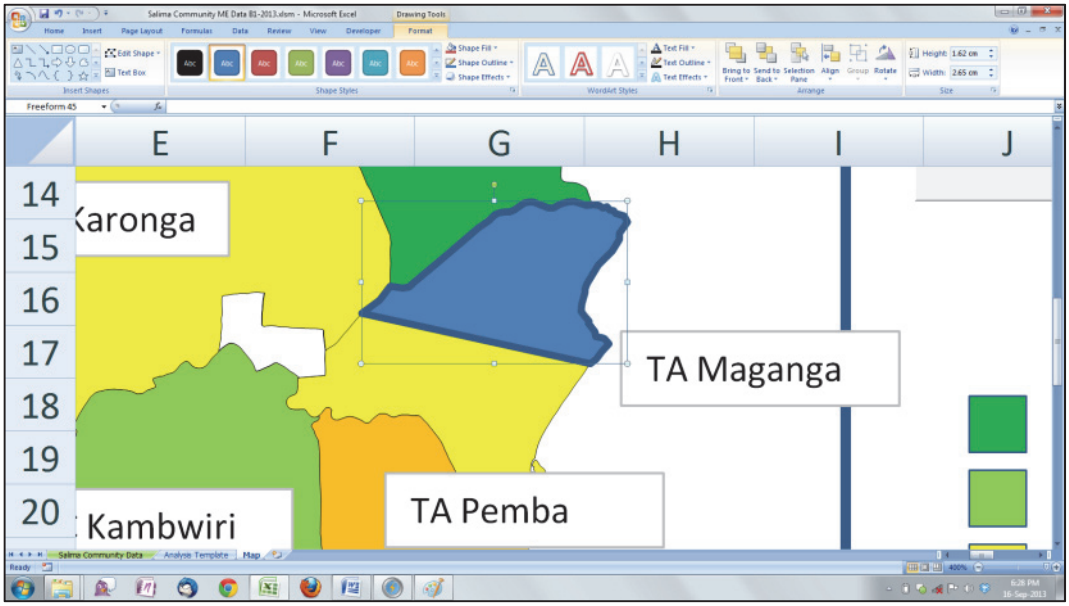


2. Go to **Insert**, **Shapes**, **Freeform Shape**

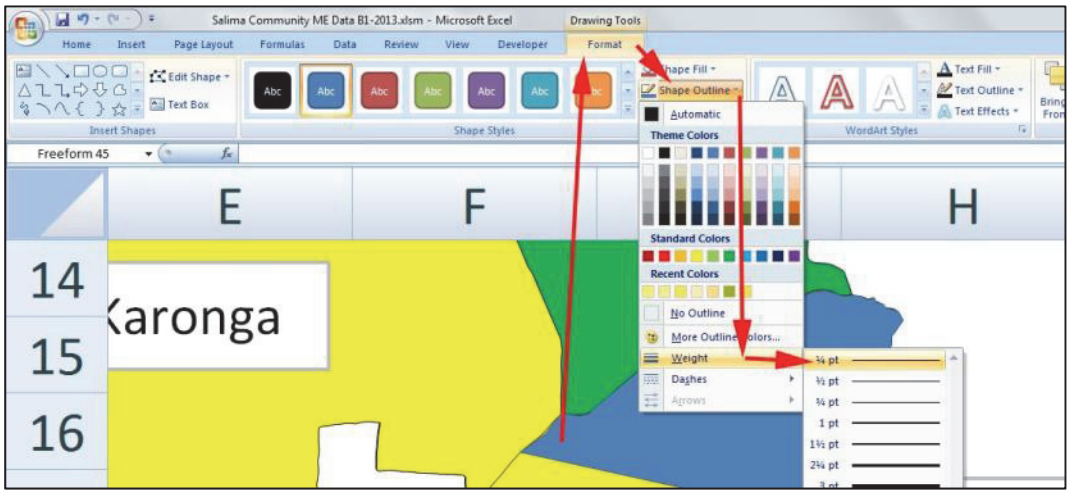


3. With your mouse draw in the new TA by clicking along the shape that you want. With each click, a new point will be added. A few tips for drawing shapes:

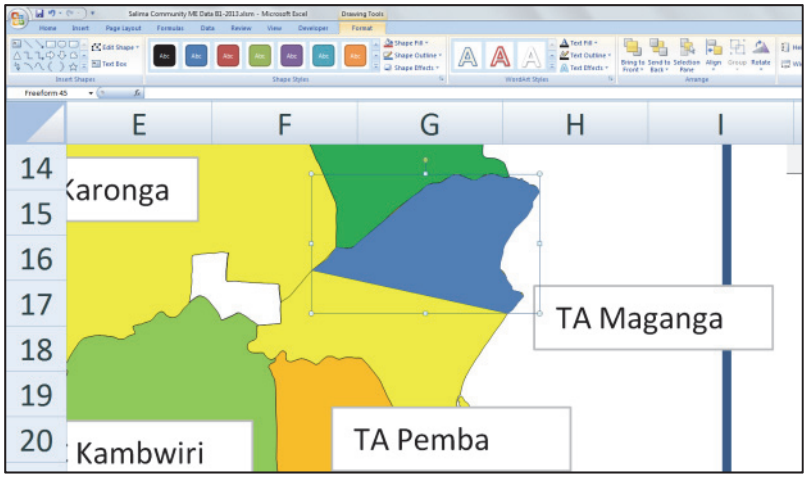
   a. You don't need to make the shape perfect the first time, the points can be adjusted later (see below).
   b. Zoom in to the area where you are drawing the shape (**click the + on the Zoom toolbar on the bottom right corner**) to get a better view.



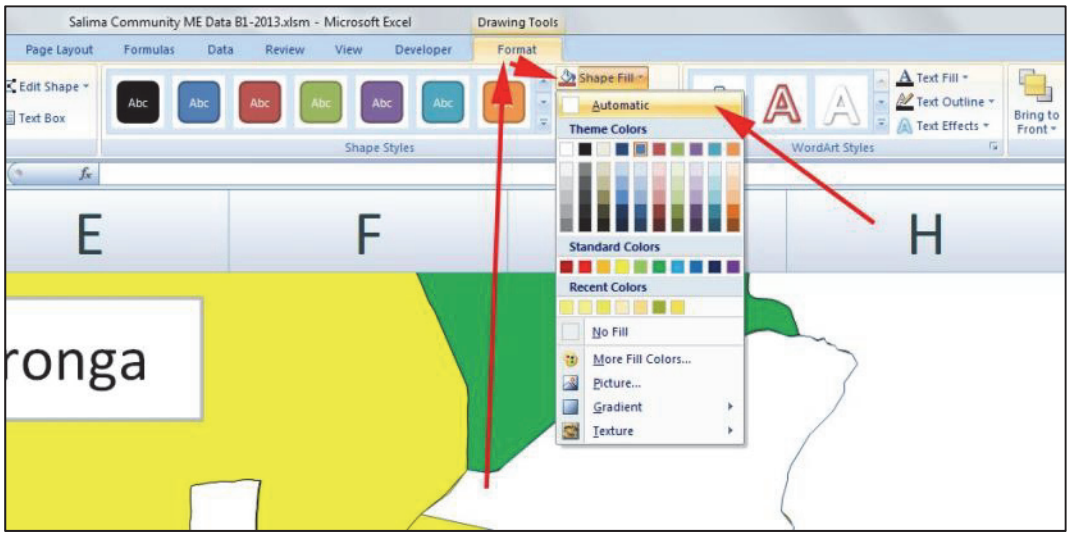
4. Reduce the line weight by selecting the shape, go to **Format**, **Shape Outline**, **Weight**, then **¼ pt**. Also select **Automatic** as the line colour



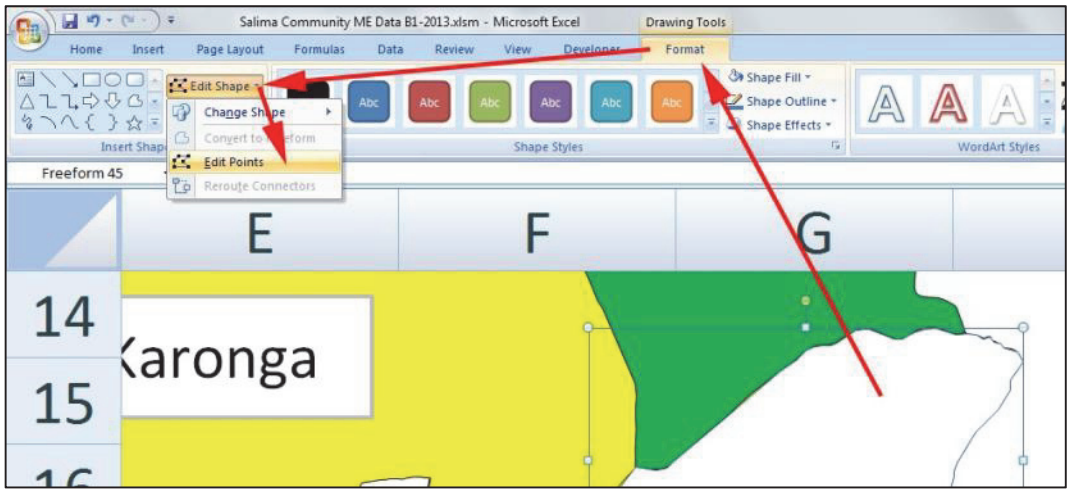
5. This is the result



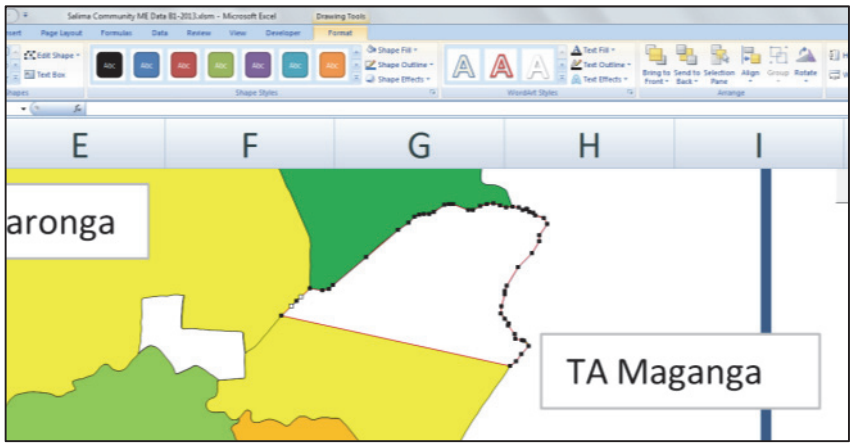
6. To remove the blue colour, select the shape. Goto **Format**, **Shape Fill**, and select **Automatic**



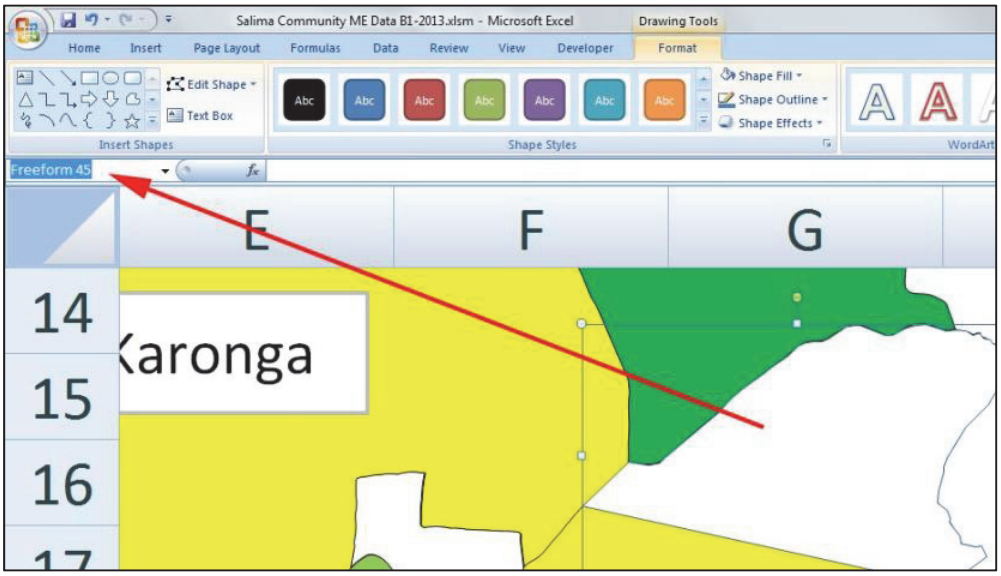
7. *Optional: You can make adjustments to the shape by selecting the shape, going to **Format**, then **edit shape**, **edit points**.



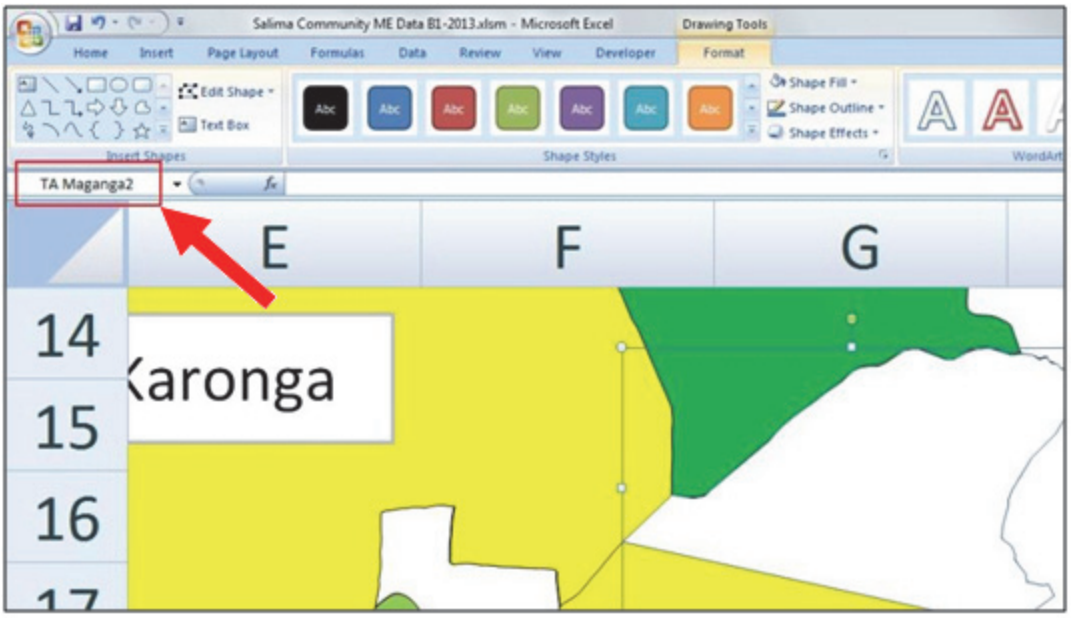
8. *Optional: You will be able to click and move different points of the shape around to adjust.



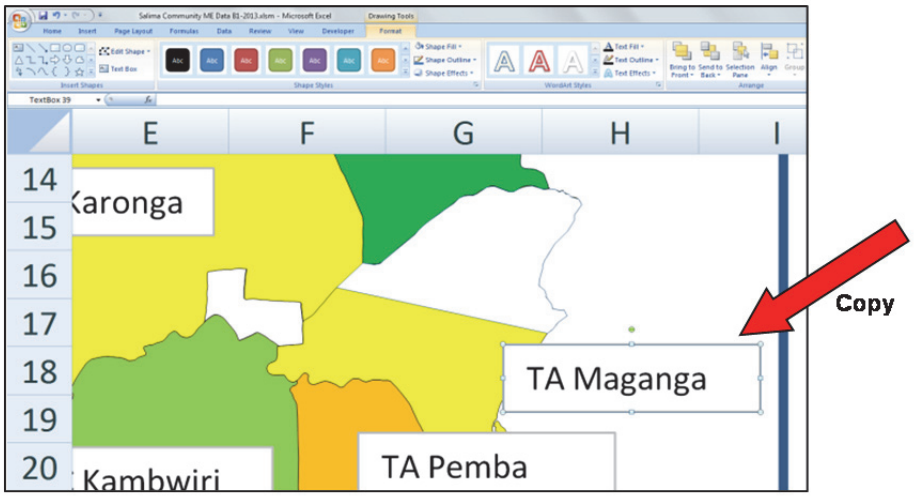
9. *Important: Be sure to change the shape name to exactly match the TA we are creating. Select the shape and click into the **name box** at the **top left corner**.



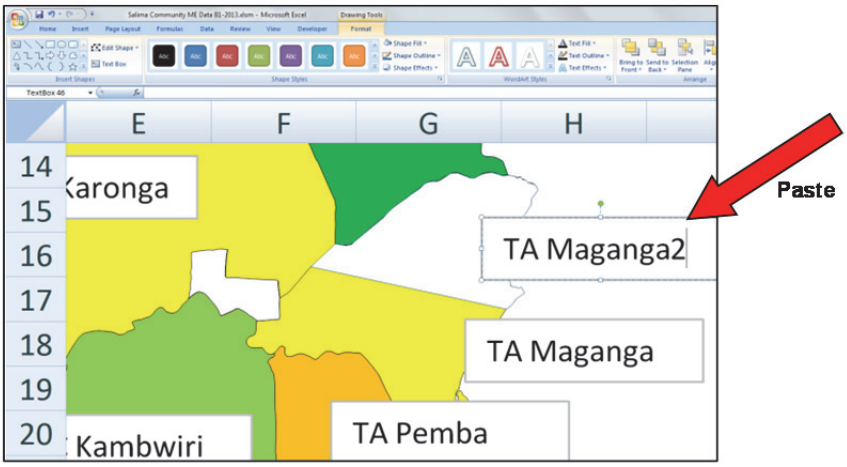
10. In this case rename the shape to TA Maganga2 (**Be sure to press enter after typing**)



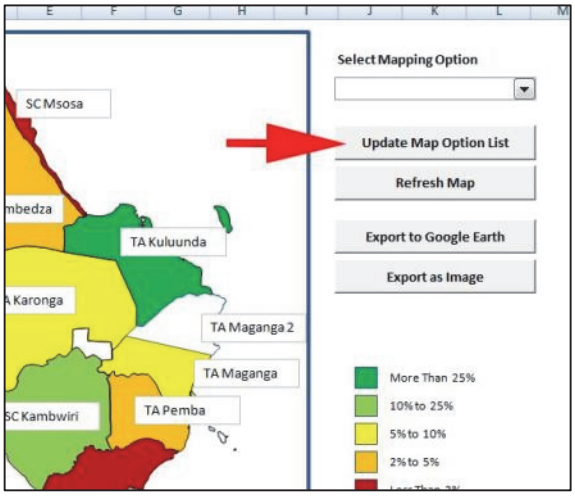
11. Move the **original TA Maganga label** and copy it



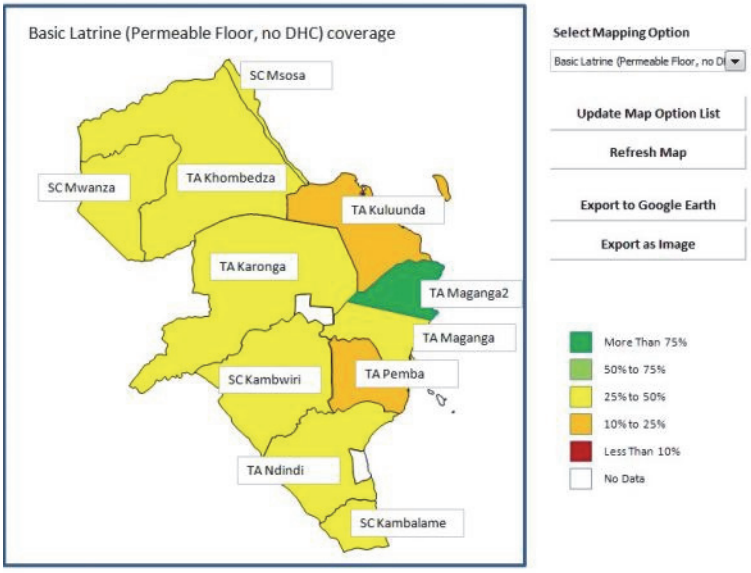
12. Paste the text box and type in the **new TA's Name in it**



13. Now you will have to update map option list to test if it is working



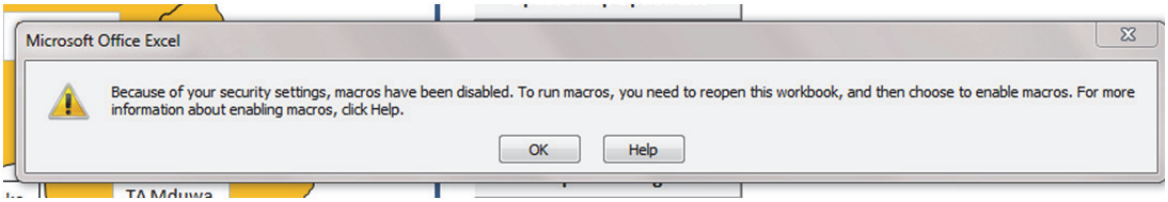
14. Here we selected Basic Latrine and it changed the TAs colour based on the example data.



E. Annex A: Solutions to Common Challenges

1. Enable Macros

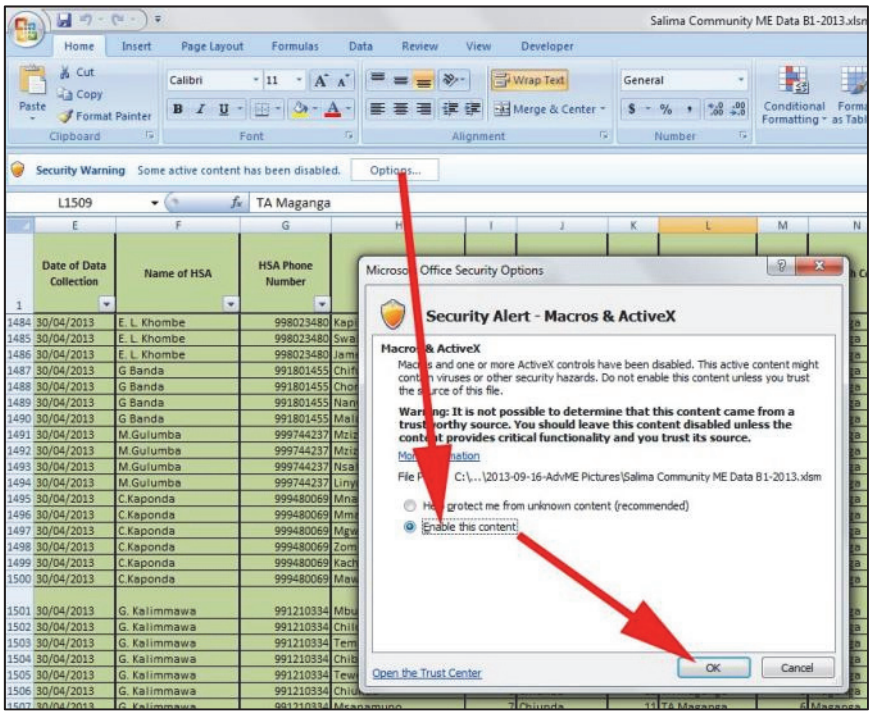
All of the analysis and mapping functions rely on macros and they need to be turned on. You may see an error like this:



Note that by default, Excel will disable macros and the functions within the database will not work unless the macros are enabled.

If you have accidentally disabled macros, close the Excel workbook. Open it again and enable macros via the Security Warning Options (see below).

When you open the Excel workbook, a Security Warning will appear. Beside that Security Warning, click on the Options... box. A dialogue box will appear. To enable macros, select “Enable the content” then click OK.



2. Capitalization, Punctuation and Spacing When Entering Data

When entering data, make sure capitalization, spacing and punctuation is ALWAYS the same for names so that the data will be grouped together properly. For example, if you are entering the GVH name M'buka into the database, it needs to be entered exactly as **M'buka**. Examples of entries that will NOT be valid:

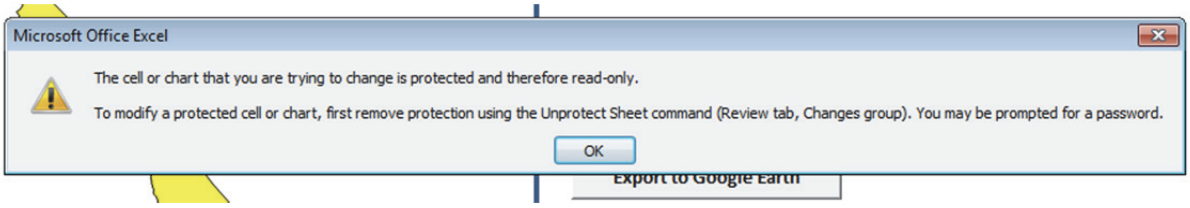
Examples:
- ✓ **M'buka**
- × **M buka**
- × **Mbuka**
- × **M'Buka**
- × **M' Buka**

If you notice that your data has been split (e.g. there is GVH M'buka and Mbuka), go back into your Village Data tab and change all of the entries Mbuka to M'buka.

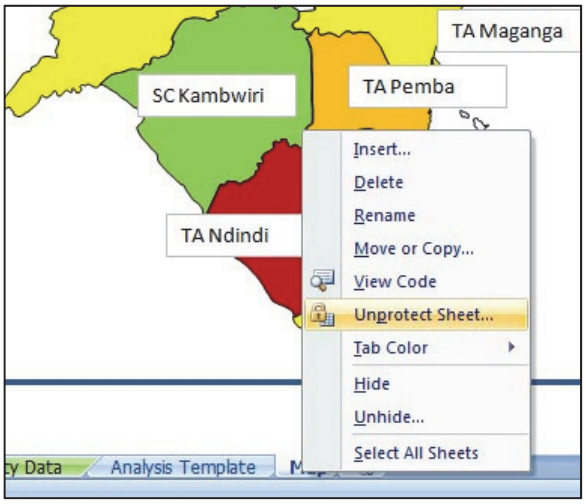
It is also easy to confuse **zero** with **O**. Check your data if you are having problems to ensure that data is correctly entered as **"0"** or **"O"**.

3. Unprotect a Worksheet

When trying to edit a worksheet, you may receive a message like this:



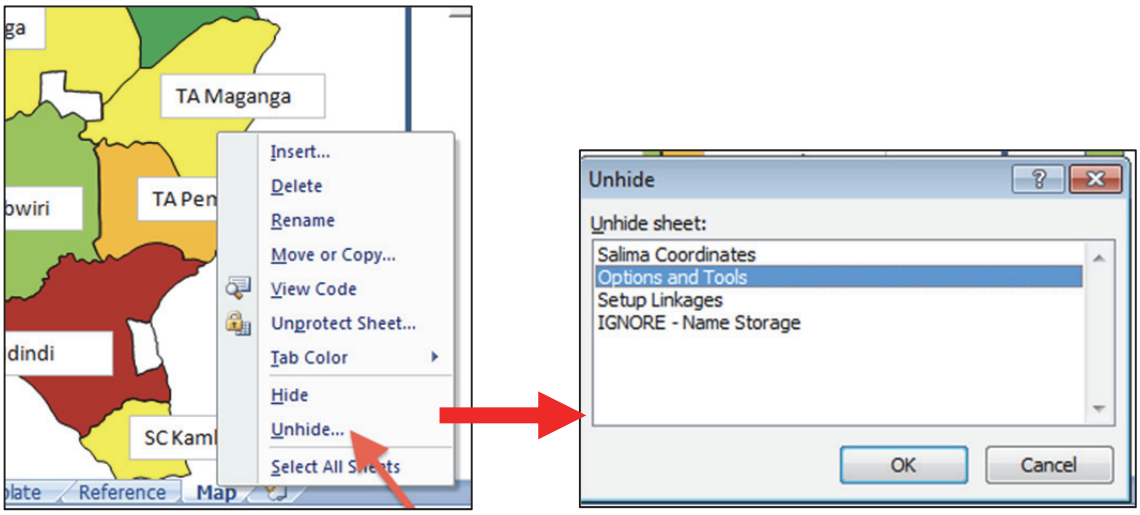
To unprotect the worksheet so it can be edited, right-click the worksheet tab and select unprotect sheet.



4. Unhide Worksheet

Certain worksheets for reference are hidden in the database. If you need to access one of these worksheets to, for example, change colours on the map, you can unhide worksheets as follows:

1. Right click on one of the worksheets
2. Select "Unhide"
3. Select the worksheet that to you want to be shown, then click OK.



5. Sorting by Columns Only

When sorting data **all columns** in the table need to be selected. Otherwise, excel will only sort the column you select and the data in rows will no longer match correctly.

✓ **Correct:** Whole table is selected for sorting. Note the column labels at the top turn blue when they are selected.

	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Date of Data Collection	Name of HSA	HSA Phone Number	Name of Village	Village Code	GVH	GVH Code	TA	TA Code	Health Center	Health Center Code	Village Population	Number of Households
2	30/04/2013	F Chisepo		Phaka	1	Phaka	9	TA Ndindi	9	Mchoka	1410	286	69
3	30/04/2013	F Chisepo		Mkwenembela	2	Phaka	9	TA Ndindi	9	Mchoka	1410	529	118
4	30/04/2013	F C Lungu		Magumbwa	1	Magumbwa	3	TA Ndindi	9	Mchoka	1410	847	190
5	30/04/2013	F C Lungu		Chingo	2	Magumbwa	3	TA Ndindi	9	Mchoka	1410	436	92
6	30/04/2013	F C Lungu		chilembwe	3	Ndindi	4	TA Ndindi	9	Mchoka	1410	370	84
7	30/04/2013	J W K Nkhata		Mphunga	1	Mphunga	6	TA Ndindi	9	Mchoka	1410	1335	250
8	30/04/2013	J W K Nkhata		Chinyama	2	Mphunga	6	TA Ndindi	9	Mchoka	1410	814	183
9	30/04/2013			Njuzi	1	Mphunga	6	TA Ndindi	9	Mchoka	1410	436	81
10	30/04/2013	J W K Nkhata		Chadza	3	Mphunga	6	TA Ndindi	9	Mchoka	1410	307	75
11	30/04/2013	G Jere		Ndindi B	1	Ndindi	4	TA Ndindi	9	Mchoka	1410	372	90
12	30/04/2013	G Jere		Nthiwatiwa	2	Ndindi	4	TA Ndindi	9	Mchoka	1410	299	58
13	30/04/2013	G Jere		Tambala	3	Ndindi	4	TA Ndindi	9	Mchoka	1410	176	46
14	30/04/2013	G Jere		Yunusu	4	Ndindi	4	TA Ndindi	9	Mchoka	1410	37	12
15	30/04/2013	G Jere		Mponda	5	Magumbwa	3	TA Ndindi	9	Mchoka	1410	627	131
16	30/04/2013	M Chigudu		Ngwire	1	Kandulu	5	TA Ndindi	9	Mchoka	1410	861	231
17	30/04/2013	M Chigudu		Kalino	2	Kandulu	5	TA Ndindi	9	Mchoka	1410	398	90
18	30/04/2013	M Chigudu		Kalele	3	Kandulu	5	TA Ndindi	9	Mchoka	1410	210	44
19	30/04/2013	L Katsichi		Mzembela	1	Mzembela	1	SC Kambwiri	3	Mchoka	1410	510	122
20	30/04/2013	L Katsichi		Senjele	2	Mzembela	1	SC Kambwiri	3	Mchoka	1410	183	74
21	30/04/2013	L Katsichi		Mphere	3	Mzembela	1	SC Kambwiri	3	Mchoka	1410	272	93
22	30/04/2013	I Mwayiwanji		Mpundu	1	Kandulu	5	TA Ndindi	9	Mchoka	1410	870	201
23	30/04/2013	I Mwayiwanji		Kandulu	2	Kandulu	5	TA Ndindi	9	Mchoka	1410	848	163
24	30/04/2013	I Mwayiwanji		Mapiko	3	Kandulu	5	TA Ndindi	9	Mchoka	1410	503	113

Salima Community Data | Analysis Template | Reference | Map

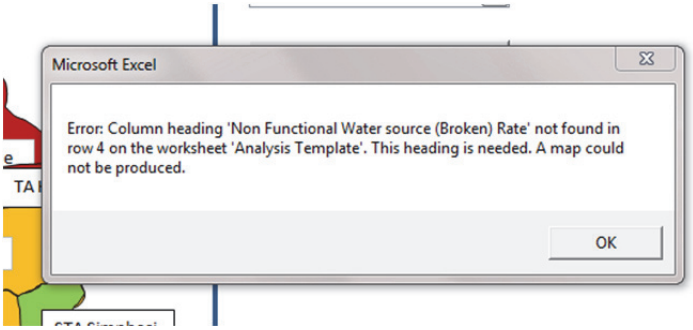
✕ **Incorrect:** Single column within table selected for sorting. Only column E (Date of Data Collection) is selected.

	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Date of Data Collection	Name of HSA	HSA Phone Number	Name of Village	Village Code	GVH	GVH Code	TA	TA Code	Health Center	Health Center Code	Village Population	Number of Households
2	30/04/2013	F Chisepo		Phaka	1	Phaka	9	TA Ndindi	9	Mchoka	1410	286	69
3	30/04/2013	F Chisepo		Mkwenembela	2	Phaka	9	TA Ndindi	9	Mchoka	1410	529	118
4	30/04/2013	F C Lungu		Magumbwa	1	Magumbwa	3	TA Ndindi	9	Mchoka	1410	847	190
5	30/04/2013	F C Lungu		Chingo	2	Magumbwa	3	TA Ndindi	9	Mchoka	1410	436	92
6	30/04/2013	F C Lungu		chilembwe	3	Ndindi	4	TA Ndindi	9	Mchoka	1410	370	84
7	30/04/2013	J W K Nkhata		Mphunga	1	Mphunga	6	TA Ndindi	9	Mchoka	1410	1335	250
8	30/04/2013	J W K Nkhata		Chinyama	2	Mphunga	6	TA Ndindi	9	Mchoka	1410	814	183
9	30/04/2013			Njuzi	1	Mphunga	6	TA Ndindi	9	Mchoka	1410	436	81
10	30/04/2013	J W K Nkhata		Chadza	3	Mphunga	6	TA Ndindi	9	Mchoka	1410	307	75
11	30/04/2013	G Jere		Ndindi B	1	Ndindi	4	TA Ndindi	9	Mchoka	1410	372	90
12	30/04/2013	G Jere		Nthiwativa	2	Ndindi	4	TA Ndindi	9	Mchoka	1410	239	58
13	30/04/2013	G Jere		Tambala	3	Ndindi	4	TA Ndindi	9	Mchoka	1410	176	46
14	30/04/2013	G Jere		Yunusu	4	Ndindi	4	TA Ndindi	9	Mchoka	1410	37	12
15	30/04/2013	G Jere		Mponda	5	Magumbwa	3	TA Ndindi	9	Mchoka	1410	627	131
16	30/04/2013	M Chigudu		Ngwire	1	Kandulu	5	TA Ndindi	9	Mchoka	1410	861	231
17	30/04/2013	M Chigudu		Kalino	2	Kandulu	5	TA Ndindi	9	Mchoka	1410	398	90
18	30/04/2013	M Chigudu		Kalele	3	Kandulu	5	TA Ndindi	9	Mchoka	1410	210	44
19	30/04/2013	L Katsichi		Mzembela	1	Mzembela	1	SC Kambwiri	3	Mchoka	1410	510	122
20	30/04/2013	L Katsichi		Senjele	2	Mzembela	1	SC Kambwiri	3	Mchoka	1410	183	74
21	30/04/2013	L Katsichi		Mphere	3	Mzembela	1	SC Kambwiri	3	Mchoka	1410	272	93
22	30/04/2013	I Mwayiwanji		Mpundu	1	Kandulu	5	TA Ndindi	9	Mchoka	1410	870	201
23	30/04/2013	I Mwayiwanji		Kandulu	2	Kandulu	5	TA Ndindi	9	Mchoka	1410	848	163
24	30/04/2013	I Mwayiwanji		Mapiko	3	Kandulu	5	TA Ndindi	9	Mchoka	1410	503	113

Salima Community Data | Analysis Template | Reference | Map

6. Map Cannot Be Produced

You may encounter an error like the one below:



This message means that the map is trying to draw something that is not in the **Analysis Template**.

1. Ensure that analysis you want is in the analysis template worksheet. You may need to add a formula to the **Analysis Template** (see **Section B "Inserting a new indicator"**)
2. Go to the Map worksheet
3. Click "Update Map Option List"
4. Select the indicator you want from the drop down list

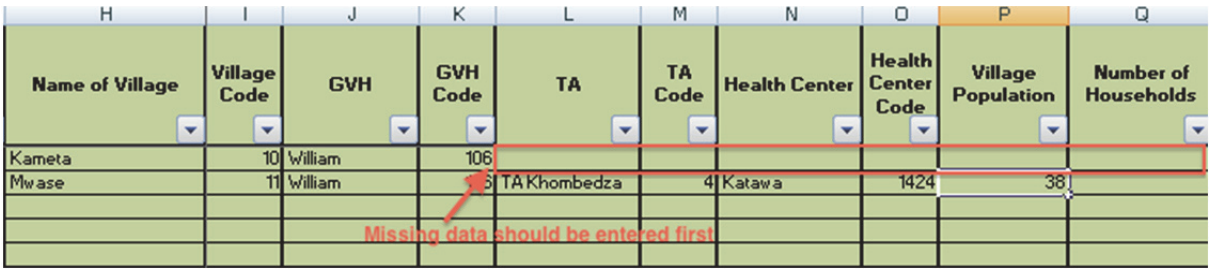
7. Incomplete Row Data

All data should be entered in a row before moving on to the next one.

✓ **Correct**: Data in row is completely entered.

H	I	J	K	L	M	N	O	P	Q
Name of Village	Village Code	GVH	GVH Code	TA	TA Code	Health Center	Health Center Code	Village Population	Number of Households
Kameta	10	William	106	TA Khombedza	4	Katawa	1424	55	7
Mwase	11	William	106	TA Khombedza	4	Katawa	1424	38	

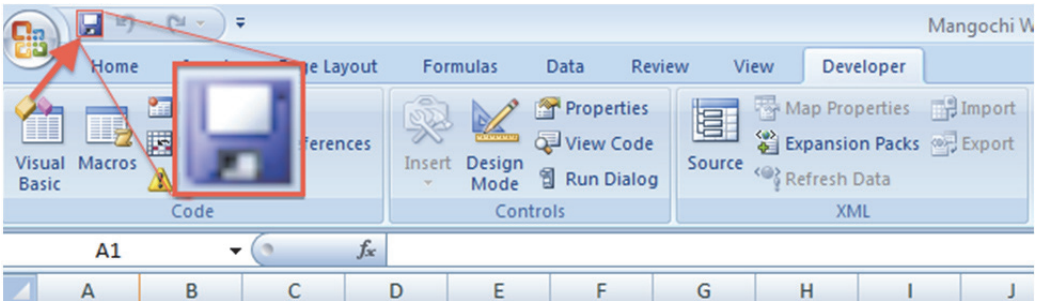
✗ **Incorrect**: Beginning data entry in the next row before completing the one above.



F. Annex B: Common Excel Commands

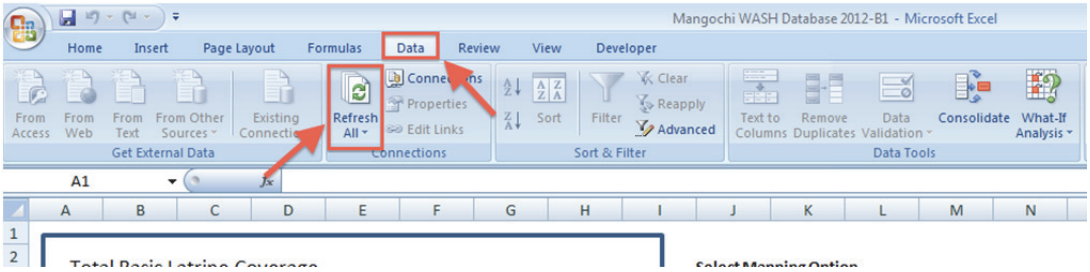
1. Saving Your Work

You should regularly save your work by clicking on the Save button on the toolbar.



2. Refreshing Your Data

After entering or editing data, click on the Refresh All button under the Data tab to update the database so that the analysis will include the most recently entered or edited data.



3. Keyboard Shortcuts

The following are common keyboard shortcuts to use in Excel.

Command	Keyboard Shortcut
Copy	Ctrl + C
Paste	Ctrl + V
Find	Ctrl + F
Save	Ctrl + S

Part III Training programme and syllabus on WASH M&E Database

1. Hands - on Training Programme for WASH M&E Database

It is the responsibility of the facilitator to develop the training programme to be covered in a particular training. One of the sample hands-on training programme for WASH M&E database is shown below.

Time		Activity
Day 1		
8:00	9:00	Opening activities
9:00	10:00	Introduction to WASH M&E database
10:00	10:15	Tea break
10:15	12:00	Basic excel skills
12:00	13:00	Lunch
13:00	15:00	Basic excel skills
15:00	15:15	Tea break
15:15	16:30	Basic excel skills
Day 2		
8:00	10:00	How to use the WASH M&E database
10:00	10:15	Tea break
10:15	12:00	How to use the WASH M&E database
12:00	13:00	Lunch
13:00	15:00	Pivot table skills for data analysis
15:00	15:15	Tea break
15:15	16:30	Pivot table skill for data analysis
Day 3		
8:00	10:00	WASH M&E advanced database skills
10:00	10:15	Tea break
10:15	12:00	WASH M&E advanced database skills
12:00	13:00	Lunch
13:00	15:00	WASH M&E advanced database skills
15:00	15:15	Tea break
15:15	16:30	Catch-up and questions
Day 4		
8:00	9:00	Catch-up and questions
9:00	10:00	Competency evaluation
10:00	10:15	Tea break
10:15	12:30	Data collector orientation guideline
12:30	13:30	Lunch
13:30	15:00	Data collector orientation guideline
15:00	16:00	District roles and responsibilities and implementation action plan
16:00	16:15	Workshop evaluation
16:15	16:30	Closing prayer

2. Hands - on Training Syllabus for WASH M&E Database

Based on the above training programme, training syllabus such as training module and session is shown below.

Module No.	No. 1
Module Name	WASH M&E System Training
Target	Training of District WASH officers and M&E officers on MS Excel skills and WASH Database functionality
Objectives	By the end of this module, participants should be able to: 1. explain a list of WASH M&E indicators 2. explain WASH M&E system 3. use WASH M&E database
Possible trainers	EWB staff, MoH Environmental Health officers, MoAIWD Sanitation Engineers, Database pilot districts (Salima, Lilongwe, Blantyre, Mzimba South)
Total Duration for Workshop No.1	4 days
Manuals to be used	This manual
Other tools / materials to be used	WASH M&E Database (**CD**) and laptop computers

Session		**Activity**
No.	**Title**	
1	Opening Activities	Opening Prayer, Introductions, Ice Breaker Game, Expectations and Fears, Workshop Agenda, Workshop Norms
2	Introduction to WASH M&E Database	Introduction to the database, Background, Malawi database maps. Introduce use potential within the district
3	Basic Excel Skills	Refer to **Clause Part II-1 "**the basic MS Excel 2007" in this manual and performing exercises participants will learn basic MS excel skills including: Basic Parts of the Excel Screen, Moving Around a Worksheet, Office Button Menu, Entering and Changing Data, Basic Formatting, Formulas, Sorting Data, Filtering Data
4	How to use the WASH M&E Database	Using the M&E database work through the WASH M&E database guide (See **Part II-3**) in this manual. Participants will learn how to enter data, read the analysis template and update and use the map.
5	Pivot Table skills for Data Analysis	Refer to **Clause Part II-2** "the pivot tables in MS Excel 2007" in this manual and performing exercises participants will learn pivot table skills in MS Excel including: Background on PivotTables, Creating a PivotTable, Manipulating a PivotTable, Performing Calculations in a PivotTable

Session		Activity
No.	Title	
6	Advanced WASH M&E Database Skills	Using the M&E database (**CD**) work through WASH M&E database advanced guide (See **Part II-4**) in this manual. Participants will learn how to add an additional indicator, update the analysis table, draw an additional TA on the map and link to the analysis table.
7	Catch-up and questions	Participants will be asked to seek clarification on any of the previous material in preparation for the competency evaluation
8	Competency Evaluation	A brief competency evaluation will confirm that the participants are able to complete basic excel and data base exercises. Advanced skills will not be tested.
9	Data Collector Orientation Guideline and Indicator Definition Manual	The guideline prepared by the four WASH M&E pilot districts for effective orientation of data collectors will be reviewed. In this session lessons learned and the challenges overcome in the pilot districts will be discussed. The indicators will be reviewed to ensure a common understanding.
10	District Roles and Responsibilities and Implementation Action Plan	The district participants will be facilitated through a session in which they will define their roles and responsibilities for the system and will create an action plan for implementation of the WASH M&E database.
11	Workshop Evaluation	Participants will complete a workshop evaluation form.
12	Closing Activities	Closing prayer and certificate distribution

Module Title	WASH M&E System Training
Session 1	Opening Activities
Appropriate Facilitator Background	Experts in training, having knowledge and skills in participatory development.
Objectives	➢ To break ice and help participants to know each other ➢ To draw out participants expectations and fears about the workshop ➢ To explain objectives and link them to expectations and fears ➢ To get trainees to agree on basic norms or rules for the workshop
Expected Outputs	➢ Participants get to know each other ➢ Participants are ready to actively participate in the workshop ➢ Participants are ready to abide to their own norms ➢ Participants are ready to follow the time table
Timing / duration	Day 1 – 1 hour
Appropriate Venue	Big, well ventilated room equipped with mobile chairs. Sitting in circular form
Methodology	Interactive Exercises
Materials required	Markers, flip charts
Handouts	Workshop agenda
Session Steps	
Step 1	Opening prayer – ask for a volunteer from among the participants
Step 2	Split into groups of 3-4 and Introduce the idea of "Rhyming" Names – e.g. Charming Chisare, Mighty Mwansa, Powerful Phiri – ask each group to help each other find rhyming names. Then bring the whole group together in a circle and ask each person to introduce herself with a rhyming name (and action), which everyone repeats.
Step 3	Divide into groups to discuss – "what are your expectations and fears about the workshop? Round robin reporting.
Step 4	Present the workshop agenda and relate them to the expectations. Make a list of items which are not included in workshop topics.
Step 5	Discuss the proposed starting and stopping times and tea breaks and get agreement. Point out that flexibility in the timing of sessions is needed: often the discussion and analysis may take longer than expected, so some sessions may need additional time.

Step 6	Ask participants to brainstorm workshop rules. Record points on flipchart which can then be taped on the wall. *Possible responses: start sessions on time, encourage everyone to contribute, speak loudly, respect each other views, don't condemn any contribution, don't interrupt when a person is speaking, active listening, keep comments brief, give construction criticism, etc.*
Notes for facilitators	
Attached materials	

Module Title	WASH M&E System Training
Session 2	Introduction to WASH M&E Database
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	▪ Background and History of the database ▪ Overview of functionality ▪ Introduce potential for use within the District
Expected Outputs	▪ General understanding of the database development process ▪ General appreciation for database feature and characteristics
Timing / duration	Day 1 – 1 hour
Appropriate Venue	Large room. Seating in circular form so that every participant is visible to one
Methodology	Presentation
Materials required	Projector, Screen, Computer, markers, flip charts
Handouts	Power point presentation slides
Session Steps	
Step 1	Give overview PowerPoint presentation explaining background, history,
Step 2	Show the Malawi database map examples to demonstrate functionality
Step 3	Discuss how they are currently doing data collection and how often. Ask participants to name potential uses of the database. Capture these on a flip chart.
Notes for facilitators	
Attached materials	

Presenting the Introduction to WASH M&E Database

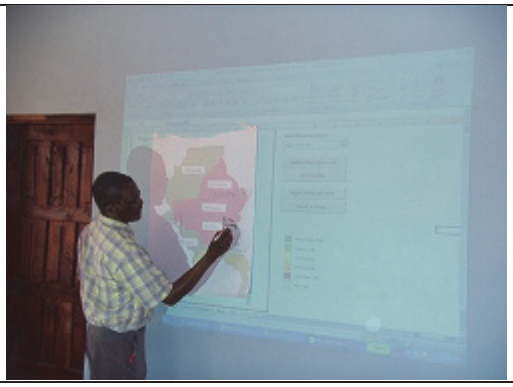
Module Title	WASH M&E System Training
Session 3	Basic Excel Skills
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database or Advanced MS Excel Skills
Objectives	Participants will learn basic MS Excel skills including: Basic Parts of the Excel Screen, Moving Around a Worksheet, Office Button Menu, Entering and Changing Data, Basic Formatting, Formulas, Sorting Data, Filtering Data
Expected Outputs	✔ All participants are able to perform the exercises given in the session. ✔ All participants able to successfully complete the competency evaluation on Day 4
Timing / duration	Day 1 – 5 hours (split into 3 sessions)
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Presentation and Interactive Exercises
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3
Handouts	This manual (**PART II – 1** Basic Microsoft Excel 2007)
Session Steps	
Step 1	Determine MS Excel skill level in the room. How often do they use it? How would they rate themselves between 1-5? (1 being beginner and 5 being expert.)
Step 2	Divide into groups of 2-3 with a mixture of skill levels in each group. If there are advanced users ask them to help others to learn through this session.
Step 3	Project the manual – **PART II – 1** Basic Microsoft Excel 2007. Each group will perform all recommended exercises on their individual computers.
Step 4	Capture any questions or concerns still remaining after the session. These can be reviewed individually or in the catch-up sessions on day 3 or 4.
Notes for facilitators	
If there are those that have more advanced excel skills in the room, ask them to help others by roaming around the different groups and answering questions when they get stuck.	
Attached materials	

Module Title	WASH M&E System Training
Session 4	How to use the WASH M&E Database
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	Using the M&E database works through the WASH M&E database guide (See **PART II – 3)** Malawi National WASH M&E Database Guide). Participants will learn how to enter data, read the analysis template and update and use the map.
Expected Outputs	▪ All participants are able to enter data, read the analysis template and use the map function. ▪ All participants able to successfully complete the competency evaluation on Day 4
Timing / duration	Day 2 – 4 hours (split into 2 sessions)
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Presentation and Interactive Exercises
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3
Handouts	This manual (**PART II – 3** Malawi National WASH M&E Database Guide)
Session Steps	
Step 1	Divide into groups of 2-3 with a mixture of skill levels in each group. If there are
Step 2	Ensure all groups have a soft copy of the database. Participants use the Database to navigate through the Guide
Step 3	Each group will perform all recommended exercises on their individual computers.
Step 4	Capture any questions or concerns still remaining after the session. These can be reviewed individually or in the catch-up sessions on day 3 or 4.
Notes for facilitators	
Attached materials	

Module Title	WASH M&E System Training
Session 5	Pivot Table skills for Data Analysis
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database or Advanced MS Excel Skills
Objectives	Refer to **Clause Part II-2** "Pivot Tables Microsoft Excel 2007" in this manual and performing exercises participants will learn pivot table skills in MS excel including: Background on PivotTables, Creating a PivotTable, Manipulating a PivotTable, Performing Calculations in a PivotTable
Expected Outputs	All participants are able to create basic pivot tables All participants understand potential of the pivot tables to analyse large amounts of data.
Timing / duration	Day 2 – 3 hours (split into 2 sessions)
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Presentation and Interactive Exercises
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3
Handouts	This manual (**PART II – 2** Pivot Tables Microsoft Excel 2007)
Session Steps	
Step 1	Determine Pivot table skill level in the room. How often do they use it? How would they rate themselves between 1-5? (1 being beginner and 5 being expert.)
Step 2	Divide into groups of 2-3 with a mixture of skill levels in each group. If there are advanced users ask them to help others to learn through this session.
Step 3	Project manual – **PART II-2** Pivot Tables in Microsoft Excel 2007. Each group will perform all recommended exercises on their individual computers.
Step 4	Capture any questions or concerns still remaining after the session. These can be reviewed individually or in the catch-up sessions on day 3 or 4.
Notes for facilitators	
If there are those that have more advanced excel skills in the room, ask them to help others by roaming around the different groups and answering questions when they get stuck.	
Attached materials	

Module Title	WASH M&E System Training
Session 6	Advanced WASH M&E Database Skills
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	Using the M&E database work through WASH M&E database advanced guide (See **PART II – 4**). Participants will learn how to add an additional indicator, update the analysis table, draw an additional TA on the map and link to the analysis table.
Expected Outputs	All participants are able to add an indicator, update the analysis table, draw an additional TA on the map and link to the analysis table
Timing / duration	Day 3 – 4 hours (split into 2 sessions)
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Presentation and Interactive Exercises
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3
Handouts	This manual (**Part II-4** Malawi National WASH M&E Advanced Database Guide)
Session Steps	
Step 1	Divide into groups of 2-3 with a mixture of skill levels in each group. If there are advanced users ask them to help others to learn through this session
Step 2	Ensure all groups have a soft copy of the database. Participants use the database to navigate through the Guide
Step 3	Project the manual –**PART II-4** Malawi National WASH M&E Advanced Database Guide. Each group will perform all recommended exercises on their individual computers.
Step 4	Capture any questions or concerns still remaining after the session. These can be reviewed individually or in the catch-up sessions on day 3 or 4.
Notes for facilitators	
Attached materials	

Module Title	WASH M&E System Training
Session 7	Catch-up and questions
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	Participants will be asked to seek clarification on any of the previous material in preparation for the competency evaluation
Expected Outputs	Participants questions are answered before the competency quiz All participants are successful on the competency quiz
Timing / duration	Day 3/4 – 1.5 hours
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Questions and Answers
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3 participants,
Handouts	
Session Steps	
Step 1	Review flip charts from day 2 and 3 sessions and answer questions or review.
Notes for facilitators	
Attached materials	

	
Practicing updating a map in the M&E system.	Providing technical support through one of the exercises

Module Title	WASH M&E System Training
Session 8	Competency Evaluation
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	A brief competency evaluation will confirm that the participants are able to complete basic excel and data base exercises. Advanced skills will not be tested.
Expected Outputs	All participants are successful on the quiz
Timing / duration	Day 3 – 1 hour
Appropriate Venue	Large room. Ability to sit in groups of 2-3 around a computer and still see the projection screen. Facilitators should be able to easily access participants to help with computer exercises. Electricity outlets for personal computers
Methodology	Quiz in small groups
Materials required	Projector, Screen, Computer, Enough Computers for 1 every 2-3
Handouts	Competency Evaluation Sheet, Evaluation Database
Session Steps	
Step 1	Split participants into groups of 2-3. Quiz can be completed in these groups
Step 2	Ensure all groups have a copy of the Evaluation Database and the paper Competency Evaluation Sheet.
Step 3	Allow 30 minutes to complete the quiz. Add 5-10 additional minutes as required.
Step 4	Facilitator must grade the quizzes and complete the certificates over lunch hour of day 4
Notes for facilitators	
Participants should not know this is a group evaluation until day 4. Facilitator will need to grade the quizzes and complete the certificates over lunch hour of day 4	
Attached materials	

Evaluating a competency on basic excel and data base exercises.

Module Title	WASH M&E System Training
Session 9	Data Collector Orientation Guideline and Indicator Definition Manual
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	The guideline prepared by the four WASH M&E pilot districts for effective orientation of data collectors will be reviewed. In this session lessons learned and the challenges overcome in the pilot districts will be discussed. The indicators will be reviewed to ensure a common understanding.
Expected Outputs	Participants are able to orient data collectors using best practice Uniform understanding of data indicator definitions
Timing / duration	Day 4 – 3 hours
Appropriate Venue	Large room. Seating in circular form so that every participant is visible to one another
Methodology	Presentation and Interactive activity
Materials required	Projector, Screen, Computer, markers, flip charts
Handouts	This manual (**PART I** M&E data collection system, **Appendix 1** data collection template, **Appendix 2** definition of each indicator)
Session Steps	
Step 1	Post flip charts around the room with each of the categories for the orientation guideline
Step 2	Ask participants to write main elements as they see them on the flip charts
Step 3	Read through the manual sections and compare to flip chart responses
Step 4	Facilitator sums up the main points of the guideline
Step 5	Give participants three pieces of colored paper to hold up after each of the definitions is read. (red – I don't understand, yellow – I'm confused, green – I understand perfectly
Step 6	Take turns around the table reading the definitions. Facilitator to point out problematic definitions such as Basic and Improved Latrines, ODF, ODF++
Step 7	Ask participants if they foresee any issues with definitions and/or if they seek additional clarification.
Notes for facilitators	
Write out the main categories for orientation of flip charts the night before	
Attached materials	

Module Title	WASH M&E System Training
Session 10	District Roles and Responsibilities and Implementation Action Plan
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	The district participants will be facilitated through a session in which they will define their roles and responsibilities for the system and will create an action plan for implementation of the WASH M&E database.
Expected Outputs	Documented roles and responsibilities for the M&E Database System Documented Action Plan for implementation roll out Group agreement on next steps
Timing / duration	Day 4 – 1 hour
Appropriate Venue	Large room. Seating in circular form so that every participant is visible to one
Methodology	Presentation
Materials required	Projector, Screen, Computer, markers, flip charts
Handouts	This manual (**PART I** M&E data collection system)
Session Steps	
Step 1	Ask participants to name all of their different roles and responsibilities for a sustainable M&E database system. Capture these on a flip chart (15min)
Step 2	Project the manual – How is data collected in "**Part I** M&E data collection system" on the screen and add any that were mentioned in the brainstorm to the list. (5 min)
Step 3	Ask participants to put a name beside each of the responsibilities in the template. Facilitator types directly into the template projected on the screen. (15 min)
Step 4	Project the suggested Action plan activities and ask the participants to review and modify if required. (10 min)
Step 5	Add timelines and person responsible for each action as a group. (10 min)
Notes for facilitators	
Attached materials	

Module Title	WASH M&E System Training
Session 11	Workshop Evaluation
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	Participants will complete a workshop evaluation form. This will help with the continuous improvement of the training materials and facilitation
Expected Outputs	Completed evaluation forms
Timing / duration	Day 4 – 15 min
Appropriate Venue	Large room. Seating in circular form so that every participant is visible to one
Methodology	Completion of a form
Materials required	
Handouts	Training Evaluation Form
Session Steps	
Step 1	Ask participants to complete evaluation form
Step 2	Facilitator should collect these forms and incorporate feedback into next
Notes for facilitators	
Attached materials	

Module Title	WASH M&E System Training
Session 12	Closing Activities
Appropriate Facilitator Background	Expert in Malawi WASH M&E Database
Objectives	Closing prayer and distribution of course completion certificates
Expected Outputs	
Timing / duration	Day 4 – 15 min
Appropriate Venue	Large room. Seating in circular form so that every participant is visible to one
Methodology	
Materials required	
Handouts	Completion certificates
Session Steps	
Step 1	Distribute Completion Certificates to participants
Step 2	Ask for a volunteer to say a closing prayer
Notes for facilitators	
Certificates must be filled in and signed at lunch on Day 4 or the evening of Day 3	
Attached materials	

Appendices

Appendix 1 Data collection Forms

1. Community WASH Data Collection Form including Additional O&M Indicators and Tally sheet

Community WASH Data Collection Form

Name of HSA		**HSA Phone Number:**		
Health Centre		**Health Centre Code:**		

										BASIC LATRINES			IMPROVED LATRINE			HANDWASHING FACILITIES		
#	**Date of Data Collection**	**Name of Village**	**Village Code**	**GVH**	**GVH Code**	**TA**	**TA Code**	**Village Population**	**Number of Households**	1. Unsatisfactory Latrines	2. Permeable Floor, No DHC	3. Permeable Floor, with DHC	4. Impermeable Floor, No DHC	5. Impermeable Floor + DHC	6. Composting Latrines (EcoSan)	7. Households With Flush Toilets	8. Handwashing Facilities **without** Soap	9. Hand Washing Facilities **with** Soap	10. Number of Households with Properly Functioning Waste Management System
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

A – 4

Comments on Form:

Community WASH Data Collection Form

		BOREHOLES			COMMUNAL TAPS / KIOSKS			INDIVIDUAL TAPS		PROTECTED SHALLOW WELLS			PROTECTED SPRINGS											
#	Name of Village	11. Functional Clean Surroundings	12. Functional Without Clean Surroundings	13. Non-Functional	14. Functional Clean Surroundings	15. Functional Without Clean Surroundings	16. Non-Functional	17. Functional	18. Non-Functional	19. Functional Clean Surroundings	20. Functional Without Clean Surroundings	21. Non-Functional	22. Functional Clean Surroundings	23. Functional Without Clean Surroundings	24. Non-Functional	25. Triggered in CLTS? (Yes, No)	26. Date Triggered	27. Date of Follow-up 1	28. Date of Follow-up 2	29. Date of Follow-up 3	30. Date of Follow-up 4	31. Verified ODF? (Yes, No)	32. Date Declared ODF	33. Verified ODF ++? (Yes, No)	34. Date Declared ODF ++
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									

Comments on Form:

Community WASH Data Collection Form

		CBM						AM		
#	Name of Village	35. No. of WPC/VHWC	36. No. of functioning and/or active WPC/VHWC at this moment	37. No. of WPC/VHWC trained in initial CBM	38. Year trained in initial CBM	39. No. of WPC/VHWC trained in CBM refresher	40. Year trained in CBM refresher course	41. No.of preventive maintenance contract between AM and WPC	42. Year.of preventive maintenance contract between AM and WPC	Remark
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

A – 6

Comments on Form:

TALLY SHEETS FOR COMMUNITY WASH DATA COLLECTION FORM

Name of village								
TA								
GVH								
Village population								
Number of households								
1. Unsatisfactory latrine	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
Basic latrine 2. Permeable floor, no DHC	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000
Basic latrine 3. Permeable floor + DHC	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000
Basic latrine 4. Impermeable floor, no DHC	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000	00000 00000 00000 00000 00000 00000
Improved Latrine 5. Impermeable floor + DHC	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Improved Latrine 6. Composting latrine	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Improved Latrine 7. HHs with Flush toilets	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

TALLY SHEETS FOR COMMUNITY WASH DATA COLLECTION FORM

Hand washing facilities(HWF) 8. HWF without soap	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Hand washing facilities(HWF) 9. HWF with soap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
10. HHs with properly functioning solid waste management system	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Boreholes 11. Functional with clean surrounding s	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Boreholes 12. Functional without clean surroundings	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Boreholes 13. Non-functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Communal Taps/Kiosk 14. Functional clean surrounding s	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Communal Taps/Kiosk 15. Functional without clean surrounding s	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Communal Taps/Kiosk 16. Non-functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Individual taps 17. Functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Individual taps 18. Non-functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Protected Shallow wells 19. Functional With Clean Surroundings	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Protected Shallow wells 20. Functional Without clean surroundings	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Protected Shallow wells 21. Non-functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

TALLY SHEETS FOR COMMUNITY WASH DATA COLLECTION FORM

Protected springs 22. Functional With Clean Surroundings	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Protected springs 23. Functional Without clean surroundings	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Protected springs 24. Non-functional	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
25. Triggered in CLTS?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
26. Date Triggered								
27. To 30. Date of followed up	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……	1…… 2…… 3…… 4……
31. Verified ODF?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
32. Date declared ODF								
33. Verified ODF++?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
34. Date declared ODF++								
CBM 35. No. of WPC/VHWC	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
CBM 36. No. of F. and/or active WPC/VHWC at this moment	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
CBM 37. No. of WPC/VHWC trained in initial CBM	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
CBM 38. Year trained in initial CBM								

TALLY SHEETS FOR COMMUNITY WASH DATA COLLECTION FORM

CBM 39. No. of WPC/VHWC trained in CBM refresher	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
CBM 40. Year trained in CBM refresher course								
AM 41. No. of preventive maintenance contract between AM and WPC	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
AM 42. Year of preventive maintenance contract between AM and WPC								

2. Public Premises WASH Data Collection Form and Tally sheet

Public Premises WASH Data Collection Form

Name of HSA	
Health Centre	

1. Public Premesis List

1. Market
2. Bus Depot
3. Fishing Dock
4. Church
5. Other

4. Water Source List

1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

6. Solid Waste Disposal List

1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

Date of data collection	Traditional Authority	Name of Public Premises	1. Type of Public Premises (Pick from List)	2. Approximate Number of Patrons per Day	3. Number of Functioning Protected Water Sources	4. Main Source of Water (Pick from List)	5. Is there a Clean Surrounding Area for the Main Water Source? (Yes=1, No=0)	6. Main Solid Waste Disposal Method (Pick from List)	7. If there is animal waste, Properly Functioning Animal Waste Pit

Public Premises WASH Data Collection Form

	MALE					FEMALE					
Name of Public Premises	8. Number of Functional Basic Latrines	9. Number of Functional Improved Latrines	10. Number of Urinals	11. Number of Flushing Toilets	12. Number of Toilets with access for the Physically Challenged	13. Number of Functional Basic Latrines	14. Number of Functional Improved Latrines	15. Number of Flushing Toilets	16. Number of Toilets with access for the Physically Challenged	17. Number of Handwashing Facilities without Soap	18. Number of Handwashing Facilities with Soap

TALLY SHEETS FOR PUBLIC PREMISES INDICATORS

Name of Public premises								
TA								
1. Type of public premises specify :	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……	☐Market ☐Church ☐Other ……
2. Approximate number of patrons per Day								
3. Number of Functioning protected water sources	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
4. Main source of water 1. Piped water/Tap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
2. Borehole	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
3. Protected shallow well	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
4. Unprotected shallow well	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
5. Protected spring	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
6. Unprotected spring	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
7. River/Stream/Lake/Dam	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
8. Other specify :	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……
5. Is there a clean surrounding area for the main water source?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
6. **Main solid waste disposal method** 1. Disposal in rubbish pit	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
2. Disposal in bin/basket	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
3. Composting	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
4. Burning	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
5. Burying underground	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
6. Pit latrine	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

TALLY SHEETS FOR PUBLIC PREMISES INDICATORS

7. Public dumping site	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
8. Open dumping	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
9. Other specify : ……	00000 00000	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……	00000 00000 ……
7. If there is animal waste, properly Functioning animal waste pit	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 8. No. of Functional basic latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 9. No. of Functional improved latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 10. Number of urinals	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Male 11. Number of flushing toilets	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 12. Number of toilets with access for the physically challenged	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Female 13. No. of Functional basic latrines	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 14. No. of functional improved latrines	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 15. Number of flushing toilets	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 16. Number of toilets with access for the physically challenged	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
17. Number of hand washing facilities without soap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
18. Number of hand washing facilities with soap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

3. Health Centre WASH Data Collection Form

Health Centre WASH Data Collection Form

Date of Data Collection		Male Patrons	9. Number of Functional Basic Latrines	
Name of Data Collector			10. Number of Functional Improved Latrines	
TA			11. Number of Urinals	
Name Health Facility			12. Number of Flushing Toilets	
Health Facility Code			13. Number of Toilets with access for the Physically Challenged	
Type of Facility (Health Center, Dispensary)		Female Patrons	14. Number of Functional Basic Latrines	
Operator (Gov't, Private, CHAM)			15. Number of Functional Improved Latrines	
Aproximate Number of Female Patrons per Day			16. Number of Flushing Toilets	
Aproximate Number of Male Patrons per Day			17. Number of Toilets with access for the Physically Challenged	
Total number of Male Staff		Male Staff	18. Number of Functional Basic Latrines	
Total number of Female Staff			19. Number of Functional Improved Latrines	
1. Functional Reticulated Water System Available? (Yes=1, No=0)			20. Number of Urinals	
2. Functioning Stand-Alone Water Point (Yes=1, No=0)			21. Number of Functional Flushing Toilets	
3. Stand Alone Water Source (Pick from List)		Female Staff	22. Number of Functional Basic Latrines	
4. Is there a Clean Surrounding Area for the Stand Alone Water Source?			23. Number of Functional Improved Latrines	
5. Main Solid Waste Disposal Method (Pick from list)			24. Number of Functional Flushing Toilets	
6. Functioning Incinerator (Yes=1, No=0)			25. Number of Handwashing Facilities without Soap	
7. Properly Functioning Placenta Pits (Yes=1, No=0)			26. Number of Handwashing Facilities with Soap	
8. Properly Functioning Liquid Waste Management System (Yes=1, No=0)			27. Number of Bath Shelters in a usable state	

3. Water Source List	5. Solid Waste Disposal List	Comments
1. Piped Water / Tap	1. Disposal in Rubbish Pit	
2. Borehole	2. Disposal in Bin/Basket	
3. Protected Shallow Well	3. Composting	
4. Unprotected Shalow Well	4. Burning	
5. Protected Spring	5. Burying underground	
6. Unprotected Spring	6. Pit Latrine	
7. River/Stream/Lake/Dam	7. Public Dumping Site	
8. Other	8. Open Dumping	
	9. Other	

4. Learning Institutions WASH Data Collection Form and Tally sheet

Learning Institutions WASH Data Collection Form

Name of Data Collector	
Position of Data Collector	

6. Water Source List
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

8. Solid Waste Disposal List
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

Date of Data Collection	Zone Name	Traditional Authority	School Number	School Name	1. Total Boys Enrolment	2. Total Girls Enrolment	3. Total number of Male Teachers	4. Total number of Female Teachers	5. Number of Functioning Protected Water Sources	6. Main Source of Water (Pick from List)	7. Is there a Clean Surrounding Area for the Main Water Source?	8. Main Solid Waste Disposal Method (Pick from list)

Learning Institutions WASH Data Collection Form

	Male Students					Female Students					Male Teachers				Female Teachers				
School Name	9. Number of Functional Basic Latrines	10. Number of Functional Improved Latrines	11. Number of Urinals	12. Number of Flushing Toilets	13. Number of Toilets with access for the Physically Challenged	14. Number of Functional Basic Latrines	15. Number of Functional Improved Latrines	16. Number of Urinals	17. Number of Flushing Toilets	18. Number of Toilets with access for the Physically Challenged	19. Number of Functional Basic Latrines	20. Number of Functional Improved Latrines	21. Number of Urinals	22. Number of Flushing Toilets	23. Number of Functional Basic Latrines	24. Number of Functional Improved Latrines	25. Number of Flushing Toilets	26. Number of Handwashing Facilities without Soap	27. Number of Handwashing Facilities with Soap

TALLY SHEETS FOR LEARNING INSTITUTIONS INDICATORS

Zone Name								
TA								
School number								
School name								
1. Total boys enrolment								
2. Total girls enrolment								
3. Total number of male teachers								
4. Total number of female teachers								
5. Number of functioning protected water sources	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
6. Main source of water								
1. Piped water/Tap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
2. Borehole	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
3. Protected shallow well	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
4. Unprotected shallow well	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
5. Protected spring	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
6. Unprotected spring	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
7. River/Stream/Lake/Dam	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
8. Other specify :	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000 .....
7. Is there a clean surrounding area for the main water source?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
8. **Main solid waste disposal method**								

TALLY SHEETS FOR LEARNING INSTITUTIONS INDICATORS

1. Disposal in rubbish pit	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
2. Disposal in bin/basket	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
3. Composting	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
4. Burning	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
5. Burying underground	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
6. Pit latrine	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
7. Public dumping site	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
8. Open dumping	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
9. Other specify :	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000 .....
Male 9. No. of Functional basic latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 10. No. of Functional improved latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 11. Number of urinals	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Male 12. Number of flushing toilets	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male 13. Number of toilets with access for the physically challenged	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Female 14. No. of Functional basic latrines	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 15. No. of Functional improved latrines	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 16. Number of urinals	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Female 17. Number of flushing toilets	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

TALLY SHEETS FOR LEARNING INSTITUTIONS INDICATORS

Female 18. Number of toilets with access for the physically challenged	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Male Teacher 19. No. of Functional basic latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male Teacher 20. No. of Functional improved latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Male Teacher 21. Number of urinals	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
Male Teacher 22. Number of flushing toilets	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Female Teacher 23. No. of Functional basic latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Female Teacher 24. No. of Functional improved latrines	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
Female Teacher 25. Number of flushing toilets	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000	00000 00000 00000 00000
26. Number of hand washing facilities without soap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
27. Number of hand washing facilities with soap	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

5. Area Mechanic Data Collection Form

AREA MECHANICS DATABASE

Date: _____

District: _____

Enumerator: _____

Area No.	Name	Sex	Village	Traditional Authority	Contact	Date of Registration
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

6. Spare Parts Retail Shop Data Collection Form

NAME LIST OF AFRIDEV SPARE PARTS RETAIL SHOPS DATABASE

Date: _____

District: _____

Enumerator: _____

NO.	NAME OF SHOP	VILLAGE	TRADITIONAL AUTHORITY	CONTACT	CURRENT SITUATION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

7. Examples to fill in the data collection forms

Community WASH Data Collection Form

Name of HSA	*K. Saukira*	HSA Phone Number:	*0996-777014*
Health Centre	*Ludzi*	Health Centre Code:	*8*

											BASIC LATRINES			IMPROVED LATRINE			HANDWASHING FACILITIES		
#	Date of Data Collection	Name of Village	Village Code	GVH	GVH Code	TA	TA Code	Village Population	Number of Households	1. Unsatisfactory Latrines	2. Permeable Floor, No DHC	3. Permeable Floor, with DHC	4. Impermeable Floor, No DHC	5. Impermeable Floor + DHC	6. Composting Latrines (EcoSan)	7. Households With Flush Toilets	8. Handwashing Facilities **without** Soap	9. Hand Washing Facilities **with** Soap	10. Number of Households with Properly Functioning Waste Management System
1	*2014/11/20*	*Mzangawo*	*15*	*Kangwere*	*4*	*Zulu*	*3*	*900*	*60*	*0*	*1*	*1*	*17*	*1*	*0*	*1*	*0*	*3*	*19*
2	*2014/11/21*	*Kapalamula*	*13*	*Kachamba*	*7*	*Zulu*	*3*	*315*	*45*	*1*	*0*	*2*	*3*	*2*	*0*	*0*	*4*	*4*	*2*
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Comments on Form:

Community WASH Data Collection Form

		BOREHOLES			COMMUNAL TAPS / KIOSKS			INDIVIDUAL TAPS		PROTECTED SHALLOW WELLS			PROTECTED SPRINGS			CLTS / ODF									
#	Name of Village	11. Functional Clean Surroundings	12. Functional Without Clean Surroundings	13. Non-Functional	14. Functional Clean Surroundings	15. Functional Without Clean Surroundings	16. Non-Functional	17. Functional	18. Non-Functional	19. Functional Clean Surroundings	20. Functional Without Clean Surroundings	21. Non-Functional	22. Functional Clean Surroundings	23. Functional Without Clean Surroundings	24. Non-Functional	25. Triggered in CLTS? (Yes, No)	26. Date Triggered	27. Date of Follow-up 1	28. Date of Follow-up 2	29. Date of Follow-up 3	30. Date of Follow-up 4	31. Verified ODF? (Yes, No)	32. Date Declared ODF	33. Verified ODF ++? (Yes, No)	34. Date Declared ODF ++
1	*Mzangawo*	*2*	*1*	*2*	*1*	*2*	*2*	*1*	*1*	*0*	*0*	*1*	*2*	*1*	*0*	*N*	*Sep. 2013*	*Dec. 2013*	*Jan. 2014*	*Feb. 2014*	*Sep. 2014*	*N*	*Not yet*	*N*	*Not yet*
2	*Kapalamula*	*2*	*2*	*2*	*0*	*0*	*0*	*1*	*2*	*1*	*1*	*0*	*2*	*2*	*1*	*Y*	*Feb. 2013*	*Dec. 2013*	*Jan-14*	*Mar. 2014*	*Sep. 2014*	*Y*	*Nov. 2014*	*N*	*Not yet*
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Comments on Form:

		CBM						AM		
#	Name of Village	35. No. of WPC/VHWC	36. No. of functioning and/or active WPC/VHWC at this moment	37. No. of WPC/VHWC trained in initial CBM	38. Year trained in initial CBM	39. No. of WPC/VHWC trained in CBM refresher	40. Year trained in CBM refresher course	41. No.of preventive maintenance contract between AM and WPC	42. Year.of preventive maintenance contract between AM and WPC	Remark
1	*Mzangawo*	*2*	*1*	*1*	*1999*	*1*	*2014*	*1*	*2013*	
2	*Kapalamula*	*1*	*1*	*1*	*1996*	*0*	*N/A*	*1*	*2010*	
3										
4										
5										
6										
7										
8										
9										
10										

Comments on Form:

Learning Institutions WASH Data Collection Form

Name of Data Collector	A Chimbizi
Position of Data Collector	SAEHO

Water Source List
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

Solid Waste Disposal List
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

Date of Data Collection	Zone Name	Traditional Authority	School Number	School Name	Total Boys Enrolment	Total Girls Enrolment	Total number of Male Teachers	Total number of Female Teachers	Number of Functioning Protected Water Sources	Main Source of Water (Pick from List)	Is there a Clean Surrounding Area for the Main Water Source?	Main Solid Waste Disposal Method (Pick from list)
08/12/2014	*Boma*	*Zulu*	*4*	*Kamuzu*	*1200*	*2450*	*21*	*14*	*3*	*2*	*Y*	*1*
08/12/2015	*Boma*	*Mlonyeni*	*1*	*Chapanama*	*600*	*900*	*12*	*6*	*1*	*2*	*N*	*1*

Learning Institutions WASH Data Collection Form

School Name	Male Students					Female Students					Male Teachers				Female Teachers				
	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Urinals	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Urinals	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Urinals	Number of Flushing Toilets	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Flushing Toilets	Number of Handwashing Facilities without Soap	Number of Handwashing Facilities with Soap
Kamuzu	*8*	*2*	*2*	*0*	*2*	*10*	*6*	*0*	*0*	*2*	*0*	*2*	*0*	*0*	*0*	*2*	*0*	*8*	*2*
Chapanama	*0*	*4*	*1*	*0*	*0*	*0*	*4*	*2*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*2*	*0*	*4*	*0*

Public Premises WASH Data Collection Form

Name of HSA	*ASK Moyomsana*
Health Centre	*Kapiri*

Public Premesis List-1
1. Market
2. Bus Depot
3. Fishing Dock
4. Church
5. Other

Water Source List-2
1. Piped Water / Tap
2. Borehole
3. Protected Shallow Well
4. Unprotected Shalow Well
5. Protected Spring
6. Unprotected Spring
7. River/Stream/Lake/Dam
8. Other

Solid Waste Disposal List-3
1. Disposal in Rubbish Pit
2. Disposal in Bin/Basket
3. Composting
4. Burning
5. Burying underground
6. Pit Latrine
7. Public Dumping Site
8. Open Dumping
9. Other

Date of data collection	Traditional Authority	Name of Public Premises	Type of Public Premises (Pick from List-1)	Approximate Number of Patrons per Day	Number of Functioning Protected Water Sources	Main Source of Water (Pick from List-2)	Is there a Clean Surrounding Area for the Main Water Source? (Yes=1, No=0)	Main Solid Waste Disposal Method (Pick from List-3)	If there is animal waste, Properly Functioning Animal Waste Pit
08/12/2014	*Dambe*	*Kapiri Market*	*1*	*1700*	*1*	*2*	*N*	*8*	*N*
08/12/2015	*Dambe*	*Kapiri Cathoric*	*4*	*200*	*1*	*3*	*Y*	*1*	*N*

Public Premises WASH Data Collection Form

	MALE					FEMALE					
Name of Public Premises	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Urinals	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged	Number of Functional Basic Latrines	Number of Functional Improved Latrines	Number of Flushing Toilets	Number of Toilets with access for the Physically Challenged	Number of Handwashing Facilities without Soap	Number of Handwashing Facilities with Soap
Kapiri market	*2*	*4*	*1*	*0*	*0*	*4*	*2*	*0*	*0*	*2*	*0*
Kapiri Catholic	*0*	*4*	*0*	*0*	*1*	*0*	*4*	*0*	*1*	*0*	*0*

Health Centre WASH Data Collection Form

Date of Data Collection	8/12/2014	Male Patrons	Number of Functional Basic Latrines	0
Name of Data Collector	S Paul		Number of Functional Improved Latrines	4
TA	Zulu		Number of Urinals	0
Name Health Facility	Mchinji District Hospital		Number of Flushing Toilets	10
Health Facility Code	12		Number of Toilets with access for the Physically Challenged	2
Type of Facility (Health Center, Dispensary)	Health centre	Female Patrons	Number of Functional Basic Latrines	0
Operator (Gov't, Private, CHAM)	Gov't		Number of Functional Improved Latrines	10
Aproximate Number of Female Patrons per Day	2700		Number of Flushing Toilets	8
Aproximate Number of Male Patrons per Day	1200		Number of Toilets with access for the Physically Challenged	2
Total number of Male Staff	128	Male Staff	Number of Functional Basic Latrines	0
Total number of Female Staff	62		Number of Functional Improved Latrines	4
Functional Reticulated Water System Available? (Yes=1, No=0)	0		Number of Urinals	8
Functioning Stand-Alone Water Point (Yes=1, No=0)	0		Number of Functional Flushing Toilets	6
Stand Alone Water Source (Pick from List-1)	1	Female Staff	Number of Functional Basic Latrines	0
Is there a Clean Surrounding Area for the Stand Alone Water Source?	Y		Number of Functional Improved Latrines	12
Main Solid Waste Disposal Method (Pick from list-2)	4		Number of Functional Flushing Toilets	8
Functioning Incinerator (Yes=1, No=0)	1		Number of Handwashing Facilities without Soap	0
Properly Functioning Placenta Pits (Yes=1, No=0)	1		Number of Handwashing Facilities with Soap	8
Properly Functioning Liquid Waste Management System (Yes=1, No=0)	1		Number of Bath Shelters in a usable state	2

Water Source List-1	Solid Waste Disposal List-2	Comments
1. Piped Water / Tap 2. Borehole 3. Protected Shallow Well 4. Unprotected Shalow Well 5. Protected Spring 6. Unprotected Spring 7. River/Stream/Lake/Dam 8. Other	1. Disposal in Rubbish Pit 2. Disposal in Bin/Basket 3. Composting 4. Burning 5. Burying underground 6. Pit Latrine 7. Public Dumping Site 8. Open Dumping 9. Other	

NAME LIST OF AREA MECHANICS

Date: *1/1/2015*

District: *Mchinji*

Enumerator: *Pili (WMA)*

Area No.	Name	Sex	Village	Traditional Authority	Contact	Date of Registration
1	*Eftone ******	*Male*	*Mikundi*	*Mduwa*	*0991 *** *****	*1/1/2013*
2	*Edward ******	*Male*	*Chakhalira*	*Mduwa*	*0996 *** *****	*1/1/2013*
3	*Andrew ******	*Male*	*Mkanda*	*Mkanda*	*0999 *** *****	*1/6/2012*
4	*Fanuel ******	*Male*	*Gumba*	*Mkanda*	*0884 *** *****	*1/6/2012*
5	*George ******	*Male*	*Chimombo*	*Mkanda*	*0993 *** *****	*1/10/2013*
6	*Nelson ******	*Male*	*Chipumi*	*STA Kapondo*	*0993 *** *****	*1/10/2013*
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

NAME LIST OF AFRIDEV SPARE PARTS RETAIL SHOPS

Date: *1/1/2015*

District: *Mchinji*

Enumerator: *Pili (WMA)*

NO.	NAME OF SHOP	VILLAGE	TRADITIONAL AUTHORITY	CONTACT	CURRENT SITUATION
1	*Pagwanji Enterprise*	*Bua Trading Centre*	*Mlonyeni*	*0991 *** ****	*Selling*
2	*R.K. Hardware*	*Matutu Trading Centre*	*Mduwa*	*0996 *** ****	*Selling*
3	*Angoni Grocery*	*Kaigwazanga*	*Mkanda*	*0999 *** ****	*Stopped selling*
4	*Zuze General Suppliers*	*Waliranji Trading Centr*	*Mavwele*	*0884 *** ****	*Selling*
5	*Give and Take*	*Mikundi Trading Centre*	*Mduwa*	*0993 *** *****	*Selling*
6	*Yanu Yanu*	*Kapiri*	*Dambe*	*09[illegible]3 *** *****	*Selling*
7					
8					
9					
10					

1. Community Indicators

Appendix 2 Definition of the WASH Indicators

Definition of Community WASH Data Indicators

No	Indicator	Definition from M&E Handbook [*1]	Photo	How to measure
1	**Unsatisfactory latrines**	Pit Latrines where walls are missing or do not provide "privacy" for the user (e.g. walls are missing or inadequate) and/or there is no roof Hanging toilets Bucket latrine A pit or receptacle of any depth which is not full or over-flowing	 	Number of Unsatisfactory Latrines

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
2	Basic Latrines	**Permeable floor, No DHC**	Basic facility has the following characteristics: • A pit of any depth which **is not full or over** flowing • Floor is a well finished **mud slab with drop hole** • Walls can be made of anything but must provide **privacy for the user** • Roof can be made of anything but must provide **shelter from the rain** • Some form of or no foot rests (that will guide appropriate positioning), • A superstructure with some form of **a door** or a type of **closing mechanism** or **enclosure and a roof**, **Mud floor without drop hole cover**	 	Number of Basic Latrines
3		**Permeable floor, with DHC**	**Mud floor with drop hole cover** **Drop hole cover:** A drop hole cover should be tight fitting and cover the entire latrine drop hole. No gaps should be present that would allow flies to escape the latrine. A drop hole cover should be fitted with a handle for easy removal and replacement		

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
4		**Impermeable floor, No DHC**	Made of Cement, burnt bricks, plastic or ceramic with cement lining without drop hole cover **Impermeable floor**: An impermeable latrine floor may be made from **cement plaster**, **concrete**, **ceramic**, **fibre glass**, **metals**, **plastic**, **clay tiles/burn bricks plus motor**, or other materials that can be cleaned easily. An impermeable floor must be smooth and solid, have no cracks, perforations, or openings other than the drop-hole.		
5	**Improved Latrine**	**Impermeable floor, with DHC**	An improved sanitation facility should have the following characteristics: • a well constructed and functional pit or receptacle with a minimum depth of 1.0 metre (which is not full or over-flowing), • **impermeable floor** made of concrete, plastic, tiles or burnt brick with cement lining and foot rests • a good **superstructure with a door**, **roof** and **walls** (which would offer privacy, comfort, security and dignity for the user) and • some other hygienic features such as a **tight fitting drop hole cover** (which would minimise smell and movement of flies).		Number of Improved Latrines

No	Indicator	Definition from M&E Handbook [*1]	Photo	How to measure
6	**Compositing Latrines (Ecosan)**	• Well-constructed sub-structure (normally with accessible double holes mostly referred to as vaults); • **either separates urine from human faeces or not (in extremely dry climates)and safely contains new or fresh faeces separate from composted faeces** • where urine is separated, it can be stored in containers for use as liquid fertilizer • Well-constructed superstructure with walls that provide privacy and roof providing shelter from the rain • Where **ash** and/or **soil** are used after use.		Number of Ecosan Latrine
7	**Households with flush Toilets**	Have running water available, and flush to either a sewer or a septic tank.		Number of flush toilets

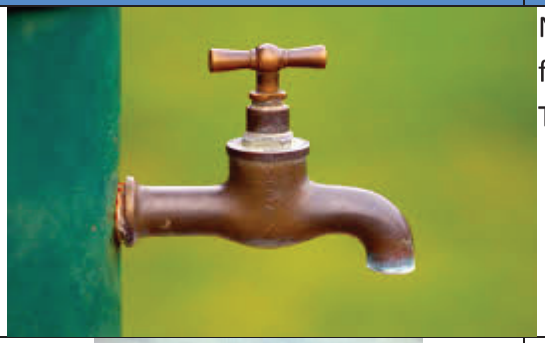
No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
8	Hand Washing Facilities	**Hand Washing facilities without Soap**	A hand washing facility should allow for free flowing water to be released over the hands (e.g. bucket with tap, home plastic water facility, jug and bowl and Soap should also be available next to the hand washing facility ***Note: HWF with no water do not count***		Number of HWFs without soap
9		**Hand Washing facilities with Soap**	A hand washing facility should allow for free flowing water to be released over the hands (e.g. bucket with tap, home plastic water facility, jug and bowl and Soap should also be available next to the hand washing facility ***Note: HWF with no water do not count***		Number of HWFs with soap
10	**Number of households with properly functioning Waste Management system**		Households **<u>with working</u>** refuse pits/ waste bins ***Note: If no functional, do not count***		Number of households with functional waste management system

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
11	Boreholes	**functional with clean surrounding**	• A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if **all components of the water extraction system are in good working order**. • **Borehole** defined that a hole which has been dug, bored, driven or drilled into the ground to depth of more than 25m for the purpose of extracting water. • **And surrounding** is free from excessive dirt, free from bushes, a soak way pit **with stones present**. ***Note: if without clean surrounding do not count***		Number of functional BHs with clean surrounding
12		**functional without clean surrounding**	A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if all components of the water extraction system are in good working order. And surrounding has excessive dirt, bushes, and a soak way pit **without stones present and stagnant water**.		Number of functional BHs without clean surrounding

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
13		**Non-functional**	A water point is considered non-functional if it is not providing water **at the time of a spot check**. This may be as a result of ***breakdown, vandalism or Abandoned:***		Number of non-functional boreholes
14	**Communal Taps/Kiosks**	**functional with clean surrounding**	A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if all components of the water extraction system are in good working order. And surrounding is free from excessive dirt, free from bushes, **a soak way pit with stones present**. ***Note: if without clean surrounding do not count***	 	Number of functional communal Taps with clean surrounding

No	Indicator	Definition from M&E Handbook [*1]	Photo	How to measure
15	**functional without clean surrounding**	A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if all components of the water extraction system are in good working order. And surrounding has excessive dirt, bushes, a **soak way pit without stones present and stagnant water**	 	Number of functional communal Taps without clean surrounding

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
					
16		**Non-functional**	A water point is considered non-functional if it is not providing water **at the time of a spot check**. This may be as a result of **breakdown, disconnection due to Non-Payment, Vandalism or Abandoned:**		Number of non-functional communal Tap
17	**Individual Taps**	**Functional**	A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if **all components of the water extraction system are in good working order**		Number of functional individual Taps (**inside house tap and yard tap**)

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
18		**Non-functional**	A water point is considered non-functional if it is not providing water **at the time of a spot check**. This may be as a result of **breakdown, disconnection due to Non-Payment, Vandalism or Abandoned:**		Number of non-functional individual Taps
19	**Protected Shallow Wells**	**functional with clean surrounding**	• A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check. • **Protected well** defines it is protected from **runoff water by a well lining or casing** that is raised above ground level and **a platform** that diverts spilled water away from the well. It is also **covered,** so that bird droppings and animals cannot fall into the well. Source: UNCEF/WHO Joint Monitoring Programme • **shallow well** define that a hole which has been dug, bored, driven or drilled into the ground to depth of less than 25m for the purpose of extracting water. • **clean surrounding** is free from excessive dirt, free from bushes, **a soak way pit with stones present.**		Number of protected shallow wells **with** clean surrounding

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
			Note: if without clean surrounding do not count		
20		**functional without clean surrounding**	A water point is considered functional if it is providing water at the minimum appropriate flow-rate at the time of a spot check, and if all components of the water extraction system are in good working order. And surrounding has excessive dirt, bushes, and **a soak way pit without stones present** and stagnant water.		Number of functional protected shallow wells **without** clean surrounding
21		**Non-functional**	A water point is considered non-functional if it is not providing water at the time of a spot check. This may be as a result of ***breakdown, Vandalism or Abandoned:***		Number of Non-functional protected shallow wells

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
22	Protected Spring	**functional with clean surrounding**	If it has a soak away pit, apron, and a drain , is located at least 30m from the closest toilet or latrine , and if it has a **water-tight concrete cover to protect from runoff**. And surrounding is free from excessive dirt, free from bushes, **a soak way pit with stones** present. ***Note: if without clean surrounding do not count***		Number of functional protected spring **with** clean surrounding
23		**functional without clean surrounding**	If it has a soak away pit, apron, and a drain , is located at least 30m from the closest toilet or latrine , and if **it has a water-tight concrete cover to protect from runoff**. And surrounding has excessive dirt, bushes, and **a soak way pit without stones** and there is stagnant water.		Number of functional protected springs **without** clean surrounding
24		**Non-functional**	A water point is considered non-functional if it is not providing water at the time of a spot check. This may be as a result of ***breakdown, Vandalism or Abandoned:***		Number of Non-functional protected spring

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
25	Sanitation	**Triggered with CLTS?**	Triggering refers to a process that inspires and empowers rural communities to stop open defecation and to build and use latrines without external support. Triggered either by government or development partners		Yes or No
26		**Date triggered**	N/A	N/A	Date
27		**Date of follow up 1**	1st Supervisory visit to a triggered village with aim of assessing change done by government EWs or development partners	N/A	Date
28		**Date of follow up 2**	2nd Supervisory visit to a triggered village with aim of assessing change done by government EWs or development partners	N/A	Date
29		**Date of follow up 3**	3rd Supervisory visit to a triggered village with aim of assessing change done by government EWs or development partners	N/A	Date
30		**Date of follow up 4**	4th Supervisory visit to a triggered village with aim of assessing change by government EWs or development partners	N/A	Date
31		**Verified ODF?**	Final supervisory visit to find out if indeed community has stopped open defecation by DCT members or a team of four members one of whom should be from the health sector.	N/A	Yes or No
32		**Date declared ODF**	Every household uses a latrine with drop hole	N/A	Date

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
			cover (except for eco-san and VIP types), that offers privacy, and there is no excreta in the open. In this particular case sharing is acceptable		
33		**Verified ODF ++?**	**Every household** has and uses a latrine with drop hole cover, superstructure, and hand washing facility. In addition, for a village to qualify for ODF++; **all primary and secondary schools, community-based childcare centres, religious institutions, market centres and health centres in the village** have latrines with drop hole covers, superstructures, and hand washing facilities	N/A	Yes or No
34		**Date declared ODF ++**	Done by DCT members and an external/independent person.	N/A	Date
35	**CBM**	**No. of WPC/VHWC**	Members elected from the water user Communities to regulate, use and care for the water point, collect and manage money to pay for spare parts and repairs	N/A	Number of WPCs and VHWC in the village
36		**No. of functioning and or active WPC/VHWC at this moment**	WPC is considered active/ functional **if it is able to carry out their roles and responsibility and more especially when their borehole is functional**	N/A	Number of active WPCs and VHWC in a village
37		**No. of WPC trained in the initial CBM**	N/A	N/A	Number of trained WPCs and VHWC in a Village
38		**Year trained in initial CBM**	N/A	N/A	Date

No	Indicator		Definition from M&E Handbook [*1]	Photo	How to measure
39		**No. of WPC/VHWC trained in refresher training**	N/A	N/A	Number of WPCs and VHWC trained in refresher training.
40		**Year trained in CBM refresher course**	N/A	N/A	Date
41	**AM**	**No. of preventive maintenance contracts between AM and WPC**	This is a **service agreement between WPC and AM** to be repairing a borehole any time it broken.	N/A	Number of preventive maintenance contracts between WPCs and AM
42		**Year of preventive maintenance contract between AM and WPC**	N/A	N/A	Date

[*1] Reference: INDICATORS CONCEPTS AND DEFINITIONS FOR IRRIGATION, WATER AND SANITATION, Ministry of Water Development and Irrigation, 2014

2. Public Premises and Learning Institutions Indicators

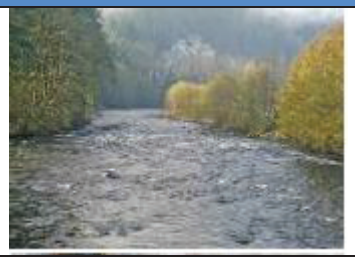
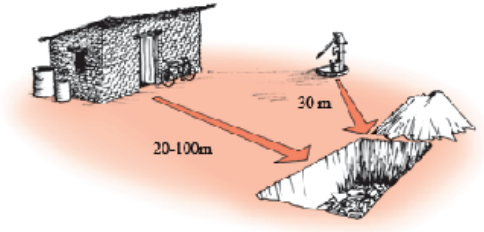
Definition of Learning Institutions / Public Premises WASH Data Indicators

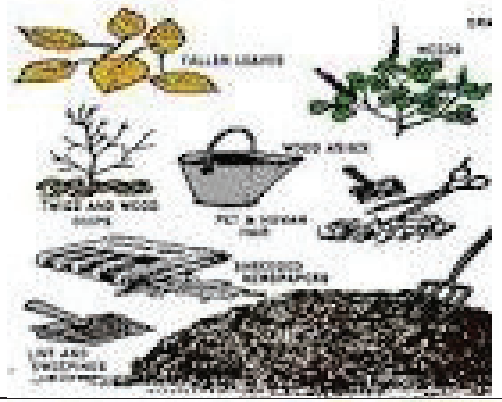
No	Indicator	Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
1	**Zone Name**	-	-	Write Zone Name
2	**Traditional Authority**	-	-	Write name of traditional Authority
3	**School Number**	-	-	Write School number
4	**School Name**	-	-	Write name of School
5	**Total Boys Enrolment**	-	-	Number of boys
6	**Total Girls Enrolment**	-	-	Number of girls
7	**Total number of Male Teachers**	-	-	Number of male teachers
8	**Total number of Female Teachers**	-	-	Number of female teachers
9	**Number of Functioning Protected Water Sources**	• **Functional**: if it is providing water at the minimum appropriate flow-rate **at the time of a spot check**, and if **all components** of the water extraction system **are in good working order.** • **Protected water source:** it is considered likely to be safe to drink, free from risk of contamination, economically affordable, and reliable over a long time period. a. Piped water into dwelling, yard or plot b. Public / communal tap/standpipe or	-	Number of functioning protected water points

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
			kiosk c. Borehole or tube well d. Protected dug well e. Protected spring		
10	Main Source of Water	**1. Piped Water / Tap**	A **communal tap** /**kiosk**/ and also **a private or household piped connection** including **yard tap** is considered an improved water source if it has **a soak away pit, apron, and a drain**.	  	Choose the main water source for learning Institutions / public premises from the list

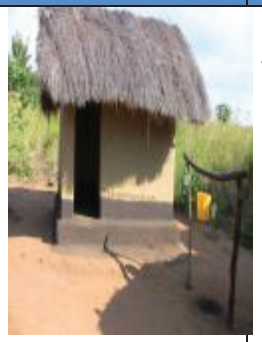
No	Indicator	Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
	2. Borehole	A borehole with a hand pump is considered an improved water supply if it has **a soak away pit**, **apron**, and a **drain**, and if it is located at least 100 m from the closest toilet or latrine.		Choose the main water source for learning Institutions / public premises from the list
	3. Protected Shallow Well	A protected shallow well with a handpump is considered an improved water supply if it has a **soak away pit, apron, and a drain** , and if it is located at least 30m from the closest toilet or latrine.		Choose the main water source for learning Institutions / public premises from the list
	4. Unprotected Shallow Well	This is a dug well for which one of the following conditions is true: 1) the well is **not protected from runoff water**; or 2) the well is **not protected from bird droppings and animals.** If at least one of these conditions is true, the well is unprotected. Source: UNCEF/WHO Joint Monitoring Programme	 	Choose the main water source for learning Institutions / public premises from the list

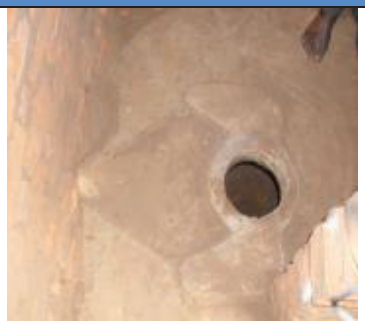
No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
					
		5. Protected Spring	A protected spring is considered an improved water supply if it has a soak away pit, apron, and a drain , is located at least 30m from the closest toilet or latrine , and if it has a **water-tight concrete cover** to protect from runoff.		Choose the main water source for learning Institutions / public premises from the list
		6. Unprotected Spring	This is a spring that is subject to **runoff**, **bird droppings**, or the **entry of animals**. Unprotected springs typically do **not have a "spring box".** Source: UNCEF/WHO Joint Monitoring Programme	 Source: http://www.wateraid.org/news/photo	Choose the main water source for learning Institutions / public premises from the list
		7. River/Stream/Lake/Dam	Dam-a barrier constructed to hold back water and raise its level, the resulting reservoir being used in the generation of electricity or as a water supply		Choose the main water source for learning Institutions / public premises from the list

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
					
		8. Other	Other sources of water for the institution such as **rain water**, **water tank truck**, **cart with small tank**, **bottled water** and etc. (Specify)		Choose the main water source for learning Institutions / public premises from the list
11	**Is there a Clean Surrounding Area for the Main Water Source?**		Surrounding is free from excessive dirt, free from bushes, **a soak way pit with stones** present.		Yes or No
12	**Main Solid Waste Disposal Method**	**1. Disposal in Rubbish Pit**	Institutions with working disposal sites **such as a land fill**	 Source: http://tilz.tearfund.org	Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
		2. Disposal in Bin/Basket	Institutions with working waste bins/baskets		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.

No	Indicator	Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
	3. Compositing	Solid waste **is converted into composite manure** which will later be used for agricultural purpose.		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
	4. Burning	Incineration of waste materials converts the waste into ash, flue gas, and heat. The ash is mostly formed by the inorganic constituents of the waste, and may take the form of solid lumps or particulates carried by the flue gas		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
	5. Burying underground	Waste are **buried under ground** and collected from under soils		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
		6. Pit Latrine	An improved pit latrine should have the following characteristics : Privacy, Safe from collapse, Pit not full ,Impermeable floor ,Tight fitting drop-hole cover, Non-leaking roof		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
		7. Public Dumping Site	Designated site for solid waste dumping **more especially in market centres**.		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
		8. Open Dumping	The disposal of **unwanted items in open ground**. There is typically no leachate control, no access control, no cover, no management, and many waste pickers.		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.
		9. Other	Other methods of solid waste disposal (specify)		Choose the main solid waste disposal Method for learning Institutions / public premises from the list.

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo		How to measure
8	Male Students	**Number of Functional Basic Latrines**	Basic facility has the following characteristics: • A pit of any depth which **is not full or over** flowing • Floor is a well finished **mud slab with drop hole** • Walls can be made of anything but must provide **privacy for the user** • Roof can be made of anything but must provide **shelter from the rain** • Some form of or no foot rests (that will guide appropriate positioning), • A superstructure with some form of **a door** or a type of **closing mechanism** or **enclosure and a roof**,			Number of functional basic latrines
9		**Number of Functional Improved Latrines**	An improved sanitation facility should have the following characteristics: • a well constructed and functional pit or receptacle with a minimum depth of 1.0 metre (which is not full or over-flowing), • **impermeable floor** made of concrete, plastic, tiles or burnt brick with cement lining and foot rests • a good **superstructure with a door**, **roof** and **walls** (which would offer privacy, comfort, security and dignity for the user) and • some other hygienic features such as a **tight fitting drop hole cover** (which would minimise smell and movement of flies).			Number of Improved latrines.

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
			Impermeable floor: An impermeable latrine floor may be made from cement plaster, concrete, ceramic, fibre glass, metals, plastic, clay tiles/burn bricks plus motor, or other materials that can be cleaned easily. An impermeable floor must be smooth and solid, have no cracks, perforations, or openings other than the drop-hole. **Drop hole cover:** A drop hole cover should be tight fitting and cover the entire latrine drop hole. No gaps should be present that would allow flies to escape the latrine. A drop hole cover should be fitted with a handle for easy removal and replacement	 	
10		**Number of Urinals**	Made of Cement, tile/burnt bricks, plastic or ceramic with cement lining with drop hole cover		Number of boys urinals

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
11		**Number of Flushing Toilets**	Have running water available, and flush to either a sewer or a septic tank.		Number of flush toilets
12		**Number of Toilets with access for the Physically Challenged**	Accessibility can be viewed as the "ability to access" and benefit from some system and economic life which includes not only physical access but access to the facility to boost the inherent right of disabled persons to have unhindered access to the National Public Toilet Map, to enable users to locate public toilet facilities.		Number of toilets with access to physically challenged
10	**Female Students**	**Number of Functional Basic Latrines**	See indicator No.8		
11		**Number of Functional Improved Latrines**	See indicator No.9		

No	Indicator		Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
12		**Number of Urinals**	See indicator No. 10		
13		**Number of Flushing Toilets**	See indicator No.11		
14		**Number of Toilets with access for the Physically Challenged**	See indicator No.12		
14	**Male Teachers**	**Number of Functional Basic Latrines**	See indicator No. 8		
15		**Number of Functional Improved Latrines**	See indicator No. 9		
16		**Number of Urinals**	See indicator No. 10		
17		**Number of Flushing Toilets**	See indicator No. 11		
18	**Female Teachers**	**Number of Functional Basic Latrines**	See indicator No. 8		
19		**Number of Functional Improved Latrines**	See indicator No. 9		
20		**Number of Flushing Toilets**	See indicator No.11		

No	Indicator	Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
21	**Number of Hand washing Facilities without Soap**	A hand washing facility should allow for free flowing water to be released over the hands (e.g. bucket with tap, home plastic water facility, jug and bowl). ***HWF with no water do not count***	 	Number of HWFs **<u>without soap</u>**
22	**Number of Hand washing Facilities with Soap**	A hand washing facility should allow for free flowing water to be released over the hands (e.g. bucket with tap, home plastic water facility, jug and bowl) and **<u>Soap</u>** should also be available next to the hand washing facility. ***HWF with no water do not count***		Number of HWFs **<u>with soap</u>**

No	Indicator	Definition from M&E Hand Book [*1] and/or general meaning	Photo	How to measure
				

[*1] Reference: INDICATORS CONCEPTS AND DEFINITIONS FOR IRRIGATION, WATER AND SANITATION, Ministry of Water Development and Irrigation, 2014

Appendix 3 Sample Report Format

MM.YYYY

XXXX District, DEHO and DWDO

XXXX Districts WASH Monitoring and Evaluation Report

1. Introduction

Malawi Government is committed to providing adequate, reliable and sustainable water and sanitation services coupled with hygiene promotion to the citizens of Malawi to meet the ever increasing demand for safe water.

The vision of the water and sanitation sector is water and sanitation for all, always. The expected output for the water department under the MGDS is that Malawi is expected to have increased access to water and sanitation services averaging a distance of 500m from communities.

Monitoring activities are often carried out by a range of different actors at the national level, including the Ministry, NSO, Donor Agencies and Non-Governmental Organizations with the aim of coming up with a sector wide information system that could provide vital data and information for programme/project planning and implementation as well as resource allocation and prioritization in the sector. Regular data collection and analysis will provide a robust M&E and MIS systems that inform performance of the sector. Recently a study was conducted on the harmonised national WASH indicators in Mchinji to establish the current status of the sector.

This report therefore will base on the findings of a survey conducted in Mchinji on selected WASH indicators. Mchinji district has 16 health centres that are responsible for delivery of health care services in 9 Traditional Authorities. The survey was conducted in the catchment areas of the 16 health centres. The HSAs were enumerators for this survey and Assistant Environmental Health Officer.

Since the survey was based on interviews and observations reliability may be compromised.

2. Results and Discussion

The preliminary results of the survey showed that the district has an estimated population of about 507,013 in 109,143 households distributed in 1428 villages as shown in table below

Table 1: Population Distribution per T/A

T/A	Villages	Village Population	Number of Households
TA Mlonyeni	144	64,174	13,992
SC Mavwere	208	77,803	18,405
TA Zulu	149	79,786	17,827
SC Mduwa	259	72,331	14,462
TA Mkanda	321	95,654	20,040
SC Dambe	136	41,319	8629
TA Simphasi	155	56,730	11,793
STA Kapondo	2	915	192
STA Nyoka	54	18,301	3,803
Grand Total	**1,428**	**507,013**	**109,143**

Data: District environmental health office, Dec. 2014 – Jan. 2015

2.1 Sanitation and Hygiene

According to WHO "Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and faeces. Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal as well as provisions of sanitary facilities such a pit latrine and refuse pits for the rural areas.

a). Latrine Coverage

This study revealed that the coverage of these sanitation facilities in still inadequate in Mchinji district requiring the attention of Authorities. Statistics indicate that total latrine coverage is at 46% and this varies per T/A. The table 2 below shows:

Table 2: Latrine coverage

Traditional Authority	Total Latrine coverage
TA Mlonyeni	48%
SC Mavwere	48%
TA Zulu	47%
SC Mduwa	32%

Traditional Authority	Total Latrine coverage
TA Mkanda	54%
SC Dambe	54%
TA Simphasi	33%
STA Kapondo	76%
Grand Total	**46%**

Data: District environmental health office, Dec. 2014 – Jan. 2015

From the table above it shows that latrine coverage is below 50% and T/A Mduwa has the lowest coverage of latrines pegged at 32%. This is a far low percentage as per the dream of Malawi to be ODF of ODF Malawi by 2015. This therefore calls for immediate action to reverse the situation so as to improve the sanitation standards in the communities consequently improving the health of the rural masses.

Table 3: Latrine Coverage by Technology

Traditional Authority	Unsatisfactory Latrines Coverage	Total Basic Latrine coverage	Total Improved Latrine coverage	Composting Toilet (EcoSan) coverage	Flush Toilet coverage
TA Mlonyeni	**17%**	**43%**	**5%**	**0%**	**0%**
SC Mavwere	**20%**	**44%**	**4%**	**1%**	**0%**
TA Zulu	**19%**	**37%**	**11%**	**1%**	**4%**
SC Mduwa	**28%**	**30%**	**1%**	**0%**	**0%**
TA Mkanda	**20%**	**52%**	**2%**	**0%**	**0%**
SC Dambe	**14%**	**52%**	**2%**	**0%**	**0%**
TA Simphasi	**23%**	**30%**	**3%**	**1%**	**1%**
STA Kapondo	**8%**	**76%**	**0%**	**0%**	**0%**
STA Nyoka	**24%**	**38%**	**4%**	**0%**	**0%**
Grand Total	**21%**	**41%**	**4%**	**0%**	**1%**

Data: District environmental health office, Dec. 2014 – Jan. 2015

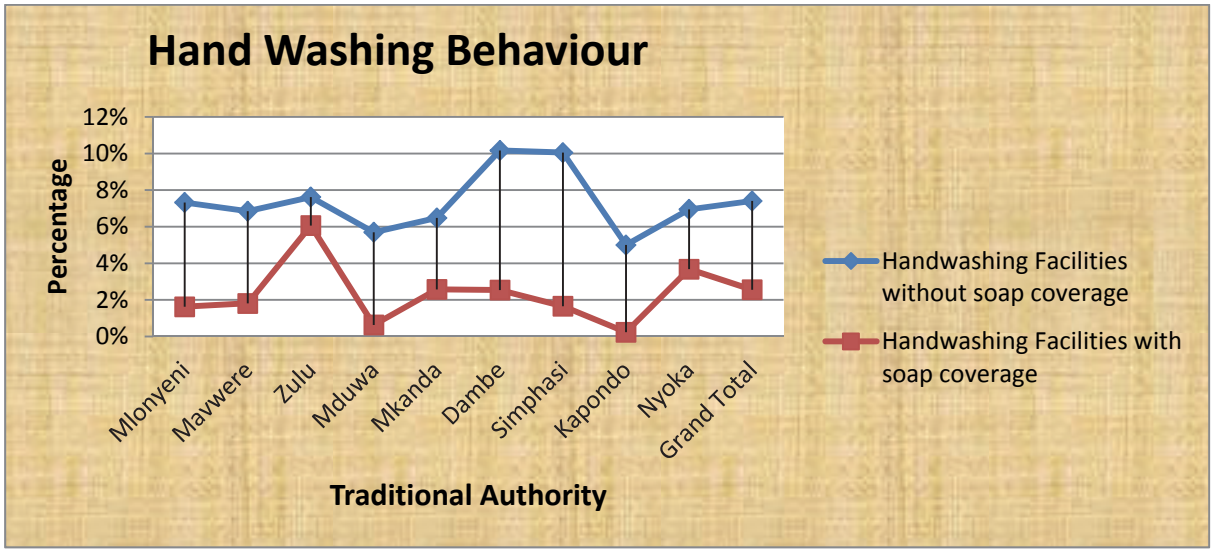
From the table above it shows that basic latrines are the most locally available technology among all other different technologies for latrines accounting for 41%. Ecosan and Flush toilets rank the least of all the technologies. According to the results in table above, the only T/A with relatively higher number of flush toilets is Zulu with at least 4%. This may be attributed to the fact that it is located at the headquarter of the district hence flush toilets due to availability of piped water.

b). Hand Washing

The study has shown that hand washing behaviour is very low in Mchinji accounting for 10%. Those that wash hands using soap are very few only 3% of the total households with those

that do not use soap accounting for 7%. This shows that there is a lot that needs to be done to improve the hand washing behaviour with soap or without soap. The figure below shows the hand washing behaviour coverage.

Fig.1 Hand Washing Behaviour Coverage



Data: District environmental health office, Dec. 2014 – Jan. 2015

From the graph it shows that T/A Kapondo, Mduwa and Mkanda have the least coverage in terms of hand washing behaviour. This is in agreement with the level of sanitation in the T/As Mduwa and Kapondo. This means Traditional Authorities Kapondo and Mduwa should be given priority when it comes to issues of promoting hand washing facilities and hand washing behaviour as well as sanitation promotion.

c). Solid waste management system coverage

This survey has revealed that only 20% of house households have some sort of functional solid waste system which is mainly waste pits while the majority 80% practising open dumping. The coverage varies per Traditional Authority as shown in the graph below.

Fig2: Graph Showing Coverage of Solid Waste Manage System

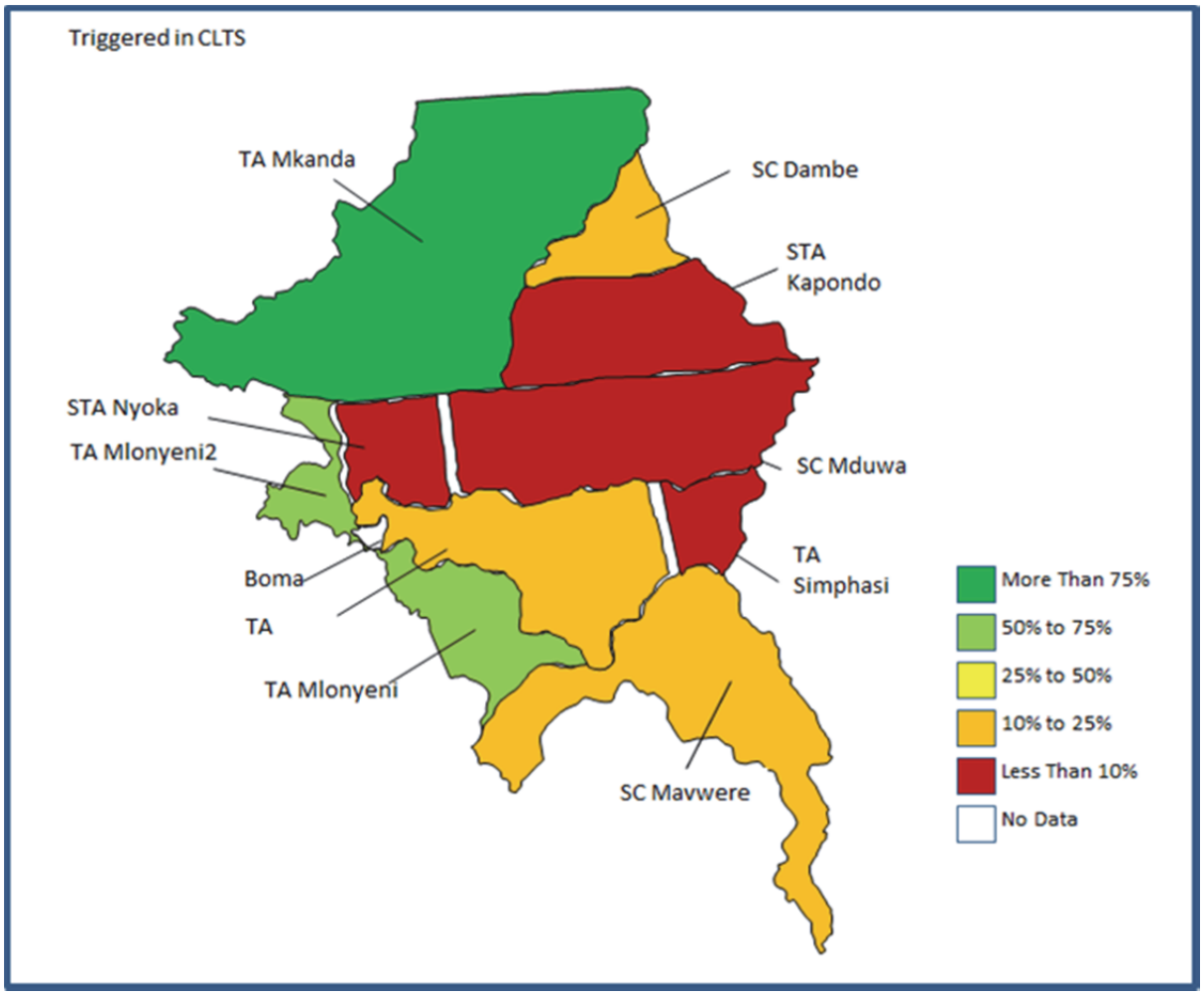
Data: District environmental health office, Dec. 2014 – Jan. 2015

Again the situation above is worrisome to the health authorities as unmanaged garbage does not only harbour disease vectors but also cause environmental hazards in addition to filthy environment. This survey has revealed that solid waste management at household level is a big problem in Mchinji. Traditional Authority Simphasi is the least served in terms of solid waste management.

d). Community Led Total Sanitation Triggering (CLTS)

Community Led Total Sanitation is a process to inspire and empower rural communities to stop open defecation and start to build and use pit latrines without external hardware subsidy. CLTS is based at stimulating a collective action towards stoppage of open defecation in their communities. This is an approach that the government of Malawi adopted as a tool for promoting sanitation in communities as well as schools and institutions. This study has stabled that those villages that were reached with triggering are only about 32%. This percentage varies among traditional Authorities. The map below shows the coverage of CLTS triggering per Traditional Authority.

Fig3: Map showing coverage of CLTS triggering



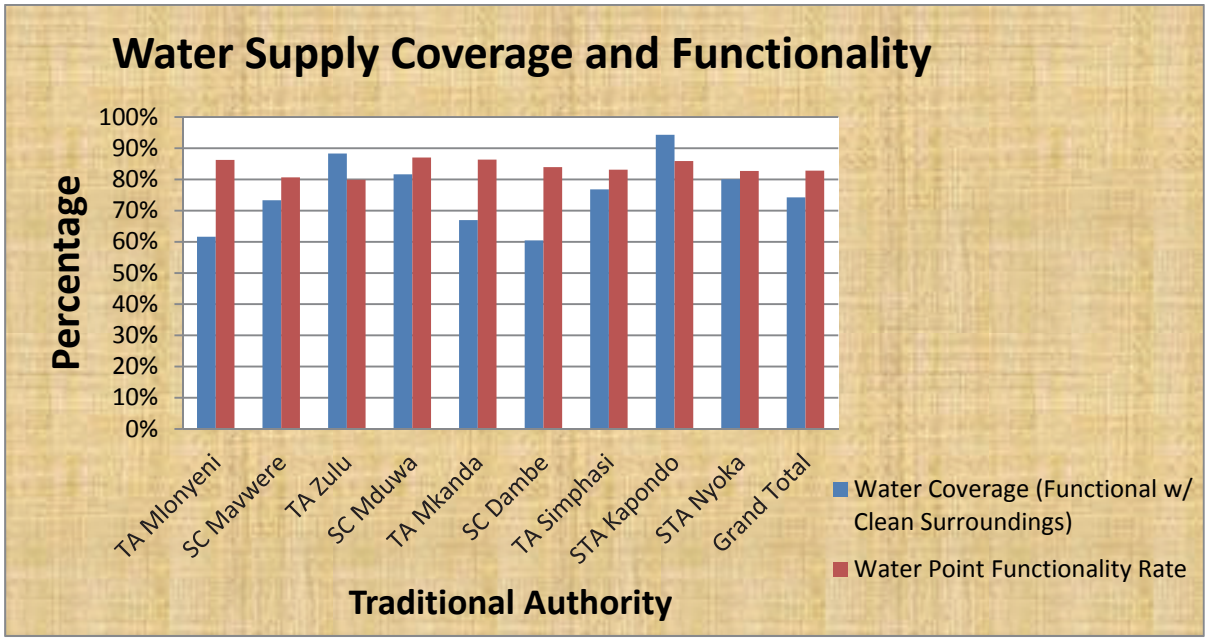
Data: District environmental health office, Dec. 2014 – Jan. 2015

From the map it has shown that more than 75 % of T/A Mkanda had been triggered with CLTS while T/A Mduwa is the least triggered. This shows that efforts have not been evenly distributed to the whole of Mchinji district in terms of triggering. In addition, Traditional Authorities Mduwa, Simphasi and Kapondo are the least served according to this survey. Of all the triggered villages only 5% were verified as Open Defecation free (ODF). And there is no ODF ++ villages so far.

2.2 Water Supply Coverage

The survey found out that water supply coverage is around 74% but this varies across the traditional Authorities. Some T/As have better coverage than others. This shows that there is need to do more in terms of water supply. The findings also revealed that functionality of the water points is relatively better pegged at 83%. However, this should not cause the authorities to relax since functionality is supposed to be almost 100%. The fig below gives a summary of coverage and functionality per T/A as well as the grand total.

Fig.4. Graph showing Water Coverage and Functionality.



Data: District environmental health office, Dec. 2014 – Jan. 2015

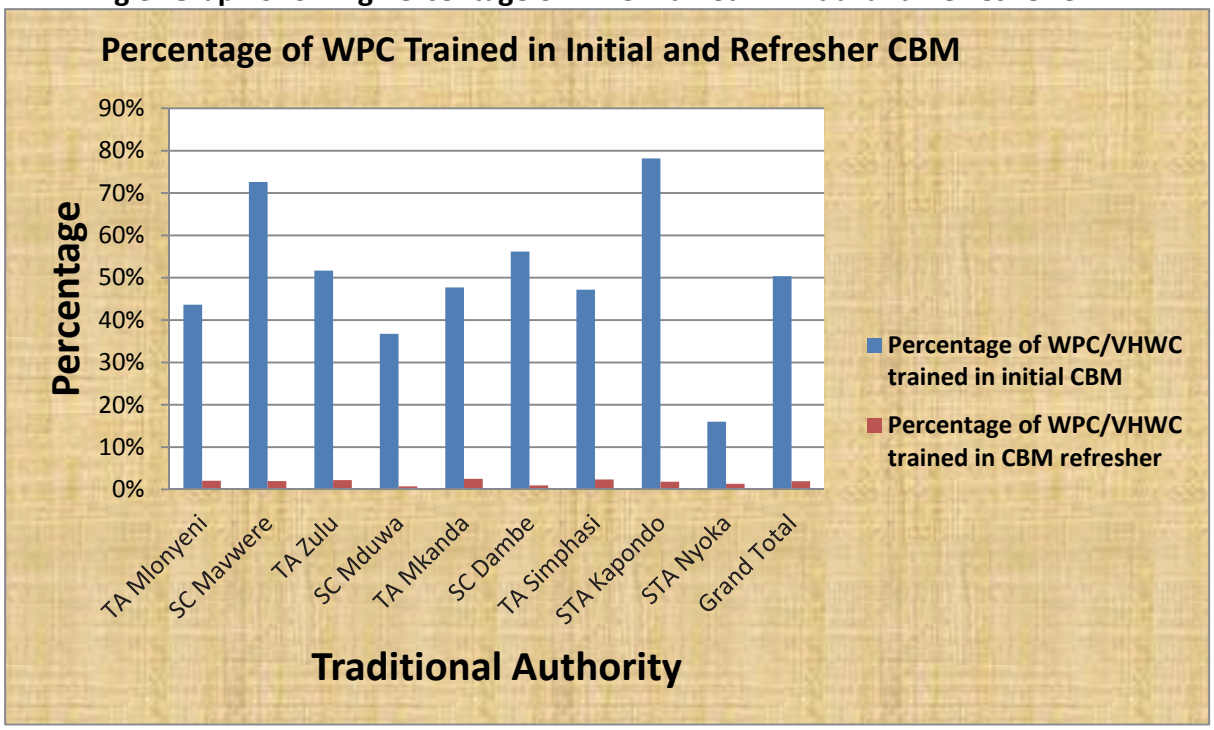
Water supply coverage and functionality varies also among T/As as well as in terms of technology. Traditional Authorities Dambe and Mlonyeni are the least served in terms of water supply coverage pegged at 60 and 62 percent respectively. Therefore, these two T/As should be the given priority any time when new water supply facilities will be constructed.

2.3 Community Based Management Training (CBM)

Community based management refers to all process done to empower the community to have a sense of ownership and responsibility over their water points and such that they maintain the water point when it breaks. Therefore the trainings are conducted with the aim of empowering communities to take over responsibility and ownership of water points such that they do operation and maintenance of their water points.

This report therefore gives a summary of the statics as of the date of the survey. The study has revealed that only 50% of all the committees received CBM training while 2% received refresher training with the remaining 48% not. Even if the committee may have been trained in initial CBM but with time there is loss of members that due to marriages and or death. This means there is need for refresher training to be conducted to the members that replace those who leave the committee on regular basis. Activeness of water point committee is highly linked to whether the committee was trained or not. The activeness of committees' is highly linked to training those committees that are trained and that this may have an impact on the functionality of the water point. This underscores the need for CBM refresher course to be conducted on regular basis by water department at district level. The Figure below shows percentage of WPC that received initial and refresher CBM training.

Fig.5: Graph Showing Percentage of WPC Trained in initial and Refresher CBM

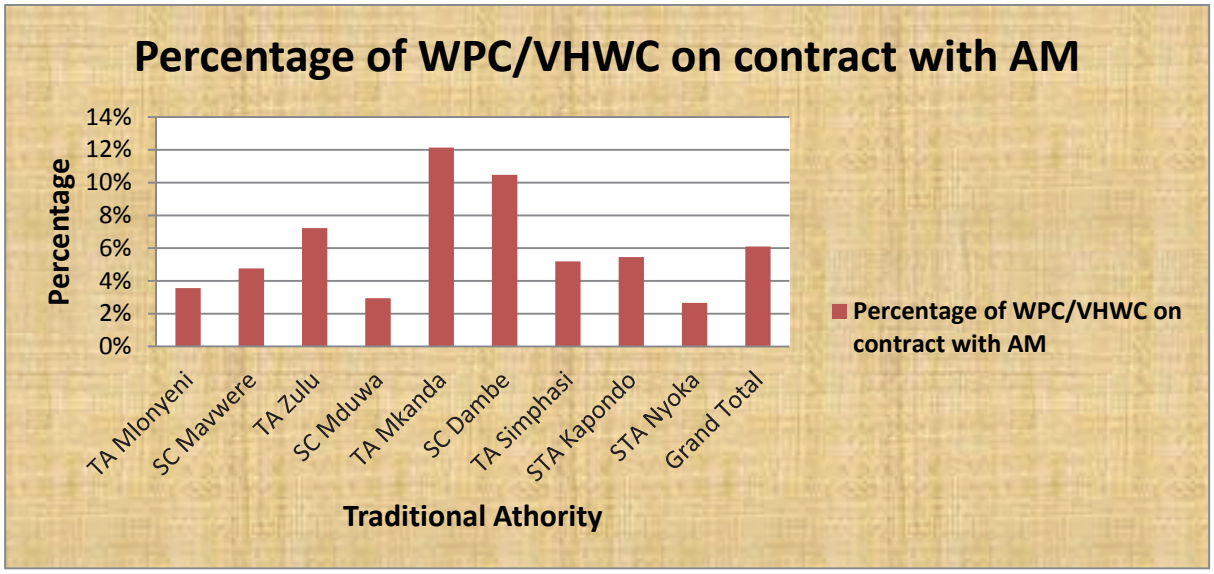


Data: District environmental health office, Dec. 2014 – Jan. 2015

2.4 Area Mechanic Contracts with Water Point Committees

Through CBM trainings water point committees are empowered with skills to do minor repairs to the borehole. However, more advanced repairs require the help of Area mechanics who have skills to repair complicated breakdowns. As such Area Mechanics are a crucial part of the operation and maintenance system. Since Area mechanics do repairs at cost that is paid by the water point committee, their work is done through contracts. The number of contracts made between Area Mechanic and Water point committee determines how much they have worked in that particular period. This survey shows that only 6% of the committees had service contracts with the Area Mechanic. This percentage varies across T/As as shown in the figure below. T/A Mkanda was found to have the highest number of contracts pegged at 12% in Mchinji.

Fig.6 Graph showing percentage of committees on Contract with Area Mechanics



Data: District environmental health office, Dec. 2014 – Jan. 2015

From the graph above it is shown that about 94% of WCPs are not on contract with Area Mechanic. This may be attributed to lack of initial and or refresher training which zero's in on the need for WPC to be on preventive contract with Area Mechanics. The other reason could be attributed to financial problems with the committee because the community members lost trust due to mismanagement of contributed water funds.

3. Conclusion

Looking at the above findings it can be concluded that sanitation and hygiene coverage is still low with latrine coverage pegged at 46% while hand washing behaviour is at 10%. This study has revealed that only 20% of all households in the district have a properly functioning solid waste management system.

The above results showed that 32% of villages in Mchinji have been reached with CLTS triggering out of which 5% were verified as ODF.

Water coverage is at 74% while functionality is at 83%. Since water is life the remaining 26% is still a bigger percentage that needs to be served with water.

4. Recommendations

1. It should be recommended that more efforts are required to reverse the sanitation problem and that efforts should be distributed across all T/As. It should be mentioned here that Traditional Authority Mduwa is the least served in terms of sanitation and hand washing behaviour and that more efforts needs to be directed to this Traditional Authority.

2. It should be concluded that Mchinji district still needs more water supply facilities to cater for the remaining 26% who have no access to safe water and also to improve the functionality from 83% to 100%. Furthermore, it should be mentioned that Traditional Authorities Dambe and Mlonyeni are the least served in terms of water supply.

3. Based on this survey 48% of water point committees have not been trained and these require refresher training so that they are able to carry out their duties properly.

Rural Water Supply Operation and Maintenance Series were developed for planners, managers and practitioners for the practices of operation and maintenance of boreholes fitted with Afridev hand pumps in rural Malawi.