Community Drinking Water Safety & Security Plan (DWSSP)



Community Details				
Village Name				
Area/Province				
No of Households				
Village Population				
Village Contact Person				
Revision No:	Date:			

Section 1 – Water Committee								
Name	Current Role in Water Committee / Community	Skills Available / Interest in the Water Supply	Contact Details (Address/Phone/E-mail)					

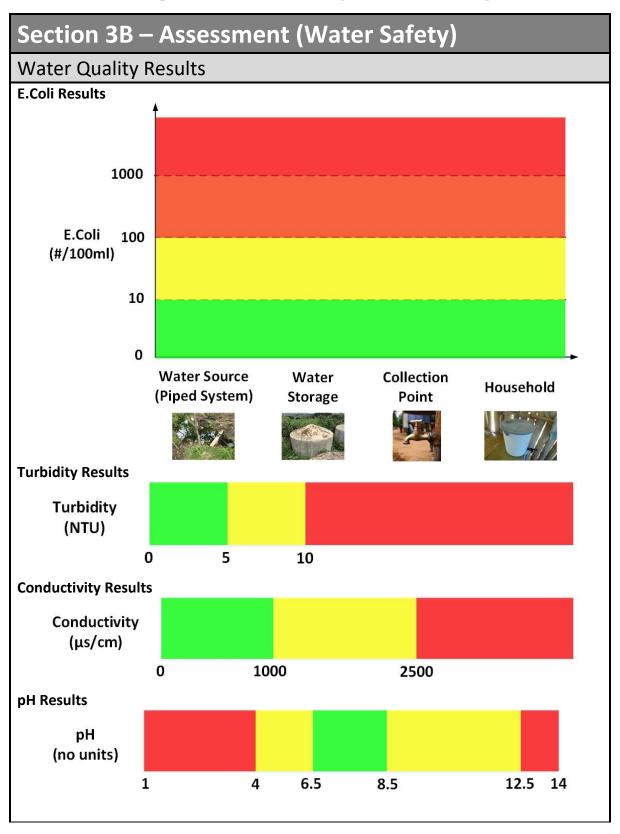
Section 2 – Description of Current Supply

Section 2 Description of Current Supply					
System Map/Flow Diagram					
Please draw a map/flow diagram of the current water and waste system If map is attached separately, please tick here					

Section 2 – Description of Current Supply								
Existing Wate	er Supply							
Piped Supply ☐ (River/Spring)	Rainwater Capture		Groundwater □	Water ☐ Storage	Water ☐ Distribution			
Measured Flow from Source (litres/min) 2A	No of Buildings Collecting 2C	Buildings Roof Area Measured Collecting (m²) Flow		Amount Available (litres) 2H	Number of Distribution Points			
	(litres p 2E = 2C x	per year er year) 2D x 0.7 x _per_year x						
Supply per day (litres/day) 2B = 2A x 1440 mins	1000 0.7 is efficiency factor x 1000 to convert m ³ to litres		Supply per day (litres/day) 2G = 2F x Minutes Used/Day		Measured Flow (litres/min)			
Water Quality Result		Quality sult	Water Quality Result	Water Quality Result	Water Quality Result			
	d Preparatio		Washing □ Bath	ing □ Toilets				
Other (Please explain) Treatment Methods Filtration Chlorine UV Light Other (Please explain)								
	Existing Waste System							
Number of Rubbish Pits								
Type of Toilets			Number of Eac	ch Type				
VIP (pit and bush)	VIP (pit and bush)							
Septic Tank								
Pour-Flush								
Other (Please list)								

Section 3A – Assessment (Water Access/Availability) Water Availability Storage Estimated Usage by Estimated Daily Usage Number of People Required Population per year (litres per day) in Community (litres) (litres per year) [3B = 3A* N litres/day]**3A** [3C = 3B][3D = 3A*N I/day *365]3B (Select value for N) **3C** 3D Water Quantity – Piped Supply System or Groundwater Source Is the supply in **2B/2G** enough to meet demand **3B**? Yes □ No □ If NO, look to improve the system design to increase flow (Please tick) \Box Is this source available at all times during the year? Yes ☐ No ☐ If NO, develop/strengthen Additional Water Source/s (Please tick) □ Water Quantity – Rainwater Capture (ONLY ANSWER IF RWC IS ONLY WATER SOURCE) Is the supply in **2E** enough to meet demand **3D**? Yes □ No □ If NO, develop Additional Water Source/s (Please tick) Water Storage - Piped Supply System Is the current storage **2H** enough to meet the required storage amount **3C**? (If NO, add More Storage) How much extra Storage is required? litres Number of tanks required [Storage Required] tanks 5000 OR 10000 Water Quantity - Distribution Points Are flow rates **more** than 6 litres/min at the tapstand/s? Yes □ No □ If NO, look to improve the system design to increase distribution flow (Please tick) \Box REMEMBER: Doing this can change pressures and flows in the system. It is important to get some technical assistance when planning to change flows in the distribution system. Water Access (Only Upgrade if enough water is supplied by the system) Water Access Do more than 5 households share 1 distribution point? Yes ☐ No ☐ Are any distribution points more than 200m away (2-3mins walk)? Yes □ No □ If YES to either question, then you need extra distribution points (Please Tick) \square REMEMBER: Doing this can change pressures and flows in the system. It is important to get some technical assistance when planning to increase the distribution system. How many extra points are required? PLEASE MARK ON COMMUNITY MAP

Community Drought Risk and Preparedness									
Risk Factors	Mitigation Measures	Risk	Improvements						
Significant dry periods >3months □ Variation in source water level/s □ Significant leaks in system□ Other (Please list)	High storage capacity Multiple water sources Water resource management (WRM) undertaken HWTS prepared Other (Please list)	High (Action Needed Now) Medium (Upgrades Needed) Low (No Action Required)	Fix/optimise system Increase storage Develop additional source Implement WRM Prepare HWTS Other (Please list)						
Community Flood R	isk and Preparednes	S							
Risk Factors	Mitigation Measures	Risk	Improvements						
Significant periods of heavy rain causing unusable dirty river, spring or well water Damage to intake, pipes, tanks United Check (Please list)	High storage capacity Multiple water sources Good spring or well-head protection Water resource management (WRM) undertaken HWTS prepared Other (Please list)	High (Action Needed Now) Medium (Upgrades Needed) Low (No Action Required)	Fix/optimise system Increase storage Develop additional source Implement WRM Prepare HWTS Other (Please list)						



Water Safet	Water Safety Plan – Risk Assessment							
Water Source	Water Source − Surface Water Source Do you use a Surface Water Source? (Please Tick) Yes Do you use a Surface Water Source?							
Hazard	Contamination Source (Tick if present)	Cu	rrent Control Mea (Tick if present)		Risk	Improvements Required		
Bacteria in Water	Human houses upstream Farm animals nearby/upstream Crop farming nearby/upstream Toilet within 30m Other (Please list)	Inta Gra Esta zon	ncing around source ake screen present avel or Sand Filter ablished water protec ae aer (Please list)	□ □ tion □	High (Action Needed Now) Medium (Upgrades Needed) Low (No Action Required)	Establish a water protection zone Build Fence Install screen Install Filter Move Source Move Toilet Other or Temporary Improvement (Please list)	ts	
Chemicals in Water	Use of pesticides in area Waste water discharge in area Algae present at source Other (Please list)	Esta	ivel or Sand Filter ablished water protec ie ner (Please list)	□ tion □	High □ Medium □ Low □	Establish a water protection zone Install Filter Move Source Other or Temporary Improvement (Please list)	ts	

Bad Colour or Taste	Soil Erosion at source Other (Please list)]	Gravel or Sand Filter Storage and settlement tanks Other (Please list)	 High Medium Low	 Install Filter Install Storage Other or Temporary Improvements (Please list)
Bad Flow or Pressure	High pressure in taps Significant leaks in pipes Other (Please list)		Minimum Head Device Pressure Box Other (Please list)	High Medium Low	 Install Head Device Install Pressure Box Other or Temporary Improvements (Please list)

Water Source	e – Spring Source	Do you use a Spring Source	? (Please Tick)	Yes No 🗆
Hazard	Contamination Source (Tick if present)	Current Control Measures (Tick if present)	Risk	Improvements Required
Bacteria in Water	Animals can access source Spring box/cover is dirty Silt/soil/dirt near source Surface water can flow Into spring water Toilet within 30m Other (Please list)	Spring box and cover	High	Establish a water protection zone Build Fence Build spring box Install/Clean cover, vent Dig diversion ditch Move Toilet Other or Temporary Improvements (Please list)
Chemicals in Water	Use of pesticides in area Waste water discharge in area Algae present at source Other (Please list)	Gravel or Sand Filter Established water protection zone Other (Please list)	High Medium Low	Establish a water protection zone Install Filter Move Source Other or Temporary Improvements (Please list)

Bad Colour or Taste	Silt/soil/dirt near source Other (Please list)	Gravel or Sand Filter Storage and settlement tanks Other (Please list)	High Medium Low	Install Filter Install Storage Other or Temporary Improvements (Please list)
Bad Flow or Pressure	High pressure in taps Significant leaks in pipes Overflow water at source Other (Please list)	Overflow pipe (clean) Pressure Box Other (Please list)	High Medium Low	Install Head Device Install Pressure Box Other or Temporary Improvements (Please list)

Water Source	e – Rainwater Capture		Do you use a Rainwa	ter Cap	ture? (Please Tick) Yes □ No □	
Hazard	Contamination Source (Tick if present)	Cu	rrent Control Meas (Tick if present)	ures	Risk	Improvements Re	quired
Bacteria in Water	Roof is dirty Gutters are dirty Open access to tank Tank is cracked Tap is leaking Water collection area is dirty / standing water Pollution (e.g. trees, Excreta etc) near system Collection bucket dirty Other (Please list)	Tan Firs	ik cover in place ik inlet has mesh/sieve it flush filter ner (Please list)		High	Clean roof/gutters Install covers on tank Install inlet mesh/sieve Install first flush filter Repair cracks Repair/replace tap Add drainage/clean collection area Remove pollution Other or Temporary Impr (Please list)	N° N° Novements
Chemicals in Water	Roof is corroded/rust Other (Please list)		t flush Filter er (Please list)		High Medium Low	Install Filter Repair/replace/paint roo Other or Temporary Import (Please list)	

Water Source	e – Groundwater	Do you use a Groundwater Source? (Please Tick) Yes □ No □			
Hazard	Contamination Source (Tick if present)	Current Control Measures (Tick if present)	Risk	Improvements Required	
Bacteria in Water	Toilet within 10m of well Toilets above well height Other pollution within 10m of well e.g. rubbish Standing water within 2m of well Broken drainage channel Surface water can enter From broken wall Cracks in concrete wall Collection bucket dirty Other (Please list)	Fence around well Well is sealed to 3m depth Drainage channel installed Established water protection zone Other (Please list)	High	Establish a water protection zone	
Chemicals in Water	Use of pesticides in area Waste water discharge in area Other (Please list)	Water treatment system Established water protection zone Other (Please list)	High Medium Low	Establish a water protection zone Install Treatment Move Source Other or Temporary Improvements (Please list)	

Water Pump		Does your system have a w	ater pump? (Pleaso	e Tick) Yes 🗆 No 🗆
Hazard	Contamination Source (Tick if present)	Current Control Measures (Tick if present)	Risk	Improvements Required
Toilet near pump Animals can access pump Pump is dirty Surface water can access the pump		Protective structure for pump Fence around pump Adequate drainage around pump	High	Establish protection zone Clean pump and area Build protective structure Build fence
Water	Standing water in pump area Other (Please list)	Established protection zone Diversion ditch Other (Please list)	Needed) Low (No Action Required)	Move toilet □ Dig diversion ditch □ Other or Temporary Improvements (Please list)
Chemicals in Water	Pipes are corroded Other (Please list)	Plastic piping (where appropriate) Other (Please list)	High Medium Low	Replace corroded pipe Other or Temporary Improvements (Please list)
Damaged Pump	Exposed location Debris loose/overhanging Other (Please list)	Protective structure for pump Other (Please list)	High Medium Low	Remove debris Build protective structure Other or Temporary Improvements (Please list)

Water Storag	Water Storage – Storage Reservoir Do you use Water Storage? (Please Tick) Yes □ No □								
Hazard	Contamination Source (Tick if present)		Current Control Measures (Tick if present)		Risk		Improvements Required		
Bacteria in Water	Open access to tank Vents/screens are dirty Tank is cracked Pipes are leaking Dirty inside tank Other (Please list)		Tank cover in place Tank inlet has mesh/sieve Tank has air vent Other (Please list)		High (Action Nee Now) Medium (Upgrades Needed) Low (No Action Required)	eded	Install covers on tank Install inlet mesh/sieve Install air vent Repair cracks Repair/replace pipes Clean tank Other or Temporary Impres (Please list)	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
Chemicals in Water	Pipes are corroded Other (Please list)		Treatment Filter Other (Please list)		High Medium Low]	Replace corroded pipe Install Filter Other or Temporary Impr (Please list)	□ □ ovements	
Bad Flow or Pressure	High pressure in taps Low pressure in taps Significant leaks in pipes Other (Please list)		Overflow pipe (clean) Float valve Other (Please list)		High Medium Low]	Install overflow pipe Install float valve Other or Temporary Impr (Please list)	□ □ ovements	

Water Distrik	oution – Stand Pipes	Do you use a Stand Pipes?	(Please Tick) Yo	es 🗆 No 🗆		
Hazard	Contamination Source (Tick if present)	Current Control Measures (Tick if present)	Risk	Improvements Required		
Bacteria in Water	Leaks in surrounding pipes Animals access to area Standing water in collection area Rubbish/pollution near tap stand Tap stand is cracked Taps are leaking Other (Please list)	Fence around stand pipe Drainage area/channel Other (Please list)	High	Build fence/s Install drainage Repair/replace pipe/s Repair/replace pipe stand/s Repair/replace tap/s Clean collection area/s Other or Temporary Improvements (Please list)		
Chemicals in Water	Pipes are corroded □ Other (Please list)	Plastic piping Other (Please list)	High Medium Low	N° Replace corroded pipe/s □ Other or Temporary Improvements (Please list)		

Water Consu	Water Consumers – Households Was this assessed during the visit? (Please Tick) Yes □ No □								
Hazard	Contamination Source (Tick if present)	Current Control Measures (Tick if present)	Risk	Improvements Required					
Bacteria in Water	Non-covered storage ☐ Containers are dirty ☐ Household Rainwater ☐ Dirty buckets for collection☐ Other (Please list)	UV treatment	High	Obtain sealed storage containers Clean/disinfect storage Containers & buckets Begin boiling water Begin UV treatment Install first flush Obtain chlorine tablets Other or Temporary Improvements (Please list)					
Chemicals in Water	House pipes/storage is corroded Other (Please list)	Other (Please list)	High Medium Low	Replace corroded pipe Install Treatment Other or Temporary Improvements (Please list)					

Section 3C – Asse	ssment (Sanitatior	n System)								
Toilet Sanitary Survey Result										
How many toilets need replacing?										
How many toilets need upgrading?										
Replace/Install New Toile	ts									
Are you replacing or installing new toilets? (Please tick) Yes □ No □										
Toilet Options (Please indicate the type and amount of toilets required)										
VIP Toilet □ Number Required	Pour Flush Toilet □ Number Required	Septic Tank Toilet □ Number Required								
		Has soil permeability test been performed? Yes □ No □								
Upgrade Existing Toilets										
What toilet type/s do you wai	Do existing toilets require upgrading? (Please tick) Yes □ No □ What toilet type/s do you want to upgrade? (Please tick all relevant ones)									
VIP Toilet – Number requiring upgrade Number requiring repairs to structure Number requiring vent in super structure Number requiring a vent with flywire Number requiring upgrade of slab/riser Number that would require lining of pit Number requiring collection pit at adequate depth										
Pour Flush Toilet – Number requiring upgrade Number requiring repairs to structure Number requiring venting in the super structure Number requiring upgrade of slab/riser Number of collection pits requiring a cover for access Number of collection pits requiring a vent Number that would require lining of pit										
Septic Tank Toilet – Number r	equiring upgrade									
Number requiring repairs to s Number requiring vents Number with drainpipes requ Number with drainpipes requ Number requiring a new septi Number requiring a drainage	iring a vent iring inspection access ic tank									

Section 4 – Improvement Plan								
Problem/Hazard	Improvement Required	Who	Who Timeframe		Status (Tick when complete)			
					Implemented □			
					Implemented □			
					Implemented			
					Implemented			
					Implemented			
					Implemented □			

Problem/Hazard	Improvement Required	Who	Timeframe	Cost	Status (Tick when complete)
					Implemented
					Implemented \Box

Section 5 – Community Management **Monitoring Schedule** System How Often? What? Who? Component (Tick if present) **5A** Primary Water Source □ Type..... **5B** Secondary Water Source □ Type..... **5C** Water Storage □ Type..... **5D** Water Treatment Type..... **5E** Water Distribution \square Type..... **5F** Primary Toilet Type Type..... **5G** Secondary Toilet Type □ Type.....

Maintenance – What actions are needed if something is broken?								
Activity	How Often?	Who?	What is needed?					

Community Training – What do you need to teach the community?								
Activity	How Often?	Who?	What is needed?					
Emergency – Wh	nat will vou do in a	an emergency?						
	10.0 11 700.00	arr criter geriey.						
Activity	How Often?	Who?	What is needed?					
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Appendix 1

Water Quality Results

System Part	Position and Time	Temp (°C)	рН	TDS (mg/L)	Conductivity (μs/cm)	Turbidity (NTU)	Res Chlorine [if used] (mg/L)	E.Coli (#/100ml)	Total Coli (#/100ml)