GWI Technical Series: Hardware Quality for Sustainable Water & Sanitation

The Global Water Initiative

A Partnership Funded by the Howard G. Buffet Foundation

WEST AFRICA

Contracting for water point construction: Provisional and final acceptance forms.

Ref.: 2012-04-E

GWI Technical Series: Hardware Quality

CRS CATHOLIC RELIEF SERVICES

SAHEL CONSULTING

September 2012

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About this series

The **GWI Technical Series: Hardware Quality for Sustainable Water & Sanitation** is a Global Water Initiative tool that was developed in West Africa by Catholic Relief Services (CRS) and Sahel Consulting as a response to common difficulties in rural water & sanitation projects.

Each document in the series addresses a particular aspect of technology choice, design, build and maintenance. All these aspects are important in delivering a reliable and lasting community water/sanitation resource within an increasingly decentralised context.

We aim to influence those with the power and responsibility to get water and sanitation to the rural poor.

We also want to influence the communities themselves to become proactive and break away from their past role as passive beneficiaries.

The tools have been designed and field tested for use with communities, development workers, commune leaders and government technical services. They focus specifically on gaining an informed understanding that will lead these key decision makers to choosing the correct technology, supervising construction to assure quality, putting in place correct operation and maintenance systems, and assuring that revenue generated is adequate to keep that service going.

These tools are not a method in themselves, they presume that anyone using them is already engaged in a robust participatory process.

The **GWI Technical Series: Hardware Quality for Sustainable Water & Sanitation** includes:

A practical guide for building a simple pit latrine	ref.: 2011-01-E
Assuring Quality: an approach to building long-lasting infrastructure in West Africa	ref.: 2012-01-E
Monitoring checklists : water points and latrines	ref.: 2012-02-E
Community monitoring of borehole construction: a training guideline	ref.: 2012-03-E
Contracting for water point construction: Provisional and final acceptance forms	ref.: 2012-04-E
The essential steps before handing-over a borehole (with hand pump) to the community	ref.: 2012-05-E

Community monitoring during the construction of a gravity-fed, solar powered water supply: a training guideline	ref.: 2012-06-E
Making the right choice: comparing your rural water technology options	ref.: 2012-07-E

Please use any of the documents freely. They can be downloaded from http://www.crsprogramquality.org/publications/tag/water-manualsuser-guides.

We would be most interested to receive feedback from you on the usefulness of this material.

The series is published in French and English. If you translate the material into another language please send a copy to lambert.nikiema@crs.org, jeanphilippe.debus@crs.org, suecavanna@sahelconsulting.org.uk.

Acknowledgements

This document was developed by Lambert Zounogo P. NIKIEMA (CRS), Sue CAVANNA (Sahel Consulting), and Jean-Philippe DEBUS (CRS), the Hardware Quality team of the Global Water Initiative (GWI) in West Africa.

GWI project staff from all five GWI countries contributed ideas during the early development stages, and most importantly tested the material in the field. We are indebted to them.

The generous support and encouragement of the Howard G. Buffett Foundation has made this publication possible.

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About the Global Water Initiative

The Global Water Initiative (GWI), supported by the Howard G. Buffett Foundation addresses the challenge of providing long term access to clean water and sanitation, as well as protecting and managing ecosystem services and watersheds, for the poorest and most vulnerable people dependent on those services. Water provision under GWI takes place in the context of securing the resource base and developing new or improved approaches to water management, and forms part of a larger framework for addressing poverty, power and inequalities that particularly affect the poorest

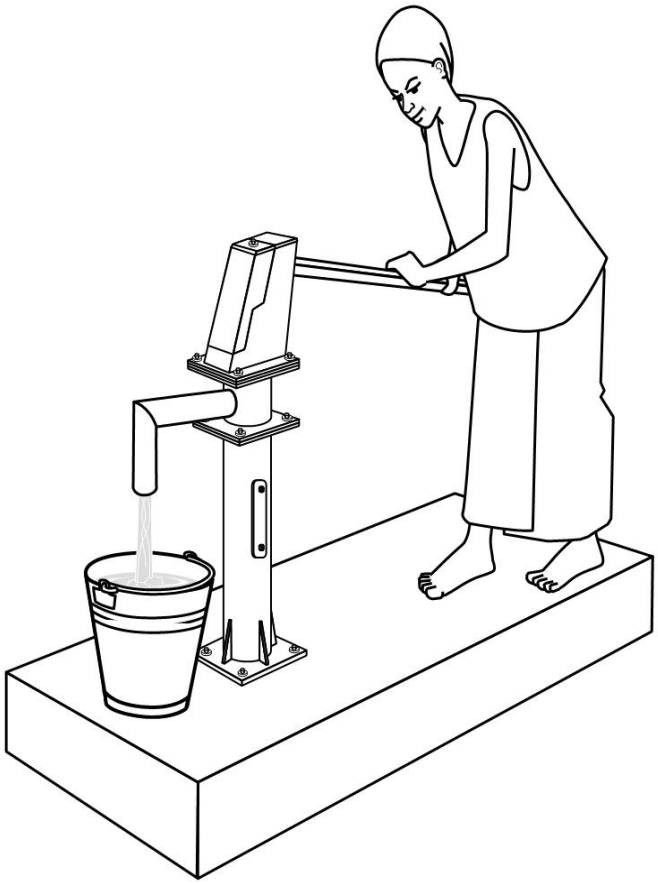
populations. This means combining a practical focus on water and sanitation delivery with investments targeted at strengthening institutions, raising awareness and developing effective policies.

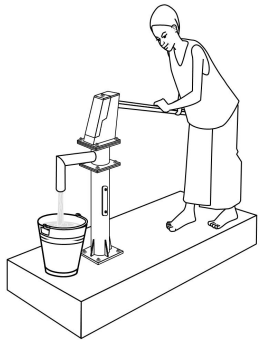
The Regional GWI consortium for West Africa includes the following partners:

- International Union for the Conservation of Nature (IUCN)
- Catholic Relief Services (CRS)
- CARE International
- SOS Sahel (UK)
- International Institute for Environment and Development (IIED).

GWI West Africa covers five countries: Burkina Faso, Ghana, Mali, Niger and Senegal. Some activities also take place around the proposed Fomi dam in Guinea. For more information on the GWI, please visit: www.globalwaterinitiative.com.

1. BOREHOLE FITTED WITH HAND/FOOT PUMP: PROVISIONAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Borehole coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of provisional acceptance: ……/……/……	Yield after full development: …… m3/h
Date borehole drilling/rehabilitation completed: ……/……/……	Date pump installed: ……/……/……
Date superstructure construction completed: ……/……/……	
Note: Attach the technical information on the borehole, on the pump acceptance and on the pump installation.	

SUPERSTRUCTURE DIMENSIONS

Concrete foundation	**Concrete apron**	**Walls**	**Drainage channel**	**Water trough**	**Soak away pit**
Length/Diam:……m	Length/Diam:……m	Length:……m	Length:……m	Length:……m	Depth:……m
Width:……m	Width:……m	Thickness:……m	Width:……m	Width:……m	Length/Diam: ……m
Height:……m	Height:……m	Height:……m	Height:……m	Height:……m	Width: ……m
			Depth:……m	Depth:……m	

INFORMATION ON THE SUPERSTRUCTURE

Have the contractual dimensions of the different parts of the infrastructure been respected?

Concrete foundation: Yes ☐ No ☐	Concrete apron: Yes ☐ No ☐	Fence/ Wall: Yes ☐ No ☐	Drainage Channel: Yes ☐ No ☐
Water trough: Yes ☐ No ☐	Soak away: Yes ☐ No ☐	Settling tank: Yes ☐ No ☐	Yes ☐ No ☐

STATE OF THE SUPERSTRUCTURE

Test the resistance of the concrete: with a hammer give 2 little blows on the different parts of the superstructure and see how it responds.

Concrete foundation:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Concrete aprons:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Wall:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Channel:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Water trough:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Soak-away pit:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....
Cover slabs:	Good state ☐	Cracked ☐	Big cracks ☐	Other: .....

Other comments:

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INFORMATION ON THE PUMP

Pump Make and Model: ……..……	Pump serial N°: ……	Date of installation: ……../……../……
Depth of installation: ……m	General appearance of the pump: ……	
Pump fixing: Good ☐ Unsteady ☐ Bad ☐ Other comments: ……		
Leakage test (to be conduct after stopping the pump for 30 minutes):		
The water comes out after ……pump strokes	Is there leaking? Yes ☐ No ☐	
Yield test: Begin the yield test after the pump has been in use continuously. Give pump strokes during approximately 1 minute (approximately 40 pump strokes) while collecting the water in a bucket. Quantity of water collected >10 liters? Yes ☐ No ☐		

Ask to the users if the pump has broken down since it was installed? Yes ☐ No ☐
Number of breakdowns?: …….. Nature of breakdowns?: ……..

WATER QUALITY

Water quality: Clear ☐ Turbid ☐ Presence of particles ☐ Presence of odour ☐
Control of sand content: Pump 10 litres of water in a bucket (the volume of the bucket should be higher than 10 litres), give a rotation movement (with one hand) to the water until you obtain a Vortex. Let the water stabilize in the bucket and measure the diameter of sand patch in the bucket (It must not exceed 1 cm). Diameter of sand patch > 1 cm? Yes ☐ No ☐
Other comments: ……

VERIFICATION OF THE EXISTENCE OF PARTIALS PROVISIONAL ACCEPTANCES OR TECHNICAL DOCUMENTS

Are the partials provisional acceptances documents or the technical documents of the different elements mentioned below available?

		Observations			Observations
Borehole :	Yes ☐ No ☐		**Hand pump:**	Yes ☐ No ☐	
water quality analysis by a laboratory:	Yes ☐ No ☐		**Yield testing data and interpretation:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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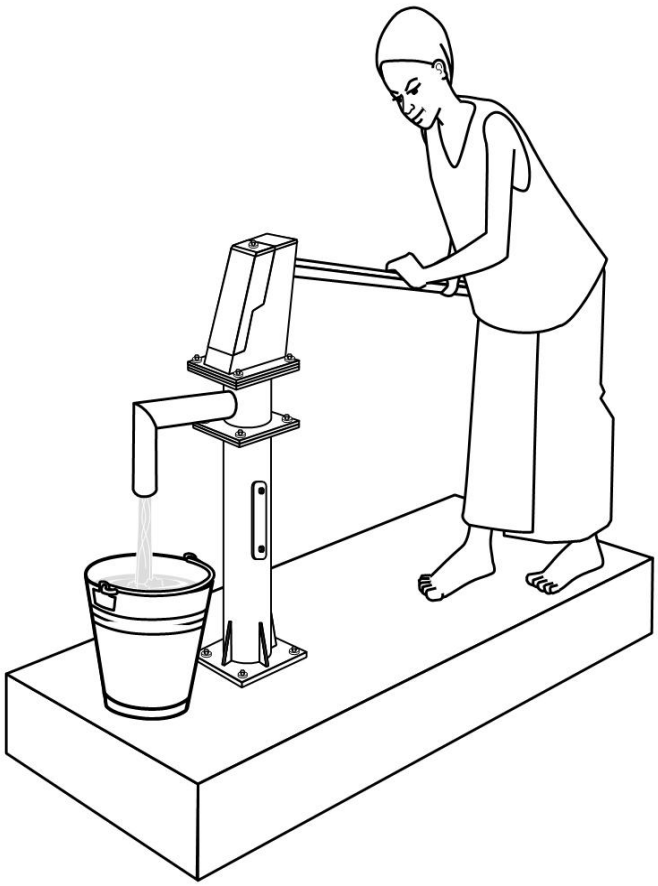
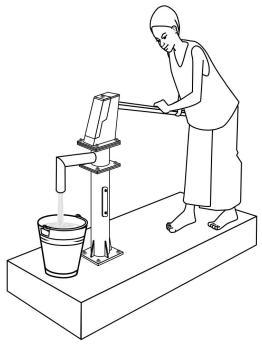
NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

2. BOREHOLE FITTED WITH HAND/FOOT PUMP: FINAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Borehole coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of final completion:……/……/……	Water level in the borehole at the final completion: ……m/ground
Date of provisional acceptance: ……/……/……	
Note: Attach a copy of the provisional acceptance and copies of technical information on the borehole and the hand pump.	

STATE OF THE SUPERSTRUCTURE

Test the resistance of the concrete: with a hammer give 2 little blows on the different parts of the superstructure and see how it responds.

Concrete foundation:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Concrete aprons:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Wall:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Channel:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Water trough:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Soak-away pit:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……
Cover slab:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……

Other comments:

……

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INFORMATION ON THE PUMP

Pump Make and Model: ……	Pump serial N°: ……	Date of the provisional acceptance: ……/……/……
General appearance of the pump: ……		
Pump fixing: Good ☐ Bad ☐ Unsteady ☐ Other comments: ……		
Leakage test (to be conduct after stopping the pump for 30 minutes):		
The water comes out after ……pump strokes	Is there leaking? Yes ☐ No ☐	
Yield test: Begin the yield test after the pump has been in use continuously. Give pump strokes during approximately 1 minute (approximately 40 pump strokes) while collecting the water in a bucket. Quantity of water collected >10 liters? Yes ☐ No ☐		

Ask users if the pump has broken down since the provisional acceptance? Yes ☐ No ☐
Number of breakdowns?: …… Nature of breakdowns?: ……

WATER QUALITY

Water quality: Clear ☐ Turbid ☐ Presence of particles ☐ Presence of odour ☐
Control of sand content: Pump 10 litres of water in a bucket (the volume of the bucket should be higher than 10 litres), give a rotation movement (with one hand) to the water until you obtain a Vortex. Let the water stabilize in the bucket and measure the diameter of sand patch in the bucket (It must not exceed 1 cm). Diameter of sand patch > 1 cm? Yes ☐ No ☐
Other comments: ……

VERIFICATION OF THE EXISTENCE OF PROVISIONAL ACCEPTANCE OR TECHNICAL DOCUMENTS

Are the provisional acceptance documents or the technical documents of the different elements mentioned below available?

		Observations			Observations
Borehole :	Yes ☐ No ☐		**Hand pump:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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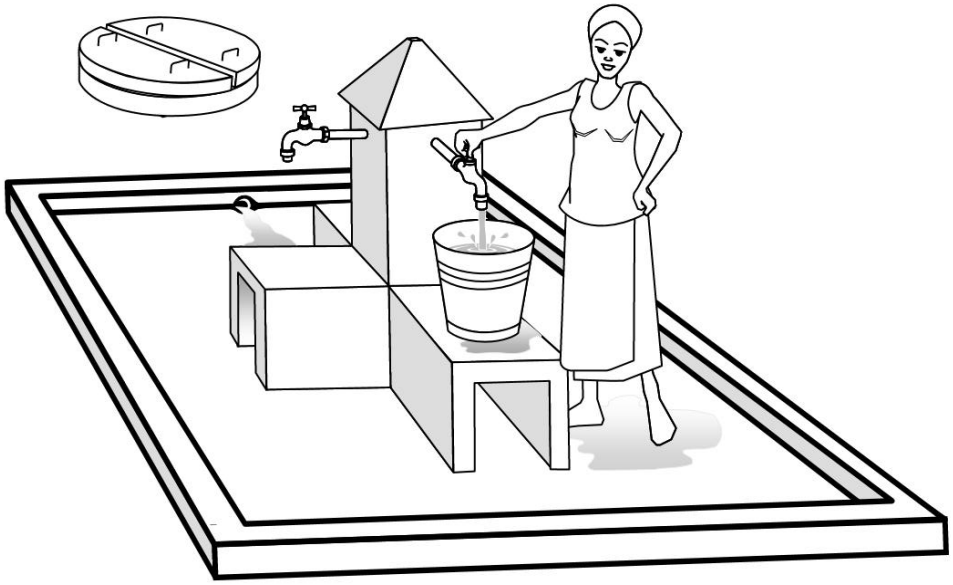
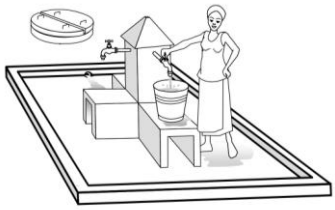
NAMES & SIGNATURES

For Contractor	**For the Consultant**	**For Water Management Committee/Community**	**For the project**	**For Water services**	**For the Commune**
_____	_____	_____	_____	_____	_____

3. BOREHOLE AND GRAVITY DISTRIBUTION WITH SUBMERSIBLE PUMP POWERED BY SOLAR ENERGY: PROVISIONAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Borehole coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of provisional acceptance: ……/……/……	
Date of borehole drilling/rehabilitation completed: ……/……/……	Yield after full development: …… m3/h
Date of piped water network construction completion: ……/……/……	Average flow through operating: ……
Note: Attach copies of each technical acceptance made (borehole, solar generator, electric pump, inverter, water tower, water network, etc.)	

BOREHOLE & PLATFORM

Water level in the borehole : ……m/sol Concrete apron characteristics: Length/diam…… Width …… Height ……	Is the borehole protected against seepage of surface water? Yes ☐ No ☐

State of the concrete foundation :

Good ☐ Cracked ☐ Big cracks ☐ Other: ……

State of the water meter on the borehole:

Good?	Yes ☐ No ☐	New?	Yes ☐ No ☐	Functioning correctly?	Yes ☐ No ☐		

SOLAR GENERATOR

Solar panels

Do the solar panels meet the specified characteristics in the design documents?	Yes ☐ No ☐	Is the number of the solar panels as specified in the design and contract documents?	Yes ☐ No ☐	Are the solar panels new?	Yes ☐ No ☐
Are the solar panels in a good state (no breaks, no visible damage)?	Yes ☐ No ☐	Is the inclination of the solar panels correct?	Yes ☐ No ☐		

Solar panel wiring

Are the wires (type, section) in accordance with those specified?	Yes ☐ No ☐	Are the wire connections well-made and all within connection boxes?	Yes ☐ No ☐
Are the wire connections well tightened? (pull some wires at random)	Yes ☐ No ☐	Is the "earthing" in place and has it been connected well?	Yes ☐ No ☐

Solar panel stands

Are the stands in accordance with those specified in the design and contract (type of material)?	Yes ☐ No ☐	Are the stands protected against corrosion?	Yes ☐ No ☐

Are the stands vertical?	Yes ☐ No ☐	Are the stands well aligned?	Yes ☐ No ☐	Are the stands well fixed? (test by shaking)	Yes ☐ No ☐
Are the foundations for the solar panel stands of the correct dimensions?	Yes ☐ No ☐	Are the concrete foundations for the stands of good quality?	Yes ☐ No ☐		

Solar panel enclosure

Is the fencing material in accordance with the material specified in the design?	Yes ☐ No ☐	Is the gauge of the wire mesh fencing in accordance with that specified in the design?	Yes ☐ No ☐
Is the height of the fencing in accordance with the height specified in the design?	Yes ☐ No ☐	Are the foundation dimensions of the stand post for the fencing correct?	Yes ☐ No ☐

Are the stand-posts of the fencing well fixed in concrete?	Yes ☐ No ☐	Are the concrete foundations of the stands of good quality?	Yes ☐ No ☐
Is the lock /padlock of the fencing enclosure being used?	Yes ☐ No ☐	Is the lock or the padlock of the fencing enclosure of the specified quality?	Yes ☐ No ☐

INVERTER AND SUBMERSIBLE ELECTRIC PUMP

Does the pump yield as much as the expected yield in the design specifications (measure the yield using the water meter on the borehole platform)?	Yes ☐ No ☐				
Does the inverter have the characteristics specified in the design?	Yes ☐ No ☐	Is the inverter working?	Yes ☐ No ☐	Is the inverter properly fixed in place?	Yes ☐ No ☐

ELEVATED WATER TANK

Water tank volume: ……m3 Height under the tank: ……..m

Is the tank capacity as specified?	Yes ☐ No ☐	Is the height under the tank in accordance with the specified height?	Yes ☐ No ☐
Is there a washout pipe?	Yes ☐ No ☐	Is there an overflow pipe?	Yes ☐ No ☐
Are the washout and the distribution valves working and in a good state?	Yes ☐ No ☐	Does the water tank have a good coat of paint (if it is made of metal)?	Yes ☐ No ☐
Does the water tank have any leaks?	Yes ☐ No ☐	Is the concrete foundation for the water tank stand of good quality?	Yes ☐ No ☐

PUBLIC STAND-POSTS

What is the total number of public stand-posts in the gravity system? : ……

Is the number of public stand-post constructed in accordance with the number in the design?	Yes ☐ No ☐	Have the stand-posts been built where they were actually designed to be built?	Yes ☐ No ☐
Are the designs of the public stand-posts and of the other parts in accordance with the plans?	Yes ☐ No ☐	Are the dimensions of the different parts in the designs respected in what was actually built?	Yes ☐ No ☐
Are all the water meters new?	Yes ☐ No ☐	Are all the water meters working well?	Yes ☐ No ☐
Are all the taps new?	Yes ☐ No ☐	Are all the taps working well?	Yes ☐ No ☐

STATE OF THE PUBLIC STAND-POSTS

<u>Test the resistance of the concrete</u>: with a hammer give 2 little blows on the different parts of the superstructure and see how it reacts

Taps:	No leaks ☐	Leaks ☐	Other: ……				
Water meters:	No leaks ☐	Leaks ☐	Other: ……				
Tap plinths:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Concrete aprons:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Drainage channels:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Soak-away:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Soak-away concrete slab:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Inspection chamber:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			
Inspection chamber slab:	Good state ☐	Cracked ☐	Big cracks ☐	Other: ……			

<u>Other comments</u>:

……

……

WATER DELIVERY AND DISTRIBUTION NETWORK

Has the trenching for the pipes been correctly back- filled? Yes ☐ No ☐	Are there any leaks in the network? Yes ☐ No ☐
Are there marker posts at acceptable intervals showing where the pipe-lines are laid? Yes ☐ No ☐	Other comments: .....

WATER QUALITY

Water quality:	Clear ☐	Turbid ☐	Presence of particles ☐	Presence of odour ☐
Other comments:				

VERIFICATION OF THE EXISTENCE OF PARTIALS PROVISIONAL ACCEPTANCES OR TECHNICAL DOCUMENTS

Are the partials provisional acceptances documents or the technical documents of the different elements of the system mentioned below been shown?

		Observations			Observations
Borehole :	Yes ☐ No ☐		**Solar generator:**	Yes ☐ No ☐	
Electric pump:	Yes ☐ No ☐		**Inverter:**	Yes ☐ No ☐	
Water tower:	Yes ☐ No ☐		**Distribution network :**	Yes ☐ No ☐	
Water quality analysis by a laboratory:	Yes ☐ No ☐		**Yield testing data and interpretation:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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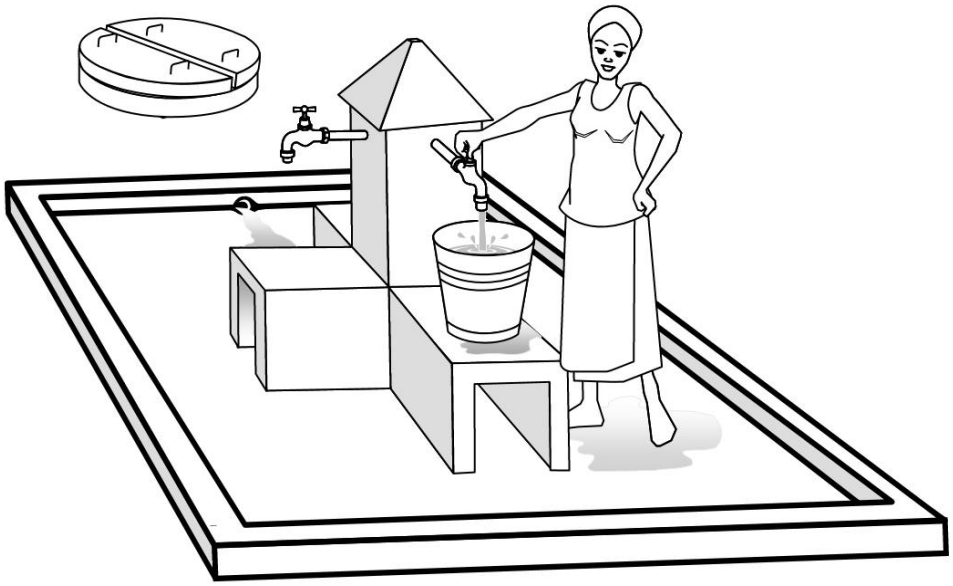
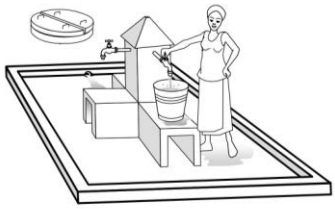
NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

4. BOREHOLE AND GRAVITY DISTRIBUTION WITH SUBMERSIBLE PUMP POWERED BY SOLAR ENERGY: FINAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Borehole coordinates (DMS units) : X (Long): …… °……’…… .’’ Y (Lat.): …… ° …… ’……’’

GENERAL INFORMATION

Date of final completion:……/……/……	Water level in the borehole at the final completion: ……m/ground
Date of provisional acceptance: ……/……/……	
Note: Attach a copy of the provisional acceptance, copies of technical information on the system, and a copy of the final acceptance of the solar generator.	

STATE OF THE BOREHOLE PLATFORM

Concrete foundation	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Water meter on the borehole	Working	☐	Not working	☐	Other: ……		

Other comments: ……

……

STATE OF THE SOLAR GENERATOR

Solar panels/ cells:	Normal working	☐	Failure	☐	Other: ……		
Solar panel wires:	Good state	☐	impaired	☐	Other: ……		

Other comments: ……

……

STATE OF THE SOLAR PANELS STANDS AND OF THE ENCLOSURE

Foundations of the solar panel stands:	Good state ☐	Cracked ☐	Other: ……
Foundations of the fencing stand-posts:	Good state ☐	Cracked ☐	Other: ……

Other comments: ……

……

STATE OF THE INVERTER AND OF THE SUBMERSIBLE ELECTRIC PUMP

Does the pump yield as much as the expected yield in the design specifications? Yes ☐ No ☐
(measure the yield using the water meter on the borehole platform)

Is the Inverter working? Working ☐ Not working ☐ Other: ……

Other comments: ……

……

STATE OF THE ELEVATED WATER TANK

Concrete of the platform:	Good state ☐	Cracked ☐	Other: ……
Pipes:	Leaks ☐	No leak ☐	Other: ……
Tank:	Leaks ☐	No leak ☐	Other: ……
Valves:	Working ☐	Not working ☐	Other: ……
Tank interior paint:	Good state ☐	Deteriorated ☐	Other: ……
Tank exterior and other parts paint:	Good state ☐	Deteriorated ☐	Other: ……

Other comments: ……

……

STATE OF THE PUBLIC STAND-POSTS

Taps:	No leaks ☐		Leaks ☐		Other: ……			
Water meters:	No leaks ☐		Leaks ☐		Other: ……			
Tap plinths:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Concrete aprons:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Drainage channels:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Soak-away:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Soak-away concrete slab:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Inspection chamber:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	
Inspection chamber slab:	Good state ☐		Cracked ☐		Big cracks ☐		Other: ……	

Other comments:

……

……

STATE OF THE WATER DISTRIBUTING NETWORK

State of pipe distribution network : Leaking ☐ No leaks ☐ Other: ……

Other comments: ……

……

WATER QUALITY

Water quality:	Clear ☐	Turbid ☐	Presence of particles ☐	Presence of odour ☐
Other comments: ……				

VERIFICATION OF THE EXISTENCE OF PROVISIONAL ACCEPTANCE DOCUMENTS

Are copy of provisional acceptance and other technical documents been shown?

		Observations			Observations
Borehole final acceptance:	Yes ☐ No ☐		**Solar generator final acceptance:**	Yes ☐ No ☐	
Electric pump final acceptance:	Yes ☐ No ☐		**Inverter final acceptance:**	Yes ☐ No ☐	
Water tower final acceptance:	Yes ☐ No ☐		**Distribution network final acceptance:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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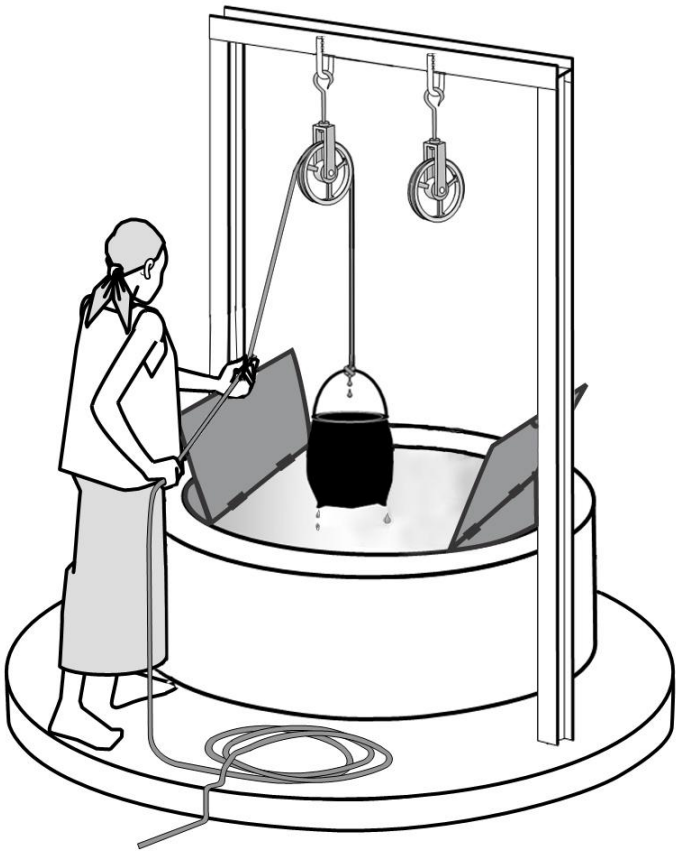
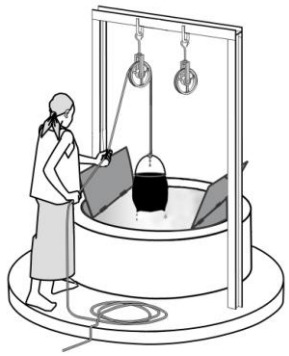
NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

5. IMPROVED HAND-DUG WELL WITH PULLEYS: PROVISIONAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Well coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of provisional acceptance: ……/……/……	Daily volume usable: ……m3/h
Date well construction completed: ……/……/……	
Date superstructure construction completed: ……/……/……	
Note: attach the technical information sheet on this well, including the superstructure plans.	

STATE OF THE WELL AT THE PROVISIONAL ACCEPTANCE

Total depth of the well : ……m	Water level: ……m/ground
Depth of the top of the perforated concrete part of the well lining : ……m/ground	

SUPERSTRUCTURE DIMENSIONS

Headwork	**Concrete apron**	**Fencing Walls**	**Drainage channel**	**Water trough**	**Soak away pit**
Length/Diam:…..m	Length/Diam:……m	Length:……m	Length:……m	Length:……m	Length/Diam: ……m
Width:……m	Width:……m	Thickness:……m	Width:……m	Width:……m	Width: ……m
Height:……m	Height:……m	Height:……m	Height:……m	Height:……m	Depth:……m
			Depth:……m	Depth:……m	Subfoundation
				Thickness:……m	Height:……m

INFORMATION ON THE HEADWORKS, THE CONCRETE RINGS, AND THE POROUS CONCRETE RINGS

Have the contractual dimensions of the different parts been respected?

Height of the headworks	Yes ☐ No ☐	**Thickness of the headworks**	Yes ☐ No ☐	**Diameter of the concrete ring**	Yes ☐ No ☐	**Height of the concrete ring**	Yes ☐ No ☐
Thickness of the concrete ring	Yes ☐ No ☐	**Diameter of the porous concrete ring**	Yes ☐ No ☐	**Height of the porous concrete ring**	Yes ☐ No ☐	**Thickness of the porous concrete ring**	Yes ☐ No ☐

STATE OF THE HEADWORKS, CONCRETE RINGS AND POROUS CONCRETE RINGS

Headworks:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....
Concrete ring:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....
Porous concrete ring:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....

Other comments: .....

.....

INFORMATION ON THE SUPERSTRUCTURE

Have the contractual dimensions of the different parts of the infrastructure been respected?

Entrance	Yes ☐ No ☐	**Concrete apron**	Yes ☐ No ☐	**Fence/ Wall**	Yes ☐ No ☐	**Drainage Channel**	Yes ☐ No ☐	**Water trough**	Yes ☐ No ☐
Soakaway	Yes ☐ No ☐	**Inspection chamber**	Yes ☐ No ☐	**Does the well have a cover?**		Yes ☐ No ☐			

STATE OF THE SUPERSTRUCTURE

Test the resistance of the concrete: with a hammer give 2 little blows on the different parts of the superstructure and see how it responds.

Concrete apron:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Fencing wall:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Drainage channel:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Water trough:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Slab cover for soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber concrete:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber cover slab:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Well cover:	Good	☐	Bad state	☐	Other: ……		

Other comments: ……

……

WATER LIFTING DEVICE

Is there a water lifting frame?	Yes	☐	Are the characteristics of the material (type, thickness ...) of the water lifting frame in accordance with the specified characteristics?	Yes	☐
	No	☐		No	☐
Is the water lifting frame well protected (e.g. with a good layer of paint)?	Yes	☐	Are the dimensions of the water lifting frame in accordance with the specified dimensions?	Yes	☐
	No	☐		No	☐
Is the water lifting frame well fixed?	Yes	☐	Are the characteristics of the material of the pulleys in accordance with the specified characteristics?	Yes	☐
	No	☐		No	☐
Is the number of pulleys in accordance with the number requested?	Yes	☐	Other comments: ……		
	No	☐			

WATER QUALITY

Water quality: .....Clear	☐	Turbid	☐	Presence of particles	☐	Presence of odour	☐
Other comments:							

VERIFICATION OF THE EXISTENCE OF PARTIALS PROVISIONAL ACCEPTANCES OR TECHNICAL DOCUMENTS

Are the partials provisional acceptances documents or the technical documents of the different elements mentioned below available?

			Observations				Observations
Well :	Yes	☐		**Water lifting frame:**	Yes	☐	
	No	☐			No	☐	
water quality analysis by a laboratory:	Yes	☐		**Yield testing data and interpretation:**	Yes	☐	
	No	☐			No	☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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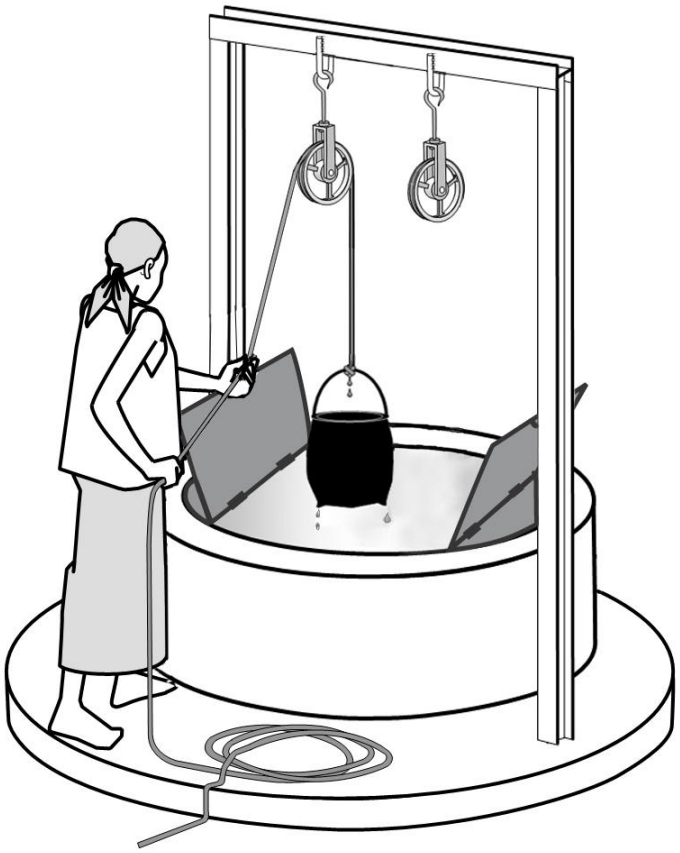
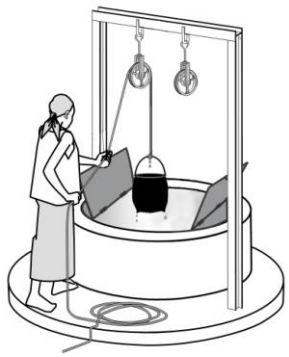
NAMES & SIGNATURES

For Contractor	**For the Consultant**	**For Water Management Committee/Community**	**For the project**	**For Water services**	**For the Commune**
_____	_____	_____	_____	_____	_____

6. IMPROVED HAND-DUG WELL WITH PULLEYS: FINAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Well coordinates (DMS units) : X (Long): …… °……’…… .’’ Y (Lat.): …… ° …… ’……’’

GENERAL INFORMATION

Date of final completion:……/……/……	Water rest level at the final completion:……m/ground
Date of provisional acceptance: ……/……/……	**Note: Attach a copy of the provisional acceptance document and technical information sheet on this well.**

STATE OF THE CONCRETE RINGS, THE POROUS CONCRETE RINGS, THE HEADWORKS AND THE SUPERSTRUCTURE

Concrete ring:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Porous concrete ring:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Headworks:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Concrete apron:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Fencing wall:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Drainage channel:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Water trough:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Slab cover for soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber concrete:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber cover slab:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Well cover:	Good	☐	Bad	☐	Other: ……		

Other comments: .....

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STATE OF THE WATER LIFTING DEVICE

State of the lifting frame:	Good ☐		Broken ☐	
Lifting frame fixing:	Strong ☐		Unsteady or out of place ☐	

Other comments:

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WATER QUALITY

Water quality: .....Clear ☐	Turbid ☐	Presence of particles ☐	Presence of odour ☐
Other comments:			

VERIFICATION OF THE EXISTENCE OF PROVISIONAL ACCEPTANCE OR TECHNICAL DOCUMENTS

Are the provisional acceptance documents or the technical documents of the different elements mentioned below available?

		Observations			Observations
Well :	Yes ☐ No ☐		**Superstructure and water lifting frame:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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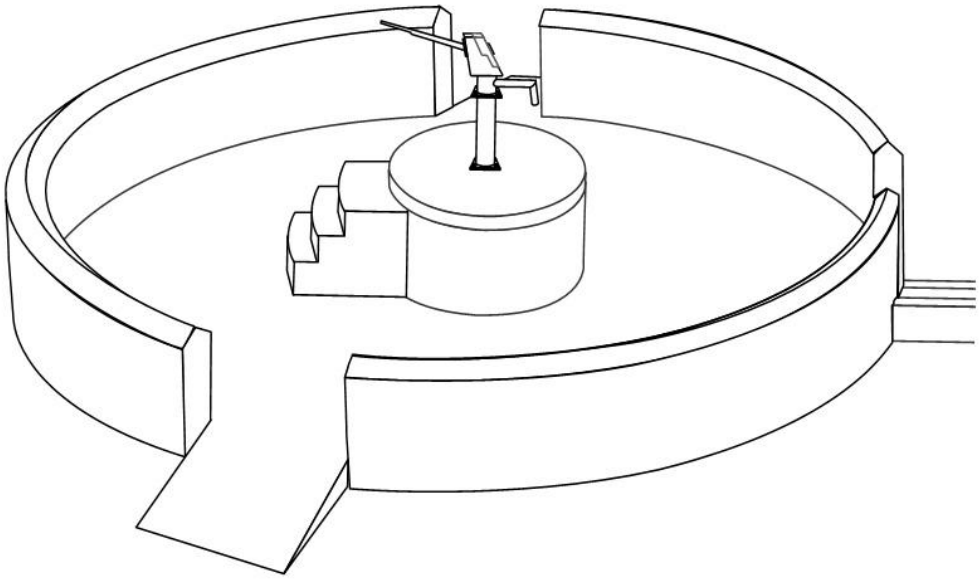
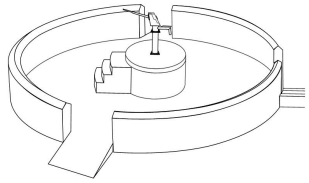
NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

7. IMPROVED HAND-DUG WELL WITH HAND/FOOT PUMP: PROVISIONAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Well coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of provisional acceptance: ……/……/……	Daily volume usable: ……m3/h
Date well construction completed: ……/……/……	Date pump installed: ……/……/……
Date superstructure construction completed: ……/……/……	
Note: attach the technical information sheet on this well, including the superstructure plans and the pump installation form.	

STATE OF THE WELL AT THE PROVISIONAL ACCEPTANCE

Total depth of the well : ……m	Water rest level: ……m/ground
Depth of the top of the perforated concrete part of the well lining : ……m/ground	

SUPERSTRUCTURE DIMENSIONS

Headwork	**Concrete apron**	**Fencing Walls**	**Drainage channel**	**Water trough**	**Soak away pit**
Length/Diam:…..m	Length/Diam:……m	Length:……m	Length:……m	Length:……m	Length/Diam: ……m
Width:……m	Width:……m	Thickness:……m	Width:……m	Width:……m	Width: ……m
Height:……m	Height:……m	Height:……m	Height:……m	Height:……m	Depth:……m
			Depth:……m	Depth:……m	Subfoundation
				Thickness:……m	Height:……m

INFORMATION ON THE HEADWORKS, THE CONCRETE RINGS, AND THE POROUS CONCRETE RINGS

Have the contractual dimensions of the different parts been respected?

Height of the headworks	Yes ☐ No ☐	**Thickness of the headworks**	Yes ☐ No ☐	**Diameter of the concrete ring**	Yes ☐ No ☐	**Height of the concrete ring**	Yes ☐ No ☐
Thickness of the concrete ring	Yes ☐ No ☐	**Diameter of the porous concrete ring**	Yes ☐ No ☐	**Height of the porous concrete ring**	Yes ☐ No ☐	**Thickness of the porous concrete ring**	Yes ☐ No ☐

STATE OF THE HEADWORKS, CONCRETE RINGS AND POROUS CONCRETE RINGS

Headworks:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....
Concrete ring:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....
Porous concrete ring:	Good ☐	Cracked ☐	Big cracks ☐	Other: .....

Other comments: .....

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INFORMATION ON THE SUPERSTRUCTURE

Have the contractual dimensions of the different parts of the infrastructure been respected?

Entrance	Yes ☐ No ☐	**Concrete apron**	Yes ☐ No ☐	**Fence/ Wall**	Yes ☐ No ☐	**Drainage Channel**	Yes ☐ No ☐	**Water trough**	Yes ☐ No ☐
Soakaway	Yes ☐ No ☐	**Inspection chamber**	Yes ☐ No ☐	**Does the well have a cover?**			Yes ☐ No ☐		

STATE OF THE SUPERSTRUCTURE

Test the resistance of the concrete: with a hammer give 2 little blows on the different parts of the superstructure and see how it responds.

Concrete apron:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Fencing wall:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Drainage channel:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Water trough:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Slab cover for soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Inspection chamber concrete:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Inspection chamber cover slab:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……..
Well cover:	Good	☐	Bad state	☐	Other: ……		

Other comments: ……

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INFORMATION ON THE PUMP

Pump Make and Model: ……	Pump serial N°: ……	Date of installation: ……../……../……
Depth of installation: ……m	General appearance of the pump: ……	
Pump fixing: Good ☐ Unsteady ☐ Bad ☐ Other comments: ……		
Leakage test(to be conduct after stopping the pump for 30 minutes):		
The water comes out after ……pump strokes	Is there leaking? Yes ☐ No ☐	
Yield test: Begin the yield test immediately after the pump has been in use continuously. Give 40 pump strokes during approximately 1 minute while collecting the water in a bucket. Quantity of water collected >10 liters? Yes ☐ No ☐		

Ask to the users if the pump has broken down since the provisional acceptance? Yes ☐ No ☐
Number of breakdowns?: ..... Nature of breakdowns?: .....

WATER QUALITY

Water quality: .....Clear ☐ Turbid ☐ Presence of particles ☐ Presence of odour ☐
Other comments: .....

VERIFICATION OF THE EXISTENCE OF PARTIALS PROVISIONAL ACCEPTANCES OR TECHNICAL DOCUMENTS

Are the partials provisional acceptances documents or the technical documents of the different elements mentioned below available?

		Observations			Observations
Well :	Yes ☐ No ☐		**Hand pump:**	Yes ☐ No ☐	
Water quality analysis by a laboratory:	Yes ☐ No ☐		**Yield testing data and interpretation:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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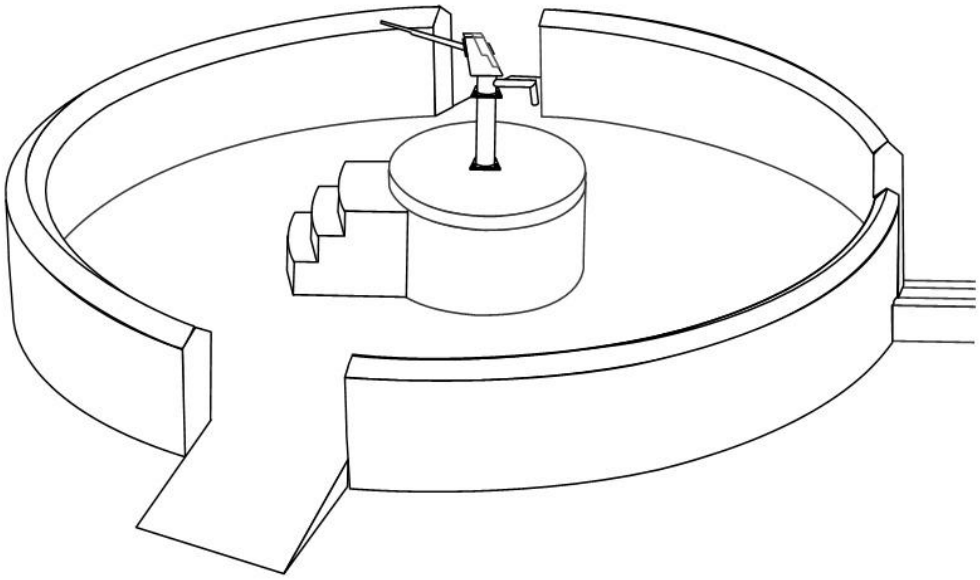
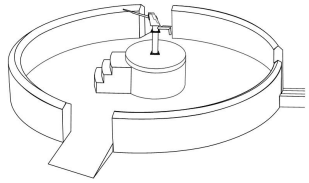
NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

8. IMPROVED HAND-DUG WELL WITH HAND/FOOT PUMP: FINAL ACCEPTANCE FORM



	Country: …… Region: …… Province: …… Commune: …… Village: …… Hamlet: ……	N°: Name of Contractor: …… …… Well coordinates (DMS units) : X (Long): …… °……’…… .” Y (Lat.): …… ° …… ’……”

GENERAL INFORMATION

Date of final completion:……/……/……	Water rest level at the final completion:……m/ground
Date of provisional acceptance: ……/……/……	**Note: Attach a copy of the provisional acceptance, copies of technical information on the well and the hand pump.**

STATE OF THE CONCRETE RINGS, THE POROUS CONCRETE RINGS, THE HEADWORKS AND THE SUPERSTRUCTURE

Concrete ring:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Porous concrete ring:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Head works:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Concrete apron:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Fencing wall:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Drainage channel:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Water trough:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Slab cover for soak-away:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber concrete:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Inspection chamber cover slab:	Good	☐	Cracked	☐	Big cracks	☐	Other: ……
Well cover:	Good	☐	Bad state	☐	Other: ……		

Other comments: ……

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INFORMATION ON THE PUMP

Pump Make and Model: ……	Pump serial N°: ……	Date of the provisional acceptance: ……../……../……
General appearance of the pump: ……		
Pump fixing: Good ☐ Unsteady ☐ Bad ☐ Other comments: ……		
Leakage test(to be conduct after stopping the pump for 30 minutes):		
The water comes out after ……pump strokes	Is there leaking? Yes ☐ No ☐	
Yield test: Begin the yield test immediately after the pump has been in use continuously. Give 40 pump strokes during approximately 1 minute while collecting the water in a bucket. Quantity of water collected >10 liters? Yes ☐ No ☐		

Ask the users if the pump has broken down since the provisional acceptance? Yes ☐ No ☐
Number of breakdowns?: …… Nature of breakdowns?: ……

WATER QUALITY

Water quality: Clear ☐ Turbid ☐ Presence of particles ☐ Presence of odour ☐
Other comments: ……

VERIFICATION OF THE EXISTENCE OF PROVISIONAL ACCEPTANCE OR TECHNICAL DOCUMENTS

Are the provisional acceptance documents or the technical documents of the different elements mentioned below available?

		Observations			Observations
Well :	Yes ☐ No ☐		**Hand pump:**	Yes ☐ No ☐	

GENERAL COMMENTS/ CORRECTIONS TO BE MADE / WORKS TO REDO

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NAMES & SIGNATURES

For Contractor	For the Consultant	For Water Management Committee/Community	For the project	For Water services	For the Commune
_____	_____	_____	_____	_____	_____

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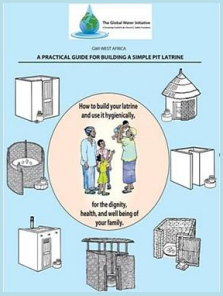
- Burkina Faso, Arrêté N° 2008 -000001/MAHRH du 07 Janvier 2008 portant définition de formulaires types de recueil d'informations sur les travaux de réalisation et/ou réhabilitation de puits modernes, de forages et d'adductions d'eau potable simplifiées.

The GWI Technical Series: Hardware Quality for Sustainable Water & Sanitation:

A practical guide for building a simple pit latrine.

ref.: 2011-01-E



Contracting for water point construction: Provisional and final acceptance forms.

ref.: 2012-04-E

Assuring Quality: an approach to building long-lasting infrastructure in West Africa.

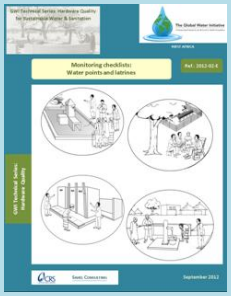
ref.: 2012-01-E

The essential steps before handing-over a borehole (with hand pump) to the community.

ref.: 2012-05-E

Monitoring checklists: water points and latrines.

ref.: 2012-02-E



Community monitoring during the construction of a gravity-fed, solar powered water supply: a training guideline.

ref.: 2012-06-E

Community monitoring of borehole construction: a training guideline.

ref.: 2012-03-E

Making the right choice: comparing your rural water technology options.

ref.: 2012-07-E

These documents are also available in French.

The main authors are Lambert Zounogo P. Nikiema (CRS), Sue Cavanna (Sahel Consulting) and Jean-Philippe Debus (CRS).

The Global Water Initiative
A Partnership Funded by the Howard G. Buffet Foundation