

UNICEF WATER & SANITATION PHASE XII
SUB-PROJECT : Rural Household Water Security

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00001	Casing pipe, mild steel, Grade ST-37 as per DIN 17100, food grade for lining of water borehole, one end male threaded, heavy duty female socket on the other end, to be produced according to DIN 4922 in lengths of 5.80 m, outer diameter 8 5/8 inch.	10000	Each
03-11-00002	Slotted casing pipe, mild steel, Grade ST-37 as per DIN 17100, food grade for lining of water borehole, one end male threaded, heavy duty female socket on the other end, to be produced according to DIN 4922 in lengths of 5.80 m, outer diameter 8 5/8 inch.	1000	Each
03-11-00003	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 150mm PN 25.	750	Each
03-11-00004	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 100mm PN 25.	4000	Each
03-11-00005	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 75mm PN 25.	7000	Each
03-11-00006	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 62mm PN 25.	7200	Each
03-11-00007	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 50mm PN 25.	10500	Each
03-11-00008	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 37 mm PN 25.	9000	Each
03-11-00009	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 25 mm PN 25.	4000	Each
03-11-00010	GI pipe for drinking water supply, both ends male threaded ISO 7, female threaded socket fitted to one end, ND 19 mm PN 25.	3150	Each
03-11-00011	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 19 mm, PN 16.	200	Each
03-11-00012	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 25 mm, PN 16.	200	Each
03-11-00013	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 37 mm, PN 16.	250	Each
03-11-00014	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 50 mm, PN 16.	430	Each
03-11-00015	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 62 mm, PN 16.	400	Each
03-11-00016	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 75 mm, PN 16.	350	Each
03-11-00017	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 100 mm, PN 16.	300	Each
03-11-00018	Bronze heavy type gate valve set with hand wheel, clockwise closing, Fx/F, threaded to BS 21 (ISO R7), ND = 150 mm, PN 16.	55	Each

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00019	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 19mm, PN 16.	9800	Each
03-11-00020	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 25mm, PN 16.	2150	Each
03-11-00021	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 37mm, PN 16.	2000	Each
03-11-00022	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 50mm, PN 16.	1900	Each
03-11-00023	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 62mm, PN 16.	1900	Each
03-11-00024	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 75mm, PN 16.	1550	Each
03-11-00025	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 100mm, PN 16.	950	Each
03-11-00026	GI equal elbows for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, 90 degree, FxF, ND 150mm, PN 16.	60	Each
03-11-00027	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 25mm.	100	Each
03-11-00028	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 25. Size 37mm.	250	Each
03-11-00029	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 50mm.	250	Each
03-11-00030	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 62mm.	225	Each
03-11-00031	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 75mm.	225	Each
03-11-00032	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 100mm.	175	Each
03-11-00033	GI equal elbows, 45 degrees, for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF, PN 16. Size 150mm.	50	Each
03-11-00034	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, FxFxF, MD 19mm, PN 16.	900	Each
03-11-00035	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, FxFxF, MD 25mm, PN 16.	1200	Each

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00036	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, Fx Fx F, MD 37mm, PN 16.	1550	Each
03-11-00037	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, Fx Fx F, MD 50mm, PN 16.	1050	Each
03-11-00038	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, Fx Fx F, MD 62mm, PN 16.	1150	Each
03-11-00039	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, Fx Fx F, MD 75mm, PN 16.	850	Each
03-11-00040	GI equal tee joints for drinking water supply conforming to iso R 49 and threaded to ISO R 7, Fx Fx F, MD 100mm, PN 16.	550	Each
03-11-00041	GI equal tee joints for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, Fx Fx F, MD 150mm, PN 16.	105	Each
03-11-00042	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R7, Fx F, PN 16 ND 19 mm.	4750	Each
03-11-00043	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R7, Fx F, PN 16 ND 25 mm.	1750	Each
03-11-00044	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R7, Fx F, PN 16 ND 37 mm.	1750	Each
03-11-00045	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R7, Fx F, PN 16 ND 50 mm.	1650	Each
03-11-00046	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R7, Fx F, PN 16 ND 62 mm.	1100	Each
03-11-00047	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, Fx F, PN 16 ND 75mm	1250	Each
03-11-00048	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, Fx F, PN 16 ND 100mm.	800	Each
03-11-00049	GI equal unions for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, Fx F, PN 16 ND 150mm.	125	Each
03-11-00050	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 19mm.	2250	Each
03-11-00051	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 25mm .	2050	Each
03-11-00052	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 37mm inch.	2050	Each
03-11-00053	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 50mm.	1350	Each

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00054	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 62mm.	1550	Each
03-11-00055	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 75mm.	1300	Each
03-11-00056	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 100mm.	1300	Each
03-11-00057	GI equal nipples (hexagonal or parallel) for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), MxM. PN 16. Size 150mm.	200	Each
03-11-00058	GI equal sockets for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF. PN 16. Size 19 mm.	500	Each
03-11-00059	GI equal sockets for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF. PN 16. Size 25 mm.	200	Each
03-11-00060	GI equal sockets for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF. PN 16. Size 37 mm.	100	Each
03-11-00061	GI equal sockets for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF. PN 16. Size 50 mm.	100	Each
03-11-00062	GI reducer joints for drinking water supply conforming to ISO R 49 and threaded to ISO R 7, FxF, size 150mm x 100mm , PN 16.	150	Each
03-11-00063	Malleable cast iron, hot dip galvanized reducer joints for drinking water supply conforming to ISO R49 and threaded to BS21 (ISO R7), FxF. PN 16. Size 100 x 75 mm.	425	Each
03-11-00064	As in above but size 100 x 62 mm.	290	Each
03-11-00065	As in above but size 100 x 50 mm.	290	Each
03-11-00066	As in above but size 75 x 62 mm.	375	Each
03-11-00067	As in above but size 75 x 50 mm.	375	Each
03-11-00068	As in above but size 75 x 37 mm.	375	Each
03-11-00069	As in above but size 75 x 25 mm.	550	Each
03-11-00070	As in above but size 62 x 50 mm.	550	Each
03-11-00071	As in above but size 62 x 37 mm.	500	Each
03-11-00072	As in above but size 62x 25 mm.	500	Each
03-11-00073	As in above but size 62 x 19 mm.	375	Each
03-11-00074	As in above but size 50 x 37 mm.	600	Each

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00075	As in above but size 50 x 25 mm.	550	Each
03-11-00076	As in above but size 50 x 19 mm.	450	Each
03-11-00077	As in above but size 37 x 25 mm.	600	Each
03-11-00078	As in above but size 37 x 19 mm.	450	Each
03-11-00079	As in above but size 25 x 19 mm.	1350	Each
03-11-00080	Brass non return valve, for potable water, Fx F. PN 16. Size 37 mm.	50	Each
03-11-00081	As in above but size 50 mm.	50	Each
03-11-00082	As in above PN 16, size 62 mm.	80	Each
03-11-00083	As in above but size 75 mm.	50	Each
03-11-00084	As in above but size 100 mm.	10	Each
03-11-00085	As in above but size 150 mm.	5	Each
03-11-00086	Water tap, brass, with T-handle and threaded as per ISO 228, size 20 mm (3/4 inch). PN 10.	5800	Each
03-11-00087	Submersible pump , Q= (10-18) m ³ /hr, head= 190-135 m, with direct coupled electrical motor and with non-return valve, control panel complete set, 150 M three core cable; suitable for control panel, tail cable and cable terminal kit, with low level cut-out electrode and cable, two years spare parts. CABLE TO BE SUPPLIED SEPERATELY FOR EACH PUMP AND TO BE INSTALLED ON NEW BOREWELL, (the unit is set). Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	20	set
03-11-00088	As in above, but Q= 4-8 m ³ /hr, head= 124-90 m. (the unit is set)	15	set
03-11-00089	As in above, but Q= 4-11 m ³ /hr, head= 220-100 m, (the unit is set),	12	set
03-11-00090	As in above, but Q=18 m ³ /hr, head=200m	8	set
03-11-00091	As in above but Q= 10m ³ /hr, head= 140m	6	set
03-11-00092	As in above but Q= 20m ³ /hr, head= 340m	9	set
03-11-00093	Diesel driven centrifugal surface mounted water pump, diesel engine, brackets with anti-vibration mountings, includes electrical starter. With two years spare parts. Altitude 1200m, capacity 10m ³ /hr and 60m head (Hatz type).(the unit is set)	5	set
03-11-00094	As in above, but 80m head,	10	Each
03-11-00095	As in above, but 180m head	10	Each

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00096	Deep well turbine pumping system, operating at 2,700 RPM for pumping clean water to fit in a 8 inch bore well, Q=10 cum/hr and head = 133 M at 1,200 metres altitude/elevation, 50 deg centigrade complete set with pump head, discharge flange, right angle gear drive connected to engine by universal shaft. Air or water cooled diesel engine unit with centrifugal clutch , electric starter, heavy duty oil bath, air cleaner, speed governor, silencer exhaust pipe, mounted fuel tank, with column pipes and line shafts, foot valve with strainer, water level indicator, tool-kit, spare parts for 2 years operation, O&M manual in English and spare parts catalogue with appropriate seaworthy packing. Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	15	set
03-11-00097	Same as above but Q = 8 cum/hr, H= 140 m, (the unit is set)	10	set
03-11-00098	Same as above but Q = 12 cum/hr, H= 180 m, (the unit is set)	15	set
03-11-00099	Handpump, complete set including connecting rods and riser pipes, (the unit is set). Each set with 15 nos of 3ML pipes.	15	set
03-11-00100	Shallow well hand pump, complete set.	10	set
03-11-00101	Deepwell turbine pump complete with body(bowls and impellers), discharge column(Column pipe elements and lineshaft), drivehead (electric motor), capacity Q=15 cum/hr(max), head=124 M (min), Complete with bowl assembly, pump head and discharge flange with 2.5 inch BSP thread, electric motor 3x380/660V, 50Hz, (RPM 2900) with housing guard direct coupled with pump head, top column pipe 3 inch length 0.485M threaded with 8 threads per inch, complete with 3/4 inch line shaft, mechanical shaft seal and coupling, intermediate column pipe 3 inch line shaft, column bearing and liner, suction pipe 3 inch, length 1.64M with 3 inch spring loaded foot-valve with strainer 50M cable 4x6MM2 and 4 PCS cable gland, spare parts for two years operation, O&M manual in English with appropriate packings, Item No.1113, (the unit is set) Each set should have 40Nos (3ML) each of red oxide threaded column assemblies.	4	set
03-11-00102	Diesel generator, 100 KVA,400/220V, 3-Phase, 50 Hz for continuous operation complete set with control panel, comprising automatic mains circuit breaker, voltmeter, ammeter, hourmeter, emergency stop and keystart, high temperature and low oil pressure warning lamp, low fuel warning; 12V voltage regulator, battery charger, water cooled with tropical radiator, air , oil & fuel filters, speed governor, silencer, 1.5 m exhaust flexible piping, 185 liters fuel tank to run for 8 hours. Model TC 100 FM type:8061 SI 16 also including: spare parts for 2 years operation, operation and maintenance manual(s) and wiring diagram, in English and (if available) in Arabic- toolkit packed in strong wooden crate, with operation and Spares /Service / Operation manual (English).	2	set
03-11-00103	Diesel generator, 50 KVA,400/220V, 3-Phase, 50 Hz for continuous operation complete set with control panel, comprising automatic mains circuit breaker, voltmeter, ammeter, hourmeter, emergency stop and keystart, high temperature and low oil pressure warning lamp, low fuel warning; 12V voltage regulator, battery charger, water cooled with tropical radiator, air , oil & fuel filters, speed governor, silencer, 1.5 m exhaust flexible piping, 142 liters fuel tank to run for 14 hours. Model TC 50 FM type:7450 I 15- engine, :- spare parts for 2 years operation, operation and maintenance manual(s) and wiring diagram, in English and (if available) in Arabic- toolkit packed in strong wooden crate, with operation and Spares /Service/ Operation manual (English),	10	set

Activity: Construction Water Supply Systems:

Code	Description	Quantity	Unit of measurement
03-11-00104	Diesel generator, 30 KVA,400/220V, 3-Phase, 50 Hz for continuous operation complete set with control panel, comprising automatic mains circuit breaker, voltmeter, ammeter, hourmeter, emergency stop and keystart, high temperature,	10	Each
03-11-00105	Diesel generator, 200 KVA,400/220V, 3-Phase, 50 Hz for continuous operation complete set with control panel, comprising automatic mains circuit breaker, voltmeter, ammeter, hourmeter, emergency stop and keystart, high temperature.	5	Each
03-11-00106	Ordinary Portland cement packed in 3-ply 50 kg paper bags (equivalent to BS12), (the unit is Ton)	2500	metric ton
03-11-00107	Mild steel deformed reinforcing bars in 6 meter length (+/- 100 mm), commercial grade tensile strength: 42.5-53.5 Kg/mm ² in bundles of 1 MT, size: Dia 10 mm : average weight 0.617 Kg/m, (the unit is Ton)	70	metric ton
03-11-00108	As in above but size 12 mm dia., (the unit is Ton)	320	metric ton
03-11-00109	As in above but size 16 mm dia., (the unit is Ton)	200	metric ton
03-11-00110	Mild steel binding wire (flexible), 1 mm diameter, fully annealed, used to tie reinforcing bars for concrete work, supplied in coils of 50 kg (approx), (the unit is Kg)	4000	Kg
03-11-00111	Concrete hollow blocks of size 20x20x40 cm (to be procured locally). For Dohuk blocks should be solid and of size 15x20x40, (in thousand)	800,000	Each
03-11-00112	50x50x3 mm angle iron, mild steel, of 6 metres length.	500	Each
03-11-00113	Manhole cover for light duty domestic use, size 0.3x0.3 M.	400	Each
03-11-00114	Manhole cover for medium duty carriage way, size 0.5x0.5 M.	700	Each
03-11-00115	Steel door with door frame for latrine of size 1 x 2 metres	300	Each