

GIZ QEP Agricultural training field at Gambela University							
2.0	Material list: irrigation system						
2.1	Reservoir	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.1.1	Geo-membrane (HDPE liner) - 1200 micron	75	-	75	m2		
2.2	Pump station at the river	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.2.1	3 " Suction hose in river 40m with inlet suction strainer	40	-	40	m		
2.2.2	50mm HDPE pipe PN6	400	20	420	m		
2.2.3	Power generator - unleaded gasoline; Single cilinder, 4-stroke, air cooled, 13HP output, 6,8kva, recoil and electric starter, alternator: copper winding	1	-	1	pcs		
2.2.4	SDM325 10HP Monoblock - Electrical pump; Head 15-50m - 10-65m3/hr	1	-	1	pcs		
2.2.5	ALTERNATIVE FOR 2.2.3 and 2.2.4: DIESEL WATER PUMP 3" WITH 40M3 CAPACITY @40M TOTAL HEAD	1	-	1	pcs		
2.3	Pump station field	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.3.1	3" SOLAR pump total head 10m - 40m3/hr including solar panels 11 pcs x 380 Wp Monokristal (4180 Wp)	1	-	1	pcs		
2.3.2	ALTERNATIVE FOR 2.3.1: DIESEL WATER PUMP 3" WITH 40M3 CAPACITY @10M TOTAL HEAD	1	-	1	pcs		
2.3.3	3" suction hose with inlet suction strainer	8	-	8	m		
2.3.4	3" double plastic disc filter both side male thread - manual cleaning - 100 micron	1	-	1	pcs		
2.3.5	3" hose connection	2	1	3	pcs		
2.3.6	3" metal nipple	1	1	2	pcs		
2.3.7	HDPE Reducer welded 75x50mm PN6	1	1	2	pcs		
2.3.8	3" HDPE female nipple both side thread	2	1	3	pcs		
2.3.9	3" male adapter one side thread one side coupling	1	1	2	pcs		
2.3.10	90mm HDPE pipe 50cm with welded male connection PN6	1	1	2	pcs		
2.3.11	HDPE Reducer 90X75mm PN6	1	1	2	pcs		
2.3.12	Rubber gasket - 90mm	2	2	4	pcs		
2.3.13	50mm HDPE pipe 30cm with welded male connection PN6	1	-	1	pcs		
2.3.14	50mm HDPE female coupling PN6	1	1	2	pcs		
2.3.15	Rubber gasket - 75mm	1	2	3	pcs		
2.3.16	Rubber gasket - 50mm	1	2	3	pcs		

2.4	<u>Main line</u>	Quantity	Additional spare parts	Total quantity	Unit	Unit price	Total Price
2.4.1	HDPE pipe 50mm from pump to site PN6	40	5	45	m		
2.4.2	HDPE pipe 50mm - central pipe site PN6	100	10	110	m		
2.4.3	HDPE Elbow 50mm - welded male and female connection PN6	2	1	3	pcs		
2.4.4	HDPE T piece 50mm - welded male and female connection PN6	11	3	14	pcs		
2.4.5	HDPE Cross piece 50mm - welded male and female connection PN6	3	1	4	pcs		
2.4.6	HDPE End cap with coupling - 50mm PN6	4	2	6	pcs		
2.4.7	HDPE female coupling - 50mm PN6	45	5	50	pcs		
2.4.8	Gasket - 50mm	45	5	50	pcs		
2.4.9	50mm HDPE pipe 30cm with male connection PN6	45	5	50	pcs		
2.5	<u>Distribution line</u>	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.5.1	HDPE pipe 50mm - distribution PN6	210	10	220	m		
2.5.2	HDPE End cap 50mm - one side coupling PN6	16	3	19	pcs		
2.5.3	HDPE Valve 50mm - both sides female coupling PN6	18	3	21	pcs		
2.6	<u>Production block - drip 1: Trees + perennials</u>	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.6.1	Start connector - 16mm	40	10	50	pcs		
2.6.2	Blind hose - 16mm	20	2	22	m		
2.6.3	Single coupling/connector	40	10	50	pcs		
2.6.4	Drip to drip connector - 16mm	40	10	50	pcs		
2.6.5	Dripline 8mil - 16mm- 20cm interval-1/hr	880	50	930	m		
2.6.6	Drip line end closer - 16mm	40	10	50	pcs		
2.6.7	Rubber gasket - 16mm	40	10	50	pcs		
2.7	<u>Production block - drip 2: Veggies</u>	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.7.1	Start connector - 16mm	120	20	140	pcs		
2.7.2	Blind hose - 16mm	60	5	65	m		
2.7.3	Single coupling/connector	120	20	140	pcs		
2.7.4	Drip to drip connector - 16mm	120	20	140	pcs		
2.7.5	Dripline 8mil - 16mm- 20cm interval-1/hr	2640	150	2790	m		
2.7.6	Drip line end closer - 16mm	120	20	140	pcs		
2.7.7	Rubber gasket - 16mm	120	20	140	pcs		
2.8	<u>Production block - sprinkler</u>	Quantity	Additional spare	Total quantity	Unit	Unit Price	Total Price
2.8.1	HDPE pipe 50mm PN6	240	10	250	m		
2.8.2	HDPE coupling T-piece - 50mm PN6	12	4	16	pcs		
2.8.3	HDPE End cap 50mm PN6	12	4	16	pcs		
2.8.4	Sprinkler head; 350lt per hour 6 x6m	40	10	50	pcs		
2.8.5	Galvanized rod for sprinkler stand + Spaghetti hose 8mm - 1m + LDP + adapter + connectors	40	10	50	pcs		
2.9	<u>Others</u>	Quantity	Additional spare parts	Total quantity	Unit	Unit Price	Total Price
2.9.1	Hose real for driplines storage	4	-	4	pcs		
	Total						-