Technical Specifications

The requested Drip Irrigation System will be used for agricultural purposes.

Lot-1. D sets	Lot-1. Drip Irrigation System for 2 hectares of Intensive Gardening in 5 regions of Karakalpakstan. Total Quantity: 5 sets					
ITEM #	ITEM DESCRIPTION The below is a list of materials and services for one	UNIT OF MEASURE	Q-TY	LATEST DELEVIRY DATE		
	set:		620	Not see the CO. I. I.		
1	Polyethylene pipe (SDR 21) / or equivalent diameter 63 mm (wall thickness 3.0-3.5 mm)	meter	630	Not more than 60 calendar days from day of signing		
2	Hose pipe (SDR 9) / or equivalent diameter 16 mm (wall thickness 2.0-2.5 mm)	meter	5000	contract by both parties		
3	Pipe plug diameter 63 mm (male)	Piece	2			
4	Pipe plug diameter 16 mm (male)	Piece	50			
5	Start connector (connector) with nipple diameter	Piece	50			
	16-18 mm					
6	Pipe connector diameter 16 mm	Piece	50			
7	Pressure Compensated Dripper 2-4 I/h (operating	Piece	1,650			
	pressure more than 1 bar) located on each 3 m					
8	Water filter disc (capacity: 16 m3/h or more)	Piece	1			
9	Solar water pump (with solar panel) PD 3-1.8-80 / or	Piece	2			
	equivalent					
	Capacity – 20 l/min					
	Solar panel capacity – not less than 0.36 kW	5.		-		
10	Water tank (tank with a capacity of 100-120 liters	Piece	1			
11	with a Venturi injector) Tee connector diameter 63x63x63mm	Piece	4			
12	Pipe connector diameter 63 mm	Piece	2			
13	Elbow diameter 63x63 mm	Piece	4	1		
14	Ball valve tap diameter 63 mm	Piece	1	1		
15	Water meter (type Voltman or equivalent, diameter 63 mm)	Piece	2			

Lot-2. Drip irrigation system per 250 sq. m. Quantity 594 sets

Technical specification for gravity powered drip irrigation kit with capacity to irrigate up to 250 m² *Application:*

Irrigation and fertigation of small plots up to 250 m²

Applicable for all crops including vegetables, cereals, pulses and fruit trees

Can be used for both open field and indoor plants cultivation (greenhouse or hotbeds)

Specification

Irrigation capacity: up to 250 m²

Power requirements: fully gravity powered – no need for pump source

Package: full kit supplied at one box

Assembling: easy assembly and operation – no need for previous experience

Modularity: fully modular, should be easily dismantled and stored

System laying off: Should be easily tailored to any plot shape within the size range

System maintenance support: should ensure special male/female connectors taking-off for easy lateral plugging when

only part of subject area needs to be irrigated

Each kit set should include the following components:

Nº	Name of	Specification	Quanti	How it looks	LATEST DELEVIRY
	components		ty	like	DATE

1	Tap connector to water tank adapter	Male, d=3/4", threaded with clump coupling and glands for two ends. Material – PVC	1 piece		Not more than 60 calendar days from day of signing contract by both parties
2	Ball valve tap	Female, d= ¾ "threaded form one side and with clump coupling form opposite one. Material - PVC	1 piece	2	
3	Water strainer	Male, d= ¾ "threaded from both sides. Materials: strainer sieve -nylon, 130 μm; strainer body-	1 piece		
4	Coupling	Female, d=¾ ", threaded. Material: PCV	1 piece	4	
5	Compress elbow	Male, d=25x¾ ", threaded from one side (d=¾ ") and with clump coupling (d=25mm) from other side. Material: PVC	1 piece	5	
6	Sub main pipe	D= 25 mm, wall thickness= 0.8-1.2 mm, pressure class =2.5 BAR. Material: polyethylene	25 m	6	
7	Drip line	Pipeline, d=12 mm, wall thickness 0.65 mm, drippers spacing =30 cm, dripper discharge -1.7 lph. Material: polyethylene	250 m		
8	Compress elbow	d=25x25 mm, with clump coupling from both sides Material: PVC	1 piece	7	
9	Tee connector	D= 25X25X25 mm, with clump coupling at each end. Material: PVC	1 piece	8	

10	Sub main pipe connector	Barb male, d= 9/12 mm. Material: PVC	22		
11	Drip line connector	Barb female, d= 9/12 mm. Material: PVC	22	11	
12	Plug for 9/12 barb male	D=9/12 mm Material: PVC	10	Q,	
13	Compress end line	25X25 mm Material: PVC	2	13	
14	"8" shaped end drip line	12X12 mm, Material: PVC	42	14	
15	Barb connector for repairing	25X25 mm, Material: PVC	1	16	
16	Barb connector for repairing	12X12 mm, Material: PVC	5	16	
17	Puncher and pusher 7.5 mm	Two ended puncher and pusher with milling cutter from one side and pusher at opposite side. Material: PVC/metal	1	10 Kg b	
18	Stabilizing peg	Length: 15-20 cm Material: PVC	22	15	
19	Gasket Teflon tape	Width: 10 -12 mm, width: 0.2-0.5 mm	1	18	

PART 1: FORM FOR SUBMITTING SUPPLIER'S QUOTATION

(This Form must be submitted only using the Supplier's Official Letterhead/Stationery)

We, the undersigned, hereby accept in full the UNDP General Terms and Conditions, and hereby offer to supply the items listed below in conformity with the specification and requirements of UNDP as per RFQ Reference No. $RFQ/019/19^6$.

TABLE 1: Offer to Supply Goods Compliant with Technical Specifications and Requirements

Lot-1. Drip Irrigation System for 2 hectares of Intensive Gardening in 5 regions of Karakalpakstan. Total Quantity: 5					
sets ITEM #	ITEM DESCRIPTION	UNIT OF	Q-TY	PRICE IN [CURRENCY] (EXCLUSIVE OF VAT)	
	The below is a list of materials and services for one set:	MEASURE	-	Unit Price	Total Price
1	Polyethylene pipe (SDR 21) / or equivalent	meter	630	Onit Frice	TotalFrice
_	diameter 63 mm (wall thickness 3.0-3.5 mm)	meter	030		
2	Hose pipe (SDR 9) / or equivalent diameter 16 mm	meter	5000		
	(wall thickness 2.0-2.5 mm)				
3	Pipe plug diameter 63 mm (male)	Piece	2		
4	Pipe plug diameter 16 mm (male)	Piece	50		
5	Start connector (connector) with nipple diameter	Piece	50		
	16-18 mm				
6	Pipe connector diameter 16 mm	Piece	50		
7	Pressure Compensated Dripper 2-4 I/h (operating	Piece	1,650		
	pressure more than 1 bar) located on each 3 m		ŕ		
8	Water filter disc (capacity: 16 m3/h or more)	Piece	1		
9	Solar water pump (with solar panel) PD 3-1.8-80 /	Piece	2		
	or equivalent				
	Capacity – 20 I/min				
	Solar panel capacity – not less than 0.36 kW				
10	Water tank (tank with a capacity of 100-120 liters	Piece	1		
	with a Venturi injector)				
11	Tee connector diameter 63x63x63mm	Piece	4		
12	Pipe connector diameter 63 mm	Piece	2		
13	Elbow diameter 63x63 mm	Piece	4		
14	Ball valve tap diameter 63 mm	Piece	1		
15	Water meter (type Voltman or equivalent,	Piece	2		
	diameter 63 mm)				
	Total Prices of Goods				
	Transportation costs				
	Packing, Insurance and other costs				
	Training Last Hating on them had in				
	Installation on turn-key basis				<u> </u>
	Total All-Inclusive Bid Price				

Lot-2. Drip irrigation system per 250 sq. m. Quantity 594 sets

Technical specification for gravity powered drip irrigation kit with capacity to irrigate up to 250 m² *Application:*

Irrigation and fertigation of small plots up to 250 m²

Applicable for all crops including vegetables, cereals, pulses and fruit trees

Can be used for both open field and indoor plants cultivation (greenhouse or hotbeds)

Specification

Irrigation capacity: up to 250 m²

Power requirements: fully gravity powered – no need for pump source

Package: full kit supplied at one box

Assembling: easy assembly and operation – no need for previous experience

Modularity: fully modular, should be easily dismantled and stored

System laying off: Should be easily tailored to any plot shape within the size range

System maintenance support: should ensure special male/female connectors taking-off for easy lateral plugging when

only part of subject area needs to be irrigated

Each kit set should include the following components:

Nº	Name of components	Specification	Quanti ty	How it looks like	
1	Tap connector to water tank adapter	Male, d=3/4", threaded with clump coupling and glands for two ends. Material – PVC	1 piece		
2	Ball valve tap	Female, d= ¾ "threaded form one side and with clump coupling form opposite one. Material - PVC	1 piece	2	
3	Water strainer	Male, d= ¾ "threaded from both sides. Materials: strainer sieve -nylon, 130 μm; strainer body-	1 piece	3	
4	Coupling	Female, d=¾ " , threaded. Material: PCV	1 piece	4	
5	Compress elbow	Male, d=25x¾ ", threaded from one side (d=¾ ") and with clump coupling (d=25mm) from other side. Material: PVC	1 piece	5	
6	Sub main pipe	D= 25 mm, wall thickness= 0.8-1.2 mm, pressure class =2.5 BAR. Material: polyethylene	25 m	6	
7	Drip line	Pipeline, d=12 mm, wall thickness 0.65 mm, drippers spacing =30 cm, dripper discharge -1.7 lph. Material: polyethylene	250 m		

8	Compress elbow	d=25x25 mm, with clump coupling from both sides Material: PVC	1 piece		
9	Tee connector	D= 25X25X25 mm, with clump coupling at each end. Material: PVC	1 piece	8	
10	Sub main pipe connector	Barb male, d= 9/12 mm. Material: PVC	22	11	
11	Drip line connector	Barb female, d= 9/12 mm. Material: PVC	22	12	
12	Plug for 9/12 barb male	D=9/12 mm Material: PVC	10	Q	
13	Compress end line	25X25 mm Material: PVC	2	13	
14	"8" shaped end drip line	12X12 mm, Material: PVC	42	14	
15	Barb connector for repairing	25X25 mm, Material: PVC	1	16	
16	Barb connector for repairing	12X12 mm, Material: PVC	5	16	
17	Puncher and pusher 7.5 mm	Two ended puncher and pusher with milling cutter from one side and pusher at opposite side. Material: PVC/metal	1	10	
18	Stabilizing peg	Length: 15-20 cm Material: PVC	22	15	

19	Gasket Teflon tape	Width: 10 -12 mm, width: 0.2-0.5 mm	1	18	
		Total Prices of Goods			
		Transportation costs			
		Packing, Insurance and other costs			
		Training			
		Total All-Inclusive Bid Price			

Table 2 – Table of technical compliance of the offered goods

Description / Specifications of Goods	Description / Specifications of			
(required by UNDP)	Goods (offered by Supplier) ⁶			
(required by ONDF)	Please indicate parameters of the offered goods			
	Please indicate for the offered goods:			
	Model:			
	Manufacturer:			
	Country of origin:			
Lot-1. Drip Irrigation System for 2 hectares of Intensive	Gardening in 5 regions of Karakalpakstan. Total			
Quantity: 5	sets			
Polyethylene pipe (SDR 21) / or equivalent				
diameter 63 mm (wall thickness 3.0-3.5 mm)				
Hose pipe (SDR 9) / or equivalent diameter 16 mm (wall				
thickness 2.0-2.5 mm)				
Pipe plug diameter 63 mm (male)				
Pipe plug diameter 16 mm (male)				
Start connector (connector) with nipple diameter 16-18 mm				
Pipe connector diameter 16 mm				
Pressure Compensated Dripper 2-4 l/h (operating pressure				
more than 1 bar) located on each 3 m				
Water filter disc (capacity: 16 m3/h or more)				
Solar water pump (with solar panel) PD 3-1.8-80 / or				
equivalent				
Capacity – 20 l/min				
Solar panel capacity – not less than 0.36 kW				
Water tank (tank with a capacity of 100-120 liters with a				
Venturi injector)				
Tee connector diameter 63x63x63mm				
Pipe connector diameter 63 mm				
Elbow diameter 63x63 mm				
Ball valve tap diameter 63 mm				
Water meter (type Voltman or equivalent, diameter 63 mm)				
Lot-2. Drip irrigation system per 250 sq. m. Quantity 594 sets				

⁶ Please provide description of offered product, model and brand name, that must meet minimum technical specifications provided in Annex 1 above

· ·	ation for gravity powered drip irrigation	
	to irrigate up to 250 m ²	
Application:		
•	igation of small plots up to 250 m ²	
	crops including vegetables, cereals, pulses	
and fruit trees		
	oth open field and indoor plants cultivation	
(greenhouse or ho	otbeds)	
Specification		
Irrigation capacity	/: up to 250 m²	
Power requireme	nts: fully gravity powered – no need for	
pump source		
Package: full kit si	upplied at one box	
Assembling: easy	assembly and operation – no need for	
previous experier	nce	
Modularity: fully i	modular, should be easily dismantled and	
stored		
System laying off:	Should be easily tailored to any plot shape	
within the size rai	nge	
System maintena	nce support: should ensure special	
male/female conr	nectors taking-off for easy lateral plugging	
when only part of	subject area needs to be irrigated	
Each kit set shoul	d include the following components:	
Tap connector	Male, d=3/4", threaded with clump	
to water tank	coupling and glands for two ends.	
adapter	Material – PVC	
Ball valve tap	Female, d= ¾ "threaded form one side	
'	and with clump coupling form opposite	
	one. Material - PVC	
Water strainer	Male, d= ¾ "threaded from both sides.	
	Materials: strainer sieve -nylon, 130 μm;	
	strainer body-	
Coupling	Female, d=¾ ", threaded. Material: PCV	
Compress elbow	Male, d=25x¾ ", threaded from one side	
	(d=¾ ") and with clump coupling	
	(d=25mm) from other side. Material: PVC	
Sub main pipe	D= 25 mm, wall thickness= 0.8-1.2 mm,	
Jan mam pipe	pressure class =2.5 BAR. Material:	
	polyethylene	
Drip line	Pipeline, d=12 mm, wall thickness 0.65	
Drip inic	mm, drippers spacing =30 cm, dripper	
	discharge -1.7 lph. Material: polyethylene	
Compress elbow	d=25x25 mm, with clump coupling from	
Compress elbow	both sides Material: PVC	
Tee connector	D= 25X25X25 mm, with clump coupling at	
TEE COMMECTOR	each end. Material: PVC	
Sub main ning		
Sub main pipe connector	Barb male, d= 9/12 mm. Material: PVC	
	Barb female, d= 9/12 mm. Material: PVC	
Drip line	Darb remaie, u= 9/12 mm. Materiai: PVC	
connector	D=0/12 mm	
Plug for 9/12	D=9/12 mm	
barb male	Material: PVC	

Compress end line	25X25 mm Material: PVC	
"8" shaped end	12X12 mm, Material: PVC	
drip line		
Barb connector	25X25 mm, Material: PVC	
for repairing		
Barb connector	12X12 mm, Material: PVC	
for repairing		
Puncher and	Two ended puncher and pusher with	
pusher 7.5 mm	milling cutter from one side and pusher	
	at opposite side. Material: PVC/metal	
Stabilizing peg	Length: 15-20 cm Material: PVC	
Gasket Teflon	Width: 10 -12 mm, width: 0.2-0.5 mm	
tape		

TABLE 3: Offer to Comply with Other Conditions and Related Requirements

Other Information pertaining to our Quotation	Your Responses				
are as follows:	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter proposal		
Terms of supply of equipment at final destination					
within 60 calendar days					
Warranty and After-Sales Requirements					
a) Minimum one (1) year warranty on both					
parts and labor					
b) Service Unit to be Provided when the					
Purchased Unit is Under Repair					
All Provisions of the UNDP General Terms and					
Conditions					
Other requirements [pls. specify]					

All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFQ.

[Name and Signature of the Supplier's Authorized Person] [Designation] [Date]