



## REQUEST FOR QUOTATION (RFQ)

Companies	Date: 30 August 2019
	Reference: RFQ/047/19 – Supply and installation of multi-tiered hydroponic unit with production capacity of 500 kg green biomass per day

Dear Sir / Madam:

We kindly request you to submit your quotation for Supply and Installation of Multi-Tiered Hydroponic Unit, as detailed in Annex 1 of this RFQ. When preparing your quotation, please be guided by the form attached hereto as Annex 2.

Quotations may be submitted on or before **18.00 (GMT 5+), 16 September 2019** and via *e-mail, or courier mail* to the address below:

**United Nations Development Programme**  
4, Taras Shevchenko Street, Tashkent city, 100029, Republic of Uzbekistan  
Procurement Unit

Electronic version of your quotation must be sent to [bids.uz@undp.org](mailto:bids.uz@undp.org)<sup>1</sup>.

Quotations submitted by email must be limited to a maximum of 5 MB, virus-free and no more than 2 email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

The following must be on the subject of email with your quotation to be sent to [bids.uz@undp.org](mailto:bids.uz@undp.org):

**RFQ/047/19 – Supply and installation of multi-tiered hydroponic unit with production capacity of 500 kg green biomass per day<sup>2</sup>**

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Please take note of the following requirements and conditions pertaining to the supply of the abovementioned good/service:

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<sup>1</sup> Quotations submitted to other email accounts will not be accepted and will be declined

<sup>2</sup> Email submission that will not contain this subject or without reference to subject tender will not be opened and will be declined

Delivery Terms [INCOTERMS 2010]	<input checked="" type="checkbox"/> DAP Nukus	
Customs clearance, if needed, shall be done by:	<input checked="" type="checkbox"/> UNDP	
Exact Address of Delivery and Installation Locations	<p>Delivery and installation locations are based in the following regions of the Republic of Karakalpakstan:</p> <ul style="list-style-type: none"> <li>- 1 set in Kegeyli region (approx. 115 km. from Nukus city);</li> <li>- 1 set Kanlikul region (approx. 85 km. from Nukus city);</li> <li>- 2 sets in Takhtakupir region (approx. 120 km. from Nukus city);</li> <li>- 1 set in Muynak region (approx. 210 km. from Nukus city);</li> </ul>	
Distribution of shipping documents	<p>For International suppliers, the cargo shall arrive to Nukus city, Karakalpak Republic of Uzbekistan for the name of UNDP CO in Uzbekistan. Goods are supposed to be exported to the end-user with waybill (2 originals), invoice (2 originals) and packing list (2 originals), with other quality confirmation documents if required. In addition, all documents under INCOTERMS 2010.</p>	
Latest Expected Delivery Date and Time	<input checked="" type="checkbox"/> 60 calendar days from the issuance of the Purchase Order (PO)	
Delivery and Installation Schedule	<input checked="" type="checkbox"/> Required	
Mode of Transport	<input checked="" type="checkbox"/> LAND	<input checked="" type="checkbox"/> Other_____
Preferred Currency of Quotation	<input checked="" type="checkbox"/> United States Dollars to foreign suppliers; <input checked="" type="checkbox"/> Local Currency: Uzbekistan So'm (UZS) to Uzbekistan based Suppliers	
Value Added Tax on Price Quotation	<input checked="" type="checkbox"/> Must be exclusive of VAT and other applicable indirect taxes	
After-sales services required	<input checked="" type="checkbox"/> Warranty on Parts and Labor for minimum period of 12 months <input checked="" type="checkbox"/> Provision of a Service when pulled out for maintenance/ repair within 12 months	
Deadline for the Submission of Quotation	16 September 2019, Tashkent time 18:00 (GMT +5)	
All documentations, including catalogs, instructions and operating manuals, shall be in this language	<input checked="" type="checkbox"/> English and/or <input checked="" type="checkbox"/> Russian <p>Bids and supporting documents in other than English or Russian languages must have translated into above either language version.</p>	

<p>List of mandatory documents to be submitted by Offeror's together with their Quotations by the deadline set above</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Duly Accomplished Form as provided in Part 1 of Annex 2, and in accordance with the list of technical requirements in Annex 1</li> <li><input checked="" type="checkbox"/> Declaration of owners' interest in other companies using form provided in Part 2 of Annex 2</li> <li><input checked="" type="checkbox"/> Company's profile with detailed information (name of the company, address, contact details etc.) using form provided in Part 3 of Annex 2</li> <li><input checked="" type="checkbox"/> Contact details (email, telephone, website) of clients whom the bidder supplied Multi-Tiered Hydroponic Unit in the last 3 years. At least 2 contracts for supply of Multi-Tiered Hydroponic Unit is must using form provided in Part 4 of Annex 2</li> <li><input checked="" type="checkbox"/> A statement whether any import or export licenses are required in respect of the goods to be purchased including any restrictions on the country of origin, use/dual use nature of goods or services, including and disposition to end users<sup>3</sup></li> <li><input checked="" type="checkbox"/> Manufacturer's Authorization Letter issued in favour of the bidder allowing selling their product to UNDP (if Supplier is not the manufacturer). The same document must demonstrate that the manufacturer takes an obligation to reserve required quantity of goods offered by the bidder for the tender should the bidder selected</li> <li><input checked="" type="checkbox"/> Verified copy of the latest valid business registration certificate of the Offeror's company<sup>4</sup></li> <li><input checked="" type="checkbox"/> Quality Certificates (ISO, etc.), Catalogue with details description of offered product with pictures</li> <li><input checked="" type="checkbox"/> Written Self-Declaration of not being included in the UN Security Council 1267/1989 list, UN Procurement Division list or other UN Ineligibility List</li> </ul>
<p>List of documents to be requested by UNDP additionally from the three lowest priced bid Offerors<sup>5</sup></p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> (a) Verified by third party (tax agency or other authorized body) copy of Financial Reports for the last two years</li> <li>OR</li> <li>(b) a bank statement from Offeror's bank, issued not less than 30 days prior the bid submission or quotation date, that Offeror has available or</li> </ul>
	<p>has access to liquid assets (asset that can be readily converted to cash), to meet the obligations/supply cash flow for the contract of not less than Offeror's bid value.</p>
<p>Period of Validity of Quotes starting the Submission Date</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 60 calendar days after deadline for submission of quotation</li> </ul> <p>In exceptional circumstances, UNDP may request the Vendor to extend the validity of the Quotation beyond what has been initially indicated in this RFQ. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Quotation.</p>
<p>Partial Quotes</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Partial quotes are not allowed.</li> </ul>

<sup>3</sup> Mandatory for the supply of imported goods

<sup>4</sup> Verified by the signature of the authorized Offeror's representative and Offeror's company stamp/seal

<sup>5</sup> Non-provision of any of additionally requested documents provided in this section will serve as a ground for disqualification of the Offer

Payment Terms	<p><b>To Local Supplier (Company registered in Uzbekistan):</b></p> <p><input checked="" type="checkbox"/> 15% advance payment and 85% final payment will be paid in Uzbek Soums (UZS) by bank transfer to the Supplier's account after delivery and acceptance of goods;</p> <p><b>To Foreign Suppliers (Company registered outside Uzbekistan):</b></p> <p><input checked="" type="checkbox"/> 100% payment will be by bank transfer to the Supplier's account after delivery and acceptance of goods. Advance payment up to a maximum of 15% of contract value can be allowed against the Advanced Payment Guarantee from reputable bank. A Bank Guarantee in the full amount of the advance payment should be in the form available at <a href="https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&amp;action=default">https://popp.undp.org/ layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&amp;action=default</a>.</p>
Liquidated Damages	<p>Will be imposed under the following conditions:</p> <p><input checked="" type="checkbox"/> Penalty will be applied as percentage of contract price per day of delay: 0.1%, but up to maximum 20% of total contract value</p> <p><input checked="" type="checkbox"/> Next course of action: penalty and termination of contract and return of advance payment if applicable</p>
Evaluation Criteria	<p><input checked="" type="checkbox"/> Technical responsiveness/Full compliance to requirements and lowest price</p> <p><input checked="" type="checkbox"/> Strong financial position: (a) <u>Liquidity ratio for the last two years not less than 1 if financial statements are presented</u></p> <p><u>OR</u></p> <p><input checked="" type="checkbox"/> (b) <u>Confirmation from bank on financial strength of the Offeror as per requirement outlined above</u></p> <p><input checked="" type="checkbox"/> Full acceptance of the PO/Contract General Terms and Conditions</p> <p><input checked="" type="checkbox"/> Comprehensiveness of after-sales services and guarantee</p> <p><input checked="" type="checkbox"/> At least 2 contracts for supply and installation of Multi-Tiered Hydroponic Unit</p> <p><input checked="" type="checkbox"/> Demonstrated availability of a permanent office reachable via landline telephone and permanent staff of at least 5 persons</p>
UNDP will award to:	<p><input checked="" type="checkbox"/> One supplier.</p> <p>UNDP will not consider offers, which include subcontracting.</p>
Type of Contract to be Signed	<input checked="" type="checkbox"/> Purchase Order (PO)
Special conditions of Contract	<input checked="" type="checkbox"/> Cancellation of PO/Contract if amount of penalty for delay in delivery exceeds 20% from total contract value
Conditions for Release of Payment	<input checked="" type="checkbox"/> Written Acceptance of Goods based on full compliance with RFQ requirements

Annexes to this RFQ	<input checked="" type="checkbox"/> Specifications of the Goods Required (Annex 1) <input checked="" type="checkbox"/> Form for Submission of Quotation (Annex 2) <input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions (Annex 3).  Non-acceptance of the terms of the General Terms and Conditions (GTC) shall be grounds for disqualification from this procurement process.
Contact Person for Inquiries (Written inquiries only)	UNDP CO Uzbekistan, Procurement Unit 4, Taras Shevchenko Street, Tashkent city 100029, Uzbekistan Fax: (+998 78) 1203485 Email: <a href="mailto:pu.uz@undp.org">pu.uz@undp.org</a>  Any delay in UNDP’s response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Post-qualification Actions	<input checked="" type="checkbox"/> Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted; <input checked="" type="checkbox"/> Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder; <input checked="" type="checkbox"/> Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed; <input checked="" type="checkbox"/> Physical inspection of the bidder’s plant, factory, branches or other places where business transpires, with or without notice to the bidder;
Other	Offers submitted by two (2) or more Offerors shall all be rejected if they are found to have <u>any</u> of the following: <ol style="list-style-type: none"> <li>a) they have at least one controlling partner, director or shareholder in common; or</li> <li>b) any one of them receive or have received any direct or indirect subsidy from the other/s; or</li> <li>c) they have the same legal representative for purposes of this RFQ;</li> <li>d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or</li> <li>e) influence on the Offer of, another Offeror regarding this RFQ process;</li> <li>f) they are subcontractors to each other’s Offer, or a subcontractor to one Offer also submits another Proposal under its name as lead Offeror; or</li> <li>g) an expert proposed to be in the team of one Offeror participates in more than one Offer received for this RFQ process. This condition does not apply to subcontractors being included in more than one Offer.</li> </ol>

Goods offered shall be reviewed based on completeness and compliance of the quotation with the minimum specifications described above and any other annexes providing details of UNDP requirements.

The quotation that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by UNDP. The unit price shall prevail and the total price shall be corrected.

If the supplier does not accept the final price based on UNDP's re-computation and correction of errors, its quotation will be rejected.

After UNDP has identified the lowest price offer, UNDP reserves the right to award the contract based only on the prices of the goods in the event that the transportation cost (freight and insurance) is found to be higher than UNDP's own estimated cost if sourced from its own freight forwarder and insurance provider.

At any time during the validity of the quotation, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the quotation. At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Purchase Order that will be issued as a result of this RFQ shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a quotation implies that the vendor accepts without question the General Terms and Conditions of UNDP herein attached as Annex 3.

UNDP is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.

Please be advised that UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a purchase order or contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link: <http://www.undp.org/procurement/protest.shtml>.

UNDP encourages every prospective Vendor to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its suppliers to adhere to the UN Supplier Code of Conduct found in this link: [http://www.un.org/depts/ptd/pdf/conduct\\_english.pdf](http://www.un.org/depts/ptd/pdf/conduct_english.pdf).

Thank you and we look forward to receiving your quotation.

Sincerely yours,

*Procurement Unit  
UNDP in Uzbekistan*

### Technical Specifications

The requested unit will be used for obtaining green biomass

DESCRIPTION: MULTI-TIERED HYDROPONIC UNIT WITH A CAPACITY OF 500 KG / DAY				
ITEM #	ITEM DESCRIPTION/SPECIFICATION OF NECESSARY MATERIALS	UNIT OF MEASURE	Q-TY	LATEST DELIVERY DATE
1	<p><b>Multi-tiered hydroponic system</b> with a capacity of 500 kg / day per set. Placed in a container-box made of sandwich panels filled with polyurethane foam with a density of 20 kg / m<sup>3</sup>. Container length 12.2-13.7 m, width 2.4-2.5 m, height 2.6-2.75. Heat and hydro isolation of the walls, ceiling, and the floor consists of the following:</p> <ul style="list-style-type: none"> <li>- Heat-isolation is made of polystyrene foam with 16kg/m<sup>3</sup> density (walls, ceiling);</li> <li>- Layer of the hydro-isolation is made of PVC film (walls, ceiling);</li> <li>- Finishing of the wall panels are made of non-combustible plastic (walls, ceiling);</li> <li>- Concrete screed inside the floor of the container, reinforced with a metal mesh 150x150x3 mm, with an drainage outlet for water darning (floor);</li> </ul> <p>Door made of aluminum profile 2100 x 850 mm - 3 pcs. Window made of aluminum profile 2000 x 550 mm - 2 pcs. Shelving sections are made of anodized aluminum profile, anti-corrosion, at least 1.8 mm thick. Equipped with PVC pipe piping for uniformed water supply with horizontal sprayers. Lighting: moisture-proof LED lamps –8 pcs. Polypropylene pallets for the bookmark of germinated grain. Daily grain consumption: 100-105kg Daily green biomass production per 1 kg of grain: 4-6 kg. Grain sprouting cycle period: 6-7 days.</p>	Set	1	Not more than 60 calendar days from day of signing contract by both parties
	<p><b>Automated control panel</b> for automated control of and management of irrigation system, temperature of the water, ozonation of the water, water level, temperature and humidity of the indoor area, lighting and supply of fresh air inside the unit;</p>	Piece	1	
	<p><b>Channel air conditioner BTU-18000</b> (English thermal unit). Productivity: at least 1500 m<sup>3</sup> / hour Power consumption: 2.5-3.5 kW/hour. Designed to maintain the optimal microclimate and provide fresh air to ensure the necessary level of CO<sub>2</sub>. Operating temperature range (-15) - (+ 60) ° C</p>	Piece	1	
	<p><b>Sensors:</b></p> <ul style="list-style-type: none"> <li>• Water temperature</li> <li>• Air humidity</li> <li>• Air temperature</li> </ul> <p>designed to ensure a control of all environment setting up and equipped with foiled connecting cables with impedance not higher than 15 ohm.</p>	Piece Piece Piece	1 3 3	
	<p><b>Galvanized tinfoil airways.</b></p>	Set	1	

Size (500-600) x (180-300) mm, with a total length of 16 running meters and with metal thickness 0.45 mm. Designed to supply fresh air and ensure uniform circulation in the facility room.		
<b>Automatic shutter.</b> Size (500-600) x (180-300) x 100 mm. For supply of fresh air required for plants. Material: Aluminum	Piece	2
<b>Mechanical shutter.</b> Size 500 x 300 x 100 mm. Designed for the outflow of moist air from the installation room. Material: Aluminum	Piece	4
<b>Moisture-proof fluorescent lamps with two fluorescent bulbs,</b> providing a luminous flux of 2500-2800 lumens each. Total power of the lights 120 kWh	Set	8
<b>Bactericidal lamps.</b> Designed for air disinfection. Consumption: up to 30W	Piece	4
<b>Air filter</b> with combined fabric synthetic winterizer (syntheticwinterizer). Size (500-600) x (180-400) mm. Designed for filtering of air from dust and insects.	Piece	2
<b>Ozone generator.</b> Capacity: 3-7 g O <sub>3</sub> per hour. Designed for water disinfection and saturation with oxygen, disinfection of steeped cereals and plants during watering.	Piece	1
<b>Centrifugal pump</b> Capacity: 18-20 m <sup>3</sup> / h, Pressure: 2.5-3.0 atm. Power consumption: 3.0 KW. Phase: 1 Designed for water supply for irrigation system.	Piece	1
<b>Vacuum pump</b> Capacity: 10-15 m <sup>3</sup> / hour, Pressure: 2-2.5 atm. Power consumption: 1.5-2.0 KW. (The first piece is for supplying the required water level in the water tank and the second piece is for washing the grain, pallets and the overall indoor area )	Piece	2
<b>Mechanical back pressure valve. d 40-50 mm</b> to ensure evenly pressure in the irrigation system	Piece	1
<b>Polyethylene tank</b> Capacity: 1-1.2 m <sup>3</sup> . Dimension: 1000 Equipped with: <ul style="list-style-type: none"> <li>• an electric heater of 1.5-2.0 kW (2 pcs),</li> <li>• a temperature sensor</li> <li>• mechanical floats,</li> <li>• disk diffusers (2 pcs),</li> <li>• a water refilling and discharge system with direct installation filters.</li> </ul>	Set	1



Designed for water treatment (filtration, heating and ozonation of water, oxygen saturation) and irrigation.		
<b>Cast-iron bath</b> Size: 1200-1700 x 600-750 x 500-600mm. Designed for washing, steeping and disinfecting grain and washing plastic pallets.	Piece	1
<b>Polypropylene durable glossy pallets</b> Dimension: (630-700) x (375-400) x (50-60)mm. Designed for accommodation of the germinated grains	Piece	520
<b>Polyethylene Boxes</b> Size: (600-800) x (300-500) x (150-250) mm Designed for getting of early germination of grains preparatory to go to bio mass growing process.	Piece	20
<b>PVC pipe line</b> (d25-32 mm for horizontal pipes, d 32-40 mm for vertical pipes, d 40-50 mm for water giving system) It is equipped with set of PVC pipes and set of fitting.	Set	1
<b>Assembled-disassembled sprinklers</b> , with the possibility of cleaning, designed for long life. <b>Throughput: 100-120 l / h</b> <b>Working radius: 360 degrees</b> <b>Watering diameter: 1.5-2 meters</b>	Piece	136
<b>Mechanical manometer 1-6 atm.</b> to control the water pressure in the irrigation system	Piece	1
<b>Mini electrolysis unit 0.3-1.0 KW</b> with a capacity of 2 L per cycle to produce a sodium hypochlorite solution intended for disinfecting grain, water, and sanitizing a room.	Piece	1

*[Enter name of authorized staff]*

*[Designation]*

*[Click here to enter a date]*

**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/047/19<sup>6</sup>.

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

ITEM #	DESCRIPTION	ITEM DESCRIPTION/SPECIFICATION OF NECESSARY MATERIALS AND SERVICES	UNIT OF MEASURE	Q-TY	PRICE IN [CURRENCY] (EXCLUSIVE OF VAT)	
					Unit Price	Total Price
1	<b>Multi-tiered hydroponic unit with production capacity of 500 kg green biomass per day</b>	<p><b>Multi-tiered hydroponic system</b> with a capacity of 500 kg / day per set. Placed in a container-box made of sandwich panels filled with polyurethane foam with a density of 20 kg / m3. Container length 12.2-13.7 m, width 2.4-2.5 m, height 2.6-2.75. Heat and hydro isolation of the walls, ceiling, and the floor consists of the following:</p> <ul style="list-style-type: none"> <li>- Heath-isolation is made of polystyrene foam with 16kg/m3 density (walls, ceiling);</li> <li>- Layer of the hydro-isolation is made of PVC film (walls, ceiling);</li> <li>- Finishing of the wall panels are made of non-combustible plastic (walls, ceiling);</li> <li>- Concrete screed inside the floor of the container, reinforced with a metal mesh 150x150x3 mm, with an drainage outlet for water darning (floor);</li> </ul> <p>Door made of aluminum profile 2100 x 850 mm - 3 pcs. Window made of aluminum profile 2000 x 550 mm - 2 pcs. Shelving sections are made of anodized aluminum profile, anti-corrosion, at least 1.8 mm thick. Equipped with PVC pipe piping for uniformed water supply with horizontal sprayers. Lighting: moisture-proof LED lamps –8 pcs. Polypropylene pallets for the bookmark of germinated grain. Daily grain consumption: 100-105kg</p>	Set	1		

<sup>6</sup> Pricing of goods should be consistent with the INCO Terms indicated in the RFQ

		Daily green biomass production per 1 kg of grain: 4-6 kg. Grain sprouting cycle period: 6-7 days.				
		<b>Automated control panel</b> for automated control of and management of irrigation system, temperature of the water, ozonation of the water, water level, temperature and humidity of the indoor area, lighting and supply of fresh air inside the unit;	Piece	1		
		<b>Channel air conditioner BTU-18000</b> (English thermal unit). Productivity: at least 1500 m <sup>3</sup> / hour Power consumption: 2.5-3.5 kW/hour. Designed to maintain the optimal microclimate and provide fresh air to ensure the necessary level of CO <sub>2</sub> . Operating temperature range (-15) - (+ 60) ° C	Piece	1		
		<b>Sensors:</b> <ul style="list-style-type: none"> <li>• Water temperature</li> <li>• Air humidity</li> <li>• Air temperature</li> </ul> designed to ensure a control of all environment setting up and equipped with foiled connecting cables with impedance not higher than 15 ohm.	Piece Piece Piece	1 3 3		
		<b>Galvanized tinplate airways.</b> Size (500-600) x (180-300) mm, with a total length of 16 running meters and with metal thickness 0.45 mm. Designed to supply fresh air and ensure uniform circulation in the facility room.	Set	1		
		<b>Automatic shutter.</b> Size (500-600) x (180-300) x 100 mm. For supply of fresh air required for plants. Material: Aluminum	Piece	2		
		<b>Mechanical shutter.</b> Size 500 x 300 x 100 mm. Designed for the outflow of moist air from the installation room. Material: Aluminum	Piece	4		
		<b>Moisture-proof fluorescent lamps with two fluorescent bulbs</b> , providing a luminous flux of 2500-2800 lumens each. Total power of the lights 120 kWh	Set	8		
		<b>Bactericidal lamps.</b> Designed for air disinfection. Consumption: up to 30W	Piece	4		
		<b>Air filter</b> with combined fabric synthetic winterizer (syntheticwinterizer). Size (500-600) x (180-400) mm.	Piece	2		

	Designed for filtering of air from dust and insects.				
	<b>Ozone generator.</b> Capacity: 3-7 g O <sub>3</sub> per hour. Designed for water disinfection and saturation with oxygen, disinfection of steeped cereals and plants during watering.	Piece	1		
	<b>Centrifugal pump</b> Capacity: 18-20 m <sup>3</sup> / h, Pressure: 2.5-3.0 atm. Power consumption: 3.0 KW. Phase: 1 Designed for water supply for irrigation system.	Piece	1		
	<b>Vacuum pump</b> Capacity: 10-15 m <sup>3</sup> / hour, Pressure: 2-2.5 atm. Power consumption: 1.5-2.0 KW. (The first piece is for supplying the required water level in the water tank and the second piece is for washing the grain, pallets and the overall indoor area )	Piece	2		
	<b>Mechanical back pressure valve. d 40-50 mm</b> to ensure evenly pressure in the irrigation system	Piece	1		
	<b>Polyethylene tank</b> Capacity: 1-1.2 m <sup>3</sup> . Dimension: 1000 Equipped with: <ul style="list-style-type: none"> <li>• an electric heater of 1.5-2.0 kW (2 pcs),</li> <li>• a temperature sensor</li> <li>• mechanical floats,</li> <li>• disk diffusers (2 pcs),</li> <li>• a water refilling and discharge system with direct installation filters .</li> </ul> Designed for water treatment (filtration, heating and ozonation of water, oxygen saturation) and irrigation.	Set	1		
	<b>Cast-iron bath</b> Size: 1200-1700 x 600-750 x 500-600mm. Designed for washing, steeping and disinfecting grain and washing plastic pallets.	Piece	1		
	<b>Polypropylene durable glossy pallets</b> Dimension: (630-700) x (375-400) x (50-60)mm. Designed for accommodation of the germinated grains	Piece	520		
	<b>Polyethylene Boxes</b>	Piece	20		

		Size: (600-800) x (300-500) x (150-250) mm Designed for getting of early germination of grains preparatory to go to bio mass growing process.				
		<b>PVC pipe line</b> (d25-32 mm for horizontal pipes, d 32-40 mm for vertical pipes, d 40-50 mm for water giving system) It is equipped with set of PVC pipes and set of fitting.	Set	1		
		<b>Assembled-disassembled sprinklers</b> , with the possibility of cleaning, designed for long life. <b>Throughput: 100-120 l / h</b> <b>Working radius: 360 degrees</b> <b>Watering diameter: 1.5-2 meters</b>	Piece	136		
		<b>Mechanical manometer 1-6 atm.</b> to control the water pressure in the irrigation system	Piece	1		
		<b>Mini electrolysis unit 0.3-1.0 KW</b> with a capacity of 2 L per cycle to produce a sodium hypochlorite solution intended for disinfecting grain, water, and sanitizing a room.	Piece	1		
		<b>Total Prices of Multi-tired hydroponic unit with production capacity of 500 kg green biomass per day (1 set)</b>				
		<b>Total Prices of Multi-tired hydroponic unit with production capacity of 500 kg green biomass per day (5 sets)</b>				
		Transportation costs for 5 sets (CIP Nukus)				
		Packing, Insurance and other costs for 5 sets				
		Training costs for 5 sets				
		Installation and commissioning costs for 5 sets				
		Other costs (travel, accommodation and living, etc.)				
		<b>Total All-Inclusive Bid Price for 5 sets of Multi-tired hydroponic unit with production capacity of 500 kg green biomass per day</b>				

**Table 2 – Table of technical compliance of the offered goods**

<b>DESCRIPTION: Multi-tiered hydroponic Unit with a capacity of 500 kg / day</b>	
Description / Specifications of Goods (required by UNDP)	Description / Specifications of Goods (offered by Supplier) <sup>7</sup> <i>Please indicate parameters of the offered goods</i> <i>Please indicate for the offered goods:</i> <i>Model: _____</i> <i>Manufacturer: _____</i> <i>Country of origin: _____</i>
<p><b>Multi-tiered hydroponic system</b> with a capacity of 500 kg / day per set. Placed in a container-box made of sandwich panels filled with polyurethane foam with a density of 20 kg / m<sup>3</sup>. Container length 12.2-13.7 m, width 2.4-2.5 m, height 2.6-2.75. Heat and hydro isolation of the walls, ceiling, and the floor consists of the following:</p> <ul style="list-style-type: none"> <li>- Heath-isolation is made of polystyrene foam with 16kg/m<sup>3</sup> density (walls, ceiling);</li> <li>- Layer of the hydro-isolation is made of PVC film (walls, ceiling);</li> <li>- Finishing of the wall panels are made of non-combustible plastic (walls, ceiling);</li> <li>- Concrete screed inside the floor of the container, reinforced with a metal mesh 150x150x3 mm, with an drainage outlet for water darning (floor);</li> </ul> <p>Door made of aluminum profile 2100 x 850 mm - 3 pcs. Window made of aluminum profile 2000 x 550 mm - 2 pcs. Shelving sections are made of anodized aluminum profile, anti-corrosion, at least 1.8 mm thick. Equipped with PVC pipe piping for uniformed water supply with horizontal sprayers. Lighting: moisture-proof LED lamps –8 pcs. Polypropylene pallets for the bookmark of germinated grain. Daily grain consumption: 100-105kg Daily green biomass production per 1 kg of grain: 4-6 kg. Grain sprouting cycle period: 6-7 days.</p>	
<p><b>Automated control panel</b> for automated control of and management of irrigation system, temperature of the water, ozonation of the water, water level, temperature and humidity of the indoor area, lighting and supply of fresh air inside the unit;</p>	
<p><b>Channel air conditioner BTU-18000</b> (English thermal unit). Productivity: at least 1500 m<sup>3</sup> / hour Power consumption: 2.5-3.5 kW/hour. Designed to maintain the optimal microclimate and provide fresh air to ensure the necessary level of CO<sub>2</sub>.</p>	

Operating temperature range (-15) - (+ 60) ° C	
<p><b>Sensors:</b></p> <ul style="list-style-type: none"> <li>• Water temperature</li> <li>• Air humidity</li> <li>• Air temperature</li> </ul> <p>designed to ensure a control of all environment setting up and equipped with foiled connecting cables with impedance not higher than 15 ohm.</p>	
<p><b>Galvanized tinplate airways.</b> Size (500-600) x (180-300) mm, with a total length of 16 running meters and with metal thickness 0.45 mm. Designed to supply fresh air and ensure uniform circulation in the facility room.</p>	
<p><b>Automatic shutter.</b> Size (500-600) x (180-300) x 100 mm. For supply of fresh air required for plants. Material: Aluminum</p>	
<p><b>Mechanical shutter.</b> Size 500 x 300 x 100 mm. Designed for the outflow of moist air from the installation room. Material: Aluminum</p>	
<p><b>Moisture-proof fluorescent lamps with two fluorescent bulbs,</b> providing a luminous flux of 2500-2800 lumens each. Total power of the lights 120 kWh</p>	
<p><b>Bactericidal lamps.</b> Designed for air disinfection. Consumption: up to 30W</p>	
<p><b>Air filter</b> with combined fabric synthetic winterizer (syntheticwinterizer). Size (500-600) x (180-400) mm. Designed for filtering of air from dust and insects.</p>	
<p><b>Ozone generator.</b> Capacity: 3-7 g O<sub>3</sub> per hour. Designed for water disinfection and saturation with oxygen, disinfection of steeped cereals and plants during watering.</p>	
<p><b>Centrifugal pump</b> Capacity: 18-20 m<sup>3</sup> / h, Pressure: 2.5-3.0 atm. Power consumption: 3.0 KW. Phase: 1 Designed for water supply for irrigation system.</p>	
<p><b>Vacuum pump</b> Capacity: 10-15 m<sup>3</sup> / hour, Pressure: 2-2.5 atm. Power consumption: 1.5-2.0 KW. (The first piece is for supplying the required water level in the water tank and the second piece is for washing the grain, pallets and the overall indoor area )</p>	
<p><b>Mechanical back pressure valve. d 40-50 mm</b> to ensure evenly pressure in the irrigation system</p>	
<b>Polyethylene tank</b>	

<p>Capacity: 1-1.2 m<sup>3</sup>.  Dimension: 1000  Equipped with:</p> <ul style="list-style-type: none"> <li>• an electric heater of 1.5-2.0 kW (2 pcs),</li> <li>• a temperature sensor</li> <li>• mechanical floats,</li> <li>• disk diffusers (2 pcs),</li> <li>• a water refilling and discharge system with direct installation filters .</li> </ul> <p>Designed for water treatment (filtration, heating and ozonation of water, oxygen saturation) and irrigation.</p>	
<p><b>Cast-iron bath</b>  Size: 1200-1700 x 600-750 x 500-600mm.  Designed for washing, steeping and disinfecting grain and washing plastic pallets.</p>	
<p><b>Polypropylene durable glossy pallets</b>  Dimension: (630-700) x (375-400) x (50-60)mm.  Designed for accommodation of the germinated grains</p>	
<p><b>Polyethylene Boxes</b>  Size: (600-800) x (300-500) x (150-250) mm  Designed for getting of early germination of grains preparatory to go to bio mass growing process.</p>	
<p><b>PVC pipe line</b> (d25-32 mm for horizontal pipes, d 32-40 mm for vertical pipes, d 40-50 mm for water giving system)  It is equipped with set of PVC pipes and set of fitting.</p>	
<p><b>Assembled-disassembled sprinklers</b>, with the possibility of cleaning, designed for long life.  <b>Throughput: 100-120 l / h</b>  <b>Working radius: 360 degrees</b>  <b>Watering diameter: 1.5-2 meters</b></p>	
<p><b>Mechanical manometer 1-6 atm.</b> to control the water pressure in the irrigation system</p>	
<p><b>Mini electrolysis unit 0.3-1.0 KW</b> with a capacity of 2 L per cycle to produce a sodium hypochlorite solution intended for disinfecting grain, water, and sanitizing a room.</p>	

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<sup>7</sup> Please provide description of offered product, model and brand name, that must meet minimum technical specifications provided in Annex 1 above



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

Other Information pertaining to our Quotation are as follows:	Your Responses		
	<i>Yes, we will comply</i>	<i>No, we cannot comply</i>	<i>If you cannot comply, pls. indicate counter proposal</i>
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 <i>[pls. specify]</i>			

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]*

## PART 2: DECLARATION OF INTEREST

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Dear Sir/Madam,

We/I, \_\_\_\_\_ (Name and Title), as shareholder(s)/owner(s) of \_\_\_\_\_ Company, declare that:

- a) Have no financial and other interests in, association or relationship with, are not employed and do not have relatives (i.e. spouse, parents, children or siblings) employed by the United Nations Development Programme (UNDP) or the Government of Uzbekistan that announced the RFQ; and do not have access to information about, or influence on the selection process for this RFQ
- b) Have no common controlling partner, director, shareholder, legal representative for the purposes of this RFQ with any other entity submitting its Quotation under this RFQ; are not subcontracting or are subcontractors to other entities for the purposes of this RFQ; and that the experts proposed in the team do not participate in more than one Quotation for this RFQ
- c) Are not involved in activities that could have an impact on the objectivity and independence of the Contractor's team in carrying out its duties under the contract or can affect the image of the United Nations and the Government of Uzbekistan.

We certify that the information stated is true, correct and complete to the best of our knowledge and belief. We are obliged to comply with all requests for additional information, documentation, clarification and/or verification concerning the Declaration of Interest statement.

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]*

**PART 3: COMPANY PROFILE**

1. Offeror's Legal Name <i>[insert Bidder's legal name]</i>		
2. In case of Joint Venture (JV), legal name of each party: <i>[insert legal name of each party in JV]</i>		
3. Actual or intended Country/ies of Registration/Operation: <i>[insert actual or intended Country of Registration]</i>		
4. Year of Registration in its Location: <i>[insert Bidder's year of registration]</i>		
5. Countries of Operation	6. No. of permanent staff in each Country	7. Years of Operation in each Country
8. Legal Address/es in Country/ies of Registration/Operation <sup>8</sup> : <i>[insert Bidder's legal address in country of registration]</i>		
9. Value and Description of Top two (2) Biggest Contracts for the past three (3) years		
10. Latest Credit Rating (Score and Source, if any)		
11. Brief description of litigation history (disputes, arbitration, claims, etc.), indicating current status and outcomes, if already resolved.		
12. Offeror's Authorized Representative Information  Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>		
13. Are you in the UNPD List 1267.1989 or UN Ineligibility List? <input type="checkbox"/> YES or <input type="checkbox"/> NO		

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

<sup>8</sup> You must specify address of permanent office, landline telephone numbers

**PART 4: EXPERIENCE IN  
SIMILAR NATURE\***

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Name of the good supplied	Delivery period (month, year)	Amount of the contract	Client (Name, contact person, telephone, email)

\* At least 2 contracts for the last 3 years for supply of Multi-Tiered Hydroponic Unit is must

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