



**INVITATION TO BID (ITB)**

**FOR THE PROCUREMENT OF**

**DRIP IRRIGATION SYSTEMS, SOLAR POWERED WATER  
PUMPING SYSTEMS AND ANCILLARY ITEMS AND SERVICES**

Tender Reference No: **2022/SLCXD/SLCDD/119248**

Project No. **GCP /SLC/018/MEX**

Destination: **Antigua and Barbuda, Barbados, Jamaica, and Saint Kitts  
& Nevis**

Closing date and time: **November 7, 2022 (23:00 Hrs. Atlantic time)**

**TO ENSURE THE VALIDITY OF YOUR OFFER:**

- **Your company shall be registered on UNGM  
([www.ungm.org](http://www.ungm.org));**
- **Your bid must be submitted as indicated in Article 8 of the  
ITB Special Requirements and Conditions.**

Please note that submissions by e-mail, sealed envelope or fax are not allowed.  
Further instructions on how to access FAO tender documents and submitting your  
bid through UNGM are attached herewith and uploaded on your UNGM Tender  
Management page under the “View Synopsis” button of the “Tender” tab.



Food and Agriculture Organization of the United Nations  
FAO Subregional Office for the Caribbean

**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**  
**CLOSING DATE: November 7, 2022 (23:00 Hrs. Atlantic time)**

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency of the United Nations with more than 190 member countries. Since its inception, FAO has worked to improve nutrition, increase agricultural productivity, raise the standard of living in rural populations and contribute to global economic growth. Achieving food security for all is at the heart of FAO's efforts – to make sure people have regular access to enough high-quality food to lead active, healthy lives.

To achieve its goals, FAO cooperates with thousands of partners worldwide, from farmers' groups to traders, from non-governmental organizations to other UN agencies, from development banks to agribusiness firms (further and more detailed information on FAO can be found on the internet site: <http://www.fao.org>).

FAO herewith invites you to submit a **Sealed Bid** in **United States Dollars (USD)**<sup>1</sup> for:

Items	Quantity	Technical Specifications	Delivery location DPU (Incoterms 2020)	Delivery time
Drip irrigation systems, solar powered water pumping systems and ancillary items and services	Please see Appendix I	As per the technical specifications attached in Appendix I	Ministry of Agriculture, Fisheries and Barbuda Affairs. Independence Ave. St. John's. <b>Antigua</b> . Port of Entry "Deep Water Harbour"	<b>Within thirty (30) calendar days</b> following the receipt of the Purchase Order from FAO
			Barbados Port Authority, Bridgetown, St. Michael, <b>Barbados</b> . 11142.	
			RADA Clarendon Parish Office. 2 Georges Street. Denbigh May Pen Clarendon Port of Entry Kingston, <b>Jamaica</b> .	
			Department of Agriculture La Guerite. Basseterre, St. Kitts. Port of Entry: Basseterre Deep Water Port. <b>St. Kitts</b>	

In preparing your bid, you should take into account the international status and humanitarian goals of FAO by submitting your best commercial terms. You should also be aware that FAO enjoys certain privileges and immunities which include exemption from payment of Value Added Tax ("VAT"), customs duties and importation restrictions.

Your Bid shall be based on all requirements included in this Invitation to Bid including all its Appendices must adhere to the General Bid Requirements and the Special Requirements and Conditions specified below:

**Documents enclosed:**

- Appendix I – Technical Specifications and Compliance Format
- Appendix II – Financial Offer
- Appendix III – Bid Submission Letter
- Appendix IV – FAO General Terms and Conditions for Goods

**Documents to be submitted as essential elements of the bid:**

<sup>1</sup> If the quote is in a different currency than specified here, FAO will convert prices for the commercial evaluation to a single currency using the official UN exchange rate corresponding to the date of the offer.



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- a) The duly completed “**Technical Specifications and Compliance Format**” in **Appendix I**, using the form enclosed, along with the relevant supporting documentation requested in the form.
- b) The duly completed “**Financial Offer**” in **Appendix II**, using the form enclosed.
- c) The duly completed “**Bid Submission Letter**” in **Appendix III**, using the form enclosed.

Bids must clearly indicate the tender number, have numbered pages and include the stamp and name of the bidder on all pages in order to facilitate verification of the completeness of the offer.

**Completeness of Bid.** Bids shall contain all the above information and documents and observe the provisions of this Invitation to Bid as otherwise it will not be possible to evaluate them on an equal basis.

**General Bid Requirements:**

1. **Contact information:** Full name, UNGM number<sup>2</sup>, address, fax and telephone numbers of your company and contact persons.
2. Supplier’s acceptance of the “**FAO General Terms and Conditions for Goods**” (enclosed, **Appendix IV**). Note that FAO cannot issue a Purchase Order in the absence of a Supplier’s acceptance of these Terms and Conditions.
3. **Payment Terms:** FAO effects payment through normal banking channels, within 30 days against invoice and shipping documents, and subject to receipt of satisfactory inspection report, if required, and acceptance of goods. FAO will, however, pay only for the goods actually accepted at final destination after inspection at unloading point(s) either by an independent inspection company or by an authorized FAO official and deduction of actual and/or liquidated damages for late delivery and/or quality deviations, if any. Letters of credit and advance payments cannot be provided.
4. Please note that the Organization will make payment to the bank account indicated by the selected supplier in its invoice, provided that the bank account is in the name of the supplier and located in the country of residence of the supplier. Any request for payment to a bank account other than that of the supplier or to a bank other than one located in the supplier’s country of residence must be specified in the offer, together with the reasons for such deviation from standard payment terms; the Organization will not be in a position to consider the request should this information be provided after the closing date of the tender. Successful bidders can register to submit invoices in PDF format via e-mail by contacting [AP-Invoices@fao.org](mailto:AP-Invoices@fao.org).
5. **Acceptance of FAO’s Bid Requirements including Technical Specifications (Appendix III).** If your bid is not compliant with any of these requirements, such non-compliance must be clearly identified in your offer (and details provided in Appendix III: Bid Submission Letter). If no mention to this effect is contained in your offer, FAO will assume that all requirements included in this Invitation to Bid are accepted by the supplier. Suppliers must in any case complete the technical specifications form.
6. **Insurance and Freight Costs:** To be arranged by supplier. The supplier will determine the appropriate type and amount of insurance coverage to address its risks up to delivery at final destination. FAO will pay only for the goods actually accepted at final destination after inspection at unloading point(s) and deduction of actual damages and/or liquidated damages for late delivery and/or quality deviations, if any.
7. **Prices:** Your unit prices, air/land/surface freight charges, insurance cost and total price shall be quoted separately for delivery to the destination(s) specified above on **DPU basis in accordance with Incoterms 2020**. FAO will pay only for the goods actually accepted at final destination after inspection at unloading

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<sup>2</sup> Please see Special requirements and Conditions point 8



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point(s) and deduction of actual damages and/or liquidated damages for late delivery and/or quality deviations, if any.

8. **Delivery time:** The preferred delivery date for goods on site including installation, if required, **is within thirty (30) days from the issuance of the Purchase Order**. FAO will endeavour to issue Purchase Orders within thirty (30) days following the closure of the tender. Suppliers are therefore requested to quote their best delivery time in calendar days following receipt of eventual Purchase Order; as necessary, a schedule of delivery times and associated prices may be offered (e.g. later delivery time at a lower cost). FAO reserves the right to consider offers for delivery beyond the preferred delivery date if the offered delivery date still meets FAO requirements.

9. **PO Delivery Terms:** DPU (Incoterms 2020) to the following delivery locations:

Country	Delivery location
Antigua	Ministry of Agriculture, Fisheries and Barbuda Affairs. Independence Ave. St. John's. Antigua. Port of Entry "Deep Water Harbour".
Barbados	Barbados Port Authority, Bridgetown, St. Michael, Barbados. 11142. Items to be distributed to farmer list attached in Appendix I.
Jamaica	RADA Clarendon Parish Office. 2 Georges Street Denbigh May Pen Clarendon. Port of Entry Kingston, Jamaica.
St. Kitts	Department of Agriculture. La Guerite. Basseterre, St. Kitts. Port of Entry: Basseterre Deep Water Port. St. Kitts

Custom clearance and related expenses will be responsibility of FAO. FAO preferred delivery time is thirty (30) days, but you may provide the best offer available in terms of delivery.

10. **Validity:** Bids must remain valid with firm and fixed prices **for 90 days** after Tender Closing Date.

11. **Country of Origin:** The origin of the goods is to be indicated by the supplier.

12. **Right to Publish Contract Award:** In responding to our tender invitation and accepting the FAO General Terms and Conditions you hereby authorize FAO to publish the details of any contractual relationship it enters into with you, including, but not limited to, the supplier's name and address, value of the award and a description of the goods or services.

13. FAO supports and promotes the UN Global Compact -- "a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption." FAO encourages all of its suppliers to confirm their adherence to the principles of the Global Compact (<http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>). All Vendors must agree to abide by the UN Supplier Code of Conduct located at:  
[https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unsc/conduct\\_english.pdf](https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unsc/conduct_english.pdf).

**14. Sanctionable Actions:**

- (a) The Supplier agrees to refrain from engaging in Sanctionable Actions, which are defined as follows:
- "Corrupt practice" or "corruption" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value whether tangible or intangible to improperly influence the actions of another party;
  - "Fraudulent practice" or "fraud" means any act or omission, including misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial and/or other benefit and/or to avoid an obligation;
  - "Collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;



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- "Coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- "Unethical practice" is any act or omission contrary to the conflict of interest, gifts and hospitality or post-employment FAO policy<sup>3</sup>, as well as any provisions or other published requirements of doing business with the Organization, including the UN Supplier Code of Conduct<sup>4</sup>; and
- "Obstructive practice" is an act or omission by a Third Party that may prevent or hinder the work of the Investigation Unit of the FAO Office of the Inspector General.

(b) If FAO determines that a bidder or supplier has engaged in a Sanctionable Action, FAO will impose sanctions in accordance with the prevailing Sanctions Procedures: [http://www.fao.org/fileadmin/user\\_upload/procurement/docs/FAO\\_Vendors\\_Sanctions\\_Policy\\_-\\_Procedures.pdf](http://www.fao.org/fileadmin/user_upload/procurement/docs/FAO_Vendors_Sanctions_Policy_-_Procedures.pdf). In addition, FAO may share information on sanctioned vendors with other Intergovernmental or UN Organizations.

(c) FAO may reject an offer for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in a Sanctionable Action in competing for the contract in question.

**15. Disclosure of Sanctions or Temporary Suspension:** The Bidder and its affiliates, agents and subcontractors should not be suspended, debarred, or otherwise identified as ineligible by any Intergovernmental or UN Organization, including any organization within the World Bank Group or any other multi-lateral development bank, or by the institutions and bodies of economic integration organizations (e.g., the European Union). You are therefore required to disclose to FAO whether your company or any of its affiliates, agents or subcontractors is subject to any sanction or temporary suspension imposed by any such organization or National Authority at any time during the three years prior to this Contract or at any time throughout the execution of this Contract. You acknowledge that a breach of this provision will entitle FAO to terminate its Contract with your firm and that material misrepresentations on your status constitute a fraudulent practice.

**16. UN Security Council Sanctions:** The Bidder must certify that it is not associated, directly or indirectly, with entities or individuals (i) that are associated with terrorism, as in the list maintained by the Security Council Committee established pursuant to its Resolutions 1267 (1999) and 1989 (2011), or (ii) that are the subject of sanctions or other enforcement measures promulgated by the United Nations Security Council. Selected bidders also agree to undertake all reasonable efforts to ensure that none of the funds received from FAO under the awarded contract are used to provide support to individuals or entities associated with terrorism or that are the subject of Security Council sanctions. This provision must be included in any subcontracts, sub-agreements or assignments entered into under the awarded contract. The bidder acknowledges and agrees that this provision is an essential term of the awarded contract and any breach of these obligations and warranties shall entitle FAO to terminate the Contract immediately upon notice to the Contractor, without any liability for termination charges or any liability of any kind of FAO.

**Special Requirements and Conditions:**

1. FAO reserves the right at its discretion to **cancel** this solicitation process if and when deemed necessary without any obligation to bidders; vendors will be informed accordingly.
2. FAO reserves the right to adjust the required quantities and to make **partial awards** if deemed necessary and/or appropriate.
3. **Partial offers of requested lots, if applicable, are NOT acceptable.** However, partial offers are acceptable if goods are not requested to be delivered in lots.

<sup>3</sup> see <http://www.fao.org/unfao/procurement/codedeconduitethique/en/>

<sup>4</sup> [https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unsc/cconduct\\_english.pdf](https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unsc/cconduct_english.pdf)



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**4. Arithmetical errors and discrepancies on the Financial Offer:**

- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected, unless in the opinion of evaluators, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals will prevail and the total will be corrected.
- In case of discrepancy between a word and figures, the amount in words will prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures will prevail subject to the note above.

**5. Samples:** If samples of goods are required as part of the evaluation, as specified in the Technical Specifications (**Appendix 1**), such samples are to be provided free of charge and are usually not returnable.

**6. Inspection:** In the event of an order, Inspection on quantity, compliance with technical specifications (quality), packing and marking may be arranged at loading/unloading by FAO or by an independent superintending agency at FAO expense. In responding to our tender invitation and accepting FAO Terms and Conditions, you hereby specifically authorize FAO and FAO nominated inspection company, to visit without formalities your premises and/ or warehouses and /or manufacturing facilities before or after issuing the eventual order.

**7. Liquidated/Actual Damages:** At FAO's discretion, damages may be applied to payments to be made in connection with any order as follows:

- **Inferior Quality:** FAO, at its sole discretion, reserves the right to either reject any delivery that does not comply with the technical specifications or to accept such delivery and apply actual or liquidated damages to be determined by FAO;
- **Late Delivery:** In the event of late delivery, liquidated damages will be applied at a rate of 2.5% of the value of the goods per week of delay. The liquidated damages applied for late delivery will not exceed 10% of the total order value.

**8. SUBMISSION OF YOUR BID.**

**The registration with UNGM (<https://www.ungm.org/Vendor/Registration>) is a mandatory requirement in order to participate in this tender.** Please visit [www.ungm.org](http://www.ungm.org) for more information on how to register your company in UNGM.

Detailed instructions on how to access FAO tender documents and submit your bid through UNGM are attached herewith and can be downloaded from your UNGM Tender Management page by clicking on the "View Synopsis" button under the "Tender" tab.

If you encounter any difficulties using the UNGM system navigation and functionality please contact [support@in-tend.com](mailto:support@in-tend.com), referencing the exact FAO ITB number.

**a. Uploading your bid on UNGM**

**Please login to the UNGM website and upload all the documents requested in the ITB document into the designated Placeholders (i.e. Technical, Commercial) within the indicated deadline.**

It is the exclusive responsibility of the bidders to ensure that the files are uploaded before the tender deadline. Offers received after the deadline will be considered invalid.

Please follow the instructions below to upload the electronic files to the UNGM portal:



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- i. **Log-in to the UNGM website** using your e-mail and password;
- ii. Click on **Tender Notices** (from the list on the left-hand side of the screen);
- iii. Click on “**Show more criteria**” and type “**FAO**” in the UN Organization field located in the upper right hand corner;
- iv. Click on **EXPRESS INTEREST (blue button)/ VIEW DOCUMENTS** (green button) on the left of the specific tender notice you are interested in;
- v. Click on the **Invitation to bid/ Request for Proposal tab** of the tender notice and scroll down to view and download the tender documents;
- vi. **Click on the “OPT IN” button;**
- vii. To upload all the files to the designated **envelope**, click on the relevant “**UPLOAD DOCUMENT**” red button under “**MY TENDER RETURN**”;
- viii. If included, please complete the mandatory tender **Questionnaire(s)**.
- ix. Click on the red button: **Submit Return**

**NOTE:** It is highly recommended that the size of the files does not exceed 5MB and that the format of the files is “PDF”, unless otherwise requested.

**IMPORTANT:** Once all files are uploaded (and the requested Questionnaire(s) completed, (if required), please remember to click on the red button “**SUBMIT MY RETURN**” to submit your offer. If the submission is properly completed, you will be able to view and download a receipt under the “**HISTORY**” tab.

**No Bid Notice:**

In the event that your company is not interested in participating to this tender, the Organization would appreciate your feedback. In this case, you are kindly requested to click on the “**OPT OUT**” button displayed on your UNGM Tender Management page and indicate one or more of the following reason(s) for non-participation:

- *Requirements are outside our normal activities;*
- *There is Insufficient time to prepare a bid;*
- *Present lack of resources to undertake more work;*
- *Bid submitted by authorized dealer in destination country*
- *Participating as subcontractor to another lead bidder*
- *Other (please specify briefly).*

**SUBMISSIONS BY E-MAIL, SEALED ENVELOPE OR FAX ARE NOT ALLOWED.**

**9. COMMUNICATIONS CONCERNING THIS TENDER**

All communications concerning this tender should be submitted as soon as possible through the UNGM portal under the “**CORRESPONDENCE**” tab.

Bidders are responsible for appropriately examining this tender. If the Bidder finds discrepancies in or omissions from the documents, or if their intent or meaning appear unclear or ambiguous, or if any other questions arise, the Bidder shall submit any request for clarification through the aforementioned “**CORRESPONDENCE**” tab.

In submitting a request for clarification, please do not, under any circumstances, submit a copy of your offer or reveal any information about your intended quotation. This will invalidate your offer.

**IMPORTANT:** **Deadline for submitting your requests for clarification is six (6) days before the tender closing date.**

**a. FAO’s REPLIES TO BIDDERS’ REQUESTS FOR CLARIFICATION**



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**FAO shall endeavour to provide answers to clarifications in an expeditious manner and not later than four (4) calendar days before the tender closing date.** Any delay in such response shall not cause an obligation on the part of FAO to extend the submission date of the Bid, unless FAO deems that such an extension is necessary.

All FAO's responses to bidders' questions will be uploaded under the "CLARIFICATIONS" tab of your Tender Management page and made available to all bidders. Please ensure to read all the clarifications as they become part of the technical specifications.

Responses to clarification enquiries **will be simultaneously issued by FAO to all bidders through the UNGM. The system will send automatic e-mail notifications to all bidders every time a clarification, or any other communication related to the tender notice, is sent out by FAO.**

**b. MODIFICATION OR WITHDRAWAL OF YOUR OFFER**

Bidders may, without prejudice, modify or withdraw their offer before the deadline using the "MODIFY RETURN" function. **No offer can be modified after the tender submission deadline.**

***BIDS RECEIVED BY ANY OTHER MEANS AND/OR BIDS RECEIVED AFTER THE CLOSING DATE WILL BE CONSIDERED INVALID.***

**10. Evaluation and Award Procedure:**

The award will be on the basis of:

- **Compliance with the technical specifications;**
- **Compliance with the commercial requirements;**
- **Acceptance of FAO General Terms and Conditions;**
- **Price;**
- **Other Evaluation Criteria if required, as specified at the tender stage.**

FAO reserves the right to consider, and disqualify firms based on, documented prior poor performance, including but not limited to poor quality of goods or services provided, late delivery and unsatisfactory performance.

Bidder Protests: Fairness and transparency are fundamental principles for FAO procurement activities. Bidders that believe that the procurement process was not fair and transparent may request feedback from the office that issued the tender. If a satisfactory response is not received, the bidder may present a protest following the instructions detailed in the following link: <http://www.fao.org/unfao/procurement/codedeconduitethique/protests/en/>.

To report allegations of fraud or misconduct in the procurement process, bidders may submit information, also anonymously, to the Office of the Inspector General Hotline: <http://www.fao.org/aud/69204/en/>.

Procurement Service  
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## Appendix I: Technical Specifications and Compliance Format

**BIDDERS MUST INDICATE COMPLIANCE OF THE GOODS OFFERED WITH THE FOLLOWING TECHNICAL SPECIFICATIONS. !!!FAILURE TO COMPLY WITH REQUIREMENTS STATED BELOW MAY RESULT IN YOUR BID BEING REJECTED!!!**

1. The Bidder must provide (i) The certificate of registration of the bidder's firm or company (**business license, articles of incorporation or equivalent document**) and (ii) **Taxpayer Identification Certificate**.
2. The Bidder must provide its standard procedure for the **provision of installation, after-sale service and warranty coverage in the country where the items are delivered**.
3. **If a brand or model is shown**, is for reference only. It means that the required product shall be of comparable quality and/or capable of performing the intended functions of the brand/model mentioned.
4. As most items require installation, award will be per lot, each lot being a beneficiary country (four in total): Antigua and Barbuda, Barbados, Jamaica, and Saint Kitts and Nevis. The summary of lots and quantities is shown in the following table:

Item	Lot				Installation required?
	Antigua and Barbuda	Barbados	Jamaica	Saint Kitts and Nevis	
1. Drip irrigation system kit with accessories and installation	21	15	2	11	Yes
2. Nine (9) stations irrigation timer	21	15	20	20	Yes
3. Water pH and electro-conductivity meter (Combo)	26	18	15	20	No
4. Solar Powered Centrifugal Water Pumping System	0	0	1	0	Yes
5. Solar Powered Surface Pumping System	20	15	5	12	Yes
6. Tensiometer	17	15	10	15	No
7. Water Storage Bladders	17	5	2	5	Yes
8. Water Storage Tanks	8	10	3	19	Yes

5. You may bid for one or multiple lots (see **Appendix II**). Partial bids of a single lot may not be accepted.
6. The Bidder **must duly complete all the empty spaces** in the technical specification format to detail the specifications being offered. The Bidder must **include the supporting documents** specified in each technical specification format. The Bidder may submit an offer for any of the following items:
  1. **Drip irrigation system kit with accessories and installation.**..... 10
  2. **Nine (9) stations irrigation timer** ..... 16
  3. **Water pH and electro-conductivity meter (Combo)**..... 19
  4. **Solar Powered Centrifugal Water Pumping System** ..... 22
  5. **Solar Powered Surface Pumping System**..... 32
  6. **Tensiometer** ..... 48
  7. **Water Storage Bladders** ..... 51
  8. **Water Storage Tanks**..... 54



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**1. Drip irrigation system kit with accessories and installation.**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL IN ALL THE SPACES BELOW TO DETAIL THE PRODUCT OFFERED SO THAT THE OFFER IS CONSIDERED AS VALID	
<b>Item</b>	<b>Description and purpose of the Item</b>	<b>Make and model of the item</b>	
<b>Drip Irrigation System Kit</b>	It is a <b>three sections</b> drip irrigation system aimed at small producers, which will be used to irrigate small areas of crop land of approximately 1 acre (43,560 sq ft). For the water supply, rainwater harvesting, ponds and wells will be used.		
<b>Unit</b>	Complete kit plus spare parts		
<b>Total quantity of units required</b>	Antigua and Barbuda : 21 Barbados : 15 Jamaica : 2 St. Kitts & Nevis : 11 <b>Total Quantity : 49</b>		
<b>Country</b>	<b>Project Code</b>		
Antigua and Barbuda, Barbados, Jamaica, St. Kitts and Nevis	<b>GCP /SLC/018/MEX</b>		
<b>1.0</b>	<b>Technical specifications: Main (from water tank to plot)</b>	<b>Quantity per KIT</b>	
1.1	Main material: SDR 41 PVC pressure pipe	<b>5 units</b>	
1.2	Size (Diameter): 1 ½ inch		
1.3	Length: 20 feet		
<b>2.0</b>	<b>Technical specifications: sub-main pipe</b>	<b>Quantity per KIT</b>	
2.1	Material: POLYETHYLENE HOSE HDPE PN 5	<b>330 feet</b>	
2.2	Size (diameter): 1 ½ inch		



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TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL IN ALL THE SPACES BELOW TO DETAIL THE PRODUCT OFFERED SO THAT THE OFFER IS CONSIDERED AS VALID	
<b>3.0</b>	<b>Technical specifications: Drip lines</b>	<b>Quantity per KIT</b>	
3.1	Material: Polyethylene drip hose 16 mm diameter, with integrated drippers. Drip line thickness: minimum 10 mil or 0.25 mm	<b>Minimum 10,000 feet to cover 1 acre</b>	
3.2	Distance between emitters: 12 inches (30 cm)		
3.3	Emitter discharge rate: ¼ gallon/h or 1 liter/h		
3.4	Connector Starts PVC- polyethylene hose including rubber	<b>1 per drip line (minimum 68)</b>	
3.5	Connector polyethylene hose – drip line	<b>1 per drip line (minimum 68)</b>	
3.6	Polyethylene hose 16 mm to join sub-main pipe with drip lines	<b>225 feet</b>	
<b>4.0</b>	<b>Technical specifications: Accessories, filter and air-valve</b>	<b>Quantity</b>	
4.1	All accessories including valves, elbows, “tee”, caps, adapters, reducers, glue, Teflon, etc. to operate the system efficiently must be provided as required to cover 1 acre divided in three sections	<b>1 kit</b>	
4.9	2-inch ring filter including adapters and two pressure gauges (before and after the filter) with a maximum flow rate: 50 m³/h	<b>1 unit</b>	
4.14	Air valve	<b>1 unit</b>	
4.15	All accessories must be UV resistant, precisely fitted and designed to prevent leakage		
4.16	All those parts of the accessories that will be in direct contact with water or ducts must be of the same material as the ducts: High density polyethylene (HDPE)		
<b>5.0</b>	<b>Spare parts</b>		
5.1	A list of the recommended spare parts sufficient for 2 years of operation must be submitted by the provider. The list must be provided, budgeted and delivered with your offer.		
5.2	Spare parts to be packaged as a set for each kit		
5.3	Indicate the percentage of parts offered as spare parts.		
<b>6.0</b>	<b>Installation</b>		



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TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED
		PLEASE FILL IN ALL THE SPACES BELOW TO DETAIL THE PRODUCT OFFERED SO THAT THE OFFER IS CONSIDERED AS VALID
6.1	Included: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
6.2	The offer shall include the cost of distribution and installation in locations provided by FAO. The cost of installation shall be presented separately from the cost of equipment and materials.	
<b>7.0</b>	<b>Certifications, Manuals and Warranties</b>	
7.1	<b>Certifications:</b> <ul style="list-style-type: none"> <li>• Certification of specifications as outlined in 1.0.</li> <li>• Eco-friendly manufacture and use with minimal discharge or generation of greenhouse gases and other pollutants.</li> <li>• Clear indication of the country of origin and product number.</li> </ul>	
7.2	<b>Manuals:</b> Directions in English for installation and maintenance must be provided, one manual per kit.	
7.3	The cost of manuals shall be included in the offer	
7.4	<b>Warranties:</b> A clear statement is required with your bid of the terms and conditions of the product warranty that will be available with the goods offered.	
7.5	Reference letters can be included in your offer (optional)	
<b>8.0</b>	<b>Packing and labelling</b>	
8.1	All containers should be marked with "Provided by FAO – <b>Resilient Caribbean Initiative: addressing the water-energy nexus in agriculture.</b> The consignment must also indicate "Goods in transit for "FAO CARIBBEAN" in English.	
8.2	Supply the name, Tel./Fax number and email or postal address of your service agents <ul style="list-style-type: none"> <li>• External bidders should provide evidence of agreement with a local representative with the detailed address of the representative.</li> </ul>	
<b>9.0</b>	<b>After Sales Service:</b>	

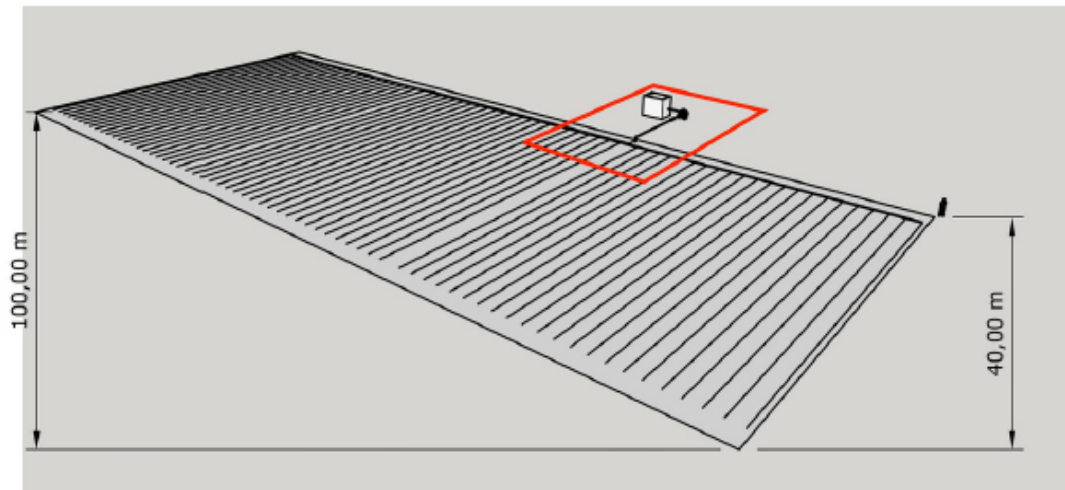


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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL IN <b>ALL THE SPACES BELOW</b> TO DETAIL THE PRODUCT OFFERED SO THAT THE OFFER IS CONSIDERED AS <b>VALID</b>
9.1	If available, state who will be responsible for the administration of the offered after sales service.	
<b>10.0</b>	<b>Special Import permissions:</b>	
10.1	<p>All costs to obtain the required permits must be included in the original bid. Bidders must annex to their offer a clear written statement obtained from their local clearing agent confirming that he will be able to obtain the required special permits from competent authorities</p> <p>The final delivery time indicated in the bid should include also the time indicated by the clearing agent to obtain the required special import permissions.</p> <p>Any delay in obtaining the required import permissions, which is not directly due to lack of documents to be submitted by the FAO (if any), and which will result in additional charges for demurrage/detention of the goods at the custom will be covered by the bidder.</p>	
<b>11.0</b>	<b>Training</b>	
11.1	Three one-day training events on O&M of irrigation system shall be included in the offer. The cost of training shall be presented in a separate offer from the materials, equipment and installation.	

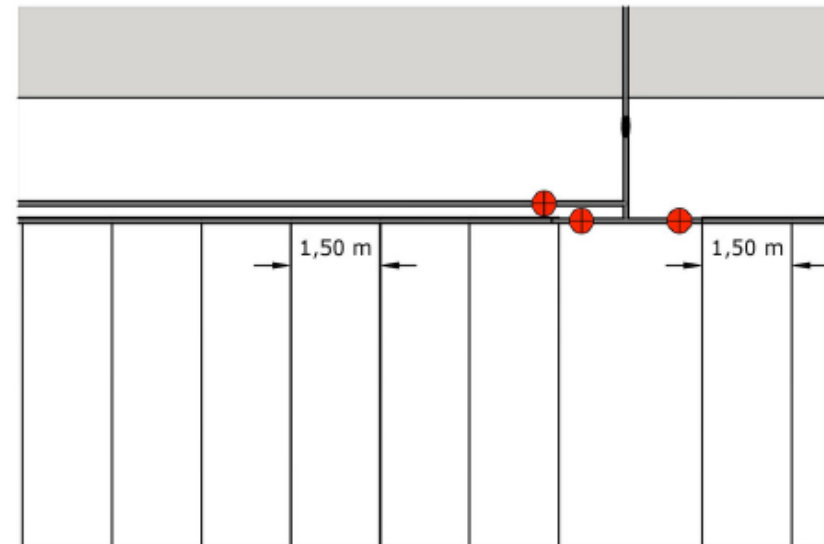
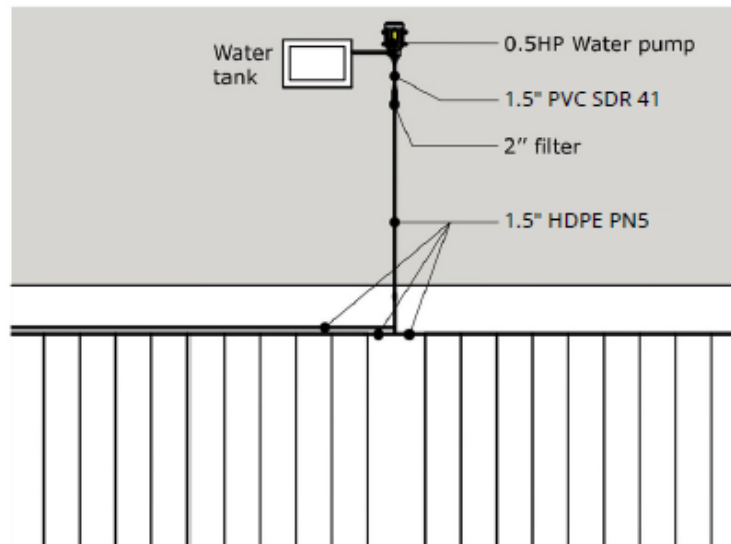


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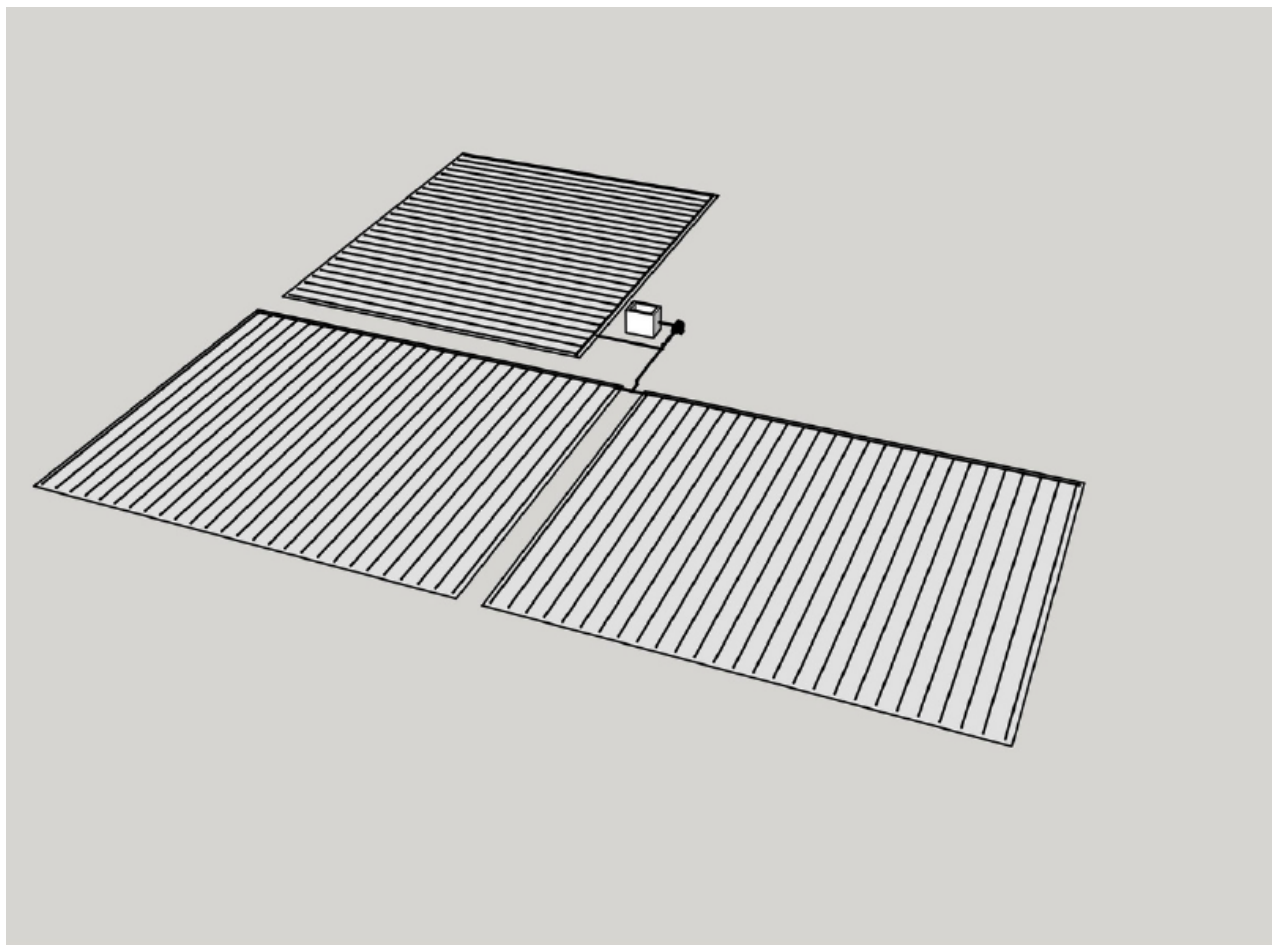
**Drip Irrigation System ~ 1 Acre**

- Water pump: 0,5HP
- Filter: inline after the pump 2"
- Main line: 1.5" PVC SDR 41
- Distance between drip lines: 1,5m
- Distance between emitters: 30cm
- # of control valves: 3





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**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



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**2. Nine (9) stations irrigation timer**

(To complete and submit along with your offer)

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		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO</u></b> <b><u>BE VALID</u></b>	
<b>Item</b>	<b>Description and purpose of the item</b>	<b>Make/ brand and model of item</b>	
<b>9- station irrigation timer</b>	Allows customized watering schedule; leak proof for outdoor use		
<b>Unit</b>	Irrigation timer		
<b>Total quantity of units required</b>	Antigua and Barbuda :21 Barbados: 15 Jamaica: 20 St. Kitts & Nevis: 20 <b>Total Quantity: 76</b>	<b>Name and address of the manufacturer of item</b>	
<b>Country</b>	<b>Project code</b>		
Antigua & Barbuda Barbados Jamaica St. Kitts & Nevis	GCP /SLC/018/MEX		
<b>1.0</b>	<b>Technical Specifications:      General</b>		
1.1	Allows for increase to watering time depending on the weather or rainy periods; equipped with rain delay features allowing for automatic resumption; separate programable schedule on each outlet; at least 2 outlets, with each outlet allowing for 3-4 watering cycles; easy to read screen		



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO</u></b> <b><u>BE VALID</u></b>
1.2	Digital display	
1.3	Has a durable locking weatherproof case or cabinet, suitable for both outdoor and indoor use, with mounting brackets	
1.4	Built-in surge protection, operating pressure 7-120psi,	
1.5	Internal transformer that allows for easy plug-and-go installation	
1.6	Battery backup to preserve programming	
<b>2.0</b>	<b>Installation</b>	
2.1	Included: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
2.2	The offer shall include the cost of distribution and installation in locations provided by FAO	
<b>3.0</b>	<b>Spare Parts</b>	
3.1	A list of manufacturer's recommended spare parts, sufficient for 2 years of operation must be submitted for each unit. The list must be itemised, costed, and submitted with your bid.	
3.2	Spare parts to be packaged as a set with each unit	
3.3	Indicate the percentage of parts offered as spare parts.	
<b>4.0</b>	<b>Certifications, Manuals and Warranties</b>	
4.1	<b>Certifications:</b> <ul style="list-style-type: none"> <li>• Certification of specifications as outlined in 1.0.</li> <li>• Eco-friendly manufacture and use with minimal discharge or generation of greenhouse gases and other pollutants.</li> </ul>	



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO</u></b> <b><u>BE VALID</u></b>
	<ul style="list-style-type: none"> <li>• Clear indication of the country of origin and product number.</li> </ul>	
4.2	<b>Manuals:</b> Directions in English for use and storage conditions should be provided.	
4.3	<b>Warranties:</b> A clear statement is required with your bid of the terms and conditions of the product warranty that will be available with the goods offered.	
<b>5.0</b>	<b>Packing and labelling</b>	
5.1	All containers should also be marked with “Provided by FAO – <b>Resilient Caribbean Initiative: addressing the water-energy nexus in agriculture</b> ” The consignment must also indicate “Goods in transit for “FAO CARIBBEAN” in English.	
<b>6.0</b>	<b>After Sales Service:</b>	
6.1	State who will be responsible for the administration of the offered after sales service.	

Company Name: \_\_\_\_\_

Date: \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



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**3. Water pH and electro-conductivity meter (Combo)**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>	
<b>Item</b>	<b>Description and purpose of the item</b>	<b>Make/ brand and model of item</b>	
Water pH and electro-conductivity meter (Combo)	Digital instrument that allows measurement of both pH and EC (electrical conductivity) to improve efficiency of fertilizer application.		
<b>Unit</b>	pH/EC meter		
<b>Total quantity of units required</b>	Antigua and Barbuda : 26 Barbados : 18 Jamaica : 15 St. Kitts & Nevis : 20 <b>Total Quantity : 79</b>		
<b>Country</b>	<b>Project code</b>	<b>Name and address of the manufacturer of item</b>	
Antigua & Barbuda Barbados Jamaica St. Kitts & Nevis	GCP /SLC/018/MEX		
<b>1.0</b>	<b>Technical Specifications: General</b>		
1.1	Temperature range: 0 – 60 °C; accuracy: ± 0.5 °C; resolution: 0.1 °C		
1.2	pH: 0 – 14; accuracy: ± 0.01; resolution: 0.01		
1.3	EC: 0 – 20 mS/cm; resolution: 0.01 mS/cm		



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TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED
		PLEASE FILL OUT <u><b>ALL THE SPACES</b></u> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <u><b>THE OFFER TO BE VALID</b></u>
1.4	Characteristic: Portable-Water proof	
1.5	Calibration pH: at 1 or 2 points with 2 sets of memorized buffers (pH 4.01/7.01/10.01). <ul style="list-style-type: none"> <li>• EC/TDS: automatic, at 1 point with calibrating solutions (included).</li> </ul>	
1.6	Battery powered and auto-off system	
1.7	A list of manufacturer's recommended, fast-moving spare parts must be submitted.	
<b>2.0</b>	<b>Installation</b>	
2.1	Included: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>3.0</b>	<b>Spare Parts</b>	
3.1	A list of manufacturer's recommended spare parts, sufficient for 2 years of operation must be submitted for each unit. The list must be itemised, costed, and submitted with your bid.	
3.2	Spare parts to be packaged as a set with each sprayer	
3.3	State the percentage of spare parts being offered	
<b>4.0</b>	<b>Certifications, Manuals and Warranties</b>	
4.1	<b>Certifications:</b> <ul style="list-style-type: none"> <li>• Certification of specifications as outlined in 1.0.</li> <li>• Eco-friendly manufacture and use with minimal discharge or generation of greenhouse gases and other pollutants.</li> <li>• Clear indication of the country of origin and product number.</li> </ul>	
4.2	<b>Manuals:</b>	



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>
	Directions in English for use and storage conditions should be provided.	
4.3	<b>Warranties:</b> A clear statement is required with your bid of the terms and conditions of the product warranty that will be available with the goods offered.	
<b>5.0</b>	<b>Packing and labelling</b>	
5.1	All containers should also be marked with ‘‘Provided by FAO – <b>Resilient Caribbean Initiative: addressing the water-energy nexus in agriculture</b> ’’ The consignment must also indicate ‘‘Goods in transit for ‘‘FAO CARIBBEAN’’ in English.	
<b>6.0</b>	<b>After Sales Service:</b>	
6.1	State who will be responsible for the administration of the offered after sales service.	

Company Name: \_\_\_\_\_

Date: \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



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**4. Solar Powered Centrifugal Water Pumping System**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>	
<b>Item</b>	<b>Description and purpose of the item</b>	<b>Make/ brand and model of item</b>	
<b>Pump for solar pumping system</b>	3 HP Solar Powered Centrifugal water motor pump for water movement from a large 250,000 gallon water harvesting pond, which will be used to irrigate small areas of crop land of approximately 1 acre (43, 560sq ft). For the water supply, a rainwater collection system and natural sources will be used, according to the conditions of each farm. A Minimum vertical lift of 100ft is required		
<b>Unit</b>	Motor pump + pump controller + accessories + spares		
<b>Total quantity of units required</b>	1	<b>Name and address of the manufacturer of item</b>	
<b>Country</b>	<b>Project code</b>		
<b>Jamaica</b>	<b>GCP/SLC/018/MEX</b>		
<b>1.0</b>	<b>Technical Specifications: Pump</b>		
1.1	3HP Stationary Solar-powered AC Surface water pumping unit, multi-stage centrifugal pump system made of corrosion resistant material suitable for the Caribbean environment, with all the necessary pipes, cables and accessories for working system. Include a device to measure the water flow rate (ultrasonic or magnetic flow meter). Pump should have		



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TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED
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	the ability to move water up inclines in order to irrigate plots of land. The pipes should be designed to deliver appropriate flow rate.	
1.2	<p>The “Motor Pump Set” should have the following features:</p> <ul style="list-style-type: none"> <li>• The manufacturer is specialized in the manufacturing of pumps with ISO 9001-2015.</li> <li>• Reference of the pump model operating in similar photovoltaic pumping system should be provided including (years of operation, location, system features)</li> <li>• The pump efficiency shall be not less than 35% for positive displacement for centrifugal pumps at rated conditions.</li> <li>• The suction/delivery pipe, electric cables, floating assembly, and other fittings required to install the system are also included. The pump should also be fitted in an adequate pump pit with adequate space for adequate air cooling.</li> <li>• The motor pump set should be installed on a <b>suitable stationary steel base</b> as per manufacturers recommendations to limit vibration to that needed to ensure smooth operations.</li> <li>• The installation of the pump shall cover both the supply and installation of the suction pipe (at the pump inlet) from an existing suction sump, as well as a delivery pipe and hose (at the outlet of the pump) of 100ft. Suction pipe should be made of rubber and delivery pipes are made of PE.</li> <li>• Components and equipment used in the PV water pumping system including the PV modules, pump, Stationary metallic structures, cables, junction box switch, structures for the pump, etc., should conform to the BS/IEC/ESS/ or international equivalent <ul style="list-style-type: none"> <li>a) The motor nameplate shall display information according to NEMA or IEC standards</li> </ul> </li> </ul>	



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1.3	<p>Pump should be properly designed for lifting water, with the motor directly coupled to the pump. The pump shall have channels of its impeller, of ample size to pass easily the water without clogging. The degree of protection of motor pump terminal block shall be not less than (IP55) and not less than IP44 for motor protection.</p> <p>The material from which the runner is made shall be able to resist corrosive action of water. The impeller material shall be made of stainless steel, bronze or gray cast Iron/Steel with special protection suitable for this application to resist corrosive and abrasive action of water. Impeller shall be statically and dynamically balanced. The maximum diameter of solids that the pump can pass shall be stated by supplier. If needed, the inlet pipe should be furnished with a grid of 20-30 mm mesh, to avoid pump blocking.</p>	
1.4	<p>The pump shall be supplied with a pump nameplate corrosion resistant material such as 304 stainless steel, suitable for a coastal environment. Test reports should be provided. Bid should contain complete pump information: manufacturer's name, serial number, model number, number of stages, speed, discharge, year manufactured, etc.</p>	
1.5	<p>Original certified and guaranteed performance curves for head, discharge rate, power absorbed and efficiency at the rated speed for pump to be submitted.</p>	
1.6	<p>Any dry pump shall be provided with complete accessories. All required accessories such as anchor bolts, washers, nuts, upper guide and intermediate guide, bar bracket, etc., shall be provided as part of the scope of work.</p> <p>In case of the pump is not self-priming, a <b>non-return valve</b> shall be used in the suction line for the manual priming purpose.</p>	



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1.7	The rated power of the motor shall be sufficient to enable driving the respective pump without overloading under all condition of starting and continuous working. The motor rating should have 20% excess power of the maximum power through the working range, with number of starts per hour according to the NEMA or IEC code, and insulation class is NEMA <b>F type</b> , tropical conditions (ambient temperature expected to be 50° C).	
1.8	The motor efficiency shall be compatible with NEMA class B standards. and approved by manufacturer for variable frequency supply operation (suitable for solar pumping application	
1.9	Minimum pumping capacity and pressure: 40 US gallon/min; 58 psi	
1.10	Maximum pumping capacity and pressure: 90-92 US gallons/min; 72-87 psi	
1.11	Minimum suction depth: 40 ft	
1.14	Pump head: 150 ft	
1.15	NPSHr (Nominal Suction Head): 20 ft	
1.16	Diameter of the suction aperture (inlet): 2"	
1.17	Diameter of the discharge aperture (outlet): 2"	
1.18	Complete with pulleys (2 grooves) and belts (set per item)	
1.19	Suction pipe 2", rubber made, 40 ft long minimum (one per unit)	
1.20	Discharge pipe 2", PE made, 100 ft long minimum (one per unit)	
1.21	One 2" clamp for suction pipe and one 2" clamp for delivery hose	
1.22	Set of tools for maintenance and repairing of pump (one per unit)	
1.23	Approximate dry weight: minimum 15 lb	
<b>2.0</b>	<b>Technical Specifications: Pump engine</b>	
2.1	Net power engine: 2.24 kW/3 HP	
2.2	Maximum speed: 3600 rpm	
2.3	Single coil, air cooled electric engine	
2.4	Plug starting system	



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2.5	Maximum motor current: 12A	
2.6	Operating voltage: 110v-250V	
2.7	Remote monitoring compatibility: required	
2.8	Insulation Class: F	
2.9	Protection against dry run, over temperature, over current	
<b>3.0</b>	<b>Technical Specifications: Pump operation control panel</b>	
3.1	Pump control panel should be fixed in the mounting of the pump. It contains operating switch meant to provide ability to turn pump on and off at specific times. Including appropriate cables, wiring, adapters, fuse and all protection means (thermal, dry run) with all other fittings, accessories and required for it to work according to NEMA, IEC, NEC, AWG or equivalent national standards The operation switch should be affixed to the pump. The panel will also include indicator for voltage and current.	
<b>4.0</b>	<b>Technical specifications: Solar Array</b>	
<b>4.1</b>	<b>Technical Specifications: General</b>	
4.1.1	Off-grid system	
4.1.2	Solar panels to be used directly with Pump	
4.1.3	No batteries required	
4.1.4	Please provide the manufacturer's datasheet inclusive of performance curves for solar panels.	
<b>4.2</b>	<b>Technical Specifications: Solar panels</b>	
4.2.1	Solar panel Type: Monocrystalline or polycrystalline	
4.2.2	Rated maximum power: 300 Wp - 500 Wp	
4.2.3	Nominal efficiency: 20 % approx.	
4.2.4	Maximum power voltage (Vmp): 32.26 V – 64.5 V	
4.2.5	Maximum power current (Imp): 7.9 A - 12.8 A	



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4.2.6	Open circuit voltage (Voc): 39.83 V – 69.8V	
4.2.7	Short circuit current (Isc): 8.2 A – 13.4 A	
4.2.8	Module efficiency (Minimum): 19.5%	
4.2.9	Operating Temperature conditions: -40 to 85 °C	
4.2.10	Weight (approx.): 25 kg per panel	
4.2.11	Estimated solar array size: 3500 Wp ( <i>minimum installed array capacity</i> )	
4.2.12	Required number of panels: 7 to 12 panels	
4.2.13	Dimensions: <i>Length:</i> 1 665 – 2 279 mm <i>Width:</i> 1 002 – 1 310 mm <i>Thickness:</i> 35 – 45 mm	
4.2.14	Anti-Glare technology Free of Cadmium telluride ( CdTe )	
4.2.15	<b><u>Relevant certifications: IEC 61215 (Terrestrial photovoltaic (PV) modules - Design qualification and type approval), IEC 61730 (Photovoltaic (PV) module safety qualification), ISO 14001:2015 (environmental standards) or equivalent.</u></b> Desirable certifications: IEC61701 (Photovoltaic (PV) modules - Salt mist corrosion testing), UL 1703 (Standard for Flat-Plate Photovoltaic Modules and Panels), IEC 61683 (Photovoltaic systems - Power conditioners - Procedure for measuring efficiency) or <i>equivalent</i> .	
4.2.16	Junction Box: The junction Weather-resistant plastic casing with a transparent lid (IP65 or IP67)	
4.3	<b>Technical Specifications: Pump Inverter/ variable frequency drive</b>	
4.3.1	Type: MPPT embedded in solar pumping inverter or variable frequency drive	



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4.3.2	Rated power: 3500W (according to solar panel arrangement)	
4.3.3	No-load loss: Maximum 10 W	
4.3.4	DC input range: 200 – 1 000 V	
4.3.5	Output voltage: 110 V – 250 V	
4.3.6	Inverter Efficiency (Peak): 95%	
4.3.7	Nominal MPPT voltage (aprox.): 110V-230 V	
4.3.8	Maximum MPPT voltage: 1 000 V	
4.3.9	1 pump Inverter ( 1-2 controller) or 1 variable frequency drive – <i>According to selection</i>	
4.3.10	<p>The inverter Interfaces between the solar panels and the pump must have:</p> <ul style="list-style-type: none"> <li>- Built-in overvoltage, overload, overheat and dry-run protection,</li> <li>- Short circuit protection and reverse polarity protection – Maximum Power Point Tracking (MPPT)</li> <li>- On/Off control switch</li> <li>- interruption of the pump when the water tank is full</li> <li>- energy meter</li> </ul> <p>The inverter and pump controller can be embedded in the same device.</p>	
4.3.11	Built into a well-sealed, weather and tamper proof housing;	
4.3.12	Solidly mounted on the support structure, easily accessible and in the shade of the modules, with antitheft provisions	
4.3.13	spare parts list: sealants, fasteners, personal protective tools, standards maintenance tools, washers, Filters, etc	
4.3.14	Relevant certificates and standards: IEC/EN 62109-2 (Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters), IEC 62109-1, IEC 727 or equivalent	
4.4	<b>Technical Specifications:</b>	<b>Mounting structure</b>



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		PLEASE FILL OUT <u>ALL THE SPACES</u> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <u>THE OFFER TO BE VALID</u>
4.4.1	PV array must be mounted on a stable, durable structure that can support the array and adverse weather conditions (extreme events such as hurricanes, cyclones, tropical storms, heavy rains and water erosion)	
4.4.2	<b>Type:</b> Pole mounted. Manual tracking mounting. Photovoltaic panel holder class-B Hot dip galvanized steel with all fittings, and screws. <b>Installation site:</b> Open field <b>Building height:</b> Defined by the supplier to ensure the optimal irradiances use <b>Pole material:</b> Galvanized steel <b>Rail material:</b> Anodized aluminium <b>Anticorrosion:</b> Anodized and galvanized	
4.4.4	<b>Total area PV panels:</b> 24 m <sup>2</sup> <i>approximated</i> (according to solar panel power and number. Suggested, to avoid shadows between solar panels)	
4.4.5	<b>Wind resistance:</b> Capable to resist wind loads of at least 150km/h	
4.4.6	<b>Bolts, nuts, fasteners and clamps and metal fixing:</b> shall be made of stainless-steel SS 304 and shall be electrically isolated from the panel frame to avoid corrosion from inducted static electricity, welding is not allowed	
4.4.7	<b>Accessories:</b> Panel grounding Lugs, Mid- Clamps, End Clamps, Solar rail splices	
4.4.8	<b>Service life:</b> not less than 20 Years.	
4.4.9	<b>Certifications and standards:</b> <ul style="list-style-type: none"> <li>- CE, SGS, DIN 1055 (Actions on structures) or equivalent</li> <li>- UL 2703 (Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels), JIS C 8955 (Load design guide on structures for photovoltaic array) <i>or equivalent</i>.</li> <li>- Desired certifications: ISO 9001, ISO 14001, OHSAS 18001</li> </ul>	



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	Proved for adverse weather conditions.	
<b>4.5</b>	<b>Technical Specifications: AC/DC Cables</b>	
	<i>DC cables</i>	
4.5.1	Type: plug, 2-4 poles, 4 mm <sup>2</sup>	
4.5.2	Material: copper	
4.5.3	Voltage rating: 900V/1500V	
4.5.4	Temperature rating: Min -10°C to Max 60°C	
4.5.5	Cable Interconnections: MC4 Connections (IP65, Solid pin)	
4.5.6	Drop voltage: shall not exceed 1%	
4.5.7	Insulation and protection: Thermoplastic	
4.5.8	Relevant certificates and standards: TUV or equivalent, EN 50618:2014 / IEC 62930 or equivalent	
	<i>AC cables:</i>	
4.5.9	Type: 2 Core 4 mm <sup>2</sup> Twin and Earth TPS Electrical cable	
4.5.10	Material: Stranded copper wire	
4.5.11	Voltage rating: 110 V – 250 V	
4.5.12	Temperature rating: Min 30 °C to Max 90°C	
4.5.13	Insulation and protection: PVC (Polyvinyl Chloride) Type TII according to BS EN 50363 or equivalent	
4.5.14	Drop voltage: shall not exceed 1%	
4.5.15	Relevant or significant certificates and standards: BS EN 60228 or equivalent	
<b>4.6</b>	<b>Technical Specifications: Distribution board</b>	
4.6.1	Type: lockable Distribution Board	
4.6.2	The bidding price shall include DC and AC CBs, bus bars, ducts, connecting cables, and all accessories needed to complete the work	



**Company Name:** \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



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**5. Solar Powered Surface Pumping System**

(To complete and submit along with your offer)

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<b>Item</b>	<b>Description and purpose of the item</b>	<b>Make/ brand and model of item</b>	
<b>Solar Power Water Pumping System</b>	0.5HP Movable Solar-powered DC surface pump system (diaphragm pumps or rotary vane pumps) including pipes, hosepipes, cables, and all accessories required for system to work. All components listed make up one (1) unit or kit.		
<b>Unit</b>	PV system + Motor pump + pump controller + mounting structure + accessories + spares	<b>Name and address of the manufacturer of item</b>	
<b>Total quantity of units required</b>	Breakdown by country: Antigua and Barbuda: 20 Barbados: 15 Jamaica: 5 St. Kitts-Nevis: 12 <b>Total: 52 units</b>		
<b>Country</b>	<b>Project code</b>		
<b>Antigua and Barbuda, Barbados, Jamaica, St. Kitts and Nevis</b>	<b>GCP/SLC/018/MEX</b>		
<b>1.0</b>	<b>Technical Specifications: Pump</b>		
1.1	0.5HP DC Surface water pump made of corrosion resistant material suitable for the Caribbean environment, with all the necessary pipes and accessories for working system. Include a device to measure the water flow rate (ultrasonic or magnetic flow meter). Pump should have		



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	the ability to move water up inclines in order to irrigate plots of land. The pipes should be designed to deliver appropriate flow rate.	
1.2	<p>The “Motor Pump Set” should have the following features:</p> <ul style="list-style-type: none"> <li>• The manufacturer is specialized in the manufacturing of pumps with ISO 9001-2015.</li> <li>• Reference of the pump model operating in similar PV pumping system should be provided including (years of operation, location, system features)</li> <li>• The pump efficiency shall be not less than 50% for positive displacement pumps or 35% for centrifugal pumps at rated conditions.</li> <li>• The suction/delivery pipe, electric cables, floating assembly, and other fittings required to install the system are also included. The pump should also be fitted in an adequate pump pit with adequate space for adequate air cooling.</li> <li>• The motor pump set should be installed on <b>a suitable movable steel base</b> as per manufacturers recommendations to limit vibration to that needed to ensure smooth operations.</li> <li>• Connection with the solar system and control panel should be simple plugs to allow easy movements</li> <li>• The installation of the pump shall cover both the supply and installation of the suction pipe (at the pump inlet) from an existing suction sump, as well as a delivery pipe and hose (at the outlet of the pump) of 4 m. Both suction and delivery pipes are made of PVC.</li> <li>• The motor nameplate shall display information according to NEMA or IEC standards</li> </ul>	



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1.3	<p>Pump should be properly designed for lifting water, with the motor directly coupled to the pump. The pump shall have channels of its impeller, of ample size to pass easily the water without clogging. The degree of protection of motor pump terminal block shall be not less than (IP54) and not less than IP44 for motor protection.</p> <p>The material from which the runner is made shall be able to resist corrosive action of water. The impeller material shall be made of stainless steel, bronze or gray cast Iron/Steel with special protection suitable for this application to resist corrosive and abrasive action of water. Impeller shall be statically and dynamically balanced. The maximum diameter of solids that the pump can pass shall be stated by supplier. If needed, the inlet pipe should be furnished with a grid of 20-30 mm mesh, to avoid pump blocking.</p>	
1.4	<p>The pump shall be supplied with a pump nameplate corrosion resistant material such as 304 stainless steel, suitable for a coastal environment.</p> <p>Test reports should be provided. Bid should contain complete pump information: manufacturer's name, serial number, model number, number of stages, speed, discharge, year manufactured, etc.</p>	
1.5	<p>Original certified and guaranteed performance curves for head, discharge rate, power absorbed and efficiency at the rated speed for pump to be submitted.</p>	
1.6	<p>Any dry pump shall be provided with complete accessories. All required accessories such as anchor bolts, washers, nuts, upper guide and intermediate guide, bar bracket, etc., shall be provided as part of the scope of work.</p> <p>In case of the pump is not self-priming, a <b>non-return valve</b> shall be used in the suction line for the manual priming purpose.</p>	



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1.7	The rated power of the motor shall be sufficient to enable driving the respective pump without overloading under all condition of starting and continuous working. The motor rating should have 20% excess power of the maximum power through the working range, with number of starts per hour according to the NEMA or IEC code, and insulation class is NEMA <b>F type</b> , tropical conditions (ambient temperature expected to be 50° C).	
1.8	The motor efficiency shall be compatible with NEMA class B standards. and approved by manufacturer for variable frequency supply operation (suitable for solar pumping application)	
1.9	Minimum pumping capacity: 12 US gallons/min	
1.10	Maximum pumping capacity and pressure: 35 US gallons/min; 58 psi	
1.11	Minimum suction depth: 20 ft	
1.12	Pump head: 66 ft	
1.13	NPSHr (Nominal Suction Head): 20 ft	
1.14	Diameter of the suction aperture (inlet): 1"	
1.15	Diameter of the discharge aperture (outlet): 1"	
1.16	Complete with pulleys (2 grooves) and belts (set per item)	
1.17	Suction pipe 1", rubber made, 24 ft long minimum (one per unit)	
1.18	Discharge pipe 1", PE made, 100 ft long minimum (one per unit)	
1.19	One 1" clamp for suction pipe and one 1" clamp for delivery hose	
1.20	Set of tools for maintenance and repairing of pump (one per unit)	
<b>2.0</b>	<b>Technical Specifications: Pump engine</b>	
2.1	Net power engine: 0.375 kW/0.5 HP	



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2.2	Maximum speed: 4000 rpm	
2.3	Single coil, air cooled electric engine	
2.4	Plug starting system	
2.5	Maximum motor current: 12A	
2.6	Operating voltage: 60-120V	
2.7	Remote monitoring compatibility: required	
2.8	Insulation Class: F	
2.9	Protection against dry run, over temperature, over current	
<b>3.0</b>	<b>Technical specifications: Pump Operation Control Panel</b>	
3.1	Pump control panel should be fixed in the same movable mounting of the pump. It contains operating switch meant to provide ability to turn pump on and off at specific times. Including appropriate cables, wiring, adapters, fuse and all protection means (thermal, dry run) with all other fittings, accessories and required for it to work according to NEMA, IEC, NEC, AWG or equivalent national standards The operation switch should be affixed to the pump. The panel will also include indicator for voltage and current.	
<b>4.0</b>	<b>Technical specifications: Solar Array</b>	
<b>4.1</b>	<b>Technical Specifications: General</b>	
4.1.1	Solar panels to be used directly with Pump	
4.1.2	No batteries required	
4.1.3	Please provide the manufacturer's datasheet inclusive of performance curves for solar panels.	
4.1.4	The cumulative power output of the PV array, under STC, should be 500 Wp, with temperature coefficient data provided	



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4.1.5	Total PV peak power should be enough to ensure the full operation of the pump for maximum 3.5 hours/day with average daily water production not less than <b>10,600 US gal/day</b>	
<b>4.2</b>	<b>Technical Specifications: Solar panels</b>	
4.2.1	Solar panel Type: Monocrystalline	
4.2.2	Rated maximum power: 500 Wp	
4.2.3	Nominal efficiency: 19 % approx.	
4.2.4	Maximum power voltage (Vmp): 40V – 55V	
4.2.5	Maximum power current (Imp): 9 -14 A	
4.2.6	Open circuit voltage (Voc): 50V – 70V	
4.2.7	Short circuit current (Isc): 9 A – 14 A	
4.2.8	Module efficiency (Minimum): 19.5%	
4.2.9	Operating Temperature conditions: -40 to 85 °C	
4.2.10	Weight (approx.): 25 kg per panel	
4.2.11	Estimated solar array size: 500 Wp ( <i>minimum installed array capacity</i> )	
4.2.12	Required number of panels: 1	
4.2.13	Solar panel dimensions: <i>Length:</i> 1 700– 2 280 mm <i>Width:</i> 1 002 – 1 310 mm <i>Thickness:</i> 35 – 45 mm	
4.2.14	Anti-Glare technology Free of Cadmium telluride ( CdTe )	



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4.2.15	<p><b><u>Relevant certifications: IEC 61215 (Terrestrial photovoltaic (PV) modules - Design qualification and type approval), IEC 61730 part I and II (Photovoltaic (PV) module safety qualification), ISO 14001:2015 (environmental standards) or equivalent.</u></b></p> <p>Desirable certifications: IEC61701 (Photovoltaic (PV) modules - Salt mist corrosion testing), UL 1703 (Standard for Flat-Plate Photovoltaic Modules and Panels), IEC 61683 (Photovoltaic systems - Power conditioners - Procedure for measuring efficiency) or <i>equivalent</i>.</p>	
4.2.16	<p>Junction Box: The junction Weather-resistant plastic casing with a transparent lid (IP65 or IP67)</p>	
<b>4.3</b>	<b>Technical Specifications: Pump controller</b>	
4.3.1	Type: pump controller/MPPT	
4.3.2	Rated power: 0.5 – 5 HP	
4.3.3	No-load loss: Maximum 10 W	
4.3.4	DC input range: 70V	
4.3.5	Output voltage: 60 V – 120V	
4.3.6	Inverter Efficiency (Peak): 95%	
4.3.7	1 pump controller	
4.3.8	<p>The controller interfaces between the solar panels and the pump must have:</p> <ul style="list-style-type: none"> <li>- Built-in overvoltage, overload, overheat and dry-run protection,</li> <li>- Short circuit protection and reverse polarity protection</li> <li>- On/Off control switch</li> <li>- interruption of the pump when the water tank is full</li> <li>- energy meter</li> </ul>	
4.3.9	Built into a well-sealed, weather and tamper proof housing;	



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4.3.10	Solidly mounted on the support structure, easily accessible and in the shade of the modules, with antitheft provisions	
4.3.11	spare parts list: sealants, fasteners, personal protective tools, standards maintenance tools, washers, Filters, etc	
4.3.12	Solar controller shall have IP 65 protection	
<b>4.4</b>	<b>Technical Specifications: Mounting structure</b>	
4.4.1	PV array must be mounted on a stable, durable structure that can support the array and adverse weather conditions (extreme events such as hurricanes, cyclones, tropical storms, heavy rains and water erosion)	
4.4.2	<p><b>Type:</b> adjustable Solar Panel Mounting Bracket – movable or solar trailer (For a movable pump and to allow their use in different locations at farms)</p> <ul style="list-style-type: none"> <li>- Steel frame</li> <li>- User adjustable mounting angle</li> <li>- Anodized aluminum construction</li> <li>- Stainless steel mounting hardware included. Fixings to fix the solar panel to the mount included.</li> <li>- If a wheel bearing system is considered, please ensure the use of damping for panel protection.</li> </ul> <p>Connection with the pump and control panel should be simple plugs to allow easy movements.</p>	
4.4.5	<b>Total area PV panels:</b> 1.7 - 3 m <sup>2</sup> approximated (according to solar panel power and dimensions).	
4.4.6	<b>Wind resistance:</b> Capable to resist wind loads of at least 150km/h	
4.4.7	<b>Bolts, nuts, fasteners and clamps and metal fixing:</b> shall be made of stainless-steel SS 304 and shall be electrically isolated from the panel frame to avoid corrosion from inducted static electricity, welding is not allowed	



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4.4.8	<b>Accessories:</b> Panel grounding Lugs, Mid- Clamps, End Clamps, Solar rail splices	
4.4.9	<b>Service life:</b> not less than 20 Years.	
4.5.0	<b>Certifications and standards:</b> - Desired certifications: ISO 9001, ISO 14001, OHSAS 18001 - <b>Proved for adverse weather conditions.</b>	
<b>4.6</b>	<b>Technical Specifications: AC/DC Cables</b>	
	<i>DC cables</i>	
4.6.1	Type: plug, 2-4 poles, 4 mm <sup>2</sup>	
4.6.2	Material: copper	
4.6.3	Voltage rating: 100V (panels to controller)	
4.6.4	Voltage rating: 120V at a maximum (controller to pump)	
4.6.5	Temperature rating: Min -10°C to Max 90°C	
4.6.6	Cable Interconnections: MC4 Connections (IP65, Solid pin)	
4.6.7	Drop voltage: shall not exceed 1%	
4.6.8	Insulation and protection: Thermoplastic	
4.6.9	Relevant certificates and standards: TUV or equivalent, EN 50618:2014 / IEC 62930 or equivalent	
<b>4.7</b>	<b>Technical Specifications: Earthing system</b>	
4.7.1	Type: Earth Stake 16mm Copper coated bar. Single ground electrode	
4.7.2	Surface: Tin coated	
4.7.3	Lightning Arrestor: according to the installation site	
4.7.4	Insulation Material: PVC	
4.7.5	Max resistance must be less than 2 ohms	



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4.7.6	Copper wires and cables cross-section area not less than 16 mm <sup>2</sup> The copper wires and cables should be connected to the electrodes through original copper connectors	
4.7.7	Relevant certificates and standards: IEC 60364 or equivalent	
<b>4.8</b>	<b>Technical Specifications:      Orientations &amp; Environment</b>	
4.8.1	Tilt: 18- 20 degrees	
4.8.2	Suitable for altitudes between sea level and 1000ft above sea level	
4.8.3	Operating temperature range -35C to +70°C	
<b>5.0</b>	<b>Technical Specifications:      Spare Parts &amp; Accessories</b>	
5.1	A list of the recommended spare parts by the manufacturer, sufficient for 2 years of operation, must be submitted by the provider. The list must be provided, budgeted and delivered with your offer.	
5.2	Spare parts to be packaged as a set for each kit	
5.3	Indicate the percentage of parts offered as spare parts.	
<b>6.0</b>	<b>Technical Specifications:      Manuals</b>	
6.1	Directions in English for installation and maintenance must be provided, one manual per kit.	
6.2	The cost of manuals shall be included in the offer	



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<b>7.0</b>	<b>Technical Specifications: Certification/ Compliance of norms or standards</b>	
7.1	Conformity with CE, IEC, NEC or equivalent standards; A copy of the last certificate awarded confirming the quality of the brand name and model of the tools offered should be attached to your bid.	
7.2	Must comply with relevant quality and safety standards and certifications in the manufacturing, processing and delivery of products as stated under each section above. <ul style="list-style-type: none"> <li>- Eco-friendly manufacture and use with minimal discharge or generation of greenhouse gases.</li> <li>- Power efficiency.</li> </ul>	
7.3	Clear country of origin and product identification number.	
7.4	Must adhere to applicable electrical codes for Caribbean region. A copy of the last certificate awarded confirming the quality of the brand name and model of the tools offered should be attached to your bid.	
<b>8.0</b>	<b>Technical Specifications: Installation</b>	
8.1	Included: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
8.2	The offer shall include the cost of distribution and installation in locations provided by FAO	
8.3	Cater for pre-delivery inspection of machinery products by the client to verify right product before delivery	



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8.4	Vender should install and test all machines and equipment and handed over to the grantee in presence of FAO Officials	
8.5	The bid price must include the cost of delivery and installation	
<b>9.0</b>	<b>Technical Specifications: Training</b>	
9.1	Three one-day training events on O&M of solar powered pumping system shall be included in the offer.	
<b>10.0</b>	<b>Technical Specifications: Warranty</b>	
10.1	A <b><u>full and clear manufacturer's warranty statement transferable with the ownership of the equipment (FAO or end-user) must be submitted</u></b> with your bid detailing the terms and conditions that are being offered.	
	A <b><u>full and clear manufacturer's Performance guarantee statement transferable with the ownership of the equipment (FAO or end-user) must be submitted</u></b> with your bid detailing the terms and conditions that are being offered. The minimum performance requirement is: <ul style="list-style-type: none"> <li>- 90% at the end of 10 years and 80% at the end of 25 years for solar panels.</li> <li>- For controller up to 2 years</li> <li>- For complete Solar System up to 1 year</li> <li>- Pump and control panel: Minimum 5-year guarantee</li> </ul>	
10.2	Reference letters can be included in your offer (optional)	



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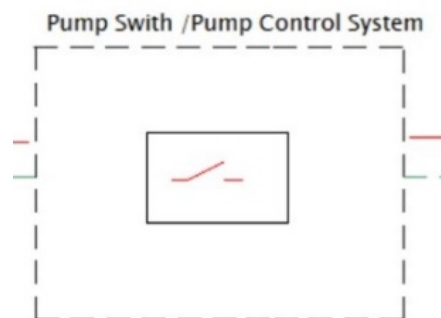
TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED
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<b>11.0</b>	<b>Technical Specifications:                      Packing and labelling</b>	
11.1	All containers should be marked with ‘‘Provided by FAO – <b>Resilient Caribbean Initiative: addressing the water-energy nexus in agriculture.</b> The consignment must also indicate ‘‘Goods in transit for ‘‘FAO CARIBBEAN’’ in English.	
11.2	Each set shall be packaged separately in international standard packaging providing sufficient protection for transportation and handling.	
<b>12.0</b>	<b>Technical Specifications:                      After Sales Service</b>	
12.1	Supply the name, Tel./Fax number and email or postal address of your service agents in Jamaica or neighbouring country.  External bidders should provide evidence of agreement with a local representative with the detailed address of the representative.	
12.2	State who will be responsible for undertaking the pre-delivery inspection of your equipment upon arrival.	
12.3	If available, state who will be responsible for the administration of the offered after sales service.	
<b>13.0</b>	<b>Technical Specifications:                      Special Import permissions</b>	



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13.1	<p>All costs to obtain the required permits must be included in the original bid.</p> <p>Bidders must annex to their offer a clear written statement obtained from their local clearing agent confirming that he will be able to obtain the required special permits from competent authorities</p> <p>The final delivery time indicated in the bid should include also the time indicated by the clearing agent to obtain the required special import permissions.</p> <p>Any delay in obtaining the required import permissions, which is not directly due to lack of documents to be submitted by the FAO (if any), and which will result in additional charges for demurrage/detention of the goods at the custom will be covered by the bidder.</p>	

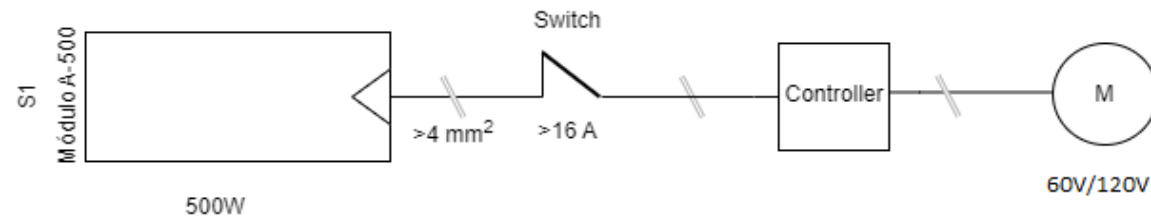
**Annex I. Schematic of Pump Control System**



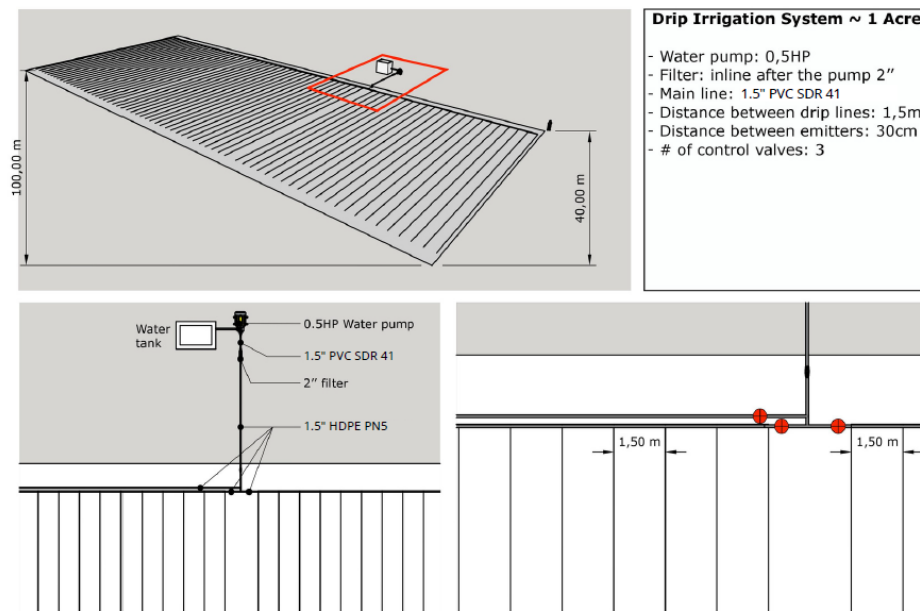


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**Annex II. Schematic of Solar array**

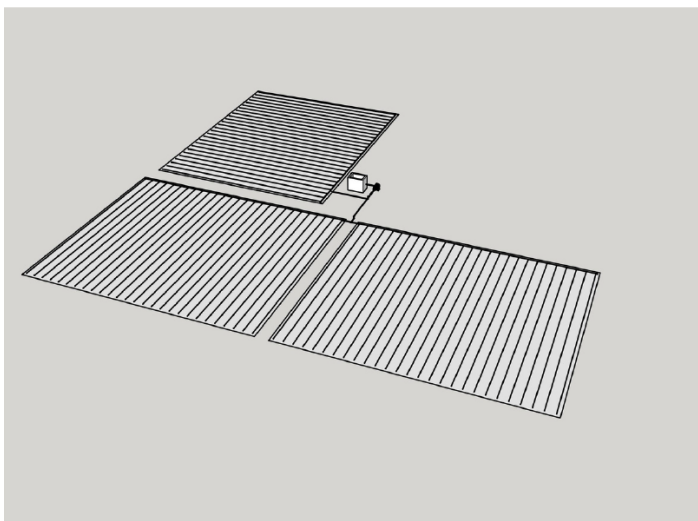


**Annex III. Schematic of Solar powered irrigation system (includes additional elements described in other specifications)**





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**Summary Bill of Quantities (per unit system)**

<b>Component Section No.</b>	<b>Component name</b>	<b>Unit</b>	<b># of unit</b>
4.2	Solar panels	No.	1
2.0	Pump Engine	No.	1
4.3	Pump controller	No.	1
4.4	Mounting structure	No.	1
4.6	DC cables	No.	-
4.7	Earthing system	No.	1

**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



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**FAO Subregional Office for the Caribbean**

**6. Tensiometer**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>	
Item	Description and purpose of the item		
Soil Moisture Measurement Equipment: Tensiometer	Allows measurement of soil moisture to determine when sufficient irrigation	Make/ brand and model of item	
Unit	Tensiometer		
Total quantity of units required	Antigua and Barbuda : 17 Barbados : 15 Jamaica : 10 St. Kitts & Nevis : 15 Total Quantity : 57	Name and address of the manufacturer of item	
Country	Project code		
Antigua & Barbuda Barbados Jamaica St. Kitts & Nevis	GCP /SLC/018/MEX		
1.0	Technical Specifications: General		
1.1	12" Tensiometer and Service Kit		
1.2	Supporting service kit: 1 unit per kit		
1.3	Vacuum gauge with analogue or digital display: 1 unit per kit		
1.4	Porous tip: 1 unit per kit		



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>
2.0	Installation	
2.1	Included: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
3.0	Spare Parts	
3.1	A list of manufacturer's recommended spare parts, sufficient for 2 years of operation must be submitted for each unit. The list must be itemised, costed, and submitted with your bid.	
3.2	Spare parts to be packaged as a set with each sprayer	
3.3	State the percentage of spare parts being offered	
4.0	Certifications, Manuals and Warranties	
4.1	Certifications: <ul style="list-style-type: none"> <li>• Certification of specifications as outlined in 1.0.</li> <li>• Eco-friendly manufacture and use with minimal discharge or generation of greenhouse gases and other pollutants.</li> <li>• Clear indication of the country of origin and product number.</li> </ul>	
4.2	Manuals: Directions in English for use and storage conditions should be provided.	
4.3	Warranties: A clear statement is required with your bid of the terms and conditions of the product warranty that will be available with the goods offered.	
5.0	Packing and labelling	
5.1	All containers should also be marked with "Provided by FAO – Resilient Caribbean Initiative: addressing the water-energy nexus in agriculture" The consignment must also indicate "Goods in transit for "FAO CARIBBEAN" in English.	



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>
6.0	After Sales Service:	
6.1	State who will be responsible for the administration of the offered after sales service.	

Company Name: \_\_\_\_\_

Date: \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



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**FAO Subregional Office for the Caribbean**

**7. Water Storage Bladders**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL OUT <u><b>ALL THE SPACES</b></u> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <u><b>THE OFFER TO BE VALID</b></u>	
<b>Item</b>	<b>Description and purpose of the item</b>	<b>Make/ brand and model of item</b>	
<b>Water Storage Bladder</b>	Water storage bladder of 5000 US gallons of capacity		
<b>Unit</b>	Storage bladder with connections and spares		
<b>Total quantity of units required</b>	Antigua & Barbuda: 17 Barbados: 5 Jamaica: 2 St. Kitts and Nevis: 5 <b>Total Required: 29</b>		
<b>Country</b>	<b>Project code</b>	<b>Name and address of the manufacturer of item</b>	
<b>Antigua &amp; Barbuda, Barbados, Jamaica, St. Kitts and Nevis</b>	GCP"/SLC/018/MEX		
<b>1.0</b>	<b>Technical Specifications</b>		
1.1	Material: HDPE/PVC, UV resistant, with anti-corrosion inner coating. The bladder is to be used as part of a rainwater harvesting system or solar powered pumping system. The inlet should have a flexible hose or piping to accommodate shifts in size and shape as the bladder fills. Bladders should be made of non-toxic material.		



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TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED
		PLEASE FILL OUT <u><b>ALL THE SPACES</b></u> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <u><b>THE OFFER TO BE VALID</b></u>
1.2	Capacity: 5000 US gallons.	
1.3	At least three layers, to prevent the passage of ultraviolet rays and not allow the development of undesirable microorganisms	
1.4	The bladder must be resistant to puncture, slashing, tearing and other shear forces	
1.5	Black, grey, blue or beige outer layer that prevents the passage of ultraviolet rays	
1.6	White anti-bacterial inner layer	
1.7	Water bladder designed specifically for water storage for potable water.	
1.8	<ul style="list-style-type: none"> <li>• 4" inlet with flexible hose</li> <li>• 1.5" outlet; PVC/PE pipe/hose is required from tank to irrigation system or field including distribution line where required.</li> </ul>	
<b>2.0</b>	<b>Certification, Manuals and Warranty</b>	
2.1	<b>Certification:</b> <ul style="list-style-type: none"> <li>• Certification of specifications as outlined in 1.0</li> <li>• Eco-friendly manufacture with minimal discharge or generation of greenhouse gases.</li> <li>• Clear country of origin and product identification number.</li> </ul>	
2.2	<b>Manuals and Directions:</b> <ul style="list-style-type: none"> <li>• Operators' handbook printed in English.</li> </ul>	
2.3	<b>Warranty:</b> Warranty of at least 10 years to cover leaks or bursts. A full and clear manufacturer's warranty statement transferable with the ownership of the equipment (FAO or end-user) must be submitted with your bid detailing the terms and conditions that are being offered.	
2.4	Reference letters can be included in your offer (optional)	



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO</u></b> <b><u>BE VALID</u></b>
<b>3.0</b>	<b>Installation</b>	
3.1	Included: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>4.0</b>	<b>Spare Parts</b>	
4.1	<ul style="list-style-type: none"> <li>A list of manufacturer's recommended spare parts, sufficient for 2 years of operation must be submitted for each unit.</li> <li>The list must be itemised, costed, and submitted with your bid</li> </ul>	
<b>5.0</b>	<b>Packing and labelling</b>	
5.1	All containers should be marked with "Provided by FAO – Resilient Caribbean Initiative: Addressing Water Energy Food Nexus in agriculture The consignment must also indicate "Goods in transit for "FAO CARIBBEAN" in English.	
5.2	Supply the name, Tel./Fax number and email or postal address of your service agents <ul style="list-style-type: none"> <li>External bidders should provide evidence of agreement with a local representative with the detailed address of the representative.</li> </ul>	
<b>6.0</b>	<b>After Sales Service</b>	
6.1	State who will be responsible for the administration of the offered after sales service	

Company Name: \_\_\_\_\_

Date: \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



**Food and Agriculture Organization of the United Nations**  
**FAO Subregional Office for the Caribbean**

**8. Water Storage Tanks**

(To complete and submit along with your offer)

TECHNICAL SPECIFICATIONS REQUIRED		TECHNICAL SPECIFICATIONS OFFERED	
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>	
<b>Item</b>	Description and purpose of the item		
<b>Water Storage Tank</b>	Food grade storage tank of 1000 US gallons of capacity	<b>Make/ brand and model of item</b>	
<b>Unit</b>	Storage tank with connections and spares		
<b>Total quantity of units required</b>	Antigua & Barbuda: 8 Barbados: 10 Jamaica: 3 St. Kitts and Nevis: 19 <b>Total Required: 40</b>		
<b>Country</b>	<b>Project code</b>	<b>Name and address of the manufacturer of item</b>	
<b>Antigua and Barbuda, Barbados, Jamaica, St. Kitts and Nevis</b>			
	GCP/SLC/018/MEX		
<b>1.0</b>	<b>Technical Specifications: General</b>		
1.1	Material: HDPE or PVC, UV resistant, with anti-corrosion inner coating. High resistance to atmospheric phenomena/climate conditions.		
1.2	Tank specifically designed for water storage or food grade storage.		
1.3	Capacity: 1000 US gallons		



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <u><b>ALL THE SPACES</b></u> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <u><b>THE OFFER TO BE VALID</b></u>
1.4	Inlet at top and outlet at bottom (both brass nipple fitted)	
1.5	Outside colour: blue or black (colour and material should not allow sunlight inside the tank)	
1.6	All accessories such as elbows, tee, couplings, adaptors must be included	
1.7	<ul style="list-style-type: none"> <li>PVC/PE pipe/hose to connect water source with the tank where required.</li> <li>PVC/PE pipe/hose from tank to irrigation system or in-field plot including distribution line where required.</li> <li>Equipped with tank cover, overflow valve, PVC adaptor, filter screen, and attachment for rainwater catchment and drain inlet</li> </ul>	
<b>2.0</b>	<b>Certification, Manuals and Warranty</b>	
2.1	<b>Certification:</b> <ul style="list-style-type: none"> <li>Certification of specifications as outlined in 1.0</li> <li>Eco-friendly manufacture with minimal discharge or generation of greenhouse gases.</li> <li>Clear country of origin and product identification number.</li> </ul>	
2.2	<b>Manuals:</b> <ul style="list-style-type: none"> <li>Operators' handbook printed in English.</li> </ul>	
2.3	<b>Warranty: at least 10 years</b> A full and clear manufacturer's warranty statement transferable with the ownership of the equipment (FAO or end-user) must be submitted with your bid detailing the terms and conditions that are being offered.	
2.4	Reference letters can be included in your offer (optional)	
<b>3.0</b>	<b>Installation</b>	
3.1	Included: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.2	The offer shall include the cost of distribution and installation in locations provided by FAO	



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<b>TECHNICAL SPECIFICATIONS REQUIRED</b>		<b>TECHNICAL SPECIFICATIONS OFFERED</b>
		PLEASE FILL OUT <b><u>ALL THE SPACES</u></b> BELOW TO SPECIFY THE EQUIPMENT BEING OFFERED FOR <b><u>THE OFFER TO BE VALID</u></b>
<b>4.0</b>	<b>Spare Parts</b>	
4.1	<ul style="list-style-type: none"> <li>A list of manufacturer's recommended spare parts, sufficient for 2 years of operation must be submitted for each unit.</li> <li>The list must be itemised, costed, and submitted with your bid</li> </ul>	
<b>5.0</b>	<b>Packing and labelling</b>	
5.1	<p>All containers should also be marked with "Provided by FAO – Resilient Caribbean Initiative: Addressing the Water Energy Food Nexus in agriculture"</p> <p>The consignment must also indicate "Goods in transit for "FAO CARIBBEAN" in English.</p>	
5.2	<p>Supply the name, Tel./Fax number and email or postal address of your service agents</p> <ul style="list-style-type: none"> <li>External bidders should provide evidence of agreement with a local representative with the detailed address of the representative.</li> </ul>	
<b>6.0</b>	<b>After Sales Service:</b>	
6.1	State who will be responsible for the administration of the offered after sales service	

Company Name: \_\_\_\_\_

Date: \_\_\_\_\_

Official stamp and signature: \_\_\_\_\_



**Food and Agriculture Organization of the United Nations  
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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix II: FINANCIAL OFFER (Lot 1: Antigua and Barbuda)**

*(all columns to be filled in and submitted as an essential element of your bid)*

#	Item description	Unit of measure	A	B	C = A x B	D	E = A x D	F	G = C + E + F	Best Delivery Time in calendar days	Delivery Mode
			Quantity	Unit Price FCA Bidder's premises (USD*)	Total Cost FCA Bidder's premises (USD*)	Freight Unit Cost (USD*)	Freight Total Cost (USD*)	Insurance Cost (USD*)	Total Cost DPU Final Destination in Dominica (USD*)		
1	Drip irrigation system kit with accessories and installation.	Each	21								
2	Irrigation timer	Each	21								
3	Water pH and electro-conductivity meter (Combo)	Each	26								
4	Solar Powered Surface Pumping System	Each	20								
5	Tensiometer	Each	17								
6	Water Storage Bladders	Each	17								
7	Water Storage Tanks	Each	8								
8	Installation service on site	Lumpsum	1								
<b>TOTAL</b>											

\* Incoterms 2020. If the quote is in a different currency than specified here, FAO will convert prices for the commercial evaluation to a single currency using the official UN exchange rate corresponding to the date of the tender's closing date.

NOTE regarding arithmetical errors and discrepancies:

- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected, unless in the opinion of evaluators, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals will prevail, and the total will be corrected.
- In case of discrepancy between a word and figures, the amount in words will prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures will prevail subject to the note above.

**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



**Food and Agriculture Organization of the United Nations  
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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix II: FINANCIAL OFFER (Lot 2: Barbados)**

*(all columns to be filled in and submitted as an essential element of your bid)*

#	Item description	Unit of measure	A	B	C = A x B	D	E = A x D	F	G = C + E + F	Best Delivery Time in calendar days	Delivery Mode
			Quantity	Unit Price FCA Bidder's premises (USD*)	Total Cost FCA Bidder's premises (USD*)	Freight Unit Cost (USD*)	Freight Total Cost (USD*)	Insurance Cost (USD*)	Total Cost DPU Final Destination in Dominica (USD*)		
1	Drip irrigation system kit with accessories and installation.	Each	15								
2	Irrigation timer	Each	15								
3	Water pH and electro-conductivity meter (Combo)	Each	18								
4	Solar Powered Surface Pumping System	Each	15								
5	Tensiometer	Each	15								
6	Water Storage Bladders	Each	5								
7	Water Storage Tanks	Each	10								
8	Installation service on site	Lumpsum	1								
<b>TOTAL</b>											

\* Incoterms 2020. If the quote is in a different currency than specified here, FAO will convert prices for the commercial evaluation to a single currency using the official UN exchange rate corresponding to the date of the tender's closing date.

NOTE regarding arithmetical errors and discrepancies:

- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected, unless in the opinion of evaluators, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals will prevail, and the total will be corrected.
- In case of discrepancy between a word and figures, the amount in words will prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures will prevail subject to the note above.

**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



**Food and Agriculture Organization of the United Nations  
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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix II: FINANCIAL OFFER (Lot 3: Jamaica)**

*(all columns to be filled in and submitted as an essential element of your bid)*

#	Item description	Unit of measure	A	B	C = A x B	D	E = A x D	F	G = C + E + F	Best Delivery Time in calendar days	Delivery Mode
			Quantity	Unit Price FCA Bidder's premises (USD*)	Total Cost FCA Bidder's premises (USD*)	Freight Unit Cost (USD*)	Freight Total Cost (USD*)	Insurance Cost (USD*)	Total Cost DPU Final Destination in Dominica (USD*)		
1	Drip irrigation system kit with accessories and installation.	Each	2								
2	Irrigation timer	Each	20								
3	Water pH and electro-conductivity meter (Combo)	Each	15								
4	Solar Powered Centrifugal Water Pumping System	Each	1								
5	Solar Powered Surface Pumping System	Each	5								
6	Tensiometer	Each	10								
7	Water Storage Bladders	Each	2								
8	Water Storage Tanks	Each	3								
9	Installation service on site	Lumpsum	1								
<b>TOTAL</b>											

\* Incoterms 2020. If the quote is in a different currency than specified here, FAO will convert prices for the commercial evaluation to a single currency using the official UN exchange rate corresponding to the date of the tender's closing date.

NOTE regarding arithmetical errors and discrepancies:

- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected, unless in the opinion of evaluators, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals will prevail, and the total will be corrected.
- In case of discrepancy between a word and figures, the amount in words will prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures will prevail subject to the note above.

**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix II: FINANCIAL OFFER (Lot 4: St. Kitts and Nevis)**

*(all columns to be filled in and submitted as an essential element of your bid)*

#	Item description	Unit of measure	A	B	C = A x B	D	E = A x D	F	G = C + E + F	Best Delivery Time in calendar days	Delivery Mode
			Quantity	Unit Price FCA Bidder's premises (USD*)	Total Cost FCA Bidder's premises (USD*)	Freight Unit Cost (USD*)	Freight Total Cost (USD*)	Insurance Cost (USD*)	Total Cost DPU Final Destination in Dominica (USD*)		
1	Drip irrigation system kit with accessories and installation.	Each	11								
2	Irrigation timer	Each	20								
3	Water pH and electro-conductivity meter (Combo)	Each	20								
4	Solar Powered Surface Pumping System	Each	12								
5	Tensiometer	Each	15								
6	Water Storage Bladders	Each	5								
7	Water Storage Tanks	Each	19								
8	Installation service on site	Lumpsum	1								
<b>TOTAL</b>											

\* Incoterms 2020. If the quote is in a different currency than specified here, FAO will convert prices for the commercial evaluation to a single currency using the official UN exchange rate corresponding to the date of the tender's closing date.

NOTE regarding arithmetical errors and discrepancies:

- If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected, unless in the opinion of evaluators, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected.
- If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals will prevail, and the total will be corrected.
- In case of discrepancy between a word and figures, the amount in words will prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures will prevail subject to the note above.

**Company Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Official stamp and signature:** \_\_\_\_\_



Food and Agriculture Organization of the United Nations  
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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix III: Bid Submission Letter**

*(to be filled in and submitted as an essential element of your bid)*

**COMPLIANCE WITH THE PRESENT TENDER REQUIREMENTS**

**1. Does your bid comply with the COMMERCIAL requirements of this tender in all respects?**

YES

☐

NO

☐

**2. Do your specifications comply with the TECHNICAL requirements of this tender in all respects?**

YES

☐

NO

☐

If not, indicate the exceptions here below attaching additional pages as necessary:

.....

.....

.....

.....

In submitting your bid, you confirm that you have read and understood the FAO General Terms and Conditions for Goods and that you agree to abide by all of the terms contained therein. You also agree to abide by the UN Supplier Code of Conduct. In addition, you confirm that you have considered all aspects relevant to the eventual performance under the Purchase Order related to this specific bid, if awarded, and that you have obtained all necessary information and data as to risks, contingencies and other circumstances which may influence or affect your bid.

Please indicate whether your company, including any affiliates agents, or subcontractors, is subject to any sanction or temporary suspension imposed by any Intergovernmental or UN Organization, including any organization within the World Bank Group or any other multi-lateral development bank, or by the institutions and bodies of economic integration organizations (e.g., the European Union):

YES\*

☐

NO

☐

\*If yes, please indicate by which organization: \_\_\_\_\_

If your company, including any affiliates, agents or subcontractors, has been subject to any temporary suspension or sanction by any such organization or National Authority within the preceding three years, please provide further information below (attaching additional pages if necessary):

.....

.....

.....

.....

**COMPLETENESS OF BID**

**IMPORTANT WARNING:** Any aspects of your Offer that differ from the requirements established in this solicitation document must be clearly stated in your Offer. Unless otherwise agreed in writing by FAO, the requirements above are mandatory and will be the basis for evaluating your Offer regardless of any statement to the contrary contained in the technical specifications or literature you may submit together with your offer.



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FAO Subregional Office for the Caribbean**

**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

I confirm that I have read and accept the provisions on Right to Publish Contract Award, Conflict of Interest and Sanctionable Actions.

I certify that my firm has not and will not engage in corrupt, fraudulent, collusive, coercive, unethical or obstructive practices during the selection process and throughout the negotiation and execution of any award.

I certify that my company is not associated with any individual or entity appearing on the 1267/1989 list of the UN Security Council or with any individual or entity subject to any other sanctions or enforcement measures promulgated by the UN Security Council.

I acknowledge that FAO reserves the right to only consider offers containing all the information and documents requested. I confirm that the Offer submitted meets the stated requirements unless otherwise stated herein. I further confirm that I understand that deviations may prevent the evaluation of my bid. I confirm that all the information provided in the Offer is accurate and complete.

**General information on the company:**

Company name:

UNGM number:

Country of origin (residence): \_\_\_\_\_

VAT or Tax number:

Commercial or Chamber of Commerce registration number:

Mailing address: \_\_\_\_\_

Contact person:

Email/s:

Telephone numbers: \_\_\_\_\_



Food and Agriculture Organization of the United Nations  
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**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Banking Instructions**

**Bank Name:** \_\_\_\_\_

**Bank Country:**

**IBAN:**

**Account Number:** \_\_\_\_\_

**Bank Account Holder Name:**

**Branch Name:** \_\_\_\_\_

**Branch Address:** \_\_\_\_\_

**SWIFT/BIC Code:** \_\_\_\_\_

**Signature and stamp:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**Food and Agriculture Organization of the United Nations  
FAO Subregional Office for the Caribbean**

**INVITATION TO BID No: 2022/SLCXD/SLCDD/119248**

**Appendix IV:  
GENERAL TERMS AND CONDITIONS FOR GOODS**

**DEFINITIONS**

“Contract” is used to include a purchase order, a contract, or any changes or amendments thereto, including all documents, exhibits, and attachments referenced therein, to which these General Terms and Conditions apply.

“Contractor” refers to the party with whom FAO is contracting to supply the goods and/or services and who shall have the sole and full responsibility for the performance of its obligations under this Contract.

“FAO” means the Food and Agriculture Organization of the United Nations.

“Goods” include equipment, spare parts, commodities, live plants or animals, seed, raw materials, components, intermediate products, or products, as specified in the Contract.

“Services” refers to the Contractor’s time, effort and/or expertise, as specified in the Contract.

**1. LEGAL STATUS OF THE PARTIES:** FAO and the Contractor shall also each be referred to as a “Party” hereunder, and:

1.1 Pursuant, *inter alia*, to the FAO Constitution and the Convention on the Privileges and Immunities of the Specialized Agencies, FAO has full juridical personality and enjoys such privileges and immunities as are necessary for the independent fulfillment of its purposes.

1.2 The Contractor shall have the legal status of an independent contractor *vis-à-vis* FAO, and it shall be fully responsible, in particular, for the acts or omissions of its personnel, agents, or other representatives. Nothing contained in or relating to the Contract shall be construed as establishing or creating between the Parties the relationship of employer and employee or of principal and agent. The officials, representatives, employees, or subcontractors of each of the Parties shall not be considered in any respect as being the employees or agents of the other Party.

**2. ASSIGNMENT:**

2.1 The Contractor may not assign, transfer, pledge or make any other disposition of the Contract, of any part of the Contract, or of any of the rights, claims or obligations under the Contract except as may be provided for in this Contract or with the prior written authorization of FAO. Any such unauthorized assignment, transfer, pledge or other disposition, or any attempt to do so, shall not be binding on FAO. Any assignment by the Contractor which is not authorized by FAO will be void and FAO reserves the right in such case, without prejudice to other rights or remedies, to terminate the Contract without liability effective upon the Contractor’s receipt of notification of termination. Except as permitted with respect to any approved subcontractors, the Contractor shall not delegate any of its obligations under this Contract, except with the prior written consent of FAO. Any such unauthorized delegation, or attempt to do so, shall not be binding on FAO.

2.2. The Contractor agrees that FAO may, at its discretion, assign, transfer, pledge, or make other disposition of this Contract or any part hereof, or any of FAO’s rights or obligations under this Contract upon written notification within a reasonable period of time either prior to or following such assignment, transfer, pledge or subcontracting arrangement.

**3. SUBCONTRACTING:** In the event that the Contractor requires the services of subcontractors to perform any obligations under the Contract, and except as may be provided for in this Contract, the Contractor shall obtain the prior written approval of FAO. FAO shall be entitled, in its sole discretion, to review the qualifications of any subcontractors and to reject any proposed subcontractor that FAO reasonably considers is not qualified to perform obligations under the Contract. The approval by FAO of a subcontractor shall not relieve the Contractor of any of its obligations under this Contract. FAO shall have the right to require any subcontractor’s removal from FAO premises without having to give any justification therefor. Any such rejection or request for removal shall not, in and of itself, entitle the Contractor to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Contractor shall be solely responsible for all services and obligations performed by its subcontractors. The terms of any subcontract shall be subject to, and shall be construed in a manner that is fully in accordance with, all of the terms and conditions of the Contract. The essential terms set out in Article 22 shall be included in all subcontracting arrangements entered into under this Contract.

**4. PURCHASE OF GOODS:** To the extent that the Contract involves any purchase of goods, whether in whole or in part, and unless specifically stated otherwise in the Contract, the following conditions shall apply:

**4.1 DELIVERY OF GOODS:** The Contractor shall hand over or make available the goods, and FAO shall receive the goods, at the place for the delivery of the goods and within the time for delivery of the goods specified in the Contract.



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The Contractor shall provide to FAO such shipment documentation (including, without limitation, bills of lading, airway bills, and commercial invoices) as are specified in the Contract in the relevant Purchase Order or, otherwise, as are customarily utilized in the trade. All manuals, instructions, displays and any other information relevant to the goods shall be in the English language unless otherwise specified in the Contract. Unless otherwise stated in the Contract (including, but not limited to, in any “INCOTERM” or similar trade term), the entire risk of loss, damage to, or destruction of the goods shall be borne exclusively by the Contractor until physical delivery of the goods to FAO in accordance with the terms of the Contract. Delivery of the goods shall not be deemed in itself as constituting acceptance of the goods by FAO, which shall be further subject to Article 4.6 below.

**4.2 INSPECTION OF THE GOODS:** FAO reserves the right to inspect and test all goods ordered under this Contract at any time and place. The Contractor, without additional charge, shall provide all facilities for inspection and all necessary support including, but not limited to, access to drawings and production data, to ensure that inspections can be performed in such a manner as not to unduly delay delivery.

4.2.1 If the Contract provides that the goods may be inspected prior to delivery, the Contractor shall promptly notify FAO when the goods are ready for pre-delivery inspection. Such facilities and assistance shall be furnished to FAO or its designated inspection agents at no charge therefor. Neither an inspection carried out by representatives of FAO nor failure by FAO to inspect and accept or reject goods shall relieve the Contractor from responsibility for such goods that are not in accordance with the Contract requirements, including warranties, or impose liabilities on FAO therefor.

4.2.2 Notwithstanding the above, the Contractor shall provide and maintain an inspection, quality, and process control system acceptable to FAO covering the goods thereunder. Records of all inspection work by the Contractor shall be kept complete and available to FAO during the performance of this Contract and for twenty-four (24) months after completion, if not otherwise specified in this Contract. Copies of all material certifications and test results will be submitted to FAO upon request.

**4.3 PACKAGING OF THE GOODS:** The Contractor shall package the goods for delivery in accordance with the highest standards of export packaging for the type and quantities and modes of transport of the goods. The goods shall be packed and marked in a proper manner in accordance with the instructions stipulated in the Contract or, otherwise, as customarily done in the trade, and in accordance with any requirements imposed by applicable law or by the transporters and manufacturers of the goods. The packing, in particular, shall mark the Contract or Purchase Order number and any other identification information provided by FAO as well as such other information as is necessary for the correct handling and safe delivery of the goods. Unless otherwise specified in the Contract, the Contractor shall have no right to any return of the packing materials.

**4.4 TRANSPORTATION & FREIGHT:** Unless otherwise specified in the Contract (including, but not limited to, in any “INCOTERM” or similar trade term), the Contractor shall be solely liable for making all transport arrangements and for payment of freight and insurance costs for the shipment and delivery of the goods in accordance with the requirements of the Contract. The Contractor shall ensure that FAO receives all necessary transport documents in a timely manner so as to enable FAO to take delivery of the goods in accordance with the requirements of the Contract.

**4.5 WARRANTIES AND AFTER SALES SERVICE:** Unless otherwise specified in the Contract, in addition to and without limiting any other warranties, remedies or rights of FAO stated in or arising under the Contract, the Contractor warrants and represents that:

4.5.1 The goods, including all packaging and packing thereof, conform to the specifications of the Contract, including any applicable standards provided for in the Contract or, if no applicable standards are provided, the most recent authoritative standards issued by the relevant institution in the goods’ country of origin. The goods are securely contained, packaged and marked in accordance with normal commercial standards of export packing for goods of this type and in a manner so as to protect the goods while in storage or in transit to their ultimate destination. The Contractor further warrants that the goods are fit for the purposes for which such goods are ordinarily used and for purposes expressly made known to the Contractor by FAO, are of current manufacture and are of even quality and free from defects in design, workmanship, material and manufacture;

4.5.2 If the Contractor is not the original manufacturer of the goods, the Contractor shall provide FAO with the benefit of all manufacturers’ warranties in addition to any other warranties required to be provided under the Contract;

4.5.3 The goods are of the quality, quantity and description required by the Contract, including when subjected to conditions prevailing in the place of final destination;

4.5.4 The goods are free from any right of claim by any third-party, including claims of infringement of any intellectual property rights, including, but not limited to, patents, copyright and trade secrets;

4.5.5 The goods are new and unused, unless procurement of used goods is approved in advance in writing by FAO;



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4.5.6 All such warranties for the goods shall remain in effect for a period of one (1) year or for such other longer period that the Contractor normally provides for such goods or a longer period agreed upon in this Contract after the goods are placed in use (the “Warranty Period”);

4.5.7 During any period in which the Contractor’s warranties are effective, upon notice by FAO that the goods do not conform to the requirements of the Contract, the Contractor shall promptly and at its own expense correct such non-conformities or, in case of its inability to do so, replace the defective goods with goods of the same or better quality or, at its own cost, remove the defective goods and fully reimburse FAO for the purchase price paid for the defective goods. In the event the Contractor fails to repair or replace defective or non-conforming goods within a reasonable time, FAO may replace or repair the goods and charge or debit the Contractor for all costs connected therewith or, if such replacement or repair is not practicable, exercise its rights under Article 4.7 and/or Article 4.9 of this Contract; and,

4.5.8 The Contractor shall remain responsive to the needs of FAO for any services that may be required in connection with any of the Contractor’s warranties under the Contract.

4.5.9 For goods ordered, the Contractor shall provide or maintain a service organization reasonably constituted to handle requests from FAO or its Members or other ultimate beneficiaries for technical assistance on maintenance, service repairs, and overhaul of the goods. If the presence of a local service agent has been requested by FAO and confirmed by the Contractor, its presence in the country becomes a condition of this Contract. The Contractor must inform FAO of any changes in its local service structure prior to delivery of the goods.

**4.6 ACCEPTANCE OF GOODS:** Under no circumstances shall FAO be required to accept any goods that do not conform to the specifications or requirements of the Contract. FAO may condition its acceptance of the goods upon the successful completion of acceptance tests as may be specified in the Contract or otherwise agreed in writing by the Parties. In no case shall FAO be obligated to accept any goods unless and until FAO has had a reasonable opportunity to inspect the goods following delivery and all required inspection reports satisfactory to FAO have been provided. If the Contract specifies that FAO shall provide a written acceptance of the goods, the goods shall not be deemed accepted unless and until FAO in fact provides such written acceptance. In no case shall payment by FAO in and of itself constitute acceptance of the goods.

**4.7 REJECTION OF GOODS:** In case of rejection by FAO of the goods provided, a new review may be carried out by the representatives of both FAO and the Contractor, if promptly requested by the Contractor and before FAO exercises any legal remedies. The Contractor shall bear the expenses of such review. Notwithstanding any other rights of, or remedies available to FAO under the Contract, including those available under Article 4.9, in case any of the goods are defective or otherwise do not conform to the specifications or other requirements of the Contract, FAO, at its sole option, may reject or refuse to accept the goods, and within thirty (30) days following receipt of notice from FAO of such rejection or refusal to accept the goods, the Contractor shall, at the sole option of FAO:

4.7.1 provide a full refund upon return of the goods, or a partial refund upon a return of a portion of the goods, by FAO; *or*,

4.7.2 repair the goods in a manner that would enable the goods to conform to the specifications or other requirements of the Contract; *or*,

4.7.3 replace the goods with goods of equal or better quality; *and*,

4.7.4 pay all costs relating to the repair or return of the defective goods as well as the costs relating to the storage of any such defective goods and for the delivery of any replacement goods to FAO.

4.8 In the event that FAO elects to return any of the goods for the reasons specified in Article 4.7, above, FAO may procure the goods from another source. In addition to any other rights or remedies available to FAO under the Contract, including, but not limited to, the right to terminate the Contract, the Contractor shall be liable for any additional cost beyond the balance of the Contract price resulting from any such procurement, including, *inter alia*, the costs of engaging in such procurement, and FAO shall be entitled to compensation from the Contractor for any reasonable expenses incurred for preserving and storing the goods for the Contractor’s account.

**4.9 DAMAGES FOR DELAY, NONCONFORMING GOODS, SHORTFALLS:** The Contractor recognizes that this Contract concerns delivery of goods where “time is of the essence” and that failure to deliver the goods by the scheduled date(s) or in accordance with the quantities and/or quality specified in this Contract may cause irreparable harm to FAO. Consequently, subject to Article 12, “Force Majeure”, it is agreed that, at FAO’s sole discretion, either actual damages or liquidated damages, when FAO determines that the calculation of actual excess costs or damages is not practicable, may be applied to reduce the consideration due under the Contract:

**4.9.1 LIQUIDATED DAMAGES FOR LATE DELIVERY:** If all or part of the goods or services are not delivered within the time period specified in the Contract, liquidated damages shall be equivalent to two point five percent (2.5%) of the total price of the Contract for each week of delay until actual delivery, up to a maximum deduction of ten percent (10%) of the total Contract price, as agreed liquidated damages, provided, however, that where delivery time was indicated in the tender documents as a criterion for award, agreed liquidated damages shall be equivalent to five percent (5%) of the total price of the Contract for each week of delay until actual



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delivery, up to a maximum deduction of twenty percent (20%) of the total Contract price. In all cases, if the delay is greater than five (5) weeks, FAO may unilaterally terminate this Contract without liability to FAO, in accordance with Article 13, "Termination"; and

**4.9.2 LIQUIDATED DAMAGES FOR NON CONFORMING GOODS/SERVICES:** In the event of delivery of non-conforming goods or services, liquidated damages shall be equivalent to ten percent (10%) of the total contracted price of the goods or services deemed non-conforming. Liquidated damages claimed by FAO will be deemed accepted by the Contractor if not contested in writing within thirty (30) days of receipt of payment from FAO. This remedy is without prejudice to any right or remedy that may be available to FAO, including termination, for the Contractor's non-performance or breach of any term or condition of the Contract.

**4.10 TITLE:** The Contractor warrants and represents that the goods delivered under the Contract are unencumbered by any third party's title or other property rights, including, but not limited to, any liens or security interests. Unless otherwise expressly provided in the Contract, title in and to the goods shall pass from the Contractor to FAO upon delivery of the goods and their acceptance by FAO in accordance with the requirements of the Contract.

**4.11 EXPORT LICENSING:** The Contractor shall be responsible for obtaining any export license required with respect to the goods, products, or technologies, including software, sold, delivered, licensed or otherwise provided to FAO under the Contract. The Contractor shall procure any such export license in an expeditious manner. Subject to and without any waiver of the privileges and immunities of FAO, FAO shall lend the Contractor all reasonable assistance required for obtaining any such export license. Should any governmental entity refuse, delay or hinder the Contractor's ability to obtain any such export license, the Contractor shall promptly consult with FAO to enable FAO to take appropriate measures to resolve the matter.

**5. INDEMNIFICATION:**

5.1 The Contractor shall indemnify, defend, and hold and save harmless, FAO, and its officials, agents and employees, and any of its member nations or member organizations ("Members") or other ultimate beneficiaries, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against FAO, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to:

5.1.1 allegations or claims that the possession of or use by FAO of any patented device, any copyrighted material, or any other goods, property or services provided or licensed to FAO under the terms of the Contract, in whole or in part, separately or in a combination contemplated by the Contractor's published specifications therefor, or otherwise specifically approved by the Contractor, constitutes an infringement of any patent, copyright, trademark, or other intellectual property right of any third party; *or*,

5.1.2 any acts or omissions of the Contractor, or of any subcontractor or anyone directly or indirectly employed by them in the performance of the Contract, which give rise to legal liability to anyone not a party to the Contract, including, without limitation, claims and liability in the nature of a claim for workers' compensation.

5.2 In addition to the indemnity obligations set forth in this Article 5, the Contractor shall be obligated, at its sole expense, to defend FAO and its officials, agents and employees, pursuant to this Article 5, regardless of whether the suits, proceedings, claims and demands in question actually give rise to or otherwise result in any loss or liability.

5.3 FAO shall advise the Contractor about any such suits, proceedings, claims, demands, losses or liability within a reasonable period of time after having received actual notice thereof. The Contractor shall have sole control of the defense of any such suit, proceeding, claim or demand and of all negotiations in connection with the settlement or compromise thereof, except with respect to the assertion or defense of the privileges and immunities of FAO or any matter relating thereto, for which only FAO itself is authorized to assert and maintain. FAO shall have the right, at its own expense, to be represented in any such suit, proceeding, claim or demand by independent counsel of its own choosing.

5.4 In the event the use by FAO of any goods, property or services provided or licensed to FAO by the Contractor, in whole or in part, in any suit or proceeding, is for any reason enjoined, temporarily or permanently, or is found to infringe any patent, copyright, trademark or other intellectual property right, or in the event of a settlement, is enjoined, limited or otherwise interfered with, then the Contractor, at its sole cost and expense, shall, promptly, either:

5.4.1 procure for FAO the unrestricted right to continue using such goods or services provided to FAO;

5.4.2 replace or modify the goods or services provided to FAO, or part thereof, with the equivalent or better goods or services, or part thereof, that is non-infringing; *or*,

5.4.3 refund to FAO the full price paid by FAO for the right to have or use such goods, property or services, or part thereof.

5.5 For the purposes of this Article, the term "third party" shall be deemed to include, *inter alia*, officials, employees and other representatives of the United Nations, FAO, and other Specialized Agencies participating in the implementation of this Contract as well as any person or entity employed by the Contractor or otherwise performing services for, or supplying goods to, the Contractor.



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**6. INSURANCE AND LIABILITY:**

6.1 The Contractor shall pay FAO promptly for all loss, destruction, or damage to the property of FAO caused by the Contractor's personnel or by any of its subcontractors or anyone else directly or indirectly employed by the Contractor or any of its subcontractors in the performance of the Contract.

6.2 Unless otherwise provided in the Contract, prior to commencement of performance of any other obligations under the Contract, and subject to any limits set forth in the Contract, the Contractor shall take out and shall maintain for the entire term of the Contract, for any extension thereof, and for a period following any termination of the Contract reasonably adequate to deal with losses:

6.2.1 insurance against all risks in respect of its property and any equipment used for the performance of the Contract;

6.2.2 workers' compensation insurance, or its equivalent, or employer's liability insurance, or its equivalent, with respect to the Contractor's personnel sufficient to cover all claims for injury, death and disability, or any other benefits required to be paid by law, in connection with the performance of the Contract;

6.2.3 liability insurance in an adequate amount to cover all claims, including, but not limited to, claims for death and bodily injury, products and completed operations liability, loss of or damage to property, and personal and advertising injury, arising from or in connection with the Contractor's performance under the Contract, including, but not limited to, liability arising out of or in connection with the acts or omissions of the Contractor, its personnel, agents, or invitees, or the use, during the performance of the Contract, of any vehicles, boats, airplanes or other transportation vehicles and equipment, whether or not owned by the Contractor; *and*,

6.2.4 such other insurance as may be agreed upon in writing between FAO and the Contractor.

6.3 The Contractor's liability policies shall also cover subcontractors and all defense costs and shall contain a standard "cross liability" clause.

6.4 The Contractor acknowledges and agrees that FAO accepts no responsibility for providing life, health, accident, travel or any other insurance coverage which may be necessary or desirable in respect of any personnel performing services for the Contractor in connection with the Contract.

6.5 Except for the workers' compensation insurance or any self-insurance program maintained by the Contractor and approved by FAO, in its sole discretion, for purposes of fulfilling the Contractor's requirements for providing insurance under the Contract, the insurance policies required under the Contract shall:

6.5.1 name FAO as an additional insured under the liability policies, including, if required, as a separate endorsement under the policy;

6.5.2 include a waiver of subrogation of the Contractor's insurance carrier's rights against FAO;

6.5.3 provide that FAO shall receive written notice from the Contractor's insurance carrier not less than thirty (30) days prior to any cancellation or material change of coverage; *and*,

6.5.4 include a provision for response on a primary and non-contributing basis with respect to any other insurance that may be available to FAO.

6.6 The Contractor shall be responsible to fund all amounts within any policy deductible or retention.

6.7 Except for any self-insurance program maintained by the Contractor and approved by FAO for purposes of fulfilling the Contractor's requirements for maintaining insurance under the Contract, the Contractor shall maintain the insurance taken out under the Contract with reputable insurers that are in good financial standing and that are acceptable to FAO. Prior to the commencement of any obligations under the Contract, the Contractor shall provide FAO with evidence, in the form of certificate of insurance or such other form as FAO may reasonably require, that demonstrates that the Contractor has taken out insurance in accordance with the requirements of the Contract. FAO reserves the right, upon written notice to the Contractor, to obtain copies of any insurance policies or insurance program descriptions required to be maintained by the Contractor under the Contract. Notwithstanding the provisions of Article 6.5.3, above, the Contractor shall promptly notify FAO concerning any cancellation or material change of insurance coverage required under the Contract.

6.8 The Contractor acknowledges and agrees that neither the requirement for taking out and maintaining insurance as set forth in the Contract nor the amount of any such insurance, including, but not limited to, any deductible or retention relating thereto, shall in any way be construed as limiting the Contractor's liability arising under or relating to the Contract.

**7. ENCUMBRANCES AND LIENS:** The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with FAO against any monies due to the Contractor or that may become due for any work done or against any goods supplied or materials furnished under the Contract, or by reason of any other claim or demand against the Contractor or FAO.



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**8. EQUIPMENT FURNISHED BY FAO TO THE CONTRACTOR:** Title to any equipment and supplies that may be furnished by FAO to the Contractor for the performance of any obligations under the Contract shall rest with FAO, and any such equipment shall be returned to FAO at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment, when returned to FAO, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear, and the Contractor shall be liable to compensate FAO for the actual costs of any loss of, damage to, or degradation of the equipment that is beyond normal wear and tear.

**9. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS:**

9.1 Except as is otherwise expressly provided in writing in the Contract, FAO shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for FAO under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for FAO.

9.2 To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, FAO does not and shall not claim any ownership interest thereto, and the Contractor grants to FAO a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract.

9.3 At the request of FAO, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to FAO in compliance with the requirements of the applicable law and of the Contract.

9.4 Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of FAO, shall be made available for use or inspection by FAO at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to FAO authorized officials on completion of work under the Contract.

**10. PUBLICITY, AND USE OF THE NAME, EMBLEM OR OFFICIAL SEAL OF FAO:** The Contractor shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with FAO, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of FAO, or any abbreviation of the name of FAO in connection with its business or otherwise without the written permission FAO.

**11. CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION:** All designs, drawings, specifications, reports, data, computer programs, and other technical or proprietary information compiled or developed by the Contractor or furnished or disclosed to the Contractor by FAO under this Contract ("Information") shall be the property of FAO and shall be treated as confidential and safeguarded by the Contractor, its employees, agents and representatives. Unless otherwise authorized in writing by FAO, the Contractor shall use such Information only in the performance of this Contract. Upon completion or termination of this Contract, the Contractor shall return such Information to FAO.

11.1 The Contractor may disclose Information to the extent required by law, *provided that*, subject to and without any waiver of the privileges and immunities of FAO, the Contractor will give FAO sufficient prior notice of a request for the disclosure of Information in order to allow FAO to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.

11.2 FAO reserves the right to publish or otherwise make public the Contractor's name and address, any information regarding the Contract, including descriptions of the goods or services provided under the Contract, and the Contract value. FAO may also disclose Information to the extent as required pursuant to the FAO Constitution or consistent with or pursuant to resolutions or regulations of the Conference of FAO or rules promulgated thereunder.

11.3 A Party shall not be precluded from disclosing Information that is obtained by that Party from a third party without restriction, is disclosed by the other Party to a third party without any obligation of confidentiality, is previously known by the Party who has received the Information, or at any time is developed by the Party completely independently of any disclosures hereunder.

11.4 These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.

**12. FORCE MAJEURE; OTHER CHANGES IN CONDITIONS:**



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12.1 In the event of and as soon as possible after the occurrence of any cause constituting *force majeure*, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of *force majeure* or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of *force majeure*. On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting *force majeure* shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract or termination under Article 13. The Contractor shall be liable for any damages resulting from lack of notice of the *force majeure* event.

12.2 If the Contractor is rendered unable, wholly or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, FAO shall have the right to suspend or terminate the Contract on the same terms and conditions as are provided for in Article 13 "Termination," except that the period of notice shall be seven (7) days instead of thirty (30) days. In any case, FAO shall be entitled to consider the Contractor permanently unable to perform its obligations under the Contract in case the Contractor is unable to perform its obligations, wholly or in part, by reason of *force majeure* for any period in excess of ninety (90) days.

12.3 *Force majeure* as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, *provided that* such acts arise from causes beyond the control and without the fault or negligence of the Contractor (or on the part of its personnel, agents, other representatives, or authorized subcontractors), and proves insurmountable in spite of all due diligence. Defects in equipment, material or supplies, or delays in their availability (unless due to *force majeure*), labor disputes, strikes or financial difficulties shall not constitute an event of *force majeure*. Notwithstanding anything to the contrary herein in this Contract, the Contractor recognizes that the provision of goods and services may from time to time be performed under harsh or hostile conditions, including civil unrest. Consequently, delays or failure to perform caused by events arising out of, or in connection with, such difficult conditions shall not, in and of itself, constitute *force majeure* under this Contract. The Contractor therefore acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in areas in which FAO is engaged in, preparing to engage in, or disengaging from any humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh conditions within such areas, or to any incidents of civil unrest occurring in such areas, shall not, in and of itself, constitute *force majeure* under the Contract.

### **13. TERMINATION:**

13.1 Either Party may terminate the Contract for cause, in whole or in part, upon thirty (30) days' notice, in writing, to the other Party. The initiation of conciliation or arbitral proceedings in accordance with Article 16 "Settlement of Disputes, Conciliation and Arbitration", shall not be deemed to be a "cause" for or otherwise to be in itself a termination of the Contract.

13.2 For the purposes of this Article, a "cause" include, without being limited to:

13.2.1 unforeseen causes beyond the control of FAO;

13.2.2 repeated and/or serious non compliance with laws and regulations related to social contribution, safety measures, pollution, prevention of injuries in the work place;

13.2.3 serious contractual breaches compromising the normal performance of the services under this Contract;

13.2.4 transfer to third parties, either directly or indirectly through an intermediary, of all or part of the rights and obligations pertaining to the services under this Contract, except for subcontracts duly authorized by FAO;

13.2.5 gross negligence;

13.2.6 unjustified delay in the execution of the services, so as to substantially prejudice the achievement of FAO's objectives under this Contract;

13.2.7 default in the submission of the performance bond as required, if applicable.

13.3 FAO may terminate the Contract at any time by providing written notice to the Contractor in any case in which the mandate of FAO applicable to the performance of the Contract or the funding of FAO applicable to the Contract is curtailed or terminated, whether in whole or in part. In addition, unless otherwise provided by the Contract, upon sixty (60) days' advance written notice to the Contractor, FAO may terminate the Contract without having to provide any justification therefor.

13.4 In the event of any termination of the Contract, upon receipt of notice of termination that has been issued by FAO, the Contractor shall, except as may be directed by FAO in the notice of termination or otherwise in writing:



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13.4.1 take immediate steps to bring the performance of any obligations under the Contract to a close in a prompt and orderly manner, and in doing so, reduce expenses to a minimum;

13.4.2 refrain from undertaking any further or additional commitments under the Contract as of and following the date of receipt of such notice;

13.4.3 place no further subcontracts or orders for materials, services, or facilities, except as FAO and the Contractor agree in writing are necessary to complete any portion of the Contract that is not terminated;

13.4.4 terminate all subcontracts or orders to the extent they relate to the portion of the Contract terminated;

13.4.5 transfer title and deliver to FAO the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the portion of the Contract terminated;

13.4.6 deliver all completed or partially completed plans, drawings, information, and other property that, if the Contract had been completed, would be required to be furnished to FAO thereunder;

13.4.7 complete performance of the work not terminated; *and*,

13.4.8 take any other action that may be necessary, or that FAO may direct in writing, for the minimization of losses and for the protection and preservation of any property, whether tangible or intangible, related to the Contract that is in the possession of the Contractor and in which FAO has or may be reasonably expected to acquire an interest.

13.5 In the event of any termination of the Contract, FAO shall be entitled to obtain reasonable written accountings from the Contractor concerning all obligations performed or pending in accordance with the Contract. In addition, FAO shall not be liable to pay the Contractor except for those goods delivered and services provided to FAO in accordance with the requirements of the Contract, but only if such goods or services were ordered, requested or otherwise provided prior to the Contractor's receipt of notice of termination from FAO or prior to the Contractor's tendering of notice of termination to FAO.

13.6 The Contractor shall immediately report any change in its legal status or control to FAO. FAO may, without prejudice to any other right or remedy available to it, terminate the Contract forthwith in the event that:

13.6.1 the Contractor is adjudged bankrupt, or is liquidated, or becomes insolvent, or applies for a moratorium or stay on any payment or repayment obligations, or applies to be declared insolvent;

13.6.2 the Contractor is granted a moratorium or a stay, or is declared insolvent;

13.6.3 the Contractor makes an assignment for the benefit of one or more of its creditors;

13.6.4 a Receiver is appointed on account of the insolvency of the Contractor;

13.6.5 the Contractor offers a settlement in lieu of bankruptcy or receivership; *or*,

13.6.6 FAO reasonably determines that the Contractor has become subject to a materially adverse change in its financial condition that threatens to substantially affect the ability of the Contractor to perform any of its obligations under the Contract.

13.7 Except as prohibited by law, the Contractor shall be bound to compensate FAO for all damages and costs, including, but not limited to, all costs incurred by FAO in any legal or non-legal proceedings, as a result of any of the events specified in Article 13.6, above, and resulting from or relating to a termination of the Contract, even if the Contractor is adjudged bankrupt, or is granted a moratorium or stay or is declared insolvent. The Contractor shall immediately inform FAO of the occurrence of any of the events specified in Article 13.6, above, and shall provide FAO with any information pertinent thereto.

13.8 The provisions of this Article 13 are without prejudice to any other rights or remedies of FAO under the Contract or otherwise.



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**14. NON-WAIVER OF RIGHTS:** The failure by either Party to exercise any rights available to it, whether under the Contract or otherwise, shall not be deemed for any purposes to constitute a waiver by the other Party of any such right or any remedy associated therewith, and shall not relieve the Parties of any of their obligations under the Contract.

**15. NON-EXCLUSIVITY:** Unless otherwise specified in the Contract, FAO shall have no obligation to purchase any minimum quantities of goods or services from the Contractor, and FAO shall have no limitation on its right to obtain goods or services of the same kind, quality and quantity described in the Contract, from any other source at any time.

**16. SETTLEMENT OF DISPUTES, CONCILIATION AND ARBITRATION:**

16.1 Any dispute between the Parties concerning the interpretation and the execution of the Contract will be settled by negotiation or, if not settled by negotiation between the Parties or by another agreed mode of settlement shall, at the request of either Party, be submitted to one conciliator. Should the Parties fail to reach agreement on the name of a sole conciliator, each Party shall appoint one conciliator. The conciliation shall be carried out in accordance with the Conciliation Rules of the United Nations Commission on International Trade Law ("UNCITRAL"), as at present in force.

16.2 Any dispute between the Parties concerning the interpretation and the execution of the Contract that is unresolved after conciliation shall, at the request of either Party be settled by arbitration in accordance with the UNCITRAL Arbitration Rules, as at present in force. Arbitrations under this provision shall be administered by the International Bureau of the Permanent Court of Arbitration.

16.3 The conciliation or the arbitration proceedings shall be conducted in any of the six (6) official languages of FAO (Arabic, Chinese, English, French, Spanish and Russian) in which the Contract is drafted. In cases in which the language of the Contract is not an official language of FAO, the conciliation or the arbitration proceedings shall be conducted in English.

16.4 The Parties may request conciliation during the execution of the Contract or within a period not to exceed twelve (12) months after the expiry or the termination of the Contract, which shall in any case include any Warranty Period as defined in Article 4.5. The Parties may request arbitration not later than ninety (90) days after the termination of the conciliation proceedings.

16.5 Decisions of the arbitral tribunal shall be final and binding to the Parties. The arbitral tribunal shall have no authority to award punitive damages or, unless otherwise expressly provided in this Contract, to award interest in which case such interest shall not be in excess of the London Inter-Bank Offered Rate ("LIBOR") then prevailing, and any such interest shall be simple interest only.

**17. PRIVILEGES AND IMMUNITIES AND APPLICABLE LAW:**

17.1 Nothing contained in or relating to this Contract shall be deemed a waiver, express or implied, of the privileges and immunities of FAO, nor as conferring any privileges or immunities of FAO on the Contractor or its employees, nor as acceptance by FAO of the jurisdiction of the courts of any country over disputes arising out of this Contract.

17.2 Notwithstanding any specific provision herein, this Contract and any dispute arising therefrom shall be governed by general principles of law to the exclusion of any single national system of law. General principles of law shall be deemed to include the UNIDROIT Principles of International Commercial Contracts 2010.

**18. TAX EXEMPTION:**

18.1 Article III Section 9, of the Convention on the Privileges and Immunities of the Specialized Agencies provides, *inter alia*, that FAO is exempt from all direct taxes, including any value-added tax (VAT), except charges for public utility services, and is exempt from customs restrictions, duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the exemptions of FAO from such taxes, restrictions, duties, or charges, the Contractor shall immediately consult with FAO to determine a mutually acceptable procedure.

18.2 The Contractor shall explicitly specify this tax exemption on any invoice. The Contractor authorizes FAO to deduct from the Contractor's invoices any amount representing such taxes, duties or charges, unless the Contractor has consulted with FAO before the payment thereof and FAO has, in each instance, specifically authorized the Contractor to pay such taxes, duties, or charges under written protest. In that event, the Contractor shall provide FAO with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized, and FAO shall reimburse the Contractor for any such taxes, duties, or charges so authorized by FAO and paid by the Contractor under written protest.



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**19. MODIFICATIONS:**

19.1 FAO may at any time by written instructions make changes within the general scope of this Contract and the Contractor shall be obliged to implement such changes in a timely manner. If any such change causes an increase or decrease in the quantities of goods and/or services or the time required for performance of this Contract, an equitable adjustment shall be made in the order price or delivery schedule, or both, and the Contract shall be amended, terminated or reissued accordingly.

19.2 Any claim by the Contractor for adjustment under this Article must be asserted within thirty (30) days from the date of receipt by the Contractor of the notification of change; provided, however, that FAO may, at its sole discretion, receive and act upon any such claim asserted at any time prior to final payment under this Contract. A dispute arising from failure to agree to any adjustments shall be subject to the provisions of Article 16, "Settlement of Disputes, Conciliation and Arbitration", of this Contract. However, nothing in this Article shall relieve the Contractor from its obligation to proceed with the performance of the Contract as changed.

19.3 No modification of or change in the terms of this Contract shall be valid or enforceable against FAO unless it is in writing and signed by a duly authorized officer.

19.4 Any modification of this Contract other than the changes provided for under paragraphs 19.1 to 19.3 above shall be effected by an amendment to this Contract to be mutually agreed between the Parties hereto.

**20. AUDITS AND INVESTIGATIONS:**

20.1 Each invoice paid by FAO shall be subject to a post-payment audit by auditors, whether internal or external, of FAO or by other authorized and qualified agents of FAO at any time during the term of the Contract and for a period of two (2) years following the expiration or prior termination of the Contract. FAO shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by FAO other than in accordance with the terms and conditions of the Contract.

20.2 The Contractor acknowledges and agrees that, from time to time, FAO may conduct investigations relating to any aspect of the Contract or the award thereof, the obligations performed under the Contract, and the operations of the Contractor generally relating to performance of the Contract. The right of FAO to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract.

20.3 The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any relevant documentation for such purposes at reasonable times and on reasonable conditions and to grant to FAO access to the Contractor's premises at reasonable times and on reasonable conditions in connection with such access to the Contractor's personnel and relevant documentation. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by FAO hereunder.

**21. LIMITATION ON ACTIONS:**

21.1 Except with respect to any indemnification obligations in Article 5, above, or as are otherwise set forth in the Contract, any conciliation proceedings in accordance with Article 16, above, arising out of the Contract must be commenced within twelve (12) months after the cause of action has accrued.

21.2 The Parties further acknowledge and agree that, for these purposes, a cause of action shall accrue when the breach actually occurs, or, in the case of latent defects, when the injured Party knew or should have known all of the essential elements of the cause of action, or in the case of a breach of warranty, when tender of delivery is made, except that, if a warranty extends to future performance of the goods or any process or system and the discovery of the breach consequently must await the time when such goods or other process or system is ready to perform in accordance with the requirements of the Contract, the cause of action accrues when such time of future performance actually begins.

**22. ESSENTIAL TERMS:** The Contractor acknowledges and agrees that each of the provisions in Articles 23 to 30 hereof constitutes an essential term of the Contract and that any breach of any of these provisions shall entitle FAO to terminate the Contract or any other contract with FAO immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind.

**23. SOURCE OF INSTRUCTIONS:** The Contractor shall neither seek nor accept instructions from any authority external to FAO in connection with the performance of its obligations under the Contract. Should any authority external to FAO seek to impose any instructions concerning or restrictions on the Contractor's performance under the Contract, the



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Contractor shall promptly notify FAO and provide all reasonable assistance required by FAO. The Contractor shall not take any action in respect of the performance of its obligations under the Contract that may adversely affect the interests of FAO, and the Contractor shall perform its obligations under the Contract with the fullest regard to the interests of the FAO.

**24. OFFICIALS NOT TO BENEFIT:** The Contractor warrants that it has not and shall not offer to any representative, official, employee, or other agent of FAO any direct or indirect benefit arising from or related to the performance of the Contract or of any other contract with FAO or the award thereof or for any other purpose intended to gain an advantage for the Contractor.

**25. OBSERVANCE OF THE LAW:** The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract. The Contractor shall promptly correct any violations thereof and shall keep FAO informed of any conflict or problem arising in relation to national authorities. In addition, the Contractor shall maintain compliance with all obligations relating to its registration as a qualified vendor of goods or services to FAO, as such obligations are set forth in FAO vendor registration procedures.

**26. LABOR:**

26.1 The Contractor shall: i) respect the prohibition of forced or compulsory labour in all its forms; ii) respect the freely exercised right of workers, without distinction, to organize, to further and defend their interest as well as the protection of those workers who exercise their right to organize; iii) ensure equality of opportunity and treatment in respect of employment and occupation; and iv) ensure fair and reasonable conditions of safety, health and welfare.

26.2 The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which *inter alia*, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

**27. MINES:** The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiaries or affiliated entities (if any) is engaged in the sale or manufacture of anti-personnel mines or components utilized in the manufacture of anti-personnel mines.

**28. SEXUAL EXPLOITATION:** The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of any direct beneficiary of the FAO projects or programmes receiving the goods or services provided under this Contract, or to any persons related to such beneficiaries, by its employees or any other persons engaged and controlled by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all reasonable and appropriate measures to prohibit its employees or other persons engaged and controlled by it from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging in any sexual activities that are exploitive or degrading to any direct beneficiary of the FAO projects or programmes receiving the goods or services provided under this contract, or to any persons related to such beneficiaries.

**29. TERRORISM:** The Contractor agrees to undertake all reasonable efforts to ensure that none of the funds received from FAO under this Contract are used to provide support to individuals or entities: (i) associated with terrorism, as included in the list maintained by the Security Council Committee established pursuant to Resolutions 1267 (1999) and 1989 (2011); or (ii) that are the subject of sanctions or other enforcement measures promulgated by the United Nations Security Council.

**30. SANCTIONABLE ACTIONS**

30.1 The Contractor shall observe the highest standard of ethics and will certify that it has not and will not engage in Sanctionable Actions during the selection process and throughout the negotiation and execution of this Contract. The Contractor expressly agrees to abide by the UN Supplier Code of Conduct.

30.2 FAO, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith if the Contractor, in the judgment of FAO, has engaged in Sanctionable Actions during the selection process or in negotiating or executing this Contract, and as appropriate, impose sanctions, as per the prevailing Sanctions Procedures ([http://www.fao.org/fileadmin/user\\_upload/procurement/docs/FAO\\_Vendors\\_Sanctions\\_Policy\\_-\\_Procedures.pdf](http://www.fao.org/fileadmin/user_upload/procurement/docs/FAO_Vendors_Sanctions_Policy_-_Procedures.pdf)),



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and request full or partial restitution of sums previously paid by FAO under this Contract. FAO may also share information on the sanctioned Contractor with other Intergovernmental or UN Organizations.

30.3 For the purpose of this Article, Sanctionable Actions are defined as follows: “Corrupt practice” means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value whether tangible or intangible to improperly influence the actions of another party; “Fraudulent practice” means any act or omission, including misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial and/or other benefit and/or to avoid an obligation; “Collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party; “Coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; “Unethical practice” is any act or omission contrary to the conflict of interest, gifts and hospitality or post-employment FAO policy (<http://www.fao.org/unfao/procurement/codedeconduitethique/en/>), as well as any provisions or other published requirements of doing business with the Organization, including the UN Supplier Code of Conduct; and “Obstructive practice” is an act or omission by a Third Party that may prevent or hinder the work of Investigation Unit of the FAO Office of the Inspector General.

**31. DISCLOSURE OF SANCTIONS OR TEMPORARY SUSPENSION:** The Contractor should not be suspended, debarred, or otherwise identified as ineligible by any Intergovernmental or UN Organization, including any organization within the World Bank Group or any multi-lateral development bank, or by the institutions and bodies of economic integration organizations (e.g., the European Union). The Contractor is therefore required to disclose to FAO whether itself, or any of its affiliates or agents, is subject to any sanction or temporary suspension imposed by any such organization or National Authority at any time during the three years prior to this Contract and at any time throughout the execution of this Contract. The Contractor recognizes that a breach of this provision will entitle FAO to terminate its Contract with the Contractor, and that material misrepresentations on its status constitute a fraudulent practice.

**32. COLLABORATION WITH CERTAIN COUNTRIES:** FAO reserves the right to communicate in writing to the Contractor, countries from which no goods or services shall be purchased directly or indirectly for purposes of delivery, distribution, installation, or use under this Contract. These communications shall be deemed a condition of this Contract and be incorporated by the Contractor in any contracts with authorized subcontractors.

**33. NOTICES AND COMMUNICATIONS:** All notices and other binding communications shall be in English, or the language of the Contract, and shall be deemed to be validly given if sent by registered mail, by fax or by email with return receipt to the other Party at the address or numbers of either Party as indicated in the Contract.