



REQUEST FOR PROPOSAL (RFP) (For Low-Valued Services)

NAME & ADDRESS OF FIRM	DATE: August 18, 2020
	REFERENCE: SgRFP2020-02

Dear Sir / Madam:

We kindly request you to submit your Proposal for ***SgRFP2020-02_Precision Agriculture***.

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before Tuesday, September 01, 2020 and via email to the address below:

**United Nations Development Programme, Global Centre for Technology, Innovation
and Sustainable Development (GCTISD)**

Procurement Unit
procurement.sg@undp.org

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

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

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

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

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscoc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

*Name: Arpik Baghdasaryan
Title: Operations Analyst
8/18/2020*

Description of Requirements

Context of the Requirement	Designing a Knowledge Product on Digital Farming Technologies for Developing Countries
Implementing Partner of UNDP	UNDP
Brief Description of the Required Services ¹	<p>As part of the Global Centre's efforts on Sustainable Agriculture, we are engaged in the discovery and dissemination of technologies and innovations in the area of precision agriculture. Digital farming broadly encompasses technologies to assist producers in farming, generally associated with benefits such as greater efficiency and higher yields. Under digital farming, one of the most common set of technologies are for precision agriculture. Precision agriculture involves measuring and responding to inter- and intra-farm variability in crops and offers several benefits over conventional methods of farming. Through the efficient use of inputs including water, fertilisers and pesticides, precision agriculture reduces costs and increases profitability, preventing the overuse of agricultural inputs mitigates the environmental impact of farming. The use of technology reduces the manual labour involved in farming activities and enhances farmer productivity.</p> <p>Recent advances in IoT, UAVs, and sensors, and the decreasing costs of their application are demonstrating the utility of precision agriculture in improving the profitability and sustainability of agriculture for even smallholder farmers. Precision farming enables the achievement of Sustainable Development Goals (SDGs) 1, 2, 6, 9, and 12.</p> <p>The Consulting Firm will deliver a knowledge product to demonstrate the utility and viability of adopting digital farming technologies (focused on precision agriculture), which will guide UNDP Country Offices in implementing pilot projects in collaboration with the Global Centre and other stakeholders.</p>
List and Description of Expected Outputs to be Delivered	<p>The knowledge product should include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> • Background summary of digital farming technologies with a focus on precision agriculture, and relevance for developing countries • Detailed study and analyses of existing digital farming technologies, including hardware and software components, covering: <ol style="list-style-type: none"> 1. General description of technology 2. Software and hardware requirements 3. Step-by-step applications, supported with infographics 4. Outcomes/impact of technology application on crop forecasts, input optimisation, cost optimisation, etc. 5. Feasibility of technology use, including size of investments, optimal size of farm, return on investment, and average increase in profit for a typical farm (3–5 ha.), etc. 6. Assessment of various methods and channels of technology transfer

¹ A detailed TOR may be attached if the information listed in this Annex is not sufficient to fully describe the nature of the work and other details of the requirements.

	<ul style="list-style-type: none"> • A digital farming model for a farm of typical size growing a specific crop in a developing country, detailing estimated costs of implementation, effect on profitability, reduction in use of inputs, and environmental impact (e.g. carbon footprint) • 3-5 case studies based on real-life examples • Countries and regions most suited to adoption and mainstreaming of precision agriculture technologies, considering types of technologies, financial feasibility, available technological expertise, etc. • Policy recommendations for governments to build a favourable regulatory environment for wide-scale adoption and mainstreaming of digital farming, as well as recommended government support measures to stimulate adoption. • Limitations and gaps in the study and opportunities for future research
Person to Supervise the Work/Performance of the Service Provider	Senior Advisor, UNDP Global Centre leading the Sustainable and Digital Agriculture team
Frequency of Reporting	<i>As needed between the period from 15 September 2020 to 17 November 2020</i>
Progress Reporting Requirements	To deliver accordingly to the deliverable within the timeline stated in the Terms of Reference.
Location of work	<input checked="" type="checkbox"/> At Contractor's Location
Expected duration of work	Up to 25 working days, across 9 weeks
Target start date	15 September 2020
Latest completion date	17 November 2020
Travels Expected	None
Special Security Requirements	N/A
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	N/A
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required
Names and curriculum vitae of individuals who will be involved in	<input checked="" type="checkbox"/> Required

completing the services													
Currency of Proposal	<input checked="" type="checkbox"/> United States Dollars												
Value Added Tax on Price Proposal ²	<input checked="" type="checkbox"/> must be inclusive of VAT and other applicable indirect taxes <input type="checkbox"/> must be exclusive of VAT and other applicable indirect taxes												
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.												
Partial Quotes	<input checked="" type="checkbox"/> Not permitted												
Payment Terms ³	<table border="1"> <thead> <tr> <th>Outputs</th> <th>Percentage</th> <th>Condition for Payment Release</th> </tr> </thead> <tbody> <tr> <td>Upon signing of contract</td> <td>20%</td> <td rowspan="3"> Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service Provider. </td> </tr> <tr> <td>Delivery of Draft knowledge product</td> <td>30%</td> </tr> <tr> <td>Upon satisfactory delivery of final knowledge product</td> <td>50%</td> </tr> </tbody> </table>	Outputs	Percentage	Condition for Payment Release	Upon signing of contract	20%	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service Provider.	Delivery of Draft knowledge product	30%	Upon satisfactory delivery of final knowledge product	50%		
Outputs	Percentage	Condition for Payment Release											
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Delivery of Draft knowledge product	30%												
Upon satisfactory delivery of final knowledge product	50%												
Person(s) to review/inspect/ approve outputs/complete d services and authorize the disbursement of payment	Senior Advisor, Sustainable and Digital Agriculture, UNDP Global Centre Singapore												
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Professional Services												
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.												

² VAT exemption status varies from one country to another. Pls. check whatever is applicable to the UNDP CO/BU requiring the service.

³ UNDP preference is not to pay any amount in advance upon signing of contract. If the Service Provider strictly requires payment in advance, it will be limited only up to 20% of the total price quoted. For any higher percentage, or any amount advanced exceeding \$30,000, UNDP shall require the Service Provider to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the payment advanced by UNDP to the Service Provider.

Criteria for the Assessment of Proposal	<p><u>Technical Proposal (70%)</u></p> <p><input checked="" type="checkbox"/> Professional working experience in relevant fields and similar activities as the ones of the Terms of Reference - 15%</p> <p><input checked="" type="checkbox"/> Experience in the production of analyses for agri-food technology applications- 20%</p> <p><input checked="" type="checkbox"/> Experience in conducting similar research in developing countries- 5%</p> <p><input checked="" type="checkbox"/> Qualification of Key Personnel - 15%</p> <p><input checked="" type="checkbox"/> Relevance of proposal in response to the Terms of Reference - 15%</p> <p><u>Financial Proposal (30%)</u></p> <p>To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.</p>
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider
Contract General Terms and Conditions ⁴	<p><input checked="" type="checkbox"/> General Terms and Conditions for contracts (goods and/or services)</p> <p>Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>
Annexes to this RFP ⁵	<p><input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2)</p> <p><input checked="" type="checkbox"/> Detailed TOR</p>
Contact Person for Inquiries (Written inquiries only) ⁶	<p><i>Procurement Team</i></p> <p>Procurement.sg@undp.org</p> <p>Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.</p>
Other Information [pls. specify]	The Contractor is required to have the aforementioned professional and technical qualifications. Only the applicants who hold these qualifications will be shortlisted and contacted.

⁴ Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

⁵ Where the information is available in the web, a URL for the information may simply be provided.

⁶ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

TERMS OF REFERENCE (ToR)

GENERAL INFORMATION

Services/Work Description:	Designing a Knowledge product on Digital Farming Technologies for Developing Countries
Project/Program Title:	UNDP Global Centre for Technology, Innovation and Sustainable Development
Post Title:	Specialised Firm on Digital Farming Technologies for Developing Countries
Duty Station:	Home-based
Duration:	25 days, from 15 September to 17 November 2020
Expected Start Date:	15 September 2020

I. BACKGROUND / PROJECT DESCRIPTION

The UNDP Global Centre for Technology, Innovation and Sustainable Development ('The Global Centre', 'we', 'our') aims to identify, co-design and share innovative and technological solutions for sustainable development. We aim to catalyse new insights, partnerships and action on the ground in the countries where UNDP works. Our initial areas of focus are: Sustainable Agriculture, Sustainable Finance, and Smart Cities and Digitalisation. We aim to leverage expertise in Singapore, as well as across the network of over 60 newly established UNDP Accelerator Labs, and from experts and partners around the globe.

The Global Centre is a joint initiative of the Singapore Government and UNDP, currently being led by a small team that is focused on programme and partnerships development – both with the public and private sector in Singapore and international partners (including the above UNDP network). Singapore Government partners include the Ministry of Foreign Affairs (MFA), the Ministry of Environment and Water Resources (MEWR), the Public Service Division, and the Economic Development Board (EDB).

As part of our efforts on Sustainable Agriculture, we are engaged in the discovery and dissemination of technologies and innovations in the area of precision agriculture. Digital farming broadly encompasses technologies to assist producers in farming, generally associated with benefits such as greater efficiency and higher yields. Under digital farming, one of the most common set of technologies are for precision agriculture. Precision agriculture involves measuring and responding to inter- and intra-farm variability in crops and offers several benefits over conventional methods of farming. Through the efficient use of inputs including water, fertilisers and pesticides, precision agriculture reduces costs and increases profitability, preventing the overuse of agricultural inputs mitigates the environmental impact of farming. The use of technology reduces the manual labour involved in farming activities and enhances farmer productivity.

Recent advances in IoT, UAVs, and sensors, and the decreasing costs of their application are demonstrating the utility of precision agriculture in improving the profitability and sustainability of agriculture for even smallholder farmers. Precision farming enables the achievement of Sustainable Development Goals (SDGs) 1, 2, 6, 9, and 12.

The Consulting Firm will deliver a knowledge product to demonstrate the utility and viability of adopting digital farming technologies (focused on precision agriculture), which will guide UNDP Country Offices in implementing pilot projects in collaboration with the Global Centre and other stakeholders.

II. SCOPE OF THE WORK

The Firm is expected to conduct extensive research on the global landscape of precision agriculture, particularly in relevance to its application in developing country contexts and for smallholder farmers, and in doing so produce a research piece in the form of a knowledge product for publication by UNDP. The objective of this deliverable would be to demonstrate the utility and viability of adopting digital farming technologies to enable achievement of the SDGs in developing countries.

III. EXPECTED OUTPUTS AND DELIVERABLES

The knowledge product should include, but not be limited to, the following elements:

- Background summary of digital farming technologies with a focus on precision agriculture, and relevance for developing countries
- Detailed study and analyses of existing digital farming technologies, including hardware and software components, covering:
 1. General description of technology
 2. Software and hardware requirements
 3. Step-by-step applications, supported with infographics
 4. Outcomes/impact of technology application on crop forecasts, input optimisation, cost optimisation, etc.
 5. Feasibility of technology use, including size of investments, optimal size of farm, return on investment, and average increase in profit for a typical farm (3–5 ha.), etc.
 6. Assessment of various methods and channels of technology transfer
- A digital farming model for a farm of typical size growing a specific crop in a developing country, detailing estimated costs of implementation, effect on profitability, reduction in use of inputs, and environmental impact (e.g. carbon footprint)
- 3-5 case studies based on real-life examples
- Countries and regions most suited to adoption and mainstreaming of precision agriculture technologies, considering types of technologies, financial feasibility, available technological expertise, etc.
- Policy recommendations for governments to build a favourable regulatory environment for wide-scale adoption and mainstreaming of digital farming, as well as recommended government support measures to stimulate adoption.
- Limitations and gaps in the study and opportunities for future research

The knowledge product should be in English, easily understandable by a general audience, include an executive summary highlighting key points of the document, and should not exceed 20 A4 size pages. The knowledge product should also be presented in a visually engaging way and supplemented with infographics and images where appropriate, that should be sourced by the Consulting Firm withstanding licensing rights. The final publication should follow guidelines mentioned in the UNDP Brand Manual (the Centre will provide this).

The Firm is expected to work closely with the Global Centre to develop this knowledge product, take into account possible changes in its scope, and take responsibility of acquiring required data and information. The Global Centre will provide support where possible and get the Firm in touch with relevant partners and stakeholders for the assignment.

Deliverables timeline:

The Consulting Firm should have the first draft of the knowledge product done by 1 November 2020 and make necessary edits upon feedback from UNDP **within 3 working days**.

The final knowledge product should be ready for publishing by 17 November 2020.

IV. INSTITUTIONAL ARRANGEMENT / REPORTING RELATIONSHIPS

The Firm will report to the Senior Advisor, UNDP Global Centre leading the Sustainable and Digital Agriculture team.

V. DURATION OF THE WORK

The Firm will deliver the outputs within the period from 15 September to 17 November 2020

VI. DUTY STATION

The assignment will be home-based. The Firm will be required to use their own computer.

VII. QUALIFICATIONS OF THE SUCCESSFUL FIRM

Team Requirements:

- **Senior Project Manager:** at least 10 years of experience in managing agricultural projects involving precision agriculture technologies, especially in developing country contexts.
- **Technical Consultants (or similar):** at least 7 years of research and/or consulting experience in agricultural technologies or innovations more broadly.

Experience of Firm:

- The Firm will have at least five years of experience in research, analysis and/or consulting on agri-food technologies or related innovations for the agriculture sector.
- The Firm will have produced at least two reports on agri-food technology applications, and at least one of which focuses on developing countries. These should be submitted as part of the Firm's application for this Terms of Reference.
- Proven experience in the production of quality technical reports on topics relevant to this Terms of Reference (innovation, digital farming, precision agriculture, smart farming technologies etc.)
- Experience working with international development organisations desirable.
- Proven ability to work under pressure with tight deadlines, and to deliver in a timely manner within cost and quality standards.

Language

- Proficiency in written and spoken English required. Proficiency in other UN official languages is an asset.

Important Note:

The Firm is required to have the aforementioned professional and technical qualifications. **Only the applicants who hold these qualifications** will be shortlisted and contacted.

Evaluation process

Applicants are reviewed based on Required Skills and Experience stated above and based on the technical evaluation criteria outlined below. Applicants will be evaluated based on cumulative scoring. When using this weighted scoring method, the award of the contract will be made to the individual Firm whose offer has been evaluated and determined as:

- Being responsive/compliant/acceptable; and
- Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation where technical criteria weigh 70% and Financial criteria/ Proposal weighs 30%.

Technical evaluation - Total 70% (70 points):

The technical evaluation will be evaluated based on the following criteria:

Criteria	Points	Maximum points
Professional working experience in relevant fields and similar activities as the ones of the Terms of Reference	10 points if number of total years is above threshold (5), and 1 point per relevant year of experience additional to the threshold.	15
Experience in the production of analyses for agri-food technology applications.	10 points for each analysis or report referenced and reviewed by the evaluation panel.	20
Experience in conducting similar research in developing countries.	5 points if satisfied.	5
Quality of expert team	Maximum of 5 points per CV. Split by: relevance of training (2), relevance of experience for the assignment (3)	15
Relevance of proposal in response to the Terms of Reference	Understanding of the assignment (5), proposed methodology (10).	15

Candidates obtaining a minimum of 70% (49 points) of the maximum obtainable points for the technical criteria (70 points) shall be considered for the financial evaluation.

Financial evaluation - Total 30% (30 points)

The following formula will be used to evaluate financial proposal:

$p = y (\mu/z)$, where

- p = points for the financial proposal being evaluated
- y = maximum number of points for the financial proposal
- μ = price of the lowest priced proposal
- z = price of the proposal being evaluated

Contract Award

Candidate obtaining the highest combined scores in the combined score of Technical and Financial evaluation will be considered technically qualified and will be offered to enter into a contract with UNDP.

Payment modality

Payment to the Firm will be made according to the following invoice schedule:

Deliverable	Percentage
Upon signing of contract	20%
Delivery of Draft knowledge product	30%
Satisfactory delivery of final knowledge product	50%

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL⁷

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery⁸)

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :

- a) *Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;*
- b) *Business Licenses – Registration Papers, Tax Payment Certification, etc.*
- c) *Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc. ;*
- d) *Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contract references;*
- e) *Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.*
- f) *Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.*

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

⁷ This serves as a guide to the Service Provider in preparing the Proposal.

⁸ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide:

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

D. Cost Breakdown per Deliverable* (Please provide this part (section D and E) as a separate "Annex -Financial Proposal" in a separate email)

	Deliverables <i>[list them as referred to in the RFP]</i>	Percentage of Total Price (Weight for payment)	Price <i>(Lump Sum, All Inclusive)</i>
1	Upon signing of contract	20%	
2	Upon delivery of Draft knowledge product	30%	
3	Upon satisfactory delivery of final knowledge product	50%	
	Total	100%	

**This shall be the basis of the payment tranches*

E. Cost Breakdown by Cost Component [This is only an Example]:

Description of Activity	Remuneration per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a. Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				

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