

February 16, 2024

Reference: CSIO/MSSA/GAP0449/0083

Subject: Call for Expression of Interest (EoI)/quotation for the purchase of goods/fabrication job work for the ongoing project activities- reg

It is informed that following items are proposed to be purchased /fabricated. Interested parties are requested to **submit quotation** through email/hard copy to the undersigned **within next three days** from the date of publishing of notice.

Items/Goods/Job work required

Sr. No.	Description of the items/Goods/Jobwork	Quantity
1.	Soil Moisture & Electrical Sensor	01
2.	Leaf Wetness Sensor	01

Terms and Conditions:

Delivery: For CSIR-CSIO, Chandigarh

Lead time/delivery time: 4-6 weeks

Payment: After delivery and successful inspection



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HEAD ISD, with a request to display on the CSIO website

Specifications for the sensor(s) (lab consumables) required for IoT in Smart Agriculture

Sensors required to measure the following quantities:

Category	Observables
Soil	Soil Moisture
	Soil Electrical Conductivity
Leaf	Leaf Wetness

The observable provided by their respective sensors should meet the following standards:

Sensor 1:

Observable	Input Power Supply	Accuracy	Resolution	Measuring Range	Communication Interface Protocol
Soil Moisture	5-24V	Upto 5% or better	Upto 0.1% RH or VWC or better	0 to 100% RH or VWC	RS485, LoRa, LoRaWAN, SPI, I2C, SDI-12, 4-20mA
Soil Electrical Conductivity		Upto $\pm 5\%$ or better	Upto $1\mu\text{S}/\text{cm}$ or better	0 to 10000 $\mu\text{S}/\text{cm}$ or better	

Sensor 2:

Observable	Input Power Supply	Accuracy	Resolution	Measuring Range	Communication Interface Protocol
Leaf Wetness	12-24V	Upto 5% or better	0.1%	0 to 100%	RS485, LoRa, LoRaWAN, SPI, I2C, SDI-12, 4-20mA

Quantity of sensors that provide the aforementioned observables: 1 nos.