Reference: CSIO/MSSA/HCP0057/103

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.	Description of the items/Goods/Jobwork	Quantity
No.		
1.	Soil Moisture and EC sensor	01
2.	Leaf Wetness/Humidity sensor	01

### **Terms and Conditions:**

Delivery: For CSIR-CSIO, Chandigarh Lead time/delivery time: 4-6 weeks

Payment: After delivery and successful inspection

Dr Babankumar S. Bansod Senior Principal Scientist & Project Leader 9888520252; scientist\_babankumar@csio.res.in

**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	
C a it	Soil Moisture	
Soil	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 ±5% or better	Upto 1µS/cm or better	0 to 10000 μS/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.