



World's first portable AI farming intelligence device with localised recommendations & mobile app.

soilo



**GET
YOURS
NOW!**

WHAT MAKES SOILO UNIQUE & SPECIAL?

**Area Covered
200 square metres**

**Results in
60 Seconds!**

Deployed 5000+ units in 110+ Countries



Portable & Real-Time Soil Testing with Nine sensors.

AI-Powered recommendations & Advice for farmers.

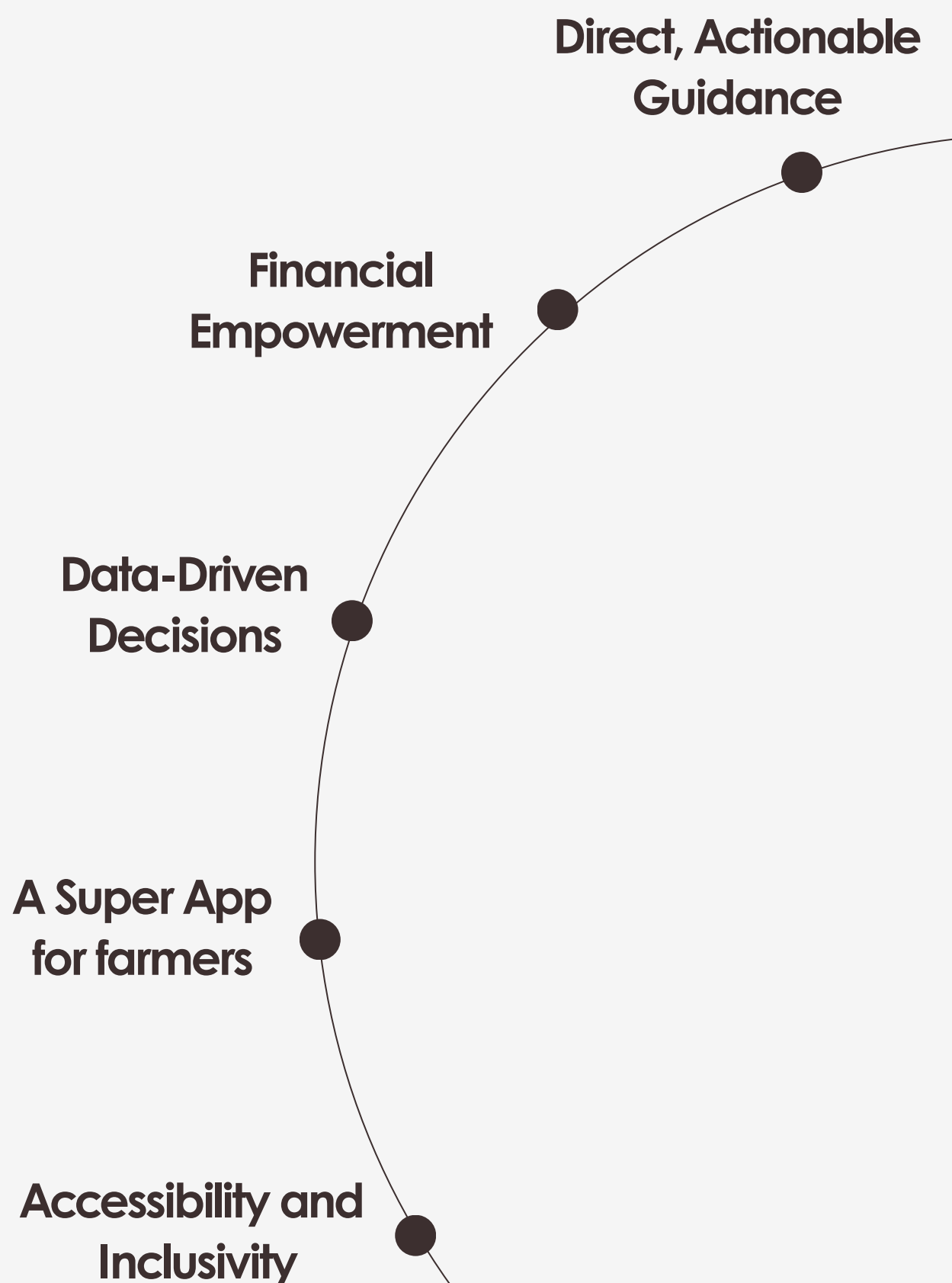
Mobile app connects with bluetooth, works without internet and is easy to use. It also comes in local language for the farmers globally.

Affordable, Accurate and, Chemical-Free Operation.

Durable Design with Aluminium body and safe for all fields and crops.

BY FARMERS, FOR FARMERS!

We use Multi-parameter electrochemical sensing along with vernacular NLP, sensor fusion & signal processing. Our device is integrated with AI Mobile app that works offline. We are also using our own AI engine and have been training our models on own and also with datasets published online by government. For constant monitoring in specific conditions, our app supports live monitoring converting values to graphical format for understanding.



SAMPLE REPORT

Farm / Location:	Ram Ganga Vihar, Moradabad, Uttar Pradesh	Farmer Name:	Ramesh Kumar Sharma
Crop:	Ginger (Adrak)	Growth Stage:	Seedling / Early Vegetative
Plot Size:	1 Acre	Device ID:	SLO-MRD-0042

OVERALL SOIL HEALTH SCORE

38 / 100

NEEDS IMMEDIATE ATTENTION

3 Critical parameters | 3 Low parameters | Soil pH severely outside safe range

ENVIRONMENTAL SNAPSHOT

Temperature 28.4 °C Normal	Moisture 44.4 % Monitor	Humidity 62 % Adequate	Light Index 7.2 / 10 Good
----------------------------------	-------------------------------	------------------------------	---------------------------------

NUTRIENT COMPOSITION ANALYSIS — 16 PARAMETERS

PARAMETER	MEASURED VALUE	OPTIMAL RANGE	STATUS	LEVEL
Soil pH	1.5	6.0 – 7.0	CRITICAL	
Nitrogen (N)	36 kg/ha	50 – 100 kg/ha	LOW	
Phosphorus (P)	18 kg/ha	30 – 60 kg/ha	LOW	
Potassium (K)	28 kg/ha	20 – 50 kg/ha	OPTIMAL	
EC / Salinity	1.6 dS/m	< 2.5 dS/m	OPTIMAL	
Organic Carbon	0.38 %	0.5 – 0.75 %	LOW	
Boron (B)	0.22 mg/kg	0.5 – 2.0 mg/kg	LOW	
Zinc (Zn)	0.18 mg/kg	1.0 – 3.0 mg/kg	CRITICAL	
Iron (Fe)	2.4 mg/kg	4.5 – 10 mg/kg	LOW	
Magnesium (Mg)	48 mg/kg	40 – 80 mg/kg	OPTIMAL	
Copper (Cu)	0.08 mg/kg	0.2 – 1.0 mg/kg	CRITICAL	
Sulphur (S)	12 mg/kg	10 – 20 mg/kg	OPTIMAL	
Molybdenum (Mo)	0.06 mg/kg	0.1 – 0.5 mg/kg	LOW	
Calcium (Ca)	220 mg/kg	200 – 800 mg/kg	OPTIMAL	
Sodium (Na)	0.4 dS/m	< 2.0 dS/m	OPTIMAL	
CEC	8.2 meq/100g	10 – 20 meq/100g	LOW	

AI EXECUTIVE SUMMARY

Soilo AI has analysed 16 soil parameters for Ginger (Adrak) at the Seedling stage. The soil is in CRITICAL condition and requires immediate corrective action. The most urgent issue is extremely acidic soil pH (1.5) which is far outside the ideal range of 6.0 to 7.0 for Ginger. At this pH level, all nutrients become chemically unavailable to the plant regardless of their presence in the soil. Zinc and Copper are critically deficient. Nitrogen, Phosphorus, Boron, Iron, Molybdenum and Organic Carbon are low. Do not sow until pH is corrected. Without treatment, crop failure risk is very high.

PRIORITY ACTIONS

CRITICAL
Correct Soil pH Immediately
Apply agricultural lime (CaCO3) at 2.5 to 3 tonnes per acre. Mix into top 6 inches of soil. Wait 21 days and re-test pH before sowing. Target pH 6.0 to 6.5.

CRITICAL
Fix Zinc Deficiency
Apply ZincSulphate at 10 to 15 kg per acre as basal dose. Or spray 0.5% ZnSO4 solution as foliar twice at 7-day intervals.

CRITICAL
Fix Copper Deficiency
Apply Copper Sulphate at 5kg per acre mixed into soil. Foliar spray of 0.2% CuSO4 also effective for quick uptake.

LOW
Boost Nitrogen
After pH is corrected, apply Urea (46% N) at 30 to 40 kg per acre in 3 split doses: 50% at planting, 25% at 30 days, 25% at 60 days.

LOW
Boost Phosphorus
Apply DAP(18:46:0) at 25 kg per acre as basal dose at sowing.

LOW
Improve Organic Carbon
Apply vermicompost or FYM at 4 to 5 tonnes per acre. Improves soil structure, water retention and microbial activity.

LOW
Correct Iron and Boron
Apply Ferrous Sulphate at 5 to 10 kg per acre and Borax at 5 kg per acre as basal doses after pH is corrected.

FERTILIZER PRESCRIPTION — PER ACRE

Input	Qty	When	How
Agricultural Lime	2.5–3 t	Now	Soil mix 6 inch deep
Vermicompost/FYM	4–5 t	Pre-sowing	Deep soil mix
DAP (18:46:0)	25 kg	At sowing	Incorporate in soil
Urea (46% N)	30–40 kg	3 split doses	Topdress + irrigate
Zinc Sulphate	10–15 kg	Basal	Broadcast in soil
Copper Sulphate	5 kg	Basal	Mix into soil
Borax (11% B)	5 kg	Basal	Broadcast in soil
Ferrous Sulphate	5–10 kg	After pH fix	Soil or foliar spray
MOP (0:0:60)	20 kg	At sowing	Incorporate in soil

CROP ADVISORY — GINGER, SEEDLING STAGE

- Do NOT sow until soil pH reaches 6.0 or above. Germination will fail at current pH of 1.5.
- After lime application, wait minimum 21 days before re-testing and sowing.
- Zinc and Boron are critical for rhizome development. Apply before sowing.
- Maintain soil moisture at 60 to 70 percent field capacity. Avoid waterlogging.
- Apply paddy straw mulch after sowing to conserve moisture and keep soil cool.
- Ginger prefers loamy, well-drained soil. Add cocopeat if soil is heavy or clay.
- Next Soilo test: 21 days after lime application to confirm pH improvement.
- Subsequent test schedule: at sowing, 45 days, and at rhizome bulking stage.

RECOMMENDED NEXT STEPS

1. Apply agricultural lime today and wait 21 days.

2. Re-test soil pH with Soilo device after 21 days.

3. Once pH reaches 6.0+, apply all basal fertilizers.
4. Prepare seedbed and sow ginger rhizomes.

5. Activate monitoring schedule on your Soilo dashboard.

How does this Work?

Put our device into the Soil

Start and Wait for 60 secs

See results in Mobile App

Validate the AI suggestions

Download the Report.

Parameters Monitored

Core Macros

Nitrogen (N)
Phosphorus (P)
Potassium (K)

Essential Micros

Boron (B)
Sulphur (S)
Manganese (Mn)
Zinc (Zn)
Iron (Fe)
Copper (Cu)
Molybdenum (Mb)

Health & Physics

pH
Temperature
Moisture
EC/Salinity
Organic Carbon
Soil Fertility

Soilo is the world's first portable and AI-powered deeptech portable farming intelligence device that delivers lab-level multi-parameter analysis instantly on the farm without sending samples to a lab.



Phone/Whatsapp: +1 (618) 366 1642

Email: soilo@ddverse.in

Offices: Chicago, Riyadh & New Delhi