



Automated Weather Advisories for Farmers

Presented by

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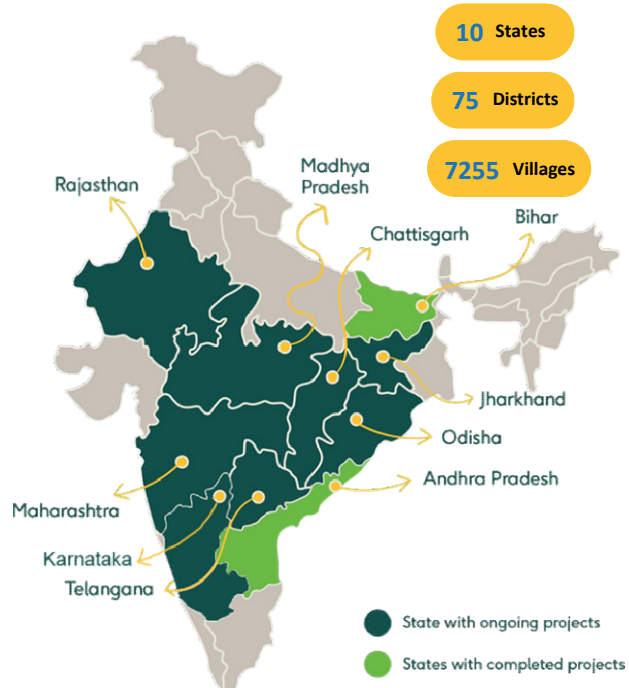
WOTR's Footprint

Empowering communities through scale, science, and sustainability

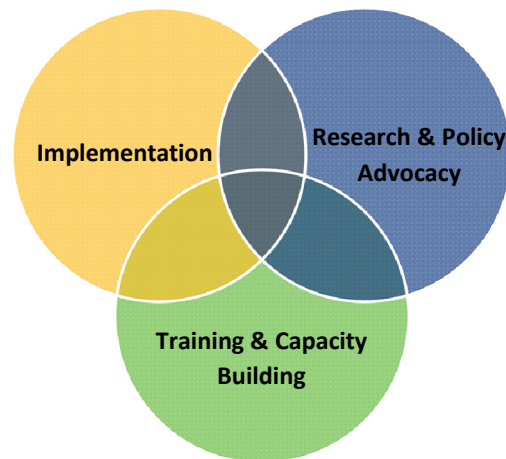


Established in 1993, WOTR is a widely recognized non-profit organization and think tank.

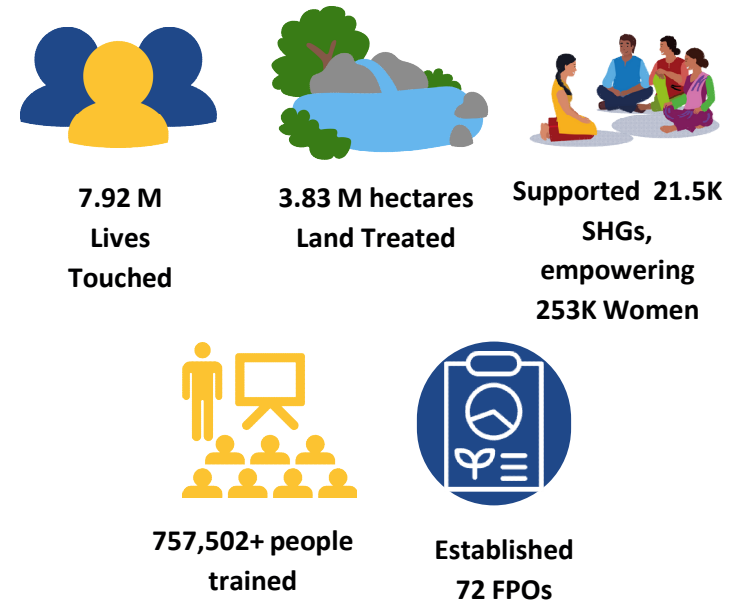
Presence



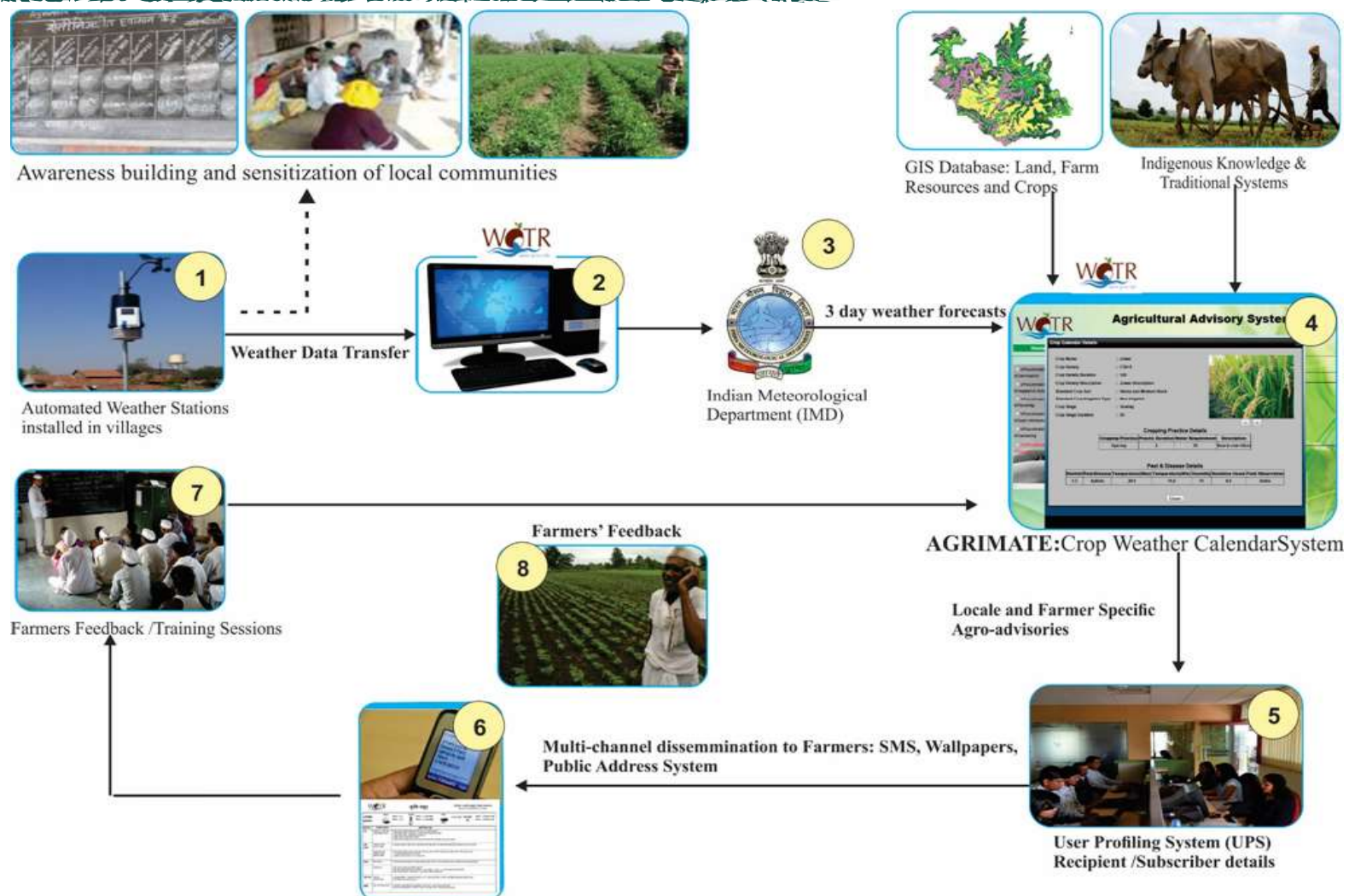
Areas of Intervention



Scale and Outputs



The Agro-Met Advisory System: An Overview



Weather Based Dynamic Decision Support System



[Dashboard](#) [District Advisory](#) [Block Level Advisory](#) 

[District Bulletin](#)
[Quick Advisory](#)
[Quick Configuration](#)

WEATHER BASED DYNAMIC DECISION SUPPORT SYSTEM FOR AGROMENT ADVISORY







[Dashboard »](#)



WHO WE ARE

Watershed Organisation Trust (WOTR) is a globally recognized organization dedicated to transforming the lives of millions across India in participatory watershed development and eco-systems restoration, adaptive sustainable agriculture, integrated and efficient water management, and climate change adaptation, with a special emphasis on vulnerable communities, farmers, and women.



WHAT WE DO

[oAdvisory/index.php/user/districtbulletin](#)

Making Farmers Climate Resilient

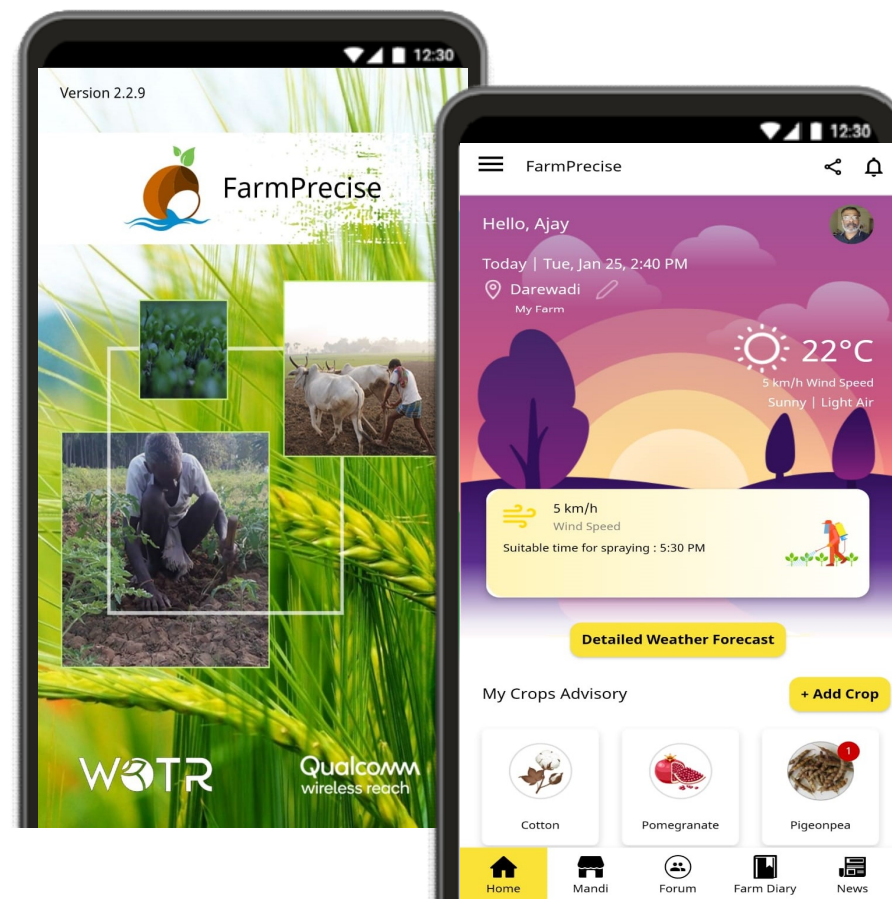


FarmPrecise
Personalized advisory for your farm

Developed by



Supported by



Overview



A mobile application which generates **dynamic weather-based** crop management advisories that are tailored to crop and **farm specific conditions**.

- It is **participatory** - the farmer is co-creator of the advisory
- It generates **weather responsive**, crop-and-farm specific farming advisories
- It is **dynamic** - it responds to likely changes in weather conditions and provides tailored advisories accordingly.
- It provides integrated and holistic solutions and **emphasizes environmentally-friendly practices**.



9+
features for
Indian Farmers



38
Crops covered
so far..



4 States

- Maharashtra
- Madhya Pradesh
- Telangana
- Odisha

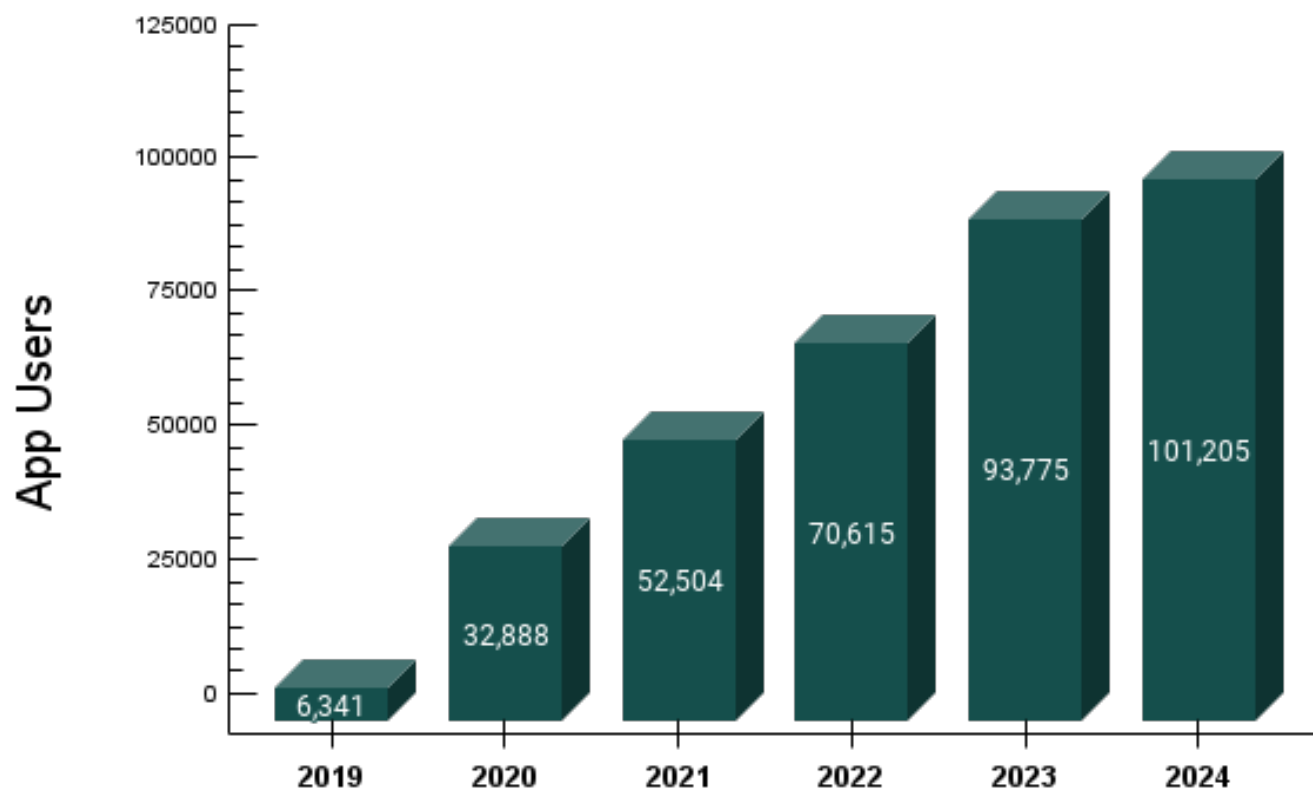


5 languages

- Marathi
- Hindi
- Telugu
- Odia
- English

Over 100,000+ Downloads so far...

Downloads so far...

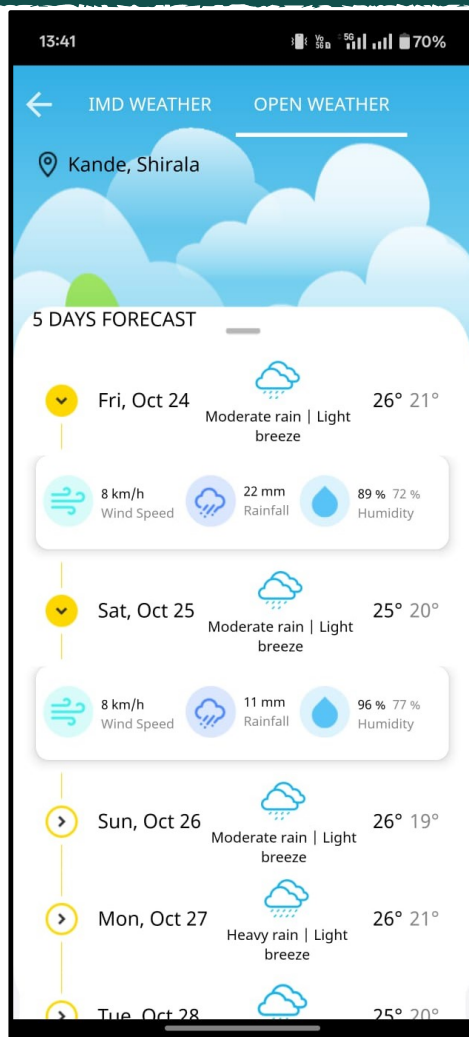


FarmPrecise Mobile App Features

An app for better farming through dynamic, crop-phenology specific advisories and digital accessories.

 Weather Forecasts for 5 days	 Farm Specific Geo-Fencing	Crop & Farm specific Advisories Weather Based....  • Cultural Practices • Irrigation Management • Nutrient Management • Pest/Disease Management
 Fertilizer Calculator	 Crop Specific Pest & Disease Library	 Farmer Interaction • Community forum • Support Chat • Phone Call
 Farm Diary (Expense/Income)	 Market • Market information • Commodity Prices • FPO-Farmer Connect	 Agriculture –News / Events /Govt. Schemes
 Livestock Advisories	 Remote Sensing Farm-level Advisories	AI Features. • Pest & Disease Recognition using AI/ML • AI Chat bot • Pest Forewarning

Weather Forecast

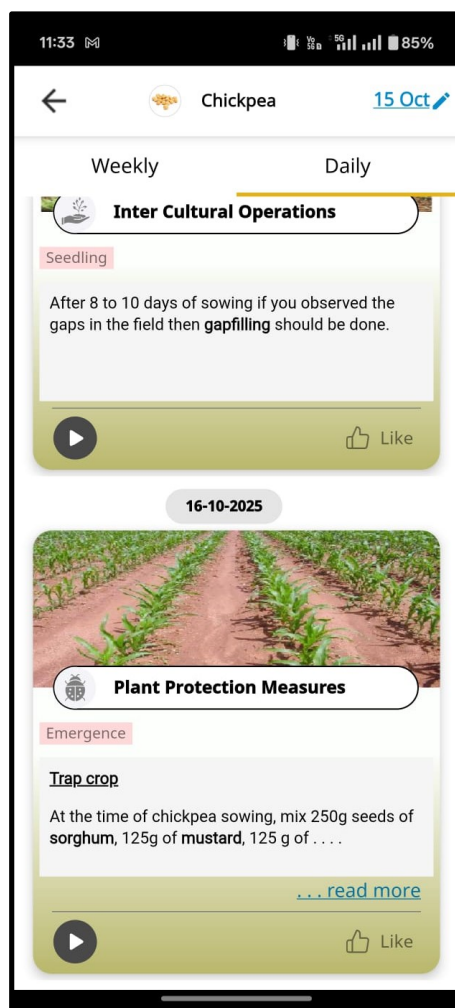
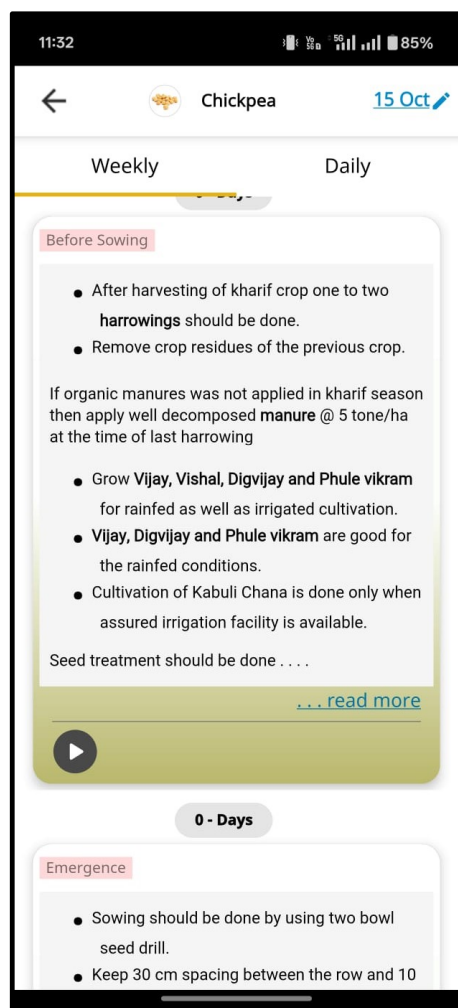


- 5 days forecast covering rainfall, temperature, humidity and wind speed
- Observed weather data (only rainfall data is displayed)
- Advisory based on observed and forecasted weather conditions – calamity warning, pesticide/fertilizer spraying, irrigation, etc.
- Weather Data Sources: AWS, IMD and OpenWeather

"I rely on the five-day weather forecast, and it has proven to be an invaluable tool for me. Based on the forecast, I decided to harvest my Black gram. My brother-in-law, on the other hand, ignored the forecast and ended up losing his entire crop. I had advised him to harvest his crop as well, but he did not heed my advice."

Ms. Gavlan, Jaferabad, Maharashtra

Crop Management Advisories: An Overview



Weather, Farm and Crop specific dynamic advisories

- Advisories customized to **each farm** with regards to:
 - Package of Practices**
 - Irrigation Management**
 - Nutrient Management**
 - Pest & Disease Management**
 - Extreme weather advisories**
- Informational support material: Multi-media material on various aspects- - seed treatment, crop geometry, trap crops, bio-fertilizers and pest identification and control, etc.
- Personalized support** through in-app chat and phone-in facility
- Krishi Manch:** Farmer-to-Farmer Query & Knowledge Sharing
- Targeted alerts** on important advisories sent through **WhatsApp** to farmers.

Nutrient Management : Fertilizer Calculator

11:46 84%

← Chickpea

Fertilizer Calculator

Plot Size

1 Hectare

Hectare Guntha Acre

Change Recommended Dose

N-P-K values in kg/ha

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

25 50 30

Do you have Soil test Report? Yes No

Enter Soil Test Results

N-P-K values in kg/ha

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

125 10 160

Target Yield (Quintal/Ha) FYM (Tonne/Ha)

20 0

Reset Calculate

Calculate Options Preferred Options

Save

11:47 84%

← Chickpea

Option 1

Oct 15 | At Sowing

Fertilizer	SSP	MOP	Total Estimated Cost
Urea	311 Kgs	37 Kgs	₹ 3897

OR

Option 2

Oct 15 | At Sowing

Fertilizer	Urea	MOP	Total Estimated Cost
DAP	65 Kgs	37 Kgs	₹ 3837

OR

Option 3

Oct 15 | At Sowing

Fertilizer	Urea	SSP	Total Estimated Cost
NPK(10:26:26)	90 Kgs	177 Kgs	₹ 3917

OR

Option 4

Oct 15 | At Sowing

Fertilizer	Urea	SSP	Total Estimated Cost
12-32-16	73 Kgs	43 Kgs	₹ 4076

Save

Recommends **fertilizer dosage** based on crop and soil test results OR as per SAU recommendations

Offers **multiple fertilizer dosage** options as per local circumstances

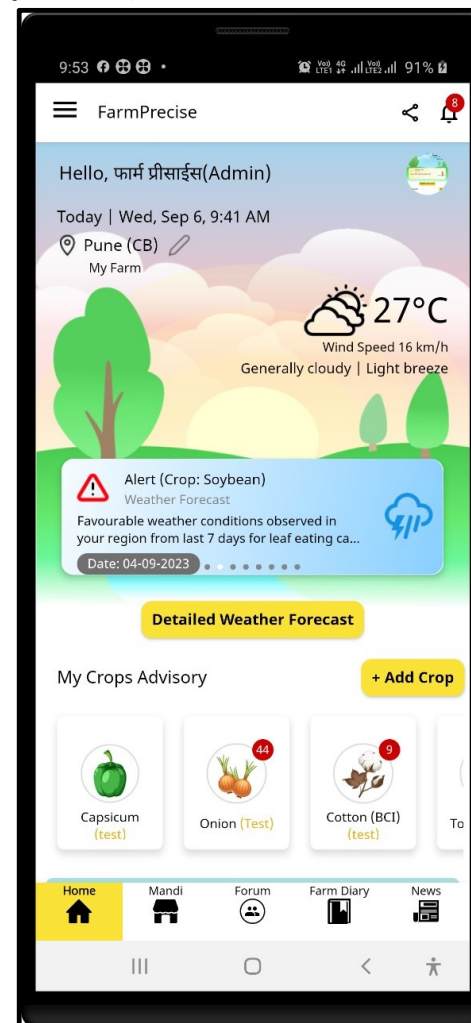
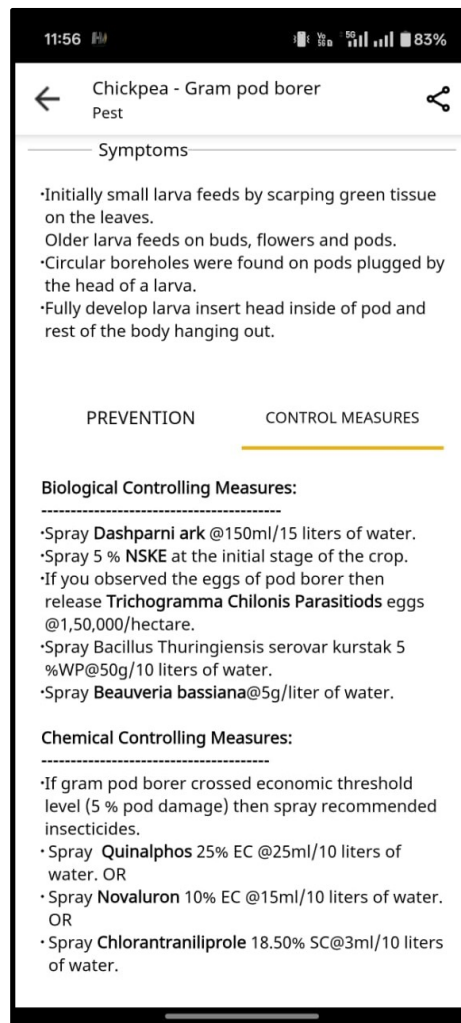
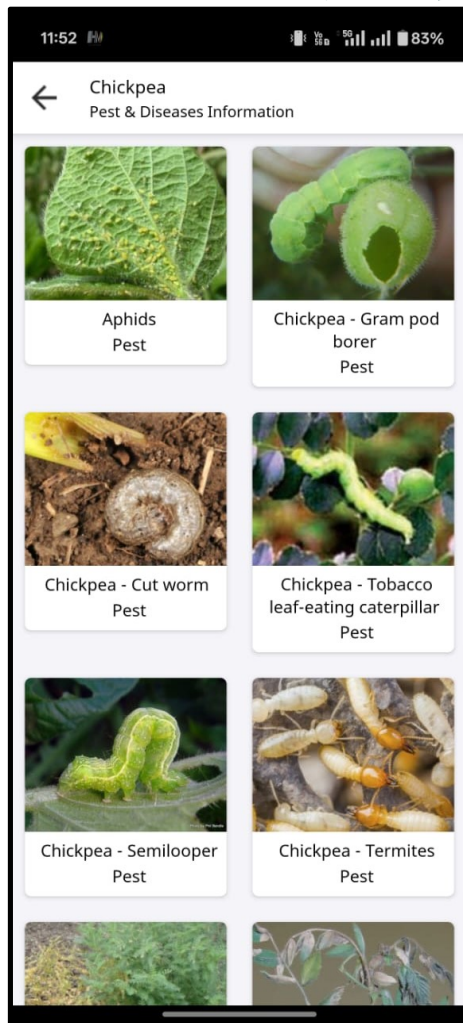
Provide **cost estimations** of various fertilizer combinations

Dissemination of fertilizer application advisories based on **phenological growth** stage of the crop, **soil moisture**, **rainfall forecast** for next three days.

"I used the fertilizer calculator for my cotton crop and learned about the importance of accurate doses of fertilizers, both basal and split. Thanks to the calculator's suggestions, I was able to reduce my fertilizer costs by half."

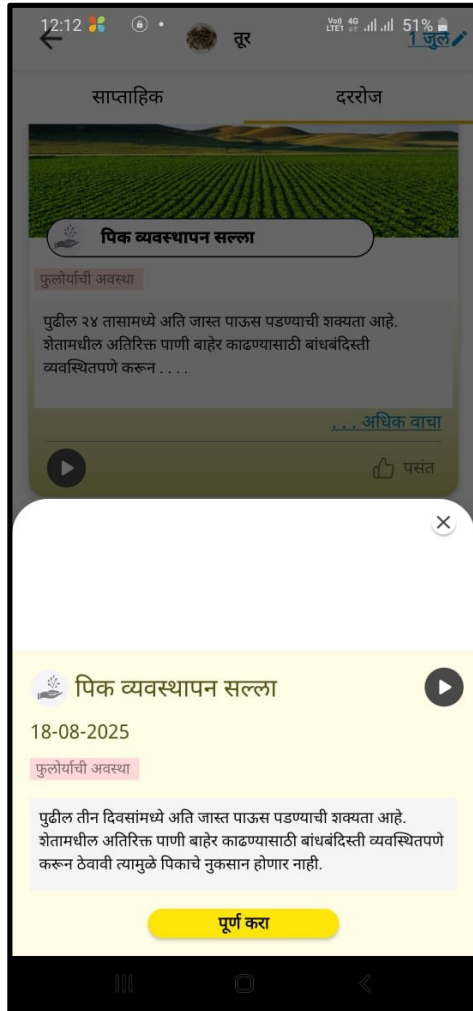
Dnyaneshwar Adbane, Bhokardan, Jalna

Pest and Disease Management Advisories



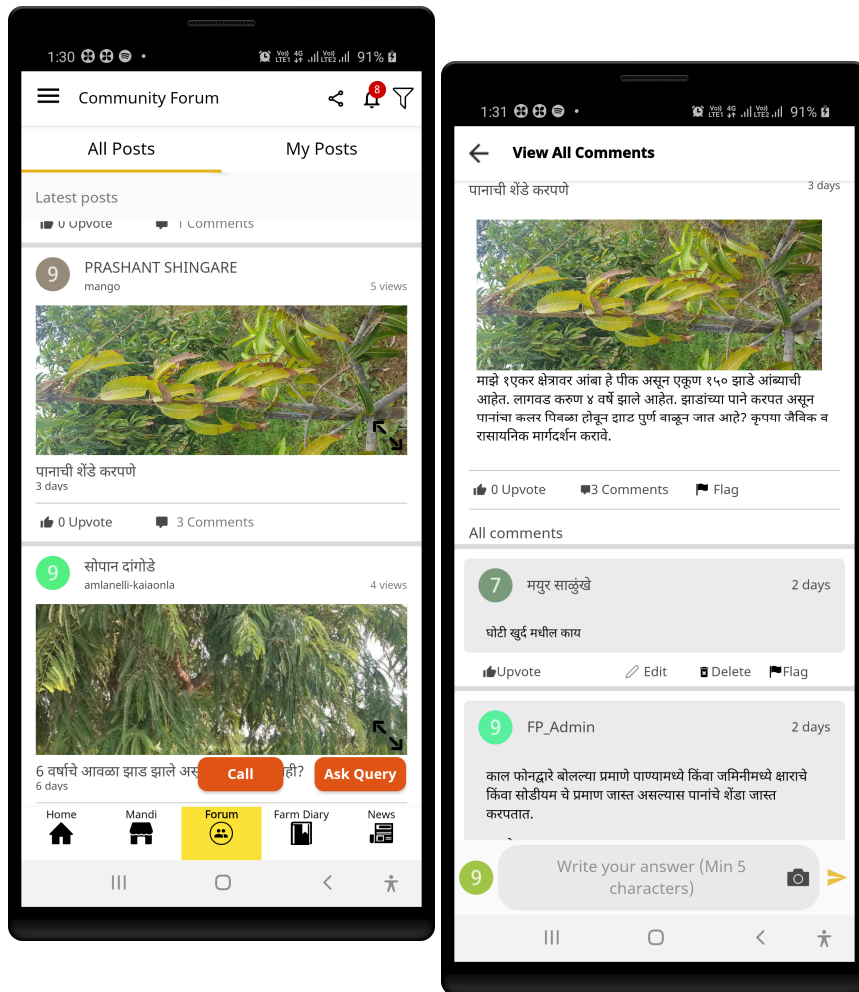
- Multi-media digital library of pest/disease information
- Offers preventive and remedial solutions based on ETL of pests
- Multimedia images help farmers recognize pest/disease and take preventive and control measures as suggested.

Extreme Weather Event Advisory



- Extreme weather event advisories are generated for dry spell, high intensity rainfall, high temperature, high humidity etc.

Krishi Manch: Community Forum



- Interactive platform for Farmer-to-farmer and farmer-to-agronomist interactions for querying, knowledge and experience sharing.
- Solutions providing platform where farmers can upload images/voice/videos and get real-time solutions from other farmers and agriculture experts.

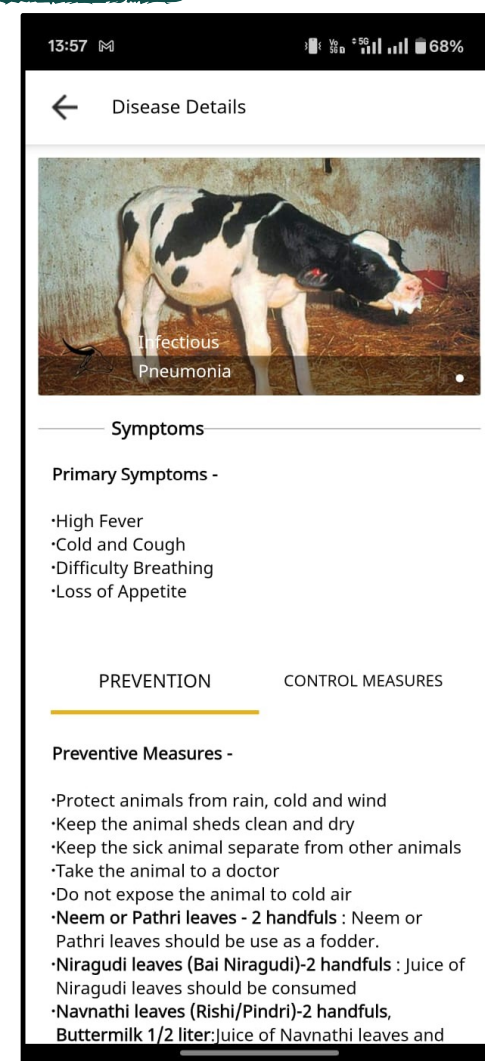
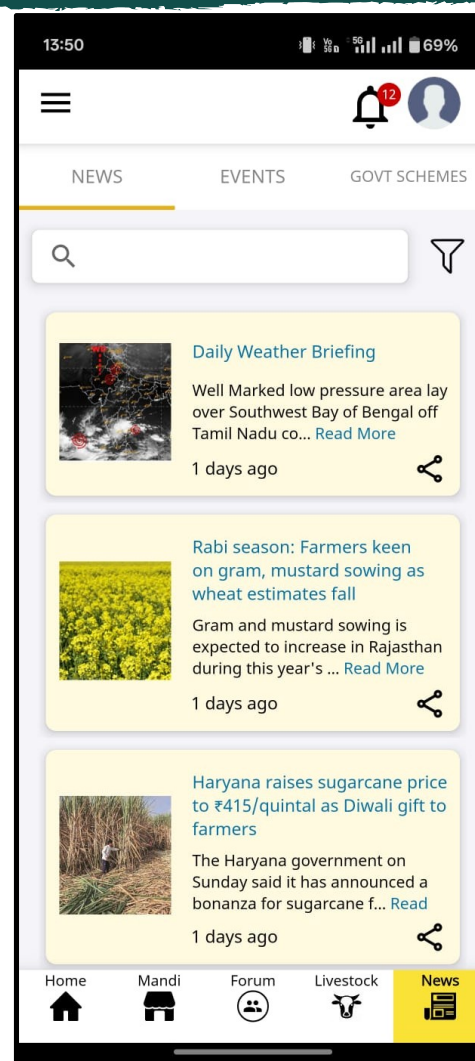
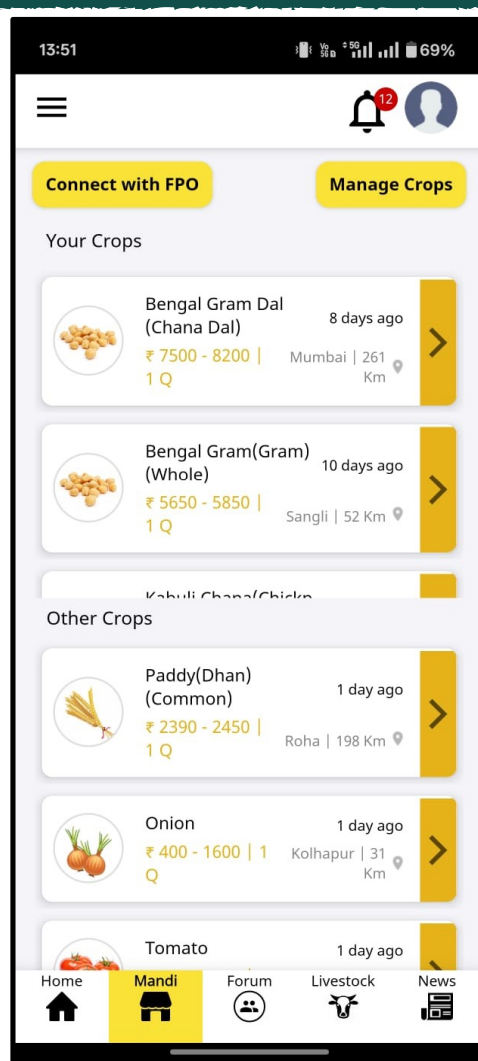
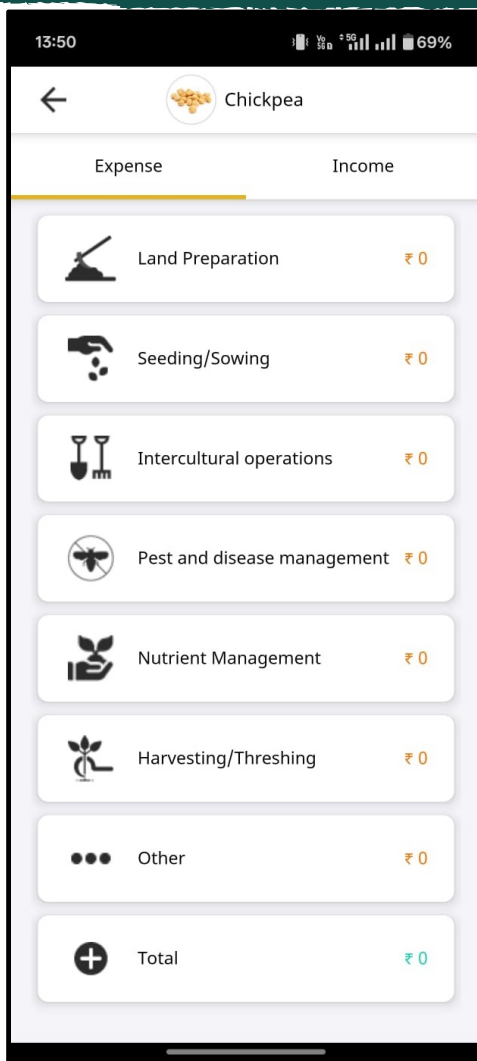
Posts by Farmers : 8200
Avg. Daily users : 506
Page views : 150,000

Daily calls by Farmers
~ 10-20 Nos

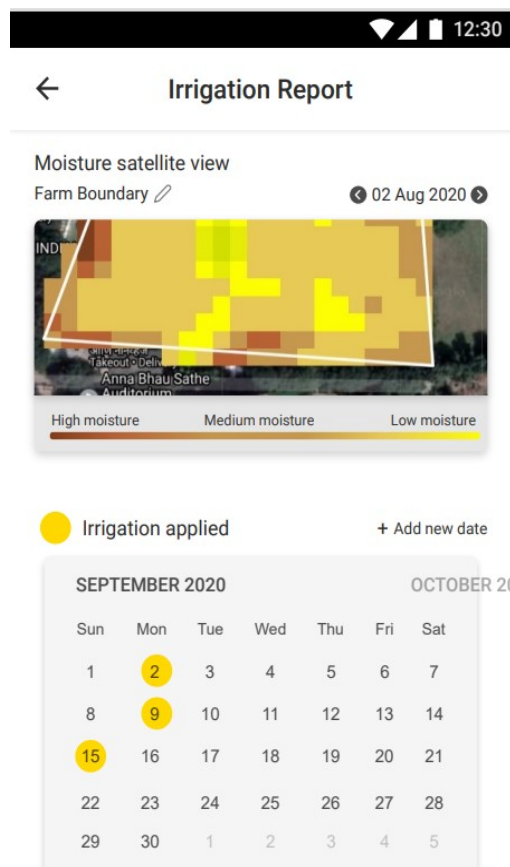
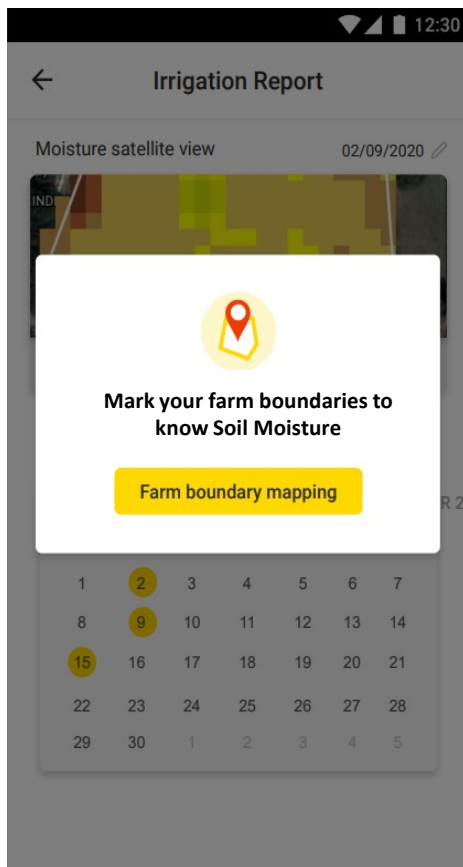
“I regularly rely on Krishi Manch for guidance. The platform's advice has allowed me to take corrective actions, saving my cotton crop from wilt disease. By posting a query with photos, I received a response from an expert and was able to minimize my losses.”

Vinod is a farmer from the Jalna district of Maharashtra.

FarmPrecise: Farmers Diary, Market Prices, News and livestock



Upcoming features :Remote-Sensing based Crop



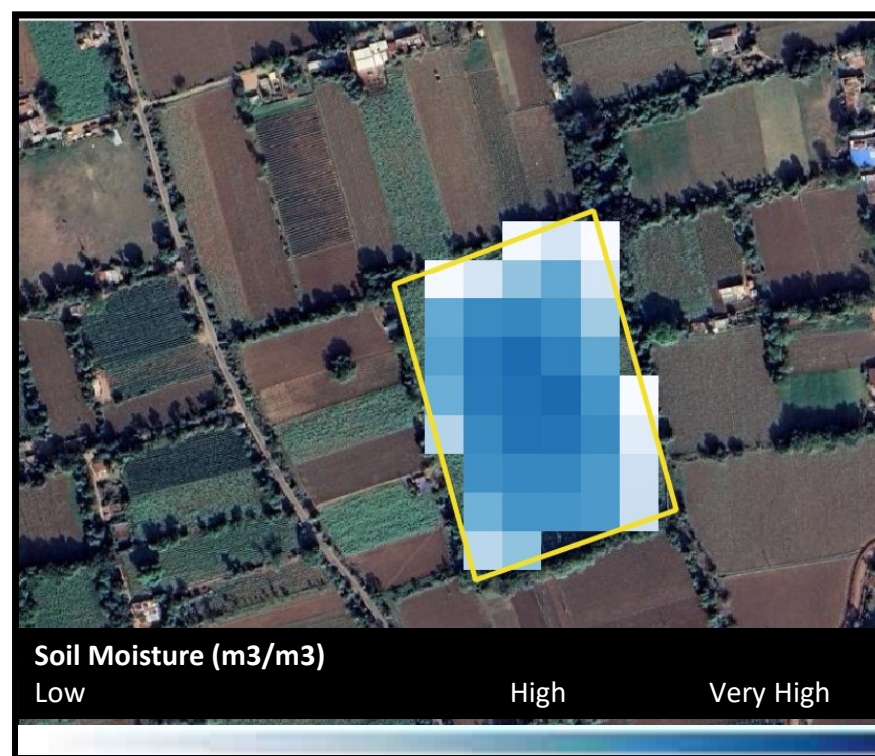
- High-resolution model using soil moisture at 20 meters has been developed using satellite products to generate farm-level irrigation advisories.
- Model for assessing Nitrogen (N) and Organic carbon (OC), at farm level, developed while that for Phosphorus (P) and Potassium (K) is underway. This will enable targeted and integrated nutrient management.
- Model for assessing crop health, at farm level, using remote sensing indices (NDVI, SAVI, NDMI, NDC) every 5-6 days under development. This will help monitor biotic and abiotic plant stress and management of the same.
- Farm-level satellite images depicting status of key growth factors -as above- will be available to farmers on a periodic basis.

Remote-Sensing based Crop Advisory (farm level)

Crop Health Monitoring



Soil Moisture





Thank You!

www.wotr.org



Rejuvenating Communities & Ecosystems



info@wotr.org