Raised In The Sky

PRECISION AGRICULTURE BY DRONES & DATA

Journey : 2015-2025

July, 2025

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BACKGROUND

Story

Born to an arecanut farming family in the western ghats of Karnataka in India, need of climbing 80+ feet tall tree during rainy monsoon season to spray fungicides to safeguard the crops.
There were no technology to minimise the 800+ litre sprayed per acre, no tools to assist farmer climbing 800+ trees in an acre risking lives.
A constant request to find a tech / tool for the ease of doing it from the farming near & dear ones.

Trivia

80 Feet Tall Trees; 800 Trees in An Acre; 800 Litre Liquid Spray Per Acre
3 Month Long Rains, Hilly Terrain, Manual Climbers.
Founders from tech industry, guilt of not done any for the people / community.
Never seen - never heard solution to test, Unconvincing methods / volumes.
And most importantly:

Blanket Ban on Drones 2014-2018 was still in effect

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INITIAL YEARS

2015-2017

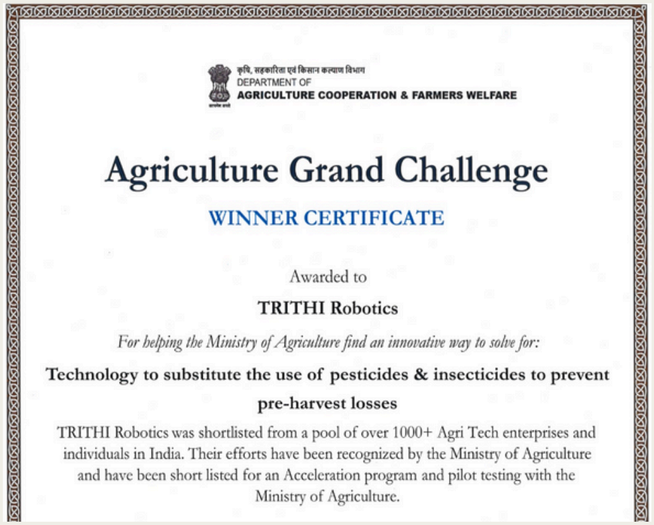
Assembled a copter that can lift 5 litre and fly for 5 minutes with manual control, stable flight took us over 3 months to achieve, flying at 95 feet was way difficult than what we envisioned.

sprayed an acre of arecanut plantation with 80 litre of fungicides.

As no one heard of the technology spraying from top, instead of manual labour spraying bunches from beneath, Spraying 80 litres instead of 800 for an acre, we were the laughing stock of the year.

Impact

Ministry of Agriculture & Farmer welfare along with Startup India, recognise our initial efforts and awards us for the Agriculture Grand Challenge 2017.



कृषि, सहकारिता एवं किसान कल्याण विभाग
DEPARTMENT OF
AGRICULTURE COOPERATION & FARMERS WELFARE

Agriculture Grand Challenge

WINNER CERTIFICATE

Awarded to

TRITHI Robotics

For helping the Ministry of Agriculture find an innovative way to solve for:

Technology to substitute the use of pesticides & insecticides to prevent pre-harvest losses

TRITHI Robotics was shortlisted from a pool of over 1000+ Agri Tech enterprises and individuals in India. Their efforts have been recognized by the Ministry of Agriculture and have been short listed for an Acceleration program and pilot testing with the Ministry of Agriculture.

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EARLY TRIALS

2016-2018

During policy ambiguity & local production constrains, we were sure of the only way the technology can go from lab to field is by providing On-Demand, affordable services to farmer to spray their required crop care.

Faced every concerns of chemical-nozzles-pressure-efficacy using drones in every stages, logistical challenges, field & crop adoption constrains, predetermined apprehension of rejection of technology by masses & classes.

Yet, created a Single team who goes to farm field and spray for a small fee to cover expenses. Bayer Crop Science does MOU to do Joint R&D on Rice, Chilly & Cotton Crops making it first to do so in India.

Applaud

Atal Innovation Mission under Niti Aayog recognise the effort and provides INR 1 Cr Grant In Aid to fine tune & popularise the working model for scale across the region.

the pioneer
Vijayawada

Drones for FARMING

Farmers are resorting to drones to spray pesticides, fertilisers, for mapping, and surveilling their farmlands, finds SHARMILA

ONE HAS TO FOLLOW BASIC LAWS WHEN FLYING A DRONE OVER 250 GRAMMES WEIGHT. THE BASIC CRITERION FOR OPERATING DRONE IS THAT IT HAS TO BE DONE ONLY IN DAYTIME

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FIRST ADOPTERS

2017-2019

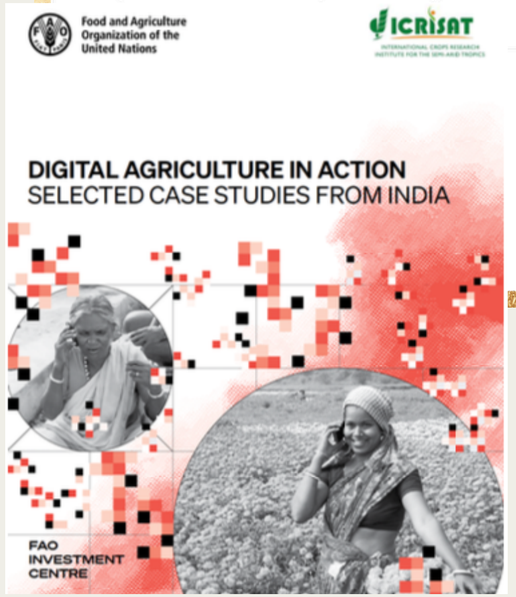
Small article of our drone usage in agriculture featured on Times Of India sets the Who is Who on agriculture industry rings us.

28 customer we interacted on that day manages the combined 60,000 hectares of Indian farmland, making us set-up demonstrations & trials & POCs for their crops & challenges / needs.

Trial on fuel hybrid drones took a centre stage to reduce the dependency on imported batteries. Team travelled across India on various trials & POCc for how drones in Agriculture can change the way we farm.

Global Recognition

Noticing the on field activities, Food & Agriculture Organisation of United Nation featured our story on its Select Case Studies from India, providing a global platform for our efforts to be read.



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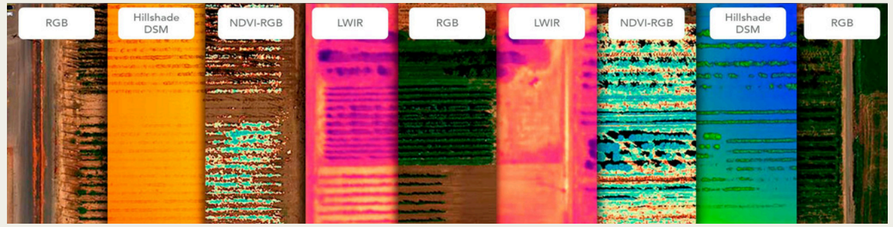
INDUSTRY'S FIRSTS

2018-2020

@2400 MSL in Ooty, Mr. Deepak Vasu became first to adopt drones for tea plantations,
Ms. Sunaina became first female agri drone pilots for sugarcane in mudhol,
Mr. Garvit Pandya in Rajkot set up rural services network for mango & banana farms,
Mr. Ali of Raipur went on to cover over 1000 acres of spray to farmers of rice,
IIT Rourkee & AKTU Lucknow setup multispectral datasets using our drones,
Mr. Santosh of Villupuram & Mr. Suryaprakash of Nagarcoil Tamil Nadu went on to cover 20+ acres per day for 280+ days for farmers of their district,
Mr. Deepak Neog took us to Nyaung Pin Thar of Mynmar for Rice Efficacy Trials, first in the military regime of Myanmar, Elpitiya Plantation PLC of Srilanka made POC trials on large scale crop health monitoring & spot spray trials on Tea,
PI Industries signed up for 138 locations across India for their chemical efficacy trials.
Contained Yellow Sigatoka disease in 700 Acres of Banana Crop for Desai Agro.



Benchmarks

Nozzle - Chemical Efficacy Trials with Bayer, PI Industries, Desai Agro,
Elpitiya PLC & Nyaung Pin Thar.
Rural Drone Entrepreneur Network for Indian On Demand Farm Crop Care.
Covered over 30 type of field to plantation crops across 12+ states of India.

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BUSINESS MODEL FOR INDUSTRY

2020-2024

Draft UAS rules & govt push for drone usage in agri provided media attention & general public fan following.
Our Drone As A Service @ Farm-Gate became de-facto business model for Industry.
By understanding the field requirements & challenges, we integrated quadcopter with best in class payload with fly time, fast charge under 15 mins capable Droneer series with scalable architecture from 15.5 litre to 50 kg payload.
Multiple design patents & name trademarks Droneer series stands unique model in Indian Agriculture Drone Industry with dedicated flight controller & sensor integrations only model from India to qualify in FAO's Desert Locust Project & subsequent listing on FAO's Global Marketplace like that of GEM Portal in India.
Startup India & Ministry of Commerce invited us for Presentation to Global Audience in Dubai Expo held in 2022.

Global Widespread

Covering Major Crops & Countries by POC Trials & Projects: Indian 20+ States, Myanmar, Srilanka, Thailand, Vietnam & Middle East.

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FUTURE SCALE

2025

On Process to enrol the model under govt subsidy scheme to provide affordable enterprise agri drones to rural entrepreneurs.
On a mission of 3100 KM railway lidar data digital twin for Indian Railways.
Co-Drafting Sudi Arabia's Mangrove afforestation Mega project using drones & data.
Co-Drafting Riyadh's Dust Suppression Giga Project using large swarm drones.
On A Mission to Create 5000+ Rural Agri Drone Entrepreneurs to generate combined 4000+ crores agri micro economy, boosting yields, increasing farm revenues, less chemical & healthier food on table for tomorrow.

New Beginning

With Indian Talent & Technology, focusing to get some of the world's most challenging projects executed with utmost efficiency possible for future to remember that; A Small Seed Sown Can Create a Forest

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“If you want to walk fast, walk alone.
But if you want to walk far, walk together”

–

Shri Ratan N. Tata

IT WAS NOT POSSIBLE WITHOUT COUNTLESS CRITICISM, FEW’S UNCONDITIONAL SUPPORT,GOVT INITIATIVES & EXTRAORDINARY EARLY BACKERS. .

Gratitude Forever_____

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