



Unleash Your Farming Potential



A man with a mustache, wearing a white long-sleeved shirt and a white turban, is kneeling in a field of tall, golden-brown grain. He is looking down at the plants in his hands. The background is a dense field of similar grain. The entire image has a blue tint. Overlaid on the left side of the image is the text "IMPROVING AGRICULTURE, IMPROVING LIVES" in white, bold, sans-serif capital letters.

IMPROVING AGRICULTURE, IMPROVING LIVES



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What We Do

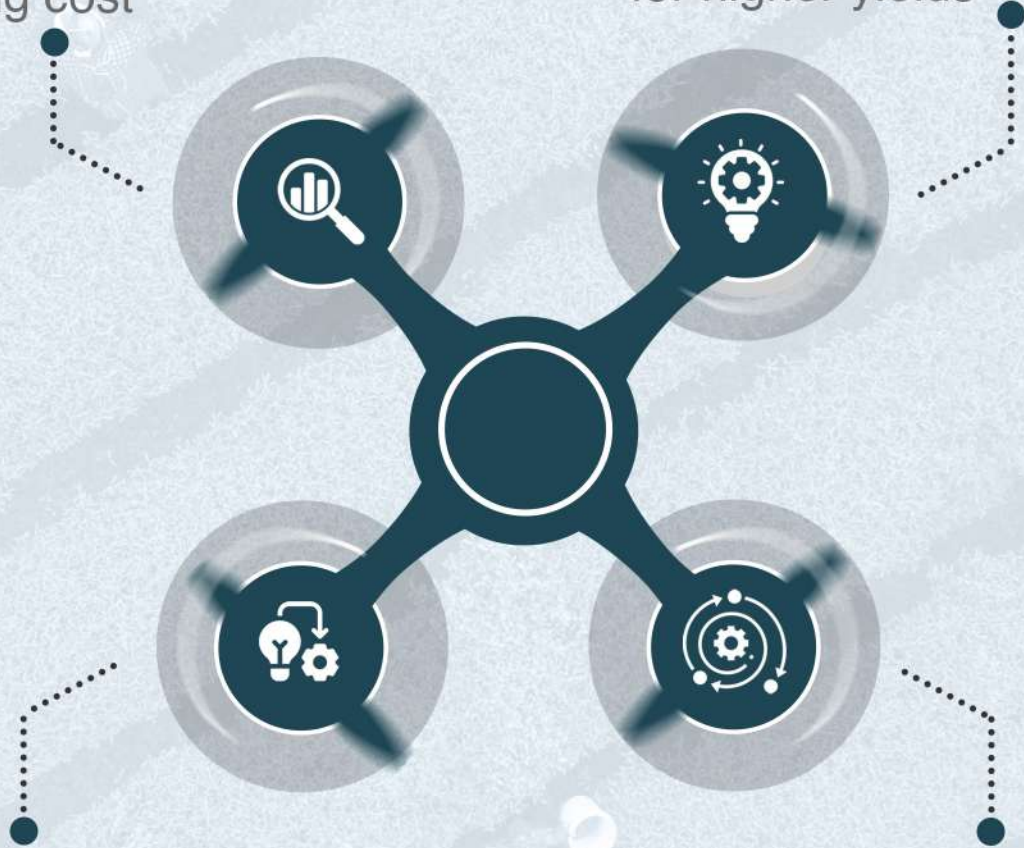
Application of Agro Inputs Through Drone Technology

Spraying Agro input on farms increasing productivity and lowering cost

Crop Analysis Through GIS

(Geographic Information System)

To analyse crop health and determine better solutions for higher yields



Manufacturing

Development of indigenous drone

Pilot Training (RPTO Partner)

Educating & training for drone operations

Company Profile

Chatak Innovation imbibes sustainability through technology in the agricultural sector. Agriculture remains far behind in adopting modern techniques. To help bridge this gap, Rajaram Group commenced Chatak Innovations as a technology-based enterprise that would provide cutting-edge drone technology for agro services to farmers.

These services range from Crop Spraying to Crop Analysis with the objective to increase yields for the farmer and save costs.

Our Unmanned Aerial Vehicle (UAV) based Agricultural Spraying Platform helps farmers with effective spraying in a time-efficient manner. We have heavily invested in the Research & Development of drone technology to acquire these distinct product capabilities. Our drones provide superior on-field performance and are able to cover an acre of land in just 7 minutes - with only 10 liters of water.

The crop analysis platform helps the GIS engineers understand the problems in the field such as pests, diseases and nutrition deficiencies and hence through an algorithm enable farmers to mitigate risks early and boost yield and productivity.

Chatak manufactures and designs parts of the drones with in-house engineers and data experts in order to achieve maximum output from each flight. Within the first year, Chatak drones have sprayed above 17,000 acres of farmland in Maharashtra, Gujarat, Karnataka and some parts of Madhya Pradesh. Chatak commits to becoming the largest aggregator of services provided to farmers with a world-class customer service experience.



Vision & Mission

Vision

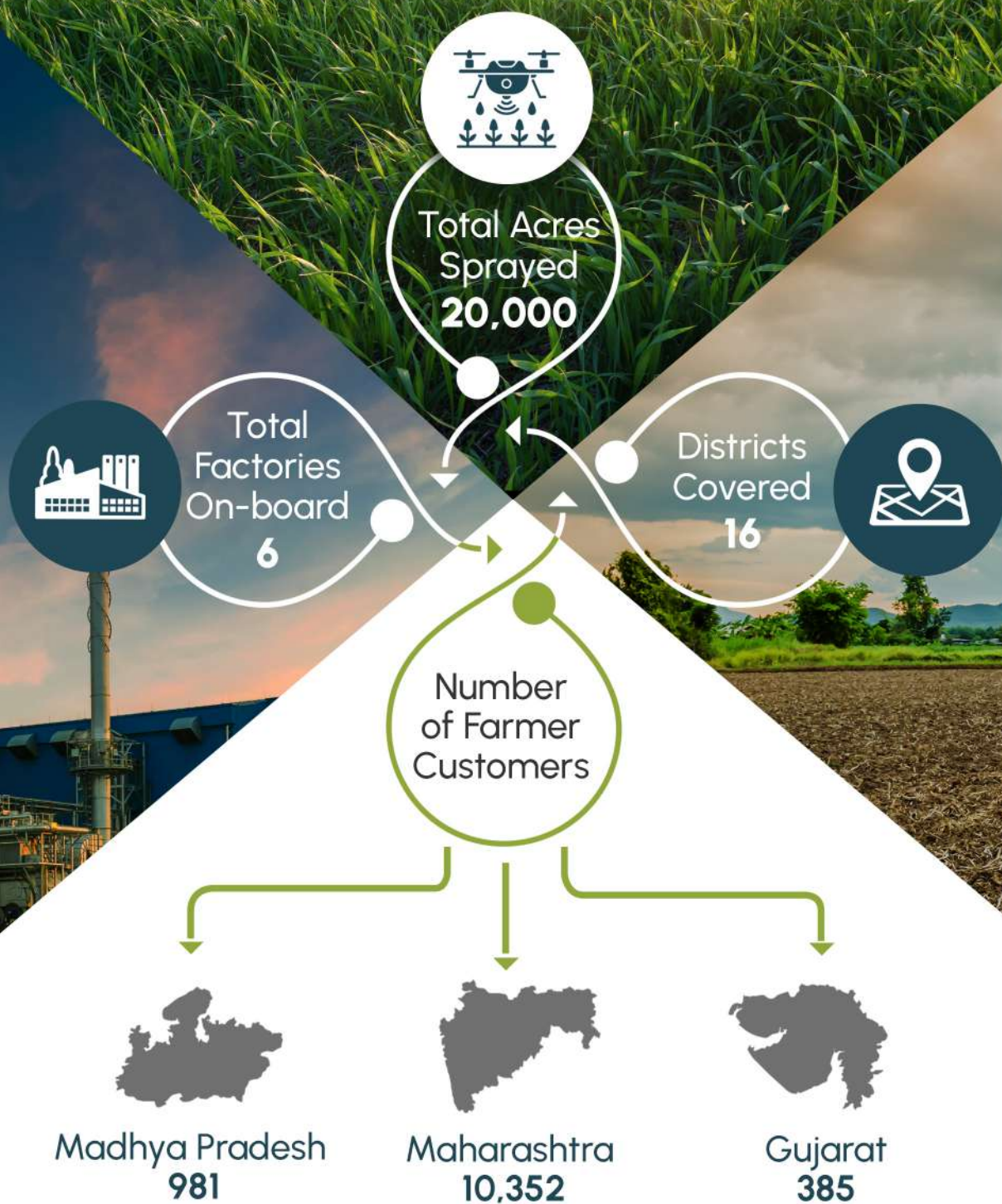
Providing technological advancement to the agricultural industry in India to help empower farmers & have a positive impact through our drone technology.

Mission

To create a technological ecosystem easily accessible to farmers for their sustainable and economic development of agriculture.



Key Highlights



Traditional Methods vs Drone Technology

Traditional Methods

Time Consuming •
Takes 4-5 hours for spraying

Water Wastage •
Uses 150-200 liters of water per acre

Ineffective •
Low spraying effectiveness 60%

Wastage •
Wastage of inputs

Uncontrolled •
Spraying damages the environment

Droplet Size: •
450-500 Micron & Precise

High Risk •
to health

Drone Technology

• **Efficient**
Sprays 1 acre in 7 minutes

• **Low Water**
Uses 8-10 liters of water with medicine

• **Effective**
High spraying effectiveness 95%

• **Savings**
Saves agro inputs by 25% - 40%

• **Controlled**
Precise spraying helps maintain soil fertility

• **Droplet Size:**
100-200 Micron Uniform & Precise

• **Low Risk**
to health



Product & Features

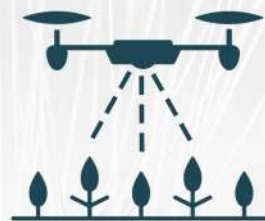
Chatak Drone



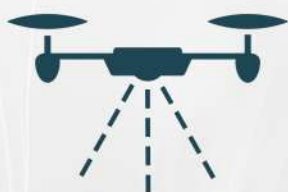
Maximum Take-off Weight
25 kg



Maximum Flight Height
50 m



Spraying Width
3 to 4 m



Spraying Time (Load)
10 mins



Flow Rate of Nozzle
1.2 to 1.3 L/S (Adjustable)



Water Tank
10 Liters



LIPO Battery
16000 mAh, 15C



Time to Spray 1 Acre
7 mins

Services

Chatak Innovations is exclusively focused on agro services and spraying of microbicides for farmers. We focus on **drone spraying & crop scouting services for the agricultural industry.**



1) Agro inputs such as PGR, bio stimulants, water soluble fertilizers, insecticide, pesticides are sprayed on 5 months to 15 -16 months old sugarcane crops with the help of drones which has increased sugarcane productivity.

2) Crop Scouting: Mapping and Survey is the process of regular monitoring of the field throughout the crop-growing season. Through this, farmers evaluate pest infestations and estimate their economic impact. Traditionally, this is done by manual monitoring of the field, but by using drone technology, farmers can see the aerial views of the harvest which are more accurate and less time-consuming. It provides better information about their crop health, water system, soil variety, pests, and fungal infestations. Multispectral sensors and digital imaging capabilities allow for Crop Analysis through GIS and can give farmers a richer picture of their fields.

Multispectral imagery can be used for the classification of crop species, detection of crop water stress, monitoring of weeds and crop diseases, and mapping of crop yield.

Advantages of Drone Technology

Why Adopt Drone Technology?

The Agriculture Sector in India has been using old and traditional methods for farming to a great extent even today. When it comes to farm management which includes all the activities from planning and sowing the crops to harvesting them, farmers still depend upon satellite imagery to guide them.

However, drones capture more accurate data for precision agriculture. This data is processed by hi-tech agricultural software to provide in depth valuable information. This helps to regulate crop health & crop treatment, perform soil health scans, and crop scouting, assist in planning irrigation schedules, apply fertilizers, estimate yield data, and provide valuable information about the weather analysis.



How Is It Revolutionary For a Sugar Factory & a Farmer?

For Sugar Factory:



Increase in Yield



Increase in Recovery



Cross Selling Agro Inputs to Farmers



Helps in Analysis of Crop Health within the Factory Territory



Helps in Cane Development Research Through GIS Mapping

For Farmers:



Saves Labour, Water & Chemical Costs



Saves Time & Effort



No Casualties & Risk to Health



Helps Increase Crop Yield



Helps Eradicate Pests & Diseases

Partnership Programme

Drone technology is very promising in India and our company Chatak Innovations is trying to nurture this technology to help increase efficiency & productivity in agriculture. We aim to create a network of drones aggregated to provide services to farmers with a world - class customer service experience.

Why partner with us:



Right to operate drone in an exclusive region



Repair & maintenance assistance



Training assistance to pilot teams



Providing training assistance for dealers to better their services



Dedicated drone assigned to the franchisee with 2 sets of batteries



Opportunity to gain better ROI with less cost

Partnering Process

At Chatak Innovations we have a comprehensive and professional process for partnership allotment. Applicants are required to meet a range of criteria post which there will be a face-to-face meeting with us. After completion of the evaluation and selection process, other formalities will be initiated.



Our Community

Farmer Testimonials

Dhondiram Patil

Drones have saved a lot of time in the process of farming. We needed around 150L water per acre initially, the same job is now done with just 10L of water.



Bharat Patil

I have been using agricultural drones for spraying since the last 2 years. I have experienced a great difference with drones in comparison with the traditional methods.



Ravindra Thorat

Drones save time & human labor. I have undertaken manual labor in the past but drones are comparatively much better in terms of performance. Its small droplets enable efficient spraying.



Pratap Patil

Spraying 1 acre land in just 10L water is an attractive deal. Drones play a vital role in terms of spraying over tender crops. With better spraying techniques, I have witnessed taller sugarcane crops.



Distributor Testimonial

Rahul Mane - Kolhapur

“ We have become the first service provider to utilize modern and futuristic technology innovated by Chatak Innovation. This innovation will bring revolution to India's farming culture. It will help farmers save their manpower and working hours and spray the crops uniformly. The drone will do accurate crop scouting too. Hence, we are proud to be a part of Chatak Innovation.”


Indrajeet Jagtap - Pune

“ As my father is a farmer too, I have been on the farm since I was a child and have seen various ways of spraying our farm. It requires a lot of hard work to spray the entire farm. Today, due to the technology advancements with Chatak Innovation we can spray 1 acre of land within 5-6 mins with very minimal cost. I am very happy with my partnership with Chatak and they have helped me a lot, right from training the pilots to quickly solving any issues faced, Chatak has been a constant support and I am very grateful to them.”



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