

Genius Farms LTD.

# Unlocking The Power Of Data For Smarter Farming.



Company Profile  
2025



572/K, Wasi Tower (7th Floor),  
ECB Chattar, Matikata Road,  
Dhaka Cantonment, Dhaka-1206

+880 1550 079 886  
business@genius-farms.com

[www.genius-farms.com](http://www.genius-farms.com)

# INTRODUCTION

## 01 About Us

Introduction	02
About the Company	03
Who do we work with	04
Mission & Vision	05
Our Data	06

## 02 What We Do

Products & Services	07
Business Model	08-09
Dr. Chashi	10-15
Agrow Chain	16-17
Our Journey	18-19

## 03 Traction

Awards & Achievements	20
Our Team & Advisor	21-22
Case Studies	23-36
Our Client Projects	37-38
Contact	39

# About The Company

---

**Genius Farms Limited** is a cutting-edge agro Tech company committed to transforming the agricultural landscape through innovative, data-driven solutions. Specializing in streamlining field-to-office data processes, Genius Farms enables real-time management, learning, communication, and analytics for farms of all sizes.

By leveraging advanced technology, the company helps farmers and agribusinesses optimize operations, improve decision-making, and enhance productivity. Through customized solutions tailored to the unique needs of its clients, Genius Farms Limited empowers the agricultural industry with the tools to make informed, data-backed decisions for sustainable growth and success.

Genius Farms Limited is at the forefront of merging agriculture and technology, driving efficiency and innovation in the agri-business sector.



# Who Do We Work With?

---

- **Target Customers:**

Our solutions are designed for businesses and individuals working across the agricultural value chain, including farming businesses, contract farmers, Agro SMEs, farmer entrepreneurs, farmers, and gardeners. We also cater to international and local NGOs or government organizations that work directly with farmers, supporting their efforts to improve agricultural productivity and sustainability.

- **Target Partners:**

We collaborate with a wide range of partners to expand our impact, including Agro Tech companies, Agro input and output companies, Bank and insurance companies, data companies, international and local NGOs, government organizations, research institutions, and educational entities such as universities and schools. Together, we aim to drive innovation and sustainable practices in the agricultural sector.



# Mission



To empower the agricultural industry with innovative, data-driven solutions that streamline operations from field to shelf. Genius Farms Limited is dedicated to boosting productivity, improving decision-making, and supporting sustainable growth through real-time data management and communication.



# Vision



To lead the global Agro Tech industry by transforming agriculture with data and technology. Genius Farms Limited aims to create a future where farmers thrive with smarter, more sustainable practices. Aligned with the UN's Sustainable Development Goals (SDGs), we strive to enhance food security, resource management, and climate resilience, making a positive impact on communities and the environment.



# Our Data

---

**At Genius Farms**, data is at the heart of our AI-powered products and custom solutions. We build our datasets from scratch, ensuring they are tailored specifically to the needs of our customers. Our extensive datasets include crop information, disease and pest data, seed details, Integrated Pest Management (IPM) solutions, organic and inorganic farming data, fertilizer, insecticide, and pesticide data, as well as comprehensive training materials for a wide range of farming practices.

We collect this data from across Bangladesh, covering various seasons and crop stages, making it highly authentic and accurate. Bangladesh, being one of the most agriculturally rich countries in the world, **provides us with exceptionally high-quality data**. Each dataset is carefully verified by our team of expert advisors, who are renowned scientists in Bangladesh. These experts not only validate the data for use in our models but also ensure the accuracy of the responses generated by our software. Additionally, they oversee the validation of our treatment protocols and product content, ensuring the highest standard of reliability for our customers.



# Products & Services

---



Dr. Chashi



Agrow Chain



Tech Consultancy

Genius Farms Limited offers innovative agricultural solutions through Dr. Chashi and AgrowChain, providing customizable and white-label options. We specialize in smart farming, supply chain transparency, and digital advisory services, alongside Consultancy & Training to enhance agricultural efficiency and sustainability.

# Business Model

---

At Genius Farms, our business model serves both B2B and B2C clients, with a focus on providing tailored solutions for the agricultural sector.

- **B2B:**

We offer custom AI-driven software solutions, such as Agro Apps, Farm Management Systems, Supply Chain Software, E-Commerce Platforms, Finance & insurance inclusion platform and Reporting Tools. Pricing for B2B services varies based on customer requirements, typically including a one-time development fee and an optional maintenance fee.

We also onboard B2B clients, such as Agro Product Retailers, as vendors on our in-house e-commerce platforms, allowing them to reach more customers.



- **B2C:**

For individual farmers and gardeners, we sell products like fertilizers, insecticides, pesticides, seeds, plants, farming, and gardening tools through our platforms, Dr. Chashi and Bagaan. For B2C, we charge vendors a platform fee and additional advertising fees for listing their products, ensuring fair access to quality goods for consumers.

In both models, we do not charge farmers, as it goes against our business ethics. We are committed to supporting farmers without imposing any costs, ensuring their success and sustainability.



# Business Model

---

- **Partnerships:**

At Genius Farms Ltd., we actively collaborate with Government bodies, NGOs, and international organizations to co-create and implement impactful projects focused on Agriculture AI Transformation and Smart Farmer Training. These strategic partnerships allow us to combine resources, technology, and expertise to drive sustainable change in the agricultural sector. Through these joint initiatives, we not only empower farmers with modern tools and knowledge but also generate income that supports our continued innovation and growth.



**USAID**  
FROM THE AMERICAN PEOPLE

# Dr. Chashi

---

**Dr. Chashi**, Bangladesh's first comprehensive digital agriculture platform, empowers farmers, gardeners, and agro-dealers with AI-driven tools to optimize crop health, boost yields, and promote environmental sustainability. By integrating advanced technology with user-centric features, we address critical challenges in agriculture while aligning with national and global climate goals.

## Challenges Addressed:

- 1. Inefficient Resource Usage:** Overuse of fertilizers and pesticides increases costs and contributes to 76.79 million metric tons of CO<sub>2</sub> emissions annually.
- 2. Crop Losses:** Pests and diseases cause up to 40% of annual crop losses, threatening food security.
- 3. Environmental Degradation:** Excessive chemical use depletes soil fertility and harms ecosystems.
- 4. Lack of Real-time Insights:** Farmers lack access to timely data, climate-resilient practices, and precision tools.
- 5. Health Hazards:** Prolonged chemical exposure leads to severe health risks for farmers.
- 6. Financial Inclusion:** Dr. Chashi platform helps farmers to get finance and insurance facility.

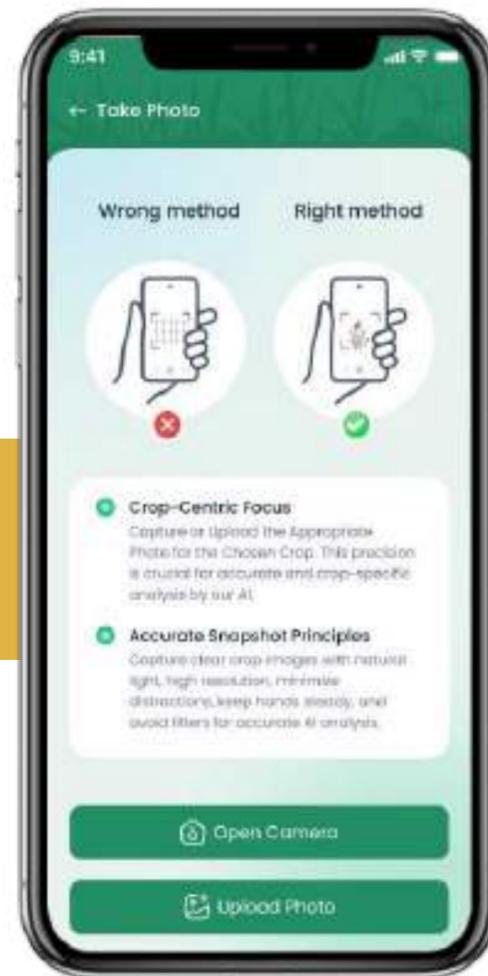


# Dr. Chashi Overview

One of Dr.Chashi's biggest highlights has been its Image Processing based Disease & Insect Detection features



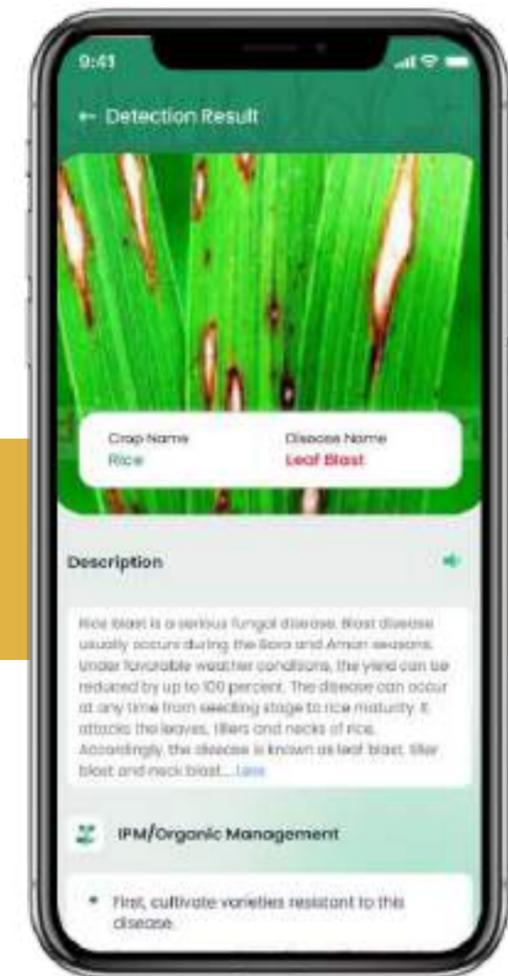
Crops



Take Photo

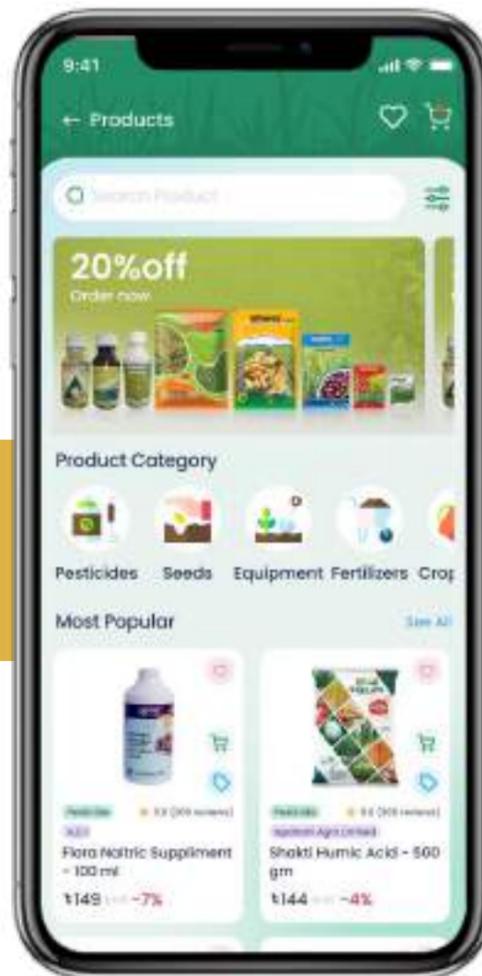


Detection



Solution

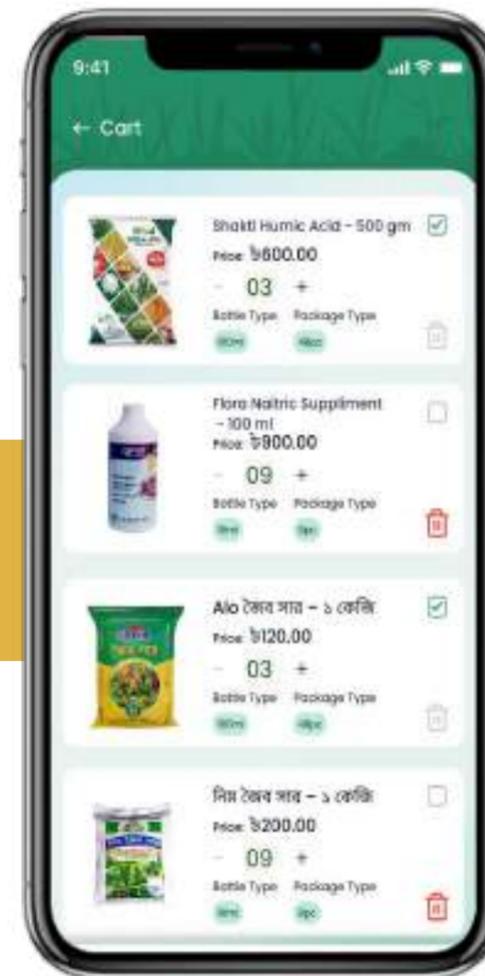
# E-Commerce



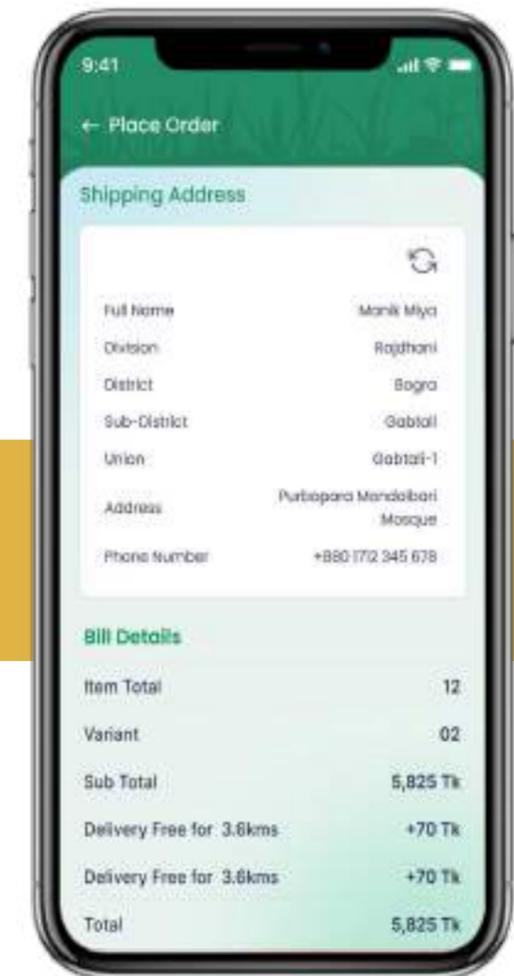
Products



Product Details



Cart



Place Order

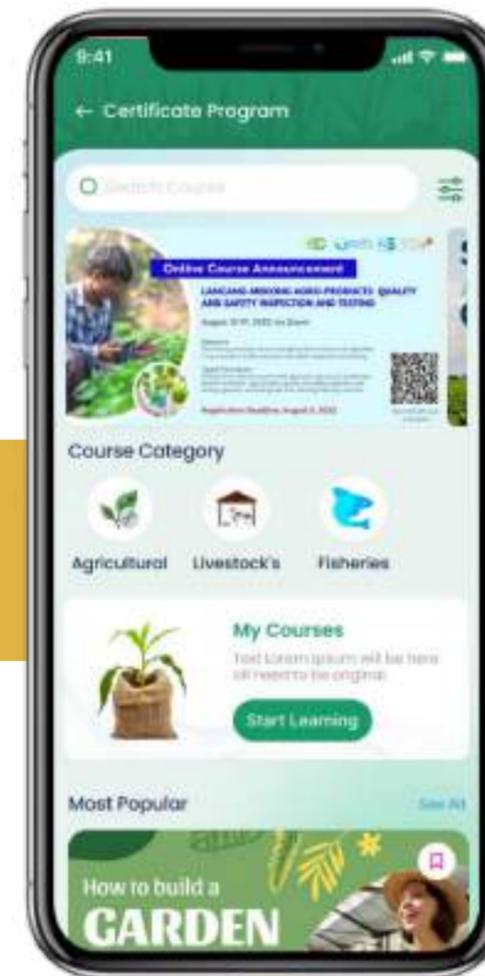
# Other



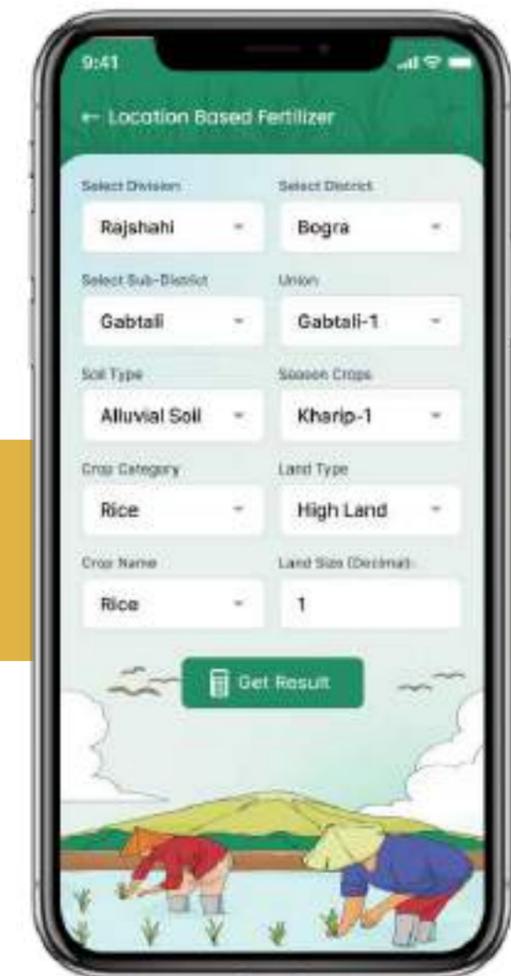
Weather



My Activity



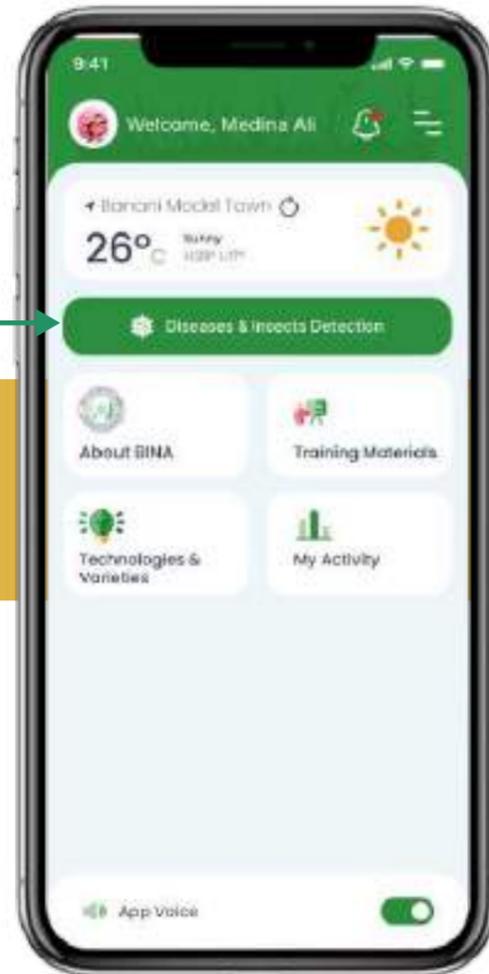
Courses



Fertilizer

# Usability Overview

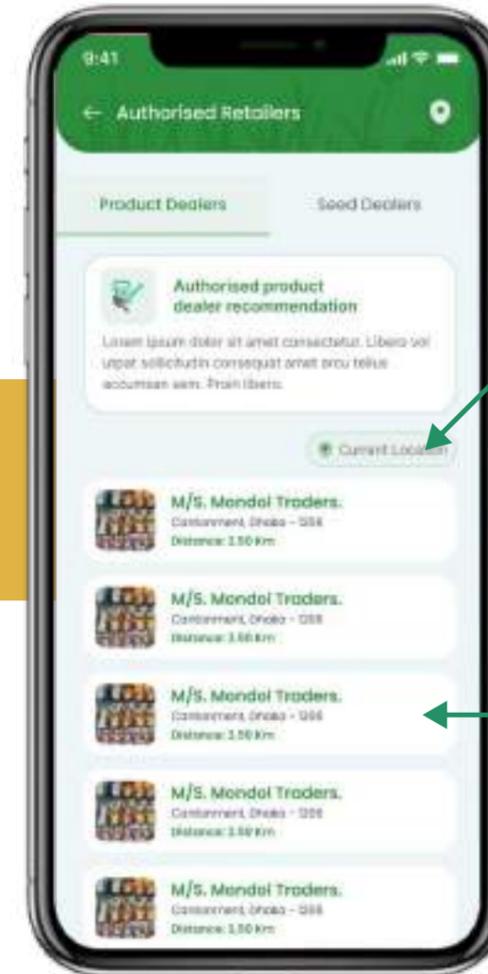
Comprehensive Automation



Inclusive Technology



Localized Expertise



Enhance B2B Services

# Notable Metrics

---

- Number Of Crops

39

Crops

- Number Of Users

[Statistics from 12-06-2023 to 12-09-2025]

89542+

Downloaded in Google Play.

- Number Of Disease/Insects

164

Disease/insects

1. Farmer - 73%	=	72529
2. Urban Gardener - 19%	=	17,013
3. Student - 05%	=	4,477
4. Scientist - 02%	=	1,790
5. Other - 01%	=	895

# Agrow Chain

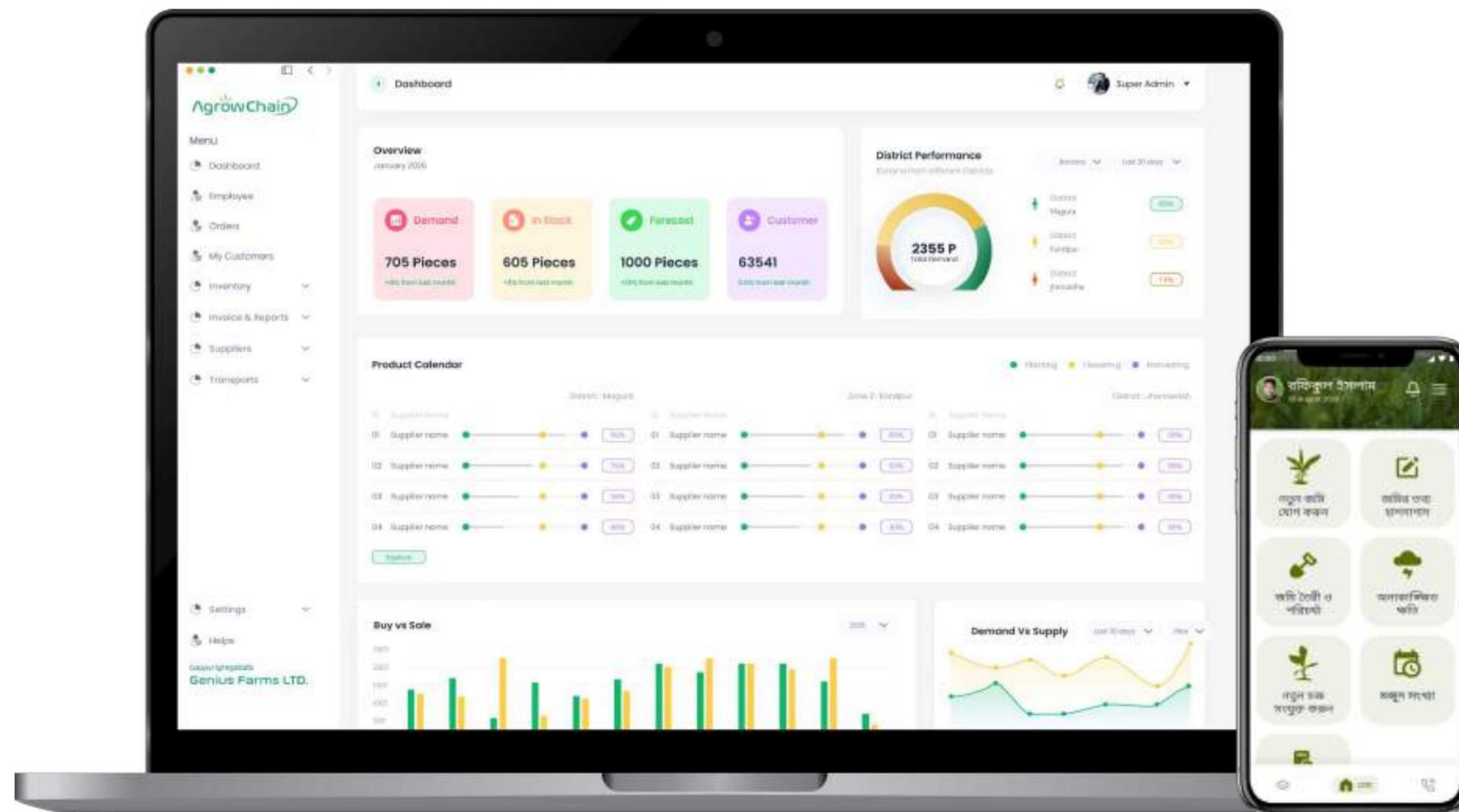
AgrowChain is a comprehensive, agro-focused supply chain solution designed to revolutionize agriculture in Bangladesh. It facilitates transparent and efficient field-to-shelf information management while empowering farmers, distributors, and retailers to optimize operations and foster seamless collaboration.

## Core Functionalities:

- Supply Chain Management
- Inventory Management
- Farming & Harvest Management
- Reports and Analytics
- Stock Adjustment
- Waste Management

## Advanced Features

- Traceability
- Blockchain for Transparency
- IoT Integration
- Marketplace Integration
- Compliance Management



# Agrow Chain

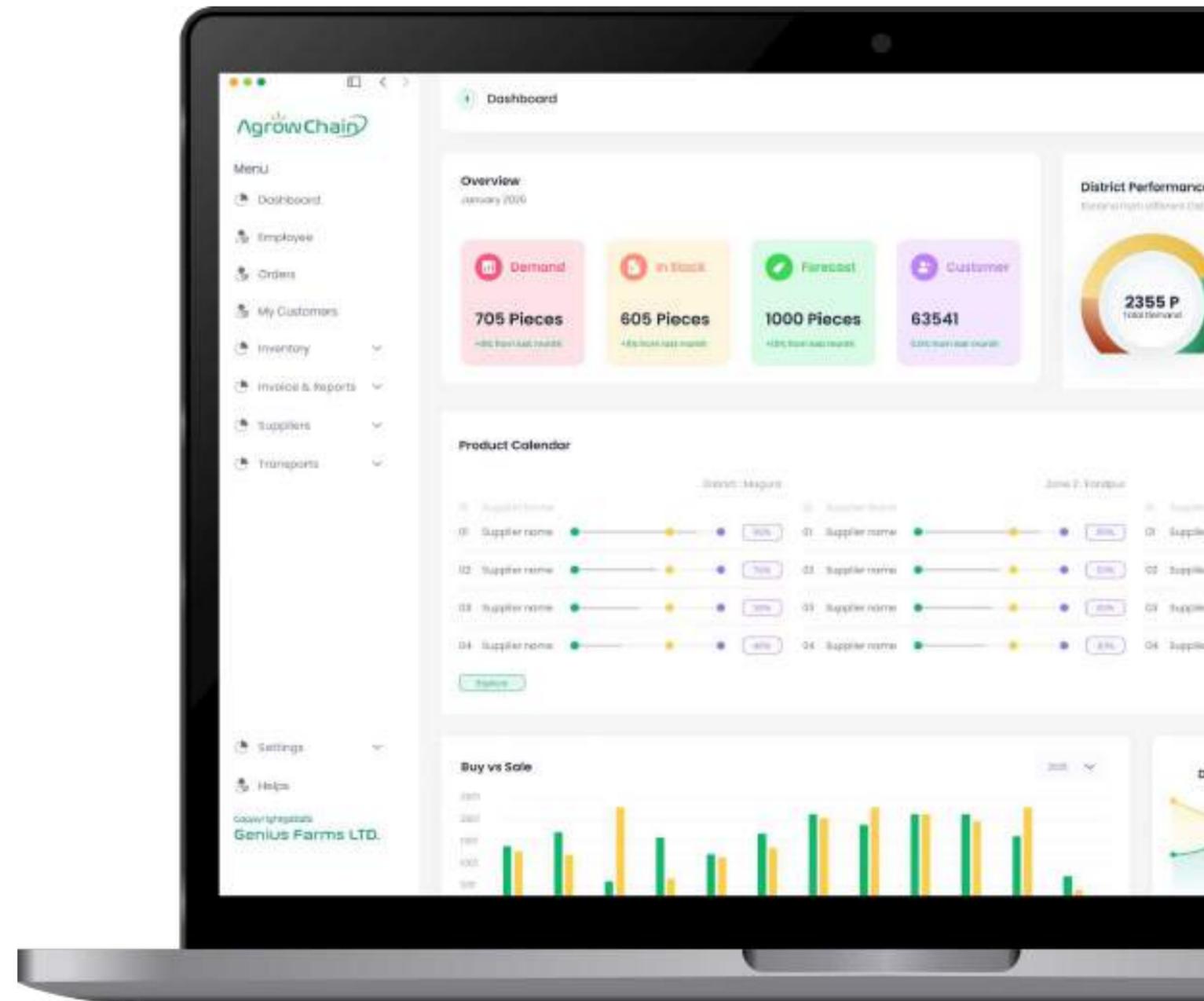
---

## Optional Features:

- Weather Forecast Integration
- Export Assistance
- Farmer Training Module
- Community Feature
- Rewards & Loyalty Programs
- Multi-Language Support

## Business Benefits:

- Enhance efficiency with streamlined operations.
- Foster transparency and collaboration across the supply chain.
- Minimize waste and optimize resource utilization.
- Empower farmers with data-driven insights and market access.
- Leverage advanced analytics for informed decision-making.
- Simplify sales and distribution management to maximize profitability.



# Our Journey

---

The journey of Genius Farms began in 2020 during the challenging early days of the COVID-19 pandemic. Founded by Medina Ali, the company launched its flagship product, Dr. Chashi, with a vision to revolutionize agriculture in Bangladesh through cutting-edge agrotech solutions. Coming from a family with over 45 years of experience in the agro industry—mainly in insecticides and pesticides—Medina had witnessed firsthand the gaps in knowledge and the challenges faced by farmers and dealers alike.

When Medina moved to Bangladesh in 2020, she was determined to address these issues. Farmers often lacked real-time assistance in crop health diagnosis and product usage, leading to overuse or misuse of insecticides and pesticides, which resulted in health hazards and inefficiencies. Dealers, too, often sold products based on popularity rather than effectiveness. With these problems in mind, Genius Farms developed Dr. Chashi, an AI-driven app designed to provide real-time crop health diagnosis, recommend solutions (organic or chemical), suggest appropriate dosages, and connect farmers to nearby stores with the necessary products.

However, launching Dr. Chashi wasn't without challenges. From the outset, Medina Ali and her team committed to not charging farmers, as it was against their ethos. Instead, Genius Farms pursued a B2B business model, offering custom solutions to companies and organizations working with contract farmers. Convincing stakeholders of this approach was initially difficult, but as the company gained clients and demonstrated the value of its model, acceptance grew.



# Our Journey

---

2020

Focused on prototyping and data collection.



2021

Runner-up in the She Loves Tech Bangladesh round (2021)



2022

1. BASIS National ICT Award (2022)
2. Secured a government grant from the ICT Division's IDEA program (2022)
3. Recognition as one of the top seven startups in UNDP Bangladesh's Youth Co: Lab program (2022)



# Our Journey

---

2023

Agro Award from Channel- i and Standard Chartered Bank (2023)



2024

1. Top 5 Startup at World Trade Organization's Innovation Festival (2024)
2. National SME Award - Startup of the Year, from the SME Foundation Bangladesh (2024)



2025

1. Champion-EBL Climate Change Action Awards (2025)
2. 2nd Runner Up: The Future of Capitalism - Startup Competition (2025)
3. Champion - bdapps Innovation Summit 2025



# Awards & Achievements



Champion - bdapps Innovation Summit 2025



IBACC-The Future of Capitalism - Startup Competition 2025



EBL Climate Change Action Awards 2025



National SME Award - Startup Entrepreneur of 2024



BASIS National ICT Awards - 2022



Channel I - Standard Chartered Agro Awards 2022

# Awards & Achievements



ITC shetrades Innovation Festival 2024

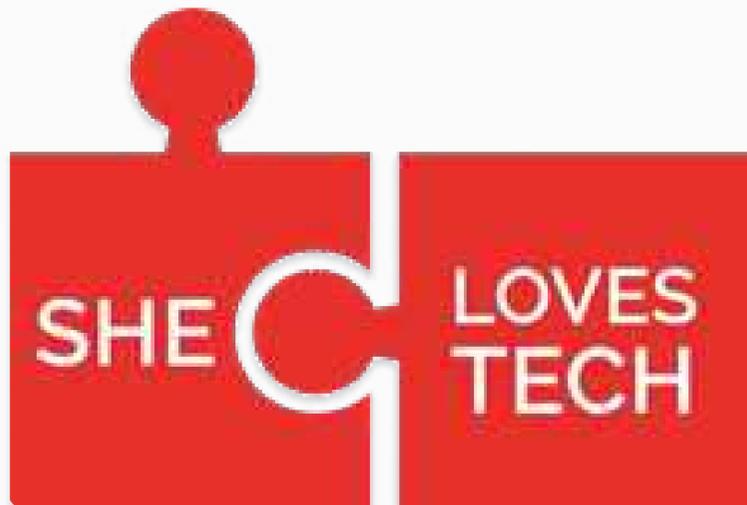


[www.idea.gov.bd](http://www.idea.gov.bd)

Received IDEA Grant 2022 – Cohort



InTop 7 Startups for 2022–2023 Cohort



1stRunner Up  
at SHE LOVES TECH2021  
Bangladesh Round

# Our Team

---



**Medina Ali**  
Founder & CEO



**Md Moktadir Hossain**  
Executive Director



**Shamiran Biswas**  
Head of Agriculture



**Shovon Lal Chakraborty**  
Lead Software Engineer



**Ashrafal Islam Sheblu**  
Lead Software Engineer



**Imran Khan**  
Lead Mobile Engineer



**Imran Nazir**  
DevOps Engineer



**Ahsan Rafsani**  
Software Engineer II



**Sohag Hossain**  
Junior Software Engineer (AI/ML)



**Abu Bakker Siddique**  
Software Engineer II (UI/UX)



**Md. Khalilur Rahman**  
Software Engineer (QA)



**Monir Hossain**  
Assistant Manager (Finance & Accounts)



**Md. Saiful Islam**  
Senior Manager (HR Admin & IT)



**Mahmud Boby**  
E-commerce Manager



**Abul Kashem**  
Business Development Associate



**Md. Somrat Hossen**  
Agriculture Technical Officer (ATO)



**Md. Nazrul Islam**  
Junior Agriculture Officer



**Md. Saddam Hossain**  
Junior Agriculture Officer



**Atif Ahmed Akkhor**  
Director & Business Development Consultant



**Mohammed Irad Ali**  
Agro-Business Development Advisor

# Our Advisors

---



**Dr. Md. Abdul Mazid**

Chief Advisor

Agronomist,  
Rice Scientist, Independence  
Award (Food Security),  
Ex- Head of agronomy, BIRRI.



**Dr. MA Hamid Miah**

Advisor

Entomologist,  
Independence Award, Ex.  
Executive Chairman - BARC, Ex.  
DG BIRRI & BJRI



**Prof. Dr. Sadrul Amin**

Advisor

Soil Scientist,  
Ex-Dean HSTU, Dinajpur



**Prof. Dr. Mahbuba  
Jahan**

Advisor

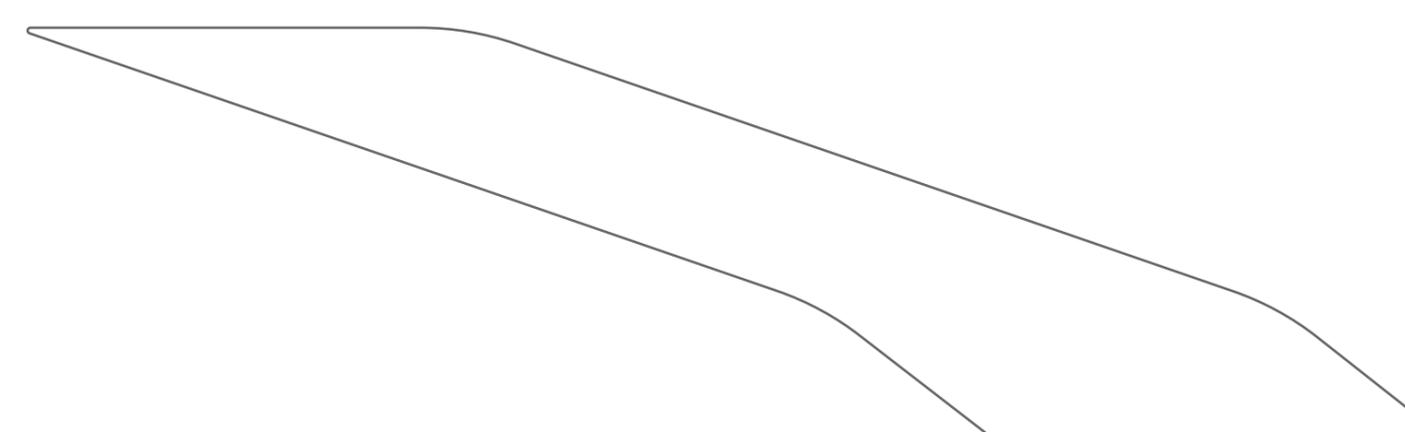
Entomologist,  
Dept of Entomology, BAU,  
Mymensingh



**Dr. Tapan Kumar Dey**

Advisor

Plant Pathologist,  
Ex - Director BARI &  
Former SPS(Crops),  
KGF, BARC



# Case Study: Groundnut Production Using The Groundnut IPM App

## Introduction

In Bangladesh, groundnuts, also referred to as peanuts, are an essential crop, particularly in coastal and drought-prone areas. It plays a significant role in the local economy and diet in addition to providing farmers with a source of income. But cultivating groundnuts has its own set of difficulties, particularly with regard to controlling pests and illnesses that can destroy harvests.

In the past, farmers have mostly depended on chemical pesticides to address these problems, but this strategy frequently has unfavorable effects on the environment and the farmers. The Groundnut IPM app is a mobile tool that farmers can use to manage their crops more efficiently. It was developed in response to the demand for a more environmentally friendly and sustainable approach to pest management.

In this case study, we'll look at how Patuakhali farmer Abdul Rahman utilized the Groundnut IPM app to enhance his groundnut production. Specifically, we'll see how it helped him control pests, raise crop yields, and eventually increase his revenue.

## Background: Groundnut Farming in Coastal Bangladesh

Bhola, Noakhali, Patuakhali, and other areas are frequent places for groundnut production. Although the soil and environment are ideal, there are certain drawbacks like pests, diseases, and unpredictable weather patterns. Aphid infestations, thrips, and diseases like rust and leaf spot cause major crop losses for farmers in these areas.



Patuakhali groundnut farmer Abdul Rahman was accustomed to these difficulties. He battled every season to keep his crops free of pests and illnesses, frequently using chemical pesticides in the process. However, he was not getting consistent yields, and the expense of pesticides was eating into his earnings. It was then that he first encountered the Groundnut IPM app.

### The Groundnut IPM App: A New Approach to Pest Management

The Groundnut IPM app is intended to be a farmer's assistant in the field, providing advice on anything from recognizing diseases and pests to suggesting the most effective management techniques. It's like always having a professional advisor at your fingertips.

## Here's what the app offers:

- **Pest and Disease Identification:** Farmers can easily identify common pests and diseases affecting groundnut crops through the app, which provides images and detailed descriptions. Farmers can upload pictures of affected plants to get real-time diagnoses and recommendations.
- **Control Recommendations:** Based on the diagnosis, the app can suggest a combination of biological, cultural, and chemical control methods that are suitable for Bangladeshi conditions. The app can include guidelines on the safe use of pesticides, emphasizing the importance of avoiding overuse and minimizing environmental impact.
- **Weather and Advisory Services:** The app also provides weather forecasts and other relevant advisories, helping farmers make informed decisions about when to carry out specific tasks.

## Abdul Rahman's Journey with the Groundnut IPM App

**Location:** Patuakhali District, Coastal Bangladesh

**Farm Size:** 5 hectares

**Crop:** Groundnut (Variety: BARI Badam-8)

**Farmer:** Abdul Rahman

**Objective:** In order to determine whether Abdul Rahman might increase yields and improve revenue by using the Groundnut IPM app to manage pests and diseases more effectively.

# Abdul Rahman's Journey with the Groundnut IPM App

**Location:** Patuakhali District, Coastal Bangladesh

**Farm Size:** 5 hectares

**Crop:** Groundnut (Variety: BARI Badam-8)

**Farmer:** Abdul Rahman

**Objective:** In order to determine whether Abdul Rahman might increase yields and improve revenue by using the Groundnut IPM app to manage pests and diseases more effectively.

## Getting Started:

Abdul Rahman's pest management approach primarily relied on chemical pesticides prior to utilizing the Groundnut IPM app. He was still losing a sizable percentage of his crop to pests and disease every season in spite of his best efforts. In addition, he was heavily indulging in pesticides, which lowered his total earnings.

Abdul Rahman was excited to try something new when he learned about the Groundnut IPM app. He began integrating the app into his everyday farming practice after being given some basic training on how to utilize it.

## Better Pest and Disease Management:

In his fields, Abdul Rahman was able to drastically lower the number of pests and diseases because of the Groundnut IPM app. For instance, a common disease called "Tikka" or cercospora leaf spot that has historically resulted in significant losses was successfully controlled, resulting in a 40% decrease in its impact from the previous season.

Abdul Rahman was able to reduce his use of chemical pesticides by 60% thanks to the app's emphasis on combining biological and cultural controls. He was able to save money and improve the environmental quality of his farm by doing this.



**Results: "A Season of Growth and Learning"**

## Increased Yield:

Abdul Rahman's groundnut yield had increased by 25% by the end of the season. He was now harvesting 1.5 tons per hectare instead of the previous 1.2 tons. This increase in yield was directly attributed to the better pest and disease control methods that the app suggested.

## Economic Benefits:

Abdul Rahman's overall profitability increased by 20% as a result of the rise in produce and the decrease in pesticide expenses. His bottom line significantly improved when he saved roughly BDT 10,000 per hectare on insecticides alone.

## A Farmer's Perspective:

Abdul found the Groundnut IPM app to be a valuable tool. It was easy to use, even for someone who wasn't very familiar with smartphones. The app's ability to provide real-time, location-specific advice made it especially useful. The weather forecasts were also a big help, allowing him to plan his work more effectively and avoid unnecessary losses.



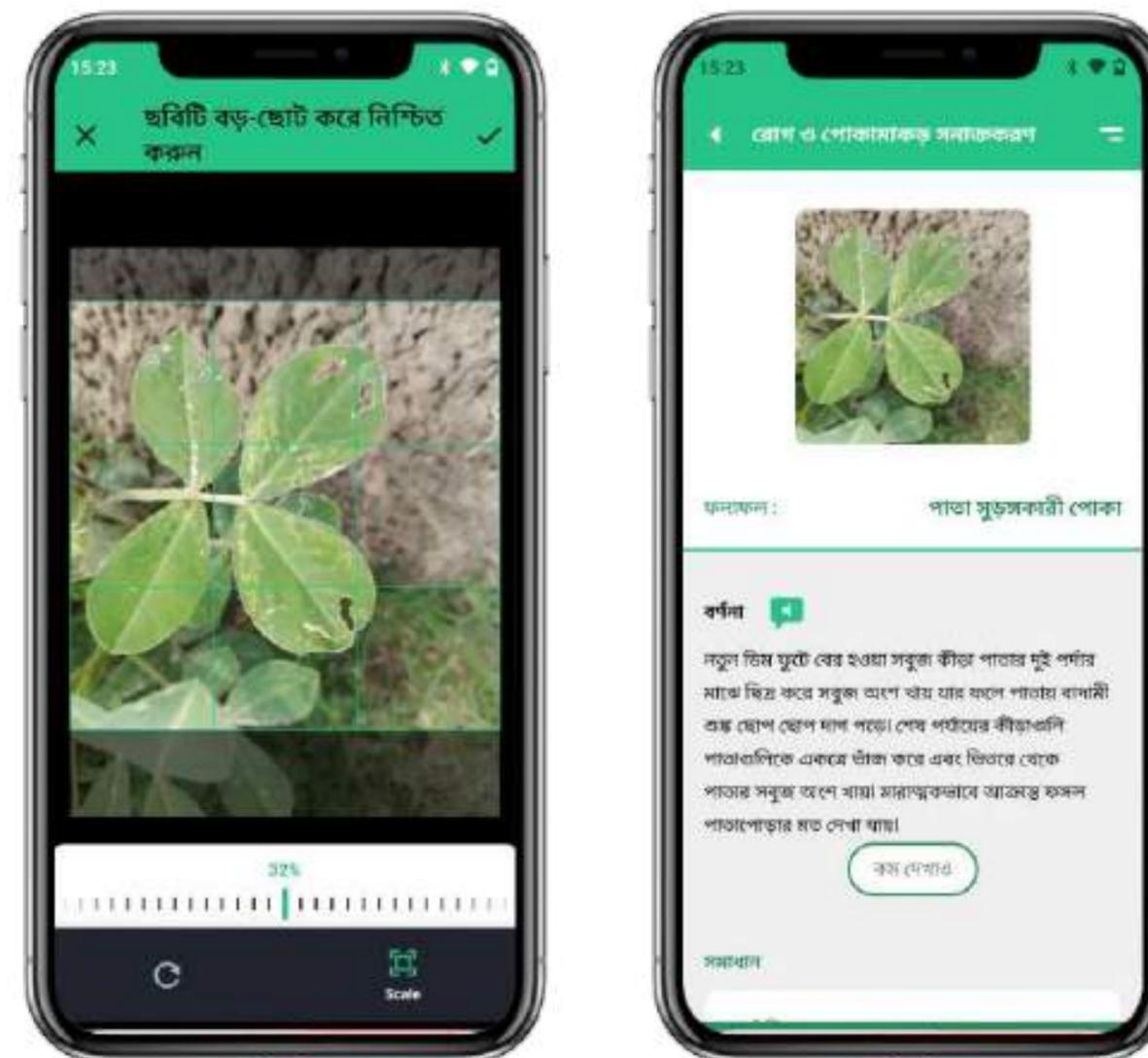
## Conclusion:

The Groundnut IPM app experience Abdul Rahman had demonstrates how technology may significantly improve farmers' life. The app helps him manage pests and diseases more effectively, increasing yields and improving income, by providing practical, science-based advice.

This case study demonstrates how digital tools, such as the Groundnut IPM app, have the capability to revolutionize Bangladesh's traditional farming methods. More farmers could profit from this technology with continuous support and training, resulting in more profitable, ecologically friendly, and sustainable agriculture.

## Looking Ahead:

Considering the Groundnut IPM app's performance in this instance, it would be beneficial to think about expanding its use to include more farmers in Bangladesh. To make sure that farmers can fully utilize this technology, continuous support and training are essential. Furthermore, using the Groundnut IPM app with other farming instruments may offer farmers even more complete guidance, enabling them to meet the difficulties of contemporary agriculture with greater efficiency. We can progress toward a future where farming is not only more productive but also more resilient and sustainable, ensuring food security and economic stability in areas like Patuakhali and beyond, by adopting technology like the Groundnut IPM app.



# Case Study: AppDr. Chashi's Impact On Dragon Fruit Farming – The Success Story Of Farmer Raja Mia

## Introduction

Farmer Raja Mia, from Chapainawabganj, Bangladesh, started dragon fruit farming in 2021. Despite its profitability, he faced challenges like pest infestations, lack of modern farming knowledge, and unpredictable weather. In 2023, he adopted Dr. Chashi, an AI-driven agricultural platform, to address these issues. This case study explores how Dr. Chashi transformed Raja's farming practices, improving productivity and sustainability.

## Challenges Faced by Raja Mia

- **Pest and Disease Management:** Fungal infections and insect attacks damaged his crops.
- **Limited Knowledge:** Raja relied on traditional methods, lacking access to modern techniques.
- **Weather Variability:** Unpredictable rainfall disrupted irrigation and harvesting.
- **High Costs:** Excessive pesticide and fertilizer use increased expenses without guaranteed results.

## How Dr. Chashi Helped Raja Mia

### 1. Real-Time Disease and Insect Management

- **Problem:** Raja's dragon fruit plants suffered from pests and diseases.
- **Solution:** Dr. Chashi's AI identified issues from uploaded photos and provided real-time solutions.
- **Outcome:** Crop damage reduced by 70%, and pesticide use decreased by 40%.



## 2. Weather Forecasting

- **Problem:** Unpredictable weather affected farming activities.
- **Solution:** The app provided accurate weather forecasts, helping Raja plan irrigation and harvesting.
- **Outcome:** Crop yield increased by 25%.
- 

## 3. Knowledge on Sustainable Practices

- **Problem:** Raja lacked knowledge about modern farming.
- **Solution:** Dr. Chashi offered resources on organic and inorganic methods.
- **Outcome:** Raja adopted organic practices, improving soil health and reducing chemical use.

## 4. Market Access and Cost Savings

- **Problem:** High input costs and limited access to quality supplies.
- **Solution:** Raja used the app to purchase seeds, fertilizers, and pesticides at competitive prices.
- **Outcome:** Input costs reduced by 20%.

## 5. Continuous Learning

- **Problem:** Lack of access to expert advice.
- **Solution:** Dr. Chashi's 24/7 helpline and voice features provided instant support.
- **Outcome:** Raja gained confidence in modern farming techniques.

# Results and Impact

- **Increased Yield:** Raja's dragon fruit yield rose by 30%.
- **Reduced Costs:** Operational costs decreased by 25%.
- **Sustainability:** Organic practices improved soil health and reduced environmental impact.
- **Higher Income:** Raja's net income increased by 40%.
- **Empowerment:** Raja became a community role model, sharing knowledge with other farmers.



“Dr. Chashi has been a game-changer for my dragon fruit farm. It helped me identify diseases, plan farming activities, and connect with experts. My yield has increased, and my costs have gone down. It’s like having a farming expert in my pocket!”

-Raja Mia

## Key Takeaways:

- **Technology as a Game-Changer:** Dr. Chashi’s AI solutions empowered Raja to overcome farming challenges.
- **Sustainability and Profitability:** Raja reduced costs and improved crop quality through sustainable practices.
- **Scalability:** Raja’s success highlights Dr. Chashi’s potential to transform agriculture for smallholder farmers.
- **Community Impact:** Raja inspired other farmers to adopt modern techniques.

## Conclusion

Dr. Chashi’s innovative platform has proven invaluable for farmers like Raja Mia, enabling them to overcome challenges and achieve sustainable, profitable farming. By leveraging AI, real-time data, and expert knowledge, Dr. Chashi is revolutionizing agriculture in Bangladesh, one farmer at a time. Raja’s dragon fruit farming success is a testament to the transformative power of technology in agriculture.





# Case Study: Streamlining Banana Supply Chains: A Digital Revolution In Abdul Jalil's Farming Journey

## Introduction

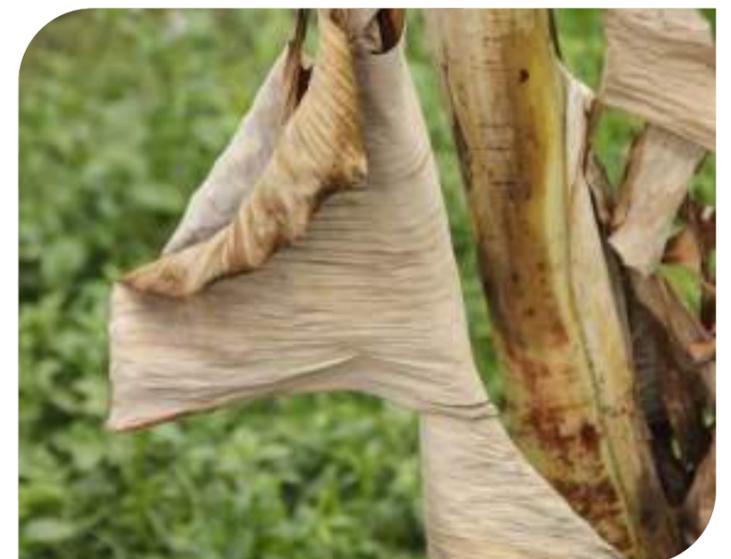
Abdul Jalil, a smallholder banana farmer and contact farmer for the 'Hanay Company,' became a beneficiary of the "Banana Supply Chain" digital tool, a collaborative effort between Chemonix International Bangladesh and Medina Tech Limited. Designed to enhance farm management, communication, and the supply chain, this tool transformed Abdul's farming practices, boosting his productivity and financial stability.

## Objectives

- Enhance communication between Hanay and farmers like Abdul Jalil to improve the supply chain process.
- Provide real-time data on banana planting, growth, and harvest schedules.
- Optimize farm management by tracking key factors like land preparation, pesticide application and harvesting dates.
- Enable Abdul Jalil to manage their banana stocks and predict Hanay needs efficiently.

## Farming Background

Abdul Jalil has been cultivating bananas for over a decade using traditional methods. Despite his hard work, he faced challenges typical for smallholder farmers; limited resources, pesticide application issues, inefficient irrigation, difficulties in determining optimal planting and harvesting times, land preparation and maintenance, estimation of seedling demand, incorporating new cycles, and dealing with uncertain market demand. These obstacles hindered his ability to earn a stable income from banana farming.



## Description of the Digital Tool

The “Banana Supply Chain” digital tool offered several features that directly benefited Abdul’s farming operations:

- **Land Management:** Abdul could input details about his land size, location, and crop status. This helped him plan his farming activities more effectively, ensuring optimal land use and resource management.
- **Planting and Harvesting Schedules:** The app provided Abdul Jalil with accurate planting and harvesting schedules, which helped him optimize crop growth cycles and minimize harvest losses.
- **Real-Time Monitoring:** Abdul used the real-time monitoring feature to track essential farm conditions like pest activity and irrigation needs. This allowed him to make timely interventions and ensure proper care for his crops.
- **Stock and Market Management:** The app enabled Abdul Jalil to efficiently monitor his banana stock levels and forecast market demand. This helped him align his supply with demand, avoid overproduction, and minimize wastage.

## Challenges Faced by Abdul Jalil

Despite the benefits, Abdul Jalil faced several challenges when adopting the digital tool:

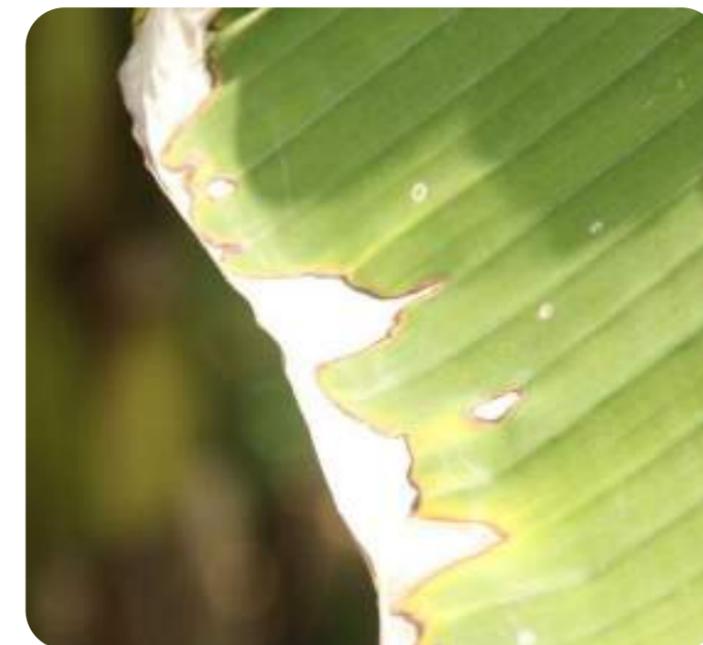
- **Digital Literacy:** Initially unfamiliar with smartphones and technology, Abdul Jalil found it difficult to navigate the app, and was skeptical about relying on digital systems.
- **Connectivity Issues:** Living in a rural area, Abdul Jalil faced internet connectivity issues, which hindered the real-time syncing of data, limiting the app's full functionality.
- **Adaptation to New Technology:** Transitioning from traditional farming to a digital platform was a significant shift for Abdul Jalil, and it took time for him to see the value of the tool.



## Overcoming Challenges

To address these challenges, Chemonix International Bangladesh and Medina Tech Limited provided Abdul Jalil with innovative solutions:

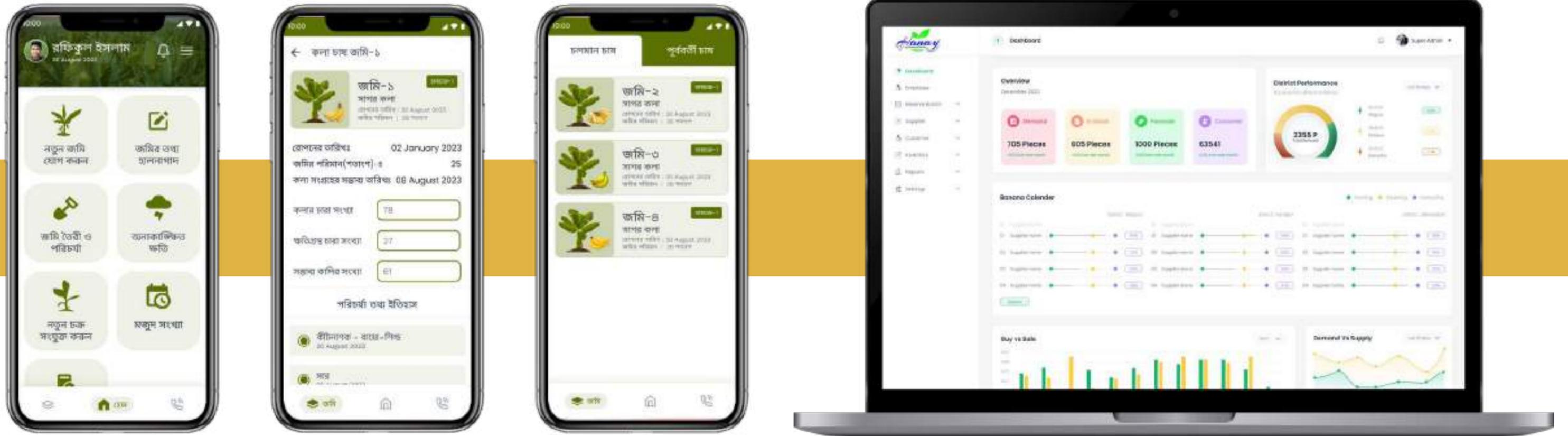
- **Training and Support:** Abdul Jalil received hands-on training to understand the tool's features and how to use it effectively for farm management.
- **User-Friendly Interface:** The app was designed to be simple and intuitive, which helped Abdul adapt more quickly.
- **Bengali Language Support:** The app included local language support, making it easier for Abdul Jalil to navigate and understand the tool's features.
- **Regular Follow-ups:** The project team conducted regular follow-ups and provided technical support to ensure Abdul Jalil used the tool correctly and achieved the desired results.



## Results and Impact

After using the “Banana Supply Chain” digital tool for several months, Abdul Jalil began to see significant improvements in his farming operations:

- **Increased Productivity:** With proper timing of spraying, irrigation, and land preparation through the app, Abdul Jalil experienced higher banana yields. Healthier crops and improved farm conditions resulted in more consistent harvests.
- **Maintain good supply chain management:** It ensures Abdul Jalil receives timely delivery of quality inputs, reduces operational costs, builds trust, and establishes a strong connection with Hanay, ultimately driving overall profitability and sustainability in agriculture.
- **Improved Quality:** By following proper input recommendations, Abdul Jalil enhanced the quality of his bananas, strengthening the overall efficiency of the banana supply chain.
- **Enhanced Knowledge and Skills:** The app provided Abdul with access to educational resources, expanding his knowledge of modern farming techniques and boosting his confidence in using technology.
- **Reduced Wastage:** The supply chain app streamlined inventory management and demand forecasting, helping to minimize overproduction and spoilage, thereby effectively reducing wastage.



App Screens for Banana App.

## Personal Testimony from Abdul Jalil

Reflecting on his experience, Abdul Jalil shared: "I never imagined that a digital tool could make such a difference in my farming life. Initially, I was unsure about using technology, but now I see the results. My banana yields have increased, my farm is more efficient, and I can supply my products to Hanay at the right time. This tool has not only improved my farm's productivity but also my understanding of farming," I feel more connected to Hanay and confident about my future.

## Conclusion

Abdul Jalil's success story highlights the transformative power of digital tools in smallholder farming. Through the "Banana Supply Chain" digital tool developed by Chemonix International Bangladesh and Medina Tech Limited, Abdul Jalil has overcome traditional farming challenges. The tool has helped him improve his productivity, improved supply chain, and the quality of his bananas. This case study illustrates how digital solutions can revolutionize farming practices and enhance the livelihoods of smallholder farmers.



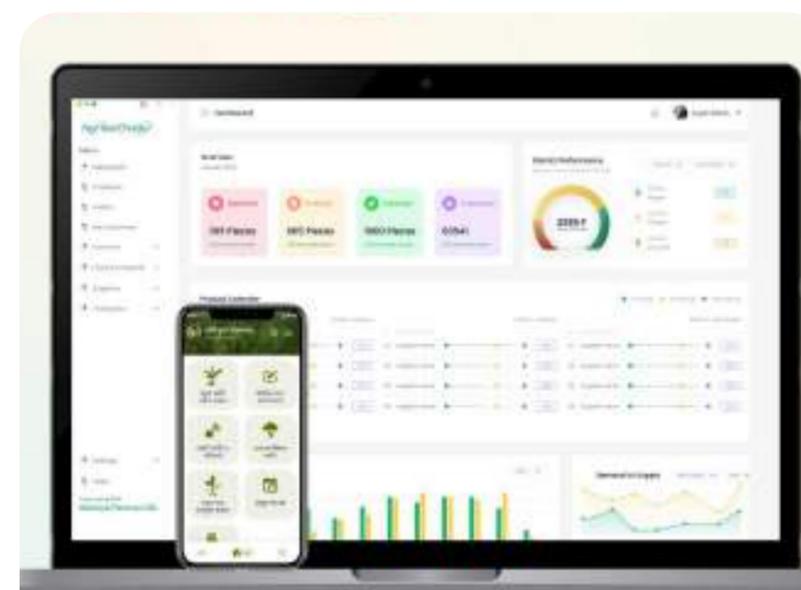
# Our Client Projects

---



## BINA - Crop Care

It is possible to easily identify crop diseases and pests using a mobile-based AI app. Farmers will be able to get immediate solutions and keep their crops safe.

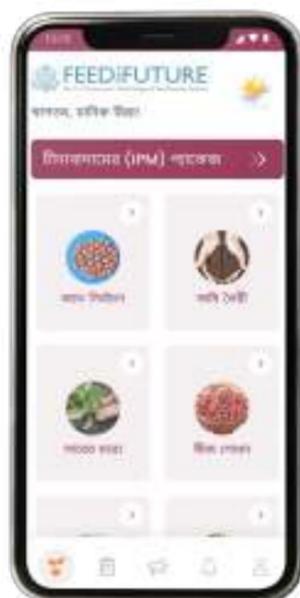


## Chemonics - Banana Supply Chain

Ensuring a transparent digital supply chain from farmer to consumer. This ensures timely demand, farmers get fair prices, and consumers get safe agricultural products.

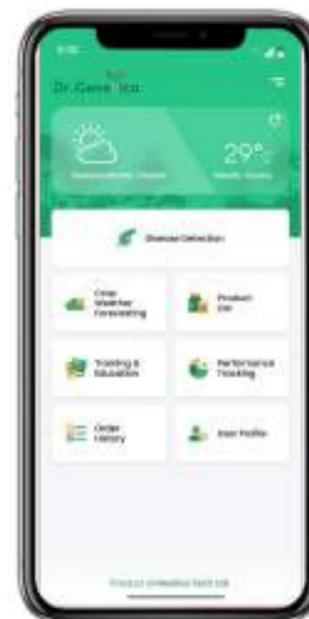
# Our Client Projects

---



## Virginia Tech - Groundnut IPM

AI-powered Groundnut IPM technology is ensuring effective management of diseases and pests. This will reduce the cost of production for farmers and the yield will be safe and sustainable.



## Genetica- Dr. Genetica

From field crops to rooftop gardens—Dr. Genetica is bringing a new generation of AI-powered solutions to farmers to identify and resolve diseases and pests in all areas.

## Get In Touch

---

CONTACT

**+880 1550 079 886**  
**[business@genius-farms.com](mailto:business@genius-farms.com)**

572/K, Wasi Tower (7th Floor),  
ECB Chattar, Matikata Road,  
Dhaka Cantonment, Dhaka-1206

