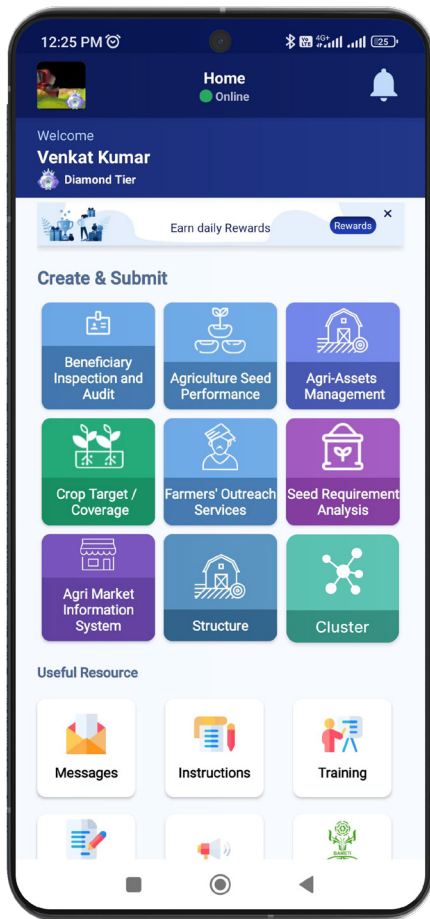


Dexian Agritech Pulse

Transforming Agri-Tech for a
Better Tomorrow



Transformed 18 million farmers livelihoods in Bihar with BIHAN



38

Districts covered

10

Impactful policies

100+

Dashboards built

50+

Datasets integrated

200+

Training conducted





Welcome to Dexian Agritech Pulse!

Imagine agriculture not just as fields and crops but as the next frontier of innovation.

If you're an Agri-Entrepreneur pushing boundaries, a policy maker shaping the future, an investor seeking the next big breakthrough, or a tech developer with dirt under your nails and ideas in your head—this is for you.

Agri-tech is transforming how we farm, and Dexian India is planting the seeds of this revolution.

Through this monthly newsletter, we're here to spark conversations, share bold ideas, and grow something remarkable together in the Agri-tech niche.

This is your chance to stay ahead of the curve and participate in a conversation that could define the next decade of the food industry.

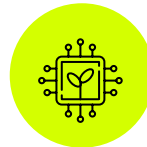
There's something here for everybody.

Let's explore. 

Inside, we'll dive into:



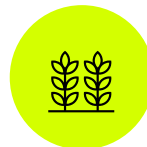
India's Agri-tech Policies.



Breakthrough Technologies.



Sustainable Farming.



How we're (Dexian) cultivating tomorrow.





How are India's Agri-tech policies transforming lives

Imagine a farmer in a remote village, once struggling to make ends meet, now using a smartphone to monitor crops, predict weather changes, and connect directly with buyers nationwide.

This isn't just a hopeful vision—it's the reality unfolding in India's agriculture sector today.



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Why This Matters?

Agriculture is India's heartbeat, feeding over a billion people and providing livelihoods for millions. Yet farmers have long faced challenges like unpredictable weather, market volatility, and limited access to technology.

Emerging Agri-tech start-ups are lighting the way to a brighter future, offering innovative solutions that empower farmers and bolster the nation's economy.





Why Now?

As the world population surges, there's mounting pressure on global food systems.

India stands at a pivotal moment where digitalization and modern techniques can vastly improve agricultural practices.

According to an EY report, Agri-tech startups in India have the potential to reach a market worth **\$24 billion by 2025**, while the Aventus report forecasts a market worth **\$34 billion by 2027**.

With such staggering growth on the horizon, there's no better time to embrace this transformation.



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2,817 CR

Approved for the Digital Agriculture Mission.

OVER 310

Government schemes streamlined through the Direct Benefit Transfer system.

\$600 BN

A projected contribution of agriculture to India's GDP by 2030 will be a 50% increase from 2020.

\$1,01,321.61 CR

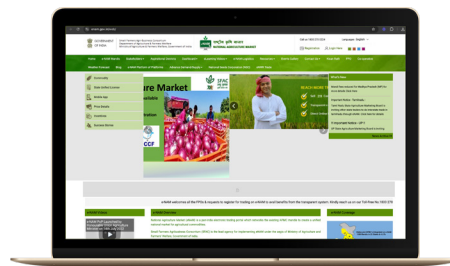
Combined budget for key agricultural schemes like PM-RKVY and Krishonnati Yojana.



The 4Es - Encourage, Elevate, Ensure, Enhance

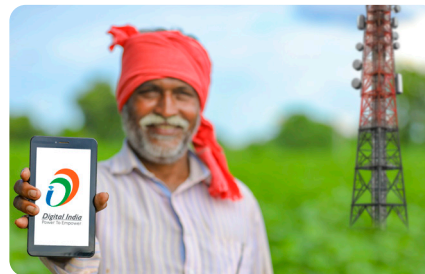
Encouraging Innovation

Government initiatives like the **Agriculture Accelerator Fund** and **Startup India** are nurturing a new generation of Agri-tech entrepreneurs. Platforms like **eNAM** are dismantling traditional barriers, allowing farmers to get fair prices by connecting directly with buyers and reducing reliance on middlemen.



Elevating Infrastructure

Rural areas are gaining vital internet access through the **Digital India** initiative and the **BharatNet Project**. This connectivity enables farm automation technologies, from Internet of Things (IoT) devices that monitor soil health to apps providing real-time market updates.



Ensuring Financial Access

Institutions like **NABARD** are simplifying access to credit, enabling farmers to invest in technologies that increase productivity and income. The **Direct Benefit Transfer (DBT)** system ensures that subsidies and benefits reach farmers directly, eliminating delays and corruption.



Enhancing Training and Literacy

Programs like the **Pradhan Mantri Gramin Digital Saksharta Abhiyan** are more than just educational initiatives—they're lifelines that equip farmers with the skills to use state-of-the-art technology, leading to better yields and higher incomes. The **Agri Clinics & Agri-Business Centers (ACABC)** program empowers rural youth to become Agri-tech service providers, strengthening the support network for farmers.





A Promising Playground for Investment

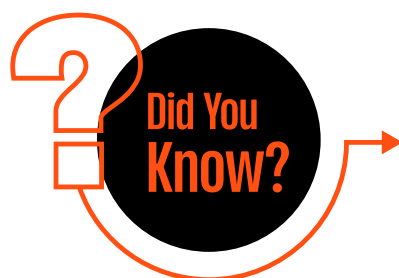
There's a noticeable uptick in Agri-tech investments from both public and private sectors.

As Indian Agri-tech companies present original and feasible solutions, they're making the Agri-sector more competitive and attracting significant investor interest.

This surge in investment is crucial for scaling innovations that can ease farmers' lives and increase agriculture's contribution to India's GDP.

At **Dexian India**, we're observers and participants in this incredible journey.

By merging traditional farming wisdom with cutting-edge technology, we believe we can help create a resilient, prosperous future for farmers and the nation.



What's the 'Agri Stack' that's set to change Indian agriculture forever?

Answer: The Government of India's **Agri Stack** initiative unifies data like crop patterns, land records, and farmer information into a digital platform. It enhances agricultural productivity by streamlining government schemes and empowers agritech companies to create innovative, data-driven solutions, improving decision-making and agricultural services.



How are AI, Robotics, Precision Agriculture, and IoT transforming how we harvest?

What's the news?

We're standing at the threshold of an agricultural tech revolution.

With the global population soaring and agriculture's contribution to GDP shrinking to just 4%, we face the monumental task of increasing food production by 70% by 2050. But here's the exciting part: groundbreaking technologies are emerging to meet this challenge head-on.



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Generational innovations are reshaping our fields:

Autonomous Machinery	Self-driving tractors and drones are taking over labor-intensive tasks, allowing for precision and efficiency we've only dreamed of.
IoT-Enabled Farms	Farms are becoming intelligent ecosystems where every plant and soil condition is monitored in real-time, empowering farmers with data-driven insights.
Robotics	Agri-bots handle repetitive tasks with surgical precision, reducing reliance on manual labor and increasing consistency.
Artificial Intelligence & Machine Learning	AI transforms decision-making, predicts weather patterns, and diagnoses crop diseases before they become outbreaks.
Precision Agriculture	We optimize every drop of water and fertilizer grain to maximize yields while minimizing environmental impact.






The context

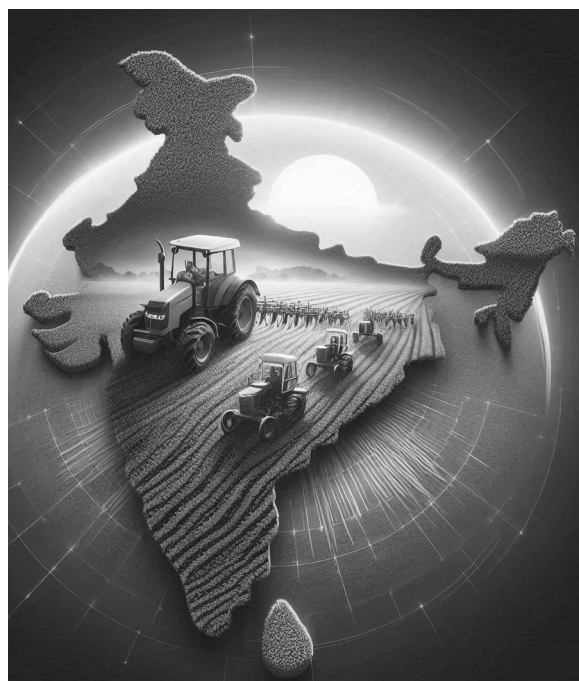
As agriculture's share of global GDP drops to just 4%, the urgency for innovation grows.

Countries like the U.S., Australia, and the Netherlands already embrace these technologies, witnessing increased efficiency and yields.

Companies like John Deere, Bosch and startups like Bloomfield Robotics are leading with solutions that were once science fiction.

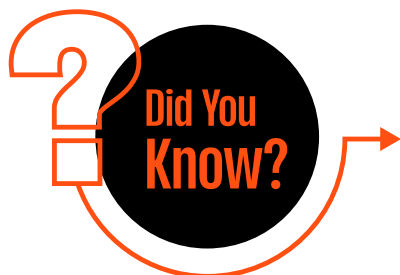
What's next for India?

-  India stands on the brink of its Agri-tech renaissance
-  With a rich farming heritage and burgeoning tech expertise, India has a unique opportunity to lead.
-  By integrating these technologies, we can empower farmers, enhance food security, and set a global example.



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What technology does Dexian use to provide data-driven crop field analytics?

Answer: Dexian utilizes **Geographic Information Systems (GIS)** with hyperspectral satellite imagery to analyze crop fields and provide actionable insights.



Growing More with Less

Farmers across India are embracing a new era where technology meets tradition. Imagine lush fields yielding more crops while using fewer resources—a reality made possible by innovative Agri-tech solutions transforming sustainable agriculture today.



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Precision Agriculture Enhances Efficiency

With drones, sensors, and data analytics, farmers monitor crop health and soil conditions in real time. Startups like **Fasal** and **Fylo** empower them to use water and fertilizers precisely where needed, boosting yields with minimal input.



Smart Irrigation Systems Conserve Water

Relying heavily on monsoons makes water management critical. Innovations from **Kheyti** and **Eeki Foods** reduce water usage by up to 80% compared to traditional methods by optimizing irrigation based on real-time soil and weather data.



Government Support Accelerates Adoption

Initiatives like the **Jal Jeevan Mission** promote technologies that reduce water wastage, especially in drought-prone areas, making sustainable practices more accessible.

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Sustainable Practices Boost Livelihoods

Adopting Agri-tech benefits the environment and enhances profitability and the quality of life for millions of farmers.



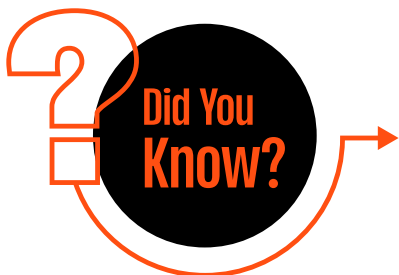
Tech and Policy Synergy Drives Change

The fusion of innovative technology with supportive government policies addresses challenges like resource scarcity, climate change, and food security.



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What solution does Dexian offer for real-time pest and disease detection in crops?

Answer: Dexian offers a **Pest and Disease Detection system powered by AI and machine learning.** It identifies issues in real time and provides immediate remediation advisories.



Dexian India's AgriTech Journey Now, 2025, and Beyond

Our mission is to empower farmers and agricultural stakeholders through innovative digital solutions that enhance efficiency, sustainability, and productivity.



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What have we done in Agri-tech Solutions?

Leveraging our expertise in technology and agriculture, we have made significant strides in transforming the Agri-tech sector.

Funded by the **Bill & Melinda Gates Foundation (BMGF)**, our mobile and web solutions are empowering officials within the Agriculture Department of an agrarian-dependent state in India.

BILL & MELINDA
GATES foundation

These solutions provide real-time insights, streamline operations, and integrate data from various sources, effectively eliminating silos and boosting efficiency.



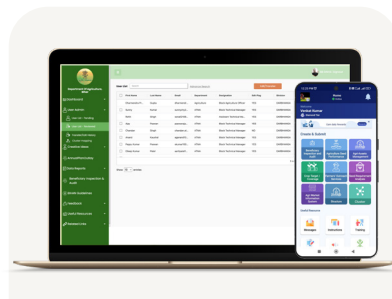
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By delivering user-friendly, data-driven applications, we are enhancing the capabilities of frontline professionals, enabling them to support farmers better and bridge the gap between government policies and grassroots practices.



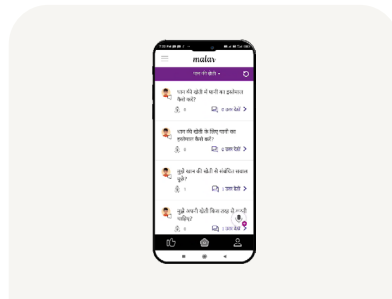
Our experience extends to collaborating with the Bihar government's agricultural initiatives, where we developed BIHAN, a comprehensive data and analytics platform. **BIHAN** enabled the state government to launch **10 impactful agricultural policies**, improving the lives of **18 million farmers**.



These policies facilitated better crop selection, improved access to subsidies and fertilizers, and promoted sustainable agricultural practices, notably increasing maize productivity.



We also created the **Agricultural Information Exchange Platform (AIEP)**, an innovative solution that provides hyper-local agricultural advisory directly to farmers in their native languages.



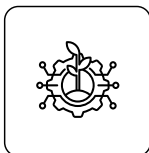
Utilizing advanced AI and machine learning technologies, including Retrieval-Augmented Generation and voice recognition with an open-source Large Language Model, AIEP empowers small-scale producers with vital agricultural insights, addressing educational gaps and facilitating informed decision-making.



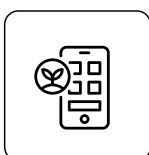


What can we do?

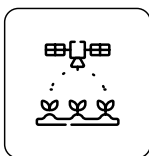
We offer comprehensive Agri-tech solutions across the entire agricultural value chain.



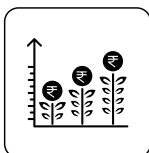
We are proficient in integrating next-generation technologies like AI and machine learning to enhance Agri-tech solutions' performance, scalability, efficiency, and security.



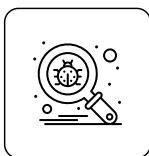
Our capabilities include developing applications that provide farmers access to loans, advisory services, and marketplaces for farm inputs through the **Agri Digital Service** app.



Our **GIS crop field analytics** platform utilizes hyperspectral satellite imagery to offer precise crop health insights and field analytics.



Our **Price Prediction Tool** leverages historical mandi data and weather insights to provide real-time crop price predictions, helping farmers make informed choices about crop selection and sowing dates.

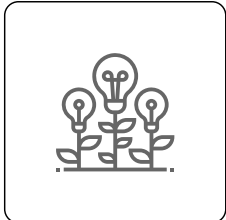


Additionally, our **AI/ML-powered Pest and Disease Detection system** enables farmers to identify pests and diseases through simple mobile or web applications. It offers immediate remediation advice and bridges the gap between traditional farming methods and modern technology.

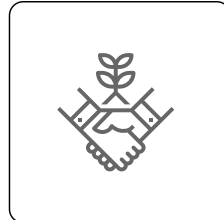




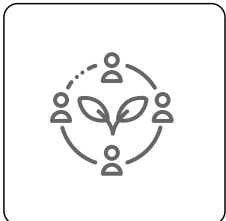
What's next in 2025 and ahead



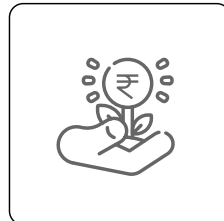
Trustworthiness is at the core of our future initiatives in 2025 and beyond.



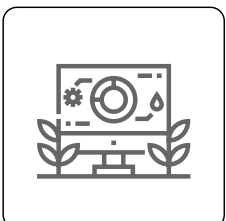
We are committed to advancing the frontiers of technological innovation in agriculture by forming strategic partnerships across multiple sectors.



By collaborating with industry leaders and stakeholders, we aim to integrate cutting-edge solutions that address key challenges in modern farming.



We plan to invest heavily in Agri-tech, assisting private companies and governments in implementing solutions that are centered on farmers' needs.



Our focus will be on expanding the use of advanced AI and data analytics to provide real-time, actionable insights, enhance farmer livelihoods, and foster sustainable economic growth.





“
"We are heavily investing in Agri-Tech and helping private companies, and the government roll out solutions for farmers."
”

Venkat Lakshminarasimha,

Dexian India,
Executive Director, Solutions and Sales, India & Middle East.



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