

SPROUT

Watering Your Roots





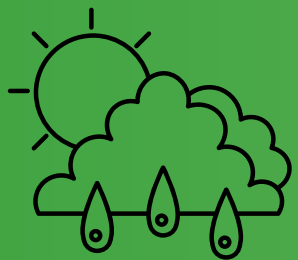
Navigating Today's Farming Frontiers

- Coping with diverse crop diseases.
- Navigating changing environmental conditions
- Embracing data-driven, sustainable farming methods.

SPROUT



- **Conquering Crop Diseases:** Precision tools to combat a range of plant diseases, promoting healthier crops and abundant harvests.



- **Adapting to Climate Dynamics:** Advanced tech for adapting to unpredictable weather, and protecting crops with informed, timely decisions.



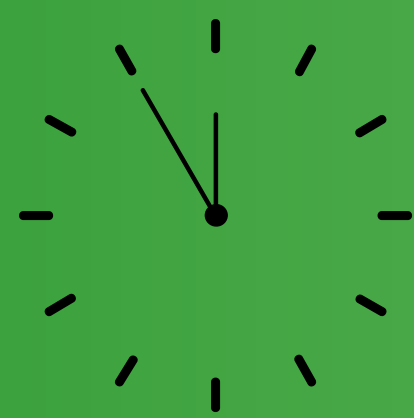
- **Revolutionizing with Data:** Harnessing data insights for smarter, eco-friendly farming, contributing to a sustainable agricultural future.



Who Benefits from SPROUT?

- Core Farmers
- Agritech Pioneers
- Agriculture Experts
- Farming Communities
- Research & Innovation
- Government Initiatives
- Next-Gen Farmers
- Eco Advocates





Timing

We believe that the timing is perfect to unveil our product

Agricultural AI Advancement

SPROUT arrives amid AI advancements, poised to revolutionize farming with smart technology.

Satellite and Sensor Data Surge

The surge in satellite and sensor data makes SPROUT essential for precise crop monitoring.

Agri-Tech Adoption

Rising adoption of smart farming creates a prime opportunity for SPROUT's farm-specific AI guidance to thrive.



BUSINESS MODEL

Flexible Subscription Tiers:

- **Freemium Model:** Basic access for free.
- **Premium Subscribers:** Unlock advanced AI features for a fee.

Data Insights Upsell:

- **Base Application:** Core AI tools at no cost.
- **Data Analytics Premium:** Deeper insights and predictions for a fee.



Equipment Integration Partnership:

- **Integrated Hardware:** SPROUT + Smart equipment bundled.
- **Seamless Farming:** A one-stop solution for modern agriculture.



OUR SUBSCRIPTION PLANS

\$0
Free

- ✓ Basic ndvi image and statistics
- ✓ Access to current soil Data
- ✓ 10 prompts per day

\$10 /month
Monthly

- ✓ Personalized crop health consultations
- ✓ Unlimited prompts
- ✓ Weather and climate trend reports

\$8 /month
Yearly

- ✓ Personalized crop health consultations
- ✓ Unlimited prompts
- ✓ Weather and climate trend reports
- ✓ \$96 paid for an entire year's subscription





FUTURE EXPANSION

Empowering Farmers Worldwide

SPROUT is geared towards expanding its reach globally, with the objective of empowering farmers on a global scale. Focusing on multilingual and multiregion features

Stay Cutting-Edge

SPROUT focuses on cutting-edge technology, investing in R&D and partnerships for advanced tools.

Facilitating Seamless Connections with IOT

SPROUT streamlines integration with open APIs, IOT devices and collaborations to create a connected agricultural network.

Sustainable Farming Champion

SPROUT champions sustainable farming through eco-insights and environmental impact-tracking partnerships.

MARKING SIZE

\$9 Billion

Total Available Market (TAM)

\$3 Billion

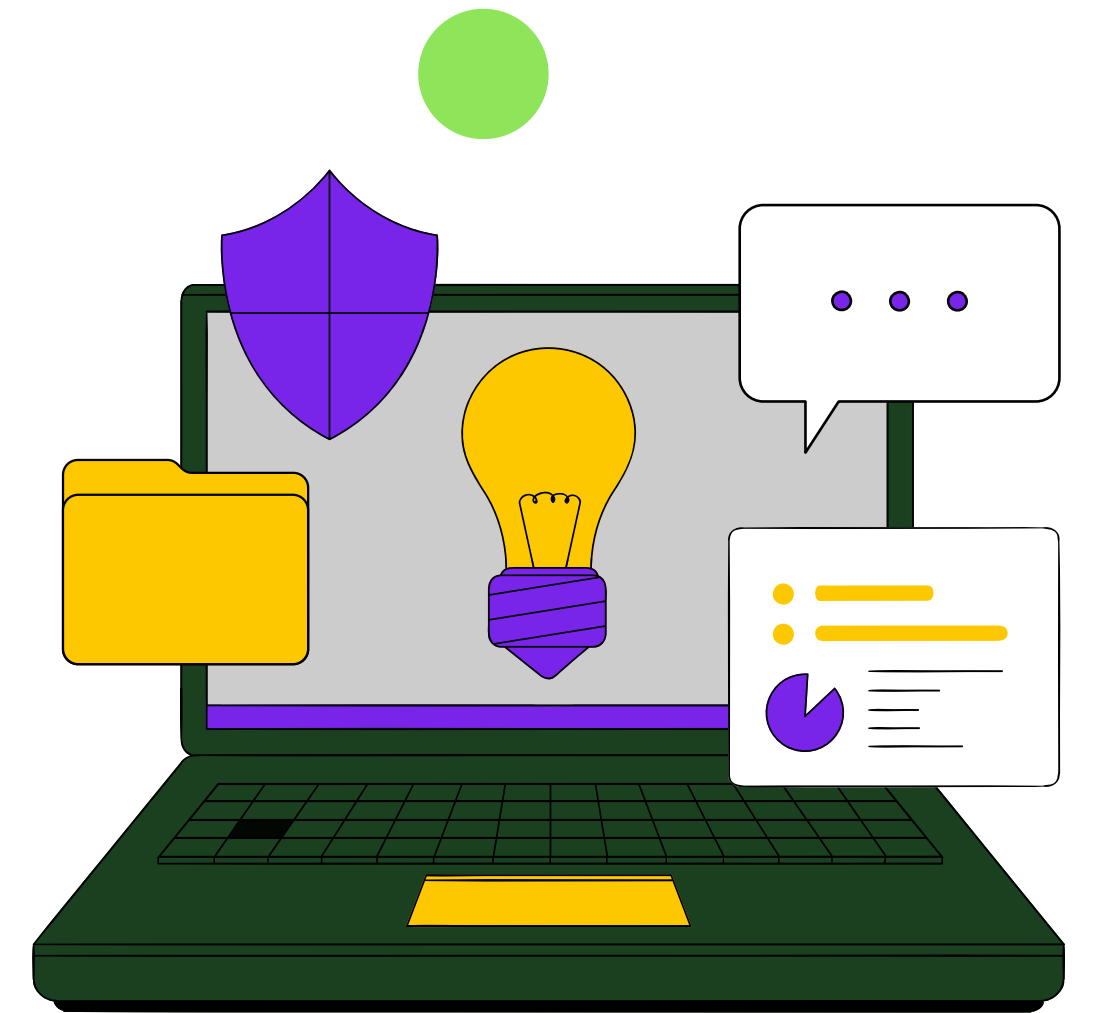
Serviceable Available Market (SAM)





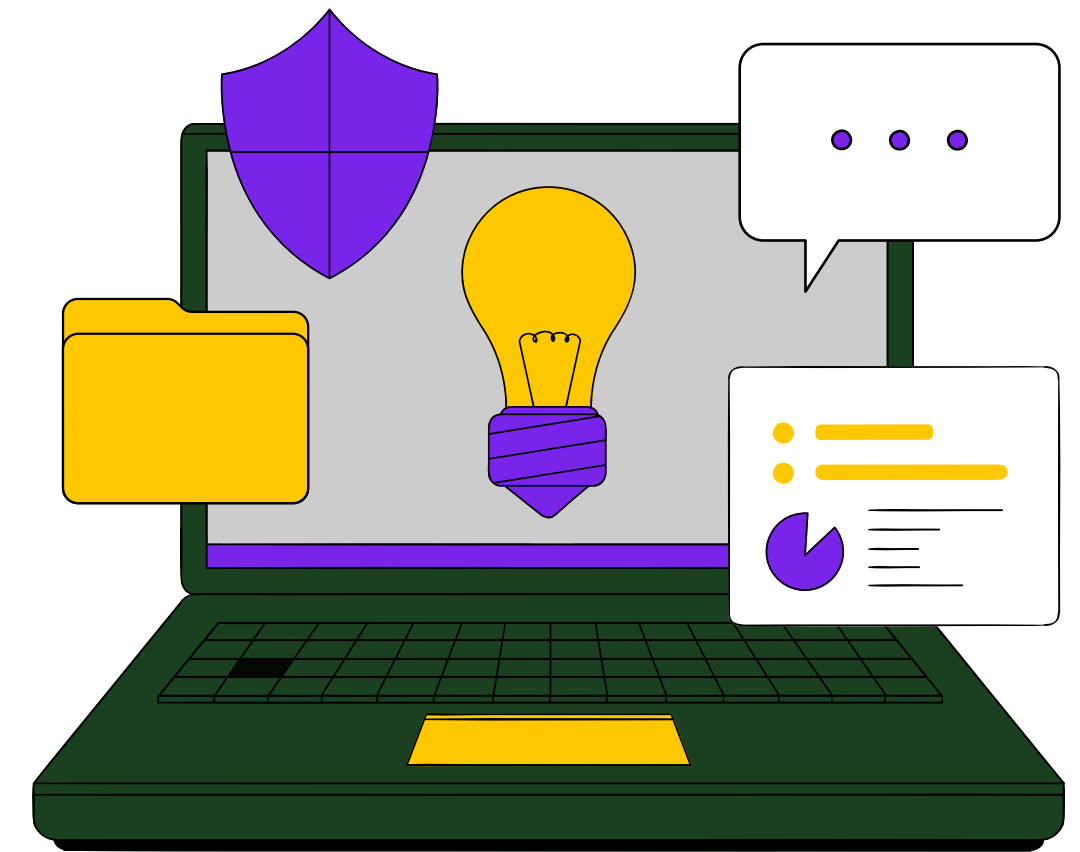
OUR TECH STACK

- **Resnet-50:** employs TensorFlow, Keras, and the ResNet-50 architecture to classify flower images, enabling users to identify various flower types accurately.
- **Vertex AI Vector Search:** Employs multimodal embeddings from Vertex AI for diagnosing plant diseases by comparing images.
- **LlamaIndex and LangChain:** Enhance response accuracy and relevance through advanced retrieval-augmented generation (RAG).
- **NDVI and API:** Analyzes NDVI imagery for vital insights into plant health and soil conditions.
- **RAG (Retrieval Augmented Generation):** Combines information retrieval with language generation for agriculture-focused response.
- **Chat-bison model (Vertex) for conversation**



OUR TECH STACK

- **LangChain Agent with ChatVertexAI:** Powers complex query handling with the chat-bison model.
- **Fuyu-8b:** Specialized in NDVI image analysis for agricultural insights.
- **CLIP and Hugging face embedding:** Enhances text query accuracy with advanced embeddings.
- **LlamaIndex for Advanced RAG:** Upgrades retrieval-augmented generation for precise responses.
- **TrueLlama for RAG Evaluation:** Optimizes RAG pipeline performance using Truera's tools.
- **TrueChain for LangChain Evaluation:** Improves LangChain agents using Truera's analysis tools.



Direct Competitor

- 1.Plantix
- 2.AgroPlexi
- 3.FarmLogs
- 4.CropIn
- 5.OneSoil
- 6.Agrivi

Indirect Competitor

- 1.Your paragraph IBM Watson Agriculture
- 2.The Climate Corporation (Climate FieldView)
- 3.John Deere Operations Center
- 4.Granular
- 5.Google Cloud AI and Machine Learning Products
- 6.Microsoft FarmBeats
- 7.text



COMPETITIVE APPROACH

Precision Agriculture:

Employing data analytics for targeted crop disease treatment.

Integrated Crop Monitoring:

Combining satellite imagery with AI for real-time field analysis.

AI-Powered Predictive Analytics:

Forecasting crop yields and diseases using advanced AI algorithms.

Adaptive Diagnosis Systems:

Offering AI-based identification of plant health issues with immediate intervention strategies.

Sustainable Farming

Insight: Utilizing machine learning to promote eco-friendly farming practices.



GET IN TOUCH



S. Moneebah

Coder

Karachi, Pakistan

moneebah.py@gmail.com



Maha Khan

Coder

Karachi, Pakistan

mmahakhan24@gmail.com



Ayesha Imran

Coder

Karachi, Pakistan

ayesha.ml2002@gmail.com



Nabiha Waseem

Coder

Karachi, Pakistan

nabihawaseem03@gmail.com