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MahaAgri-AI Policy

2025–2029

Policy framework and implementation roadmap for transforming agriculture through Artificial Intelligence & emerging technologies

Agriculture Department,
Government of Maharashtra

Contents

Executive Summary

The **MahaAgri-AI Policy 2025–2029** outlines an ambitious roadmap to revolutionize the state's agricultural landscape through the strategic integration of Artificial Intelligence (AI) and emerging technologies in Agriculture sector. The policy aims to foster sustainable growth enhancing productivity, resilience, and farmer incomes through technology-driven farmer centric interventions and overcome persistent challenges being faced such as lower productivity, climate variability, and water stress using AI and emerging technologies. This forward-thinking policy seeks to position Maharashtra as a national leader in AI-driven agriculture, produce replicable models, aligning with broad initiatives like Viksit Bharat@2047 and making a substantial contribution to the Sustainable Development Goals (SDGs) that will lead to the economic transformation of the farmers in the state.

Under the policy framework, a comprehensive Shared Digital Public Infrastructure (DPI) will be established to provide support to the various stakeholders such as startups, companies, research organizations etc. DPI will encompass Agriculture Data Exchange which will have both credible public datasets (farmer registries, crop statistics, weather condition, soil health, dynamic crop condition, disease and pest infestation, Market arrivals and prices etc.) and private datasets (including export market intelligence, smart credit systems, and private warehouses and cold storages data). A secure sandbox environment will be provided to the stakeholders for simulation of real-world conditions for controlled experimentation and validation of AI based agricultural solutions. AI enabled Remote Sensing and Geospatial Intelligence Engine will be deployed to support stakeholders across a wide range of applications, including, dynamic crop acreage estimation, yield forecasting, and vulnerability mapping in relation to climate-related risks etc. AI enabled Agri-food traceability and certification platforms will be provided to ensure food safety and quality verification through credible, government-backed, and internationally recognized certification system. The shared digital public infrastructure provided by Government will empower the stakeholders to develop farmer-centric AI based solutions backed by credible datasets.

The policy provides a multi-tiered institutional framework comprising - State-Level Steering Committee (SLSC) at apex level for approving AI based projects, a State-Level Technical Committee (SLTC) for technical and commercial feasibility evaluation of projects, and a dedicated full time AI and Agritech Innovation Centre managed by a team of multi-sectoral professionals will implement the policy in the State. The AI and Agritech Innovation Centre will identify problem statements in collaboration with the stakeholders, call for proposals, organize hackathons for uncovering novel ideas; it will provide incubation and handholding support to the approved projects, monitor the project execution, performance and impact assessment. It will organize Global AI in Agriculture Conference and Investor Summit which will also provide a global platform for startups and research institutions to unveil their products, stakeholder networking and opportunities for collaboration. The AI and Agritech Innovation Centre will be complimented by establishment of AI Research and Innovation Centers in four State Agriculture Universities (SAUs) for enabling a comprehensive statewide ecosystem anchored around AI and emerging technology-based farmer centric Research and Innovation. These centers will serve as hubs for the design, development, and deployment of solutions based on GenAI and other emerging technologies to address real-world agricultural challenges in collaboration with industries and National, International Research institutions.

The implementation strategy under this policy adopts a phased approach, initially digital public infrastructure will be created, and institutions are set-up to provide mentoring, handholding, infrastructural and financial support for the incubation of novel ideas, and to scale-up the proven solutions. Based on technical & commercial viability, effectiveness, and potential impact, policy offers a tailor-made support from pilot to scale-up on case-to-case basis. The policy advocates for promoting public-private partnerships and multi-stakeholder collaboration with national and international institutions for knowledge sharing, co-development of AI tools, and enhancement of research quality.

An initial allocation of ₹500 crore is proposed, and an additional funds will be made available as per the requirements. A special budget line is proposed for capacity-building initiatives to be taken for the farmers and extension functionary of the Agriculture Department for use of AI powered tools and solutions. The policy will undergo a mid-term assessment of the policy after three years, based on the learning; policy will be suitably revamped with additional funding arrangements as required.

By providing shared digital public infrastructure, handholding and financial support along with agile decision-making process, this policy promotes startups, industries, research institutions and innovators to develop farmer-centric AI and emerging technology based solutions. This policy will foster ecosystem conducive to deploy AI and emerging technology based solutions across the agriculture value chains in the State to enhance the economic prosperity of the farming community.

PART A

STRATEGIC POLICY FRAMEWORK

01 Preamble

Agriculture plays a vital role in Maharashtra's economy, contributing significantly to the Gross State Value Added (GSVA) and providing livelihoods to over half of the state's population. In recent years, the sector has been increasingly challenged by low productivity, climate variability, water stress, rising input costs, labour shortages, and market inefficiencies. These systemic issues underscore the need for technology-led interventions that can improve productivity, resilience, and farmer incomes in a sustainable manner.

Advancements in Artificial Intelligence (AI), including Generative AI (GenAI) and other emerging technologies such as Internet of Things (IoT), drones, edge computing, and data platforms, offer powerful tools to address these challenges in a targeted and scalable way. These technologies are being used globally to enable precision agriculture, personalized advisory services, real-time monitoring, supply chain optimization, and improved access to markets and finance. India is also taking significant steps to promote responsible AI adoption in agriculture through national missions such as IndiaAI, AgriStack, and Digital Public Infrastructure (DPI) initiatives.

In this context, the Government of Maharashtra has developed the Artificial Intelligence in Agriculture Policy, to be implemented as **MahaAgri-AI Policy 2025–2029** to serve as a comprehensive strategic framework for the deployment of AI, Generative AI, and emerging technologies across the agricultural value chain. The policy is aligned with the national goals of Viksit Bharat@2047 and the vision of transforming India into a $5 trillion economy by 2027, while also contributing to Sustainable Development Goals (SDGs) related to food security, climate action, and inclusive rural development.

The policy aims to position Maharashtra as a leading national hub for AI and GenAI-based innovation in agriculture by:

Promoting scalable, farmer-centric technology use cases for crop planning, farm management, risk mitigation, and post-harvest value addition;

Creating a robust ecosystem of AI research, data exchange, startup incubation, and digital skilling in partnership with State Agriculture Universities (SAUs), industry, and civil society;

Establishing governance, regulatory, and funding mechanisms to enable rapid prototyping, sandbox testing, and outcome-based scale-up;

Ensuring ethical, inclusive, and secure use of AI and emerging technologies, with a strong emphasis on data privacy, algorithmic fairness, and environmental sustainability.

This policy will guide Agriculture and allied government departments, academic institutions, startups, and private sector partners in implementing coordinated, evidence-based AI strategies in agriculture over the next five years. It also provides an institutional roadmap for building Maharashtra's leadership in digital agriculture innovations, setting a replicable model for other states and emerging economies.

1.1 Introduction and Context

Agriculture Profile of Maharashtra[1]

Agriculture is a foundational sector of Maharashtra's economy, making a significant contribution to the state's GDP and employing over half of its population. Maharashtra boasts an extensive cropped area of 246 Lakh Ha in the year 2023-24. As one of India's primary agricultural centers, Maharashtra is a leader in the production of several major crops, including Cotton (43 Lakh Ha), Soybean (51 Lakh Ha), Pulses (44 Lakh Ha), Paddy (15 Lakh Ha), Sugarcane (14 Lakh Ha), Maize (13 Lakh Ha), and various Horticultural crops (22 Lakh Ha). The state is renowned for its high-value horticultural commodities such as Grapes, Pomegranates, Mangoes, Banana, and Citrus. Additionally, Maharashtra stands out as a major exporter of Vegetables, Grapes, and Bananas, highlighting its pivotal role in the national agricultural sector.

A robust infrastructure support exists in the State that fosters a conducive ecosystem for research and development of advanced technologies and in its extension to farmers. This encompasses four State Agricultural Universities, two ICAR National Research Centres (Grapes and Pomegranate), three ICAR Institutes (CICR, CCRI, NIASM), two Directorates (Onion & Garlic and Floriculture) one National Bureau (NBSSLUP), one ATARI and 49 Krishi Vigyan Kendra's (KVKs), complemented by a vast network of more than 2,500 Automatic Weather Stations strategically distributed across the state. Additionally, NABL accredited laboratories enable thorough testing of soil, water and various agricultural inputs such as fertilizers, seeds, pesticides, and bio-inputs. The state is equipped with 306 Agricultural Produce Market Committees (APMCs) and 105 private markets.

Complementing to the physical infrastructure, over the years, Maharashtra has established a robust digital infrastructure in agriculture, positioning the state at the forefront of integrating Artificial Intelligence (AI) into the Agriculture sector. Key initiatives such as Agristack, MahaAgriTech, Mahavedh, Agricultural Marketing Information Network (AGMARKNET), Crop Pest Surveillance and Advisory Project (CROPSAP), Farmer Field Schools (FFS), and MahaDBT have been instrumental in collecting and managing credible datasets. These digital platforms have not only enhanced transparency and efficiency but also empowered farmers with real-time information and access to various schemes. With this solid digital foundation, Maharashtra is well-prepared to harness the potential of AI in agriculture.

Implementation of Projects such as Nanaji Deshmukh Krishi Sanjivani Prakalp (POCRA), State of Maharashtra Agribusiness and Rural Transformation (SMART) and Maharashtra Agribusiness Network (MAGNET), supported by multilateral funding agencies, the focus on resilient and climate-smart agricultural practices has been mainstreamed across Maharashtra's agricultural policy and program landscape. In parallel, targeted interventions have contributed to the progressive optimization of the agricultural value chain, improving efficiency across production, post-harvest handling, and market integration.

1. Source: Economic Survey of Maharashtra 2024-25 & Department of Agriculture, GoM

Furthermore, Maharashtra has most enterprising and progressive farmers who are ready to adopt innovation and technologies. Maharashtra also fosters a strong network of Farmer Producer Organizations (FPOs) and growers' associations, which enhance collaboration and support within the farming community, promoting better market access. Also, Maharashtra's agricultural extension services are supported by an extensive team of over 13,000 field technical staff.

This strong foundation facilitates the effective dissemination and adoption of innovative agricultural practices & technologies to farmers, significantly enhancing the state's agricultural success.

Despite of all these advantages, the agricultural sector in Maharashtra faces several challenges, including climate change, water scarcity, declining productivity, and lack of investment in new technologies.

To address these systemic issues and unlock the next wave of inclusive growth, the Government of Maharashtra recognizes the need for a strategic shift towards AI-powered agriculture. The transformative potential of Artificial Intelligence (AI), Generative AI (GenAI), and other emerging technologies—such as IoT, Computer vision, Robotics, Drones, and predictive analytics—presents a timely opportunity to modernize agriculture, enhance resilience, and improve farmer incomes. This policy framework builds upon prior state-level digital initiatives like Agristack, Mahavedh, MahaAgriTech, Crop Pest Surveillance and Advisory Project (CROPSAP), Agricultural Marketing Information Network (AGMARKNET), MahaDBT and Farmer Field Schools (FFS), etc. and seeks to create a comprehensive roadmap for the adoption, integration, and responsible scaling of AI solutions across the agricultural value chain.

Vision, Mission & Strategic Objectives

Vision

To position Maharashtra as a national leader and global model for AI-enabled, **farmer-centric**, and sustainable agriculture by harnessing Artificial Intelligence, Generative AI, and emerging technologies to drive productivity, climate resilience, market access, and inclusive rural prosperity.

Mission

To develop and operationalize **farmer centric**, robust and inclusive ecosystem for the application of Artificial Intelligence, Generative AI, and emerging technologies in agriculture across Maharashtra.

The mission seeks to integrate context-aware, scalable AI solutions throughout the agricultural value chain; strengthen digital public infrastructure and data readiness; foster innovation through partnerships with startups, research institutions, and private enterprises; and promote responsible, secure, and ethical use of AI. This policy aims to achieve measurable improvements in agricultural productivity, climate resilience, market efficiency, and farmer incomes, while ensuring that technological adoption remains inclusive and sustainable.

Strategic Objectives

The key objectives that the department of Agriculture seeks to achieve through this policy are:

01

Mainstream GenAI and Emerging technology across Agriculture value chain:

Deploy context-specific GenAI and emerging technology enabled tools for crop planning, disease and pest prediction, irrigation management, supply chain optimization, post-harvest handling, and market access.

02

Build Digital Public Infrastructure for Agriculture (DPI-A):

Operationalize the Agriculture Data Exchange (ADeX), expand weather and soil sensor networks, and integrate with platforms such as Agristack and MahaAgriTech to support AI readiness.

03

Deploy Remote Sensing-Based Engine as a Shared Digital Public Good for the state:

Deploy a unified, AI-enabled Remote Sensing Intelligence Engine to serve as a shared digital public good across multiple departments. This engine will process satellite imagery, drone feeds, and GIS datasets to generate high-resolution insights on land use, crop health, water availability, soil moisture, vegetation indices, and disaster risk.

04

Develop and deploy a statewide food traceability and quality certification platform as part of DPI:

Establish a digitally integrated platform that ensures end-to-end traceability of agricultural produce and enables verification of food quality through credible government backed and internationally recognised certifications. Leveraging AI, blockchain, QR codes, and IoT, the platform will enhance transparency, support compliance with national and international standards, and improve market access for farmers and producer collectives.

05

Promote Farmer Centric Design and Adoption:

Ensure farmers are co-creators in AI solution design by enabling participatory model development, multilingual advisory delivery, and community-based piloting mechanisms.

06

Enable Startup-Led Innovation and Agri-Tech Scale-Up:

Provide sandbox environments, structured funding windows, and market access support to early-stage innovators and proven solution providers through a phased implementation model.

07

Establish AI Research and Innovation Infrastructure:

Set up AI Research and Innovation Centres in State Agriculture Universities (SAUs) and district-level AI Labs to foster collaboration between academia, startups, and government.

08

Develop Capacity and Talent at Scale:

Build AI literacy among farmers, skilling pathways for students and agri-extension workers, and a cadre of AI professionals focused on rural transformation.

09

Ensure Ethical, Responsible, and Secure AI Deployment:

Adopt robust data governance, bias mitigation, and risk management frameworks to ensure safe, inclusive, and equitable use of AI in agriculture.

10

Strengthen Monitoring, Evaluation, and Impact Measurement:

Deploy KPI-linked dashboards, third-party assessments, and adaptive learning loops to track outcomes, scale successes, and course correct interventions.

Policy Pillars and Thematic Focus Areas

The Government of Maharashtra envisions a transformative shift in agriculture by placing Generative AI (GenAI), frontier technologies, and digital public infrastructure at the core of its agricultural policy for 2025–2029. The following eight priorities define the strategic direction for implementing this vision across the state's Agri-value chain.

01 **Establish a AI and Agritech Innovation Centre for Integrated Policy Execution and Innovation Delivery complimented with the statewide Research and GenAI and Emerging technologies Innovation Labs in SAUs and Rural Clusters**

02 **Establish the Agriculture Data Exchange (ADeX) and Sandboxing Environment as statewide shared Digital Public Infrastructure (DPI)**

03 **Deploy a Shared Remote Sensing and Geospatial Intelligence Engine**

04 **Operationalize Generative AI and Emerging Technologies for Farmer-Centric Advisory and Simulation through the Virtually Integrated System to Access Agricultural Resources (VISTAAR) Initiative**

05 **Build a Statewide AI-Enabled Agri-Food Traceability and Quality Certification Platform**

06 **Support to Innovative Digital Solution Providers for Farmer-Centric AI Innovation**

07 **Build Institutional Capacity, Community Collaboration, and Last-Mile Adoption**

08 **Launch the Global AI in Agriculture Conference and Investor Summit**

01 Establish a State-Level AI and Agritech Innovation Centre for Integrated Policy Execution and Innovation Delivery complimented with the statewide Research and GenAI Innovation Labs in SAUs and Rural Clusters

To ensure coordinated and efficient implementation of this policy, Department of Agriculture will set up a professionally managed State level AI and Agritech Innovation Centre under Principal Secretary (Agriculture) / Commissioner (Agriculture). This AI and Agritech Innovation Centre will serve as the central program management and innovation delivery unit, staffed with domain experts in AI, agriculture, policy, and finance. It will be responsible for supervision of approved projects, overseeing the implementation of the Agricultural Data Exchange (ADeX) and associated Digital Public Goods (DPGs) implemented through POCRA Project as the nodal agency, regulatory oversight, organizing global investor summits, stakeholder onboarding, and risk management. The AI and Agritech Innovation Centre will also act as the secretariat to the State Level Technical Committee (SLTC) and may evolve into an independent entity at a later stage, ensuring sustainability and cross-sectoral convergence.

The state level AI and Agritech Innovation Centre will be complimented by a comprehensive Statewide Research and Innovation Ecosystem anchored around AI Research and Innovation Centers/Labs in State Agriculture Universities (SAUs) and regional innovation clusters. These centres at SAUs will serve as hubs for the design, development, and deployment of GenAI and emerging technology solutions for agriculture, addressing both research challenges and real-world implementation gaps.

Each centre at SAU will be equipped with advanced computing resources, deep learning tools, and integration capabilities with the Agricultural Data Exchange (ADeX) and the Sandbox Environment. They will leverage existing infrastructure within SAUs for cost efficiency, while receiving targeted funding for research, incubation, and collaboration over a five-year horizon.

The centers will foster interdisciplinary collaboration, engaging scientists, students, and external experts from public research institutions, private sector companies, and civil society. A special focus will be placed on:

- Incubating early-stage startups and supporting them with access to datasets, cloud services, and domain mentorship
- Developing localized AI models to address crop-specific and agro-climatic challenges
- Creating reusable AI tools, APIs, and simulation modules for broader use across the ecosystem
- Facilitating farmer-centric innovation through participatory research and field validation through the research infrastructure, and the demo farms established by these institutions.
- The Department of Agriculture will provide access to laboratories and field infrastructure for validating innovative solutions.

All projects will be subject to approval under the policy's governance structure, with dedicated funding for hardware, software, and high-skill human resources not readily available within SAUs. In addition, these centres will actively pursue national and international collaborations with global agri-tech institutions and AI labs to exchange knowledge, co-develop tools, and elevate the quality of research. Industry partnerships will focus on converting research outputs into commercially viable products and decision-support systems.

By institutionalizing this ecosystem, Maharashtra will establish itself as a long-term innovation engine—bridging the gap between academia, startups, and farmers while generating scalable, AI-driven agricultural solutions tailored to India's unique farming systems.

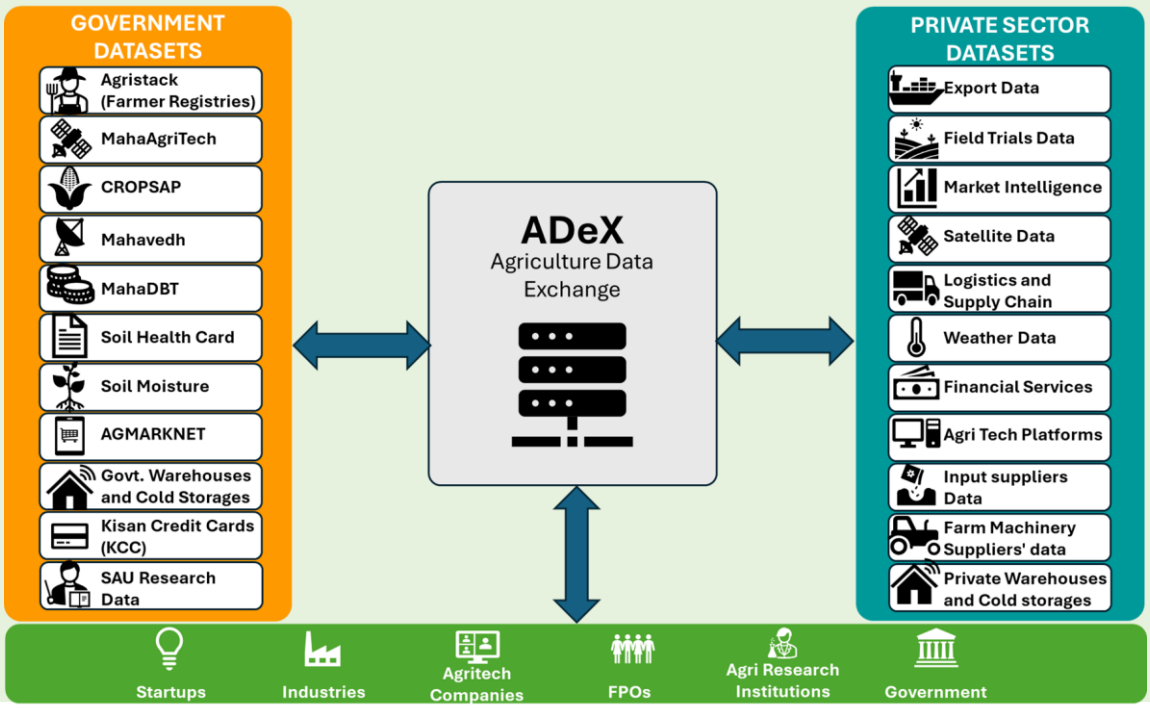
02 Establish the Agriculture Data Exchange (ADeX) and Sandboxing Environment as statewide shared Digital Public Infrastructure (DPI)

To enable data-driven agriculture and responsible AI deployment at scale, Maharashtra will operationalize a state-of-the-art Agricultural Data Exchange (ADeX)—a federated, consent-based platform that facilitates the secure and interoperable flow of agricultural datasets across stakeholders. ADeX will serve as the backbone for Maharashtra's digital public infrastructure in agriculture, offering discoverable metadata, standardized APIs, consent-driven access protocols, and robust governance aligned with state and national data governance policies.

The platform will not store all data itself but will function as a dynamic catalogue of resources, integrating datasets such as weather, soil health, crop phenology, input usage, pricing, and post-harvest flows. It will incorporate multiple interfaces including Consent, Discovery, Authorization, and Identity management, supporting structured interactions between Agriculture Information Providers (AIPs), Agriculture Information Users (AIUs), and Data Service Providers (DSPs). ADeX will be built on open-source, modular architecture with features that promote developer accessibility, traceability, and farmer data ownership. Use-case design and model development will be supported through dedicated analytical tools and benchmarking frameworks, helping innovators validate performance against real-world scenarios.

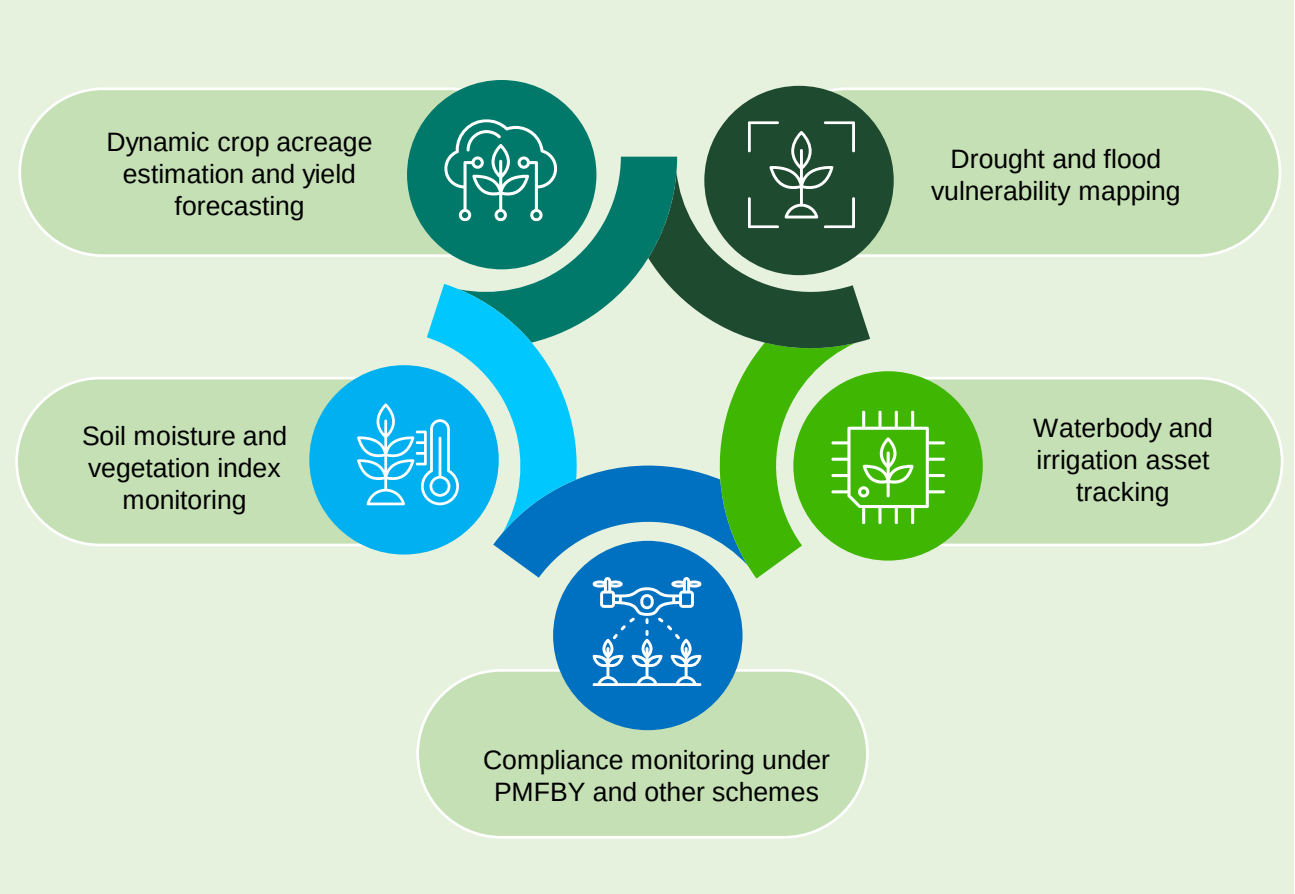
To complement ADeX, the state will establish a Sandboxing Environment that offers startups and solution providers a secure, virtualized test bed. This will allow simulation of real-world conditions for controlled experimentation with GenAI and emerging technologies models, decision support tools, and precision agriculture solutions before deployment. Sandbox users will be able to access anonymized or synthetic datasets, leverage test APIs, and iterate their solutions using a plug-and-play architecture that simulates network, climate, and field conditions.

Together, ADeX and the Sandbox Environment will create an enabling foundation for Maharashtra's leadership in building ethical, scalable, and locally adaptable AI, GenAI and emerging technologies applications in agriculture.



03 Deploy a Shared Remote Sensing and Geospatial Intelligence Engine

Maharashtra will develop and operationalize a unified, AI-enabled Remote Sensing and Geospatial Intelligence Engine as a shared digital public good. The platform will ingest and analyze multi-source spatial data including satellite imagery, drone-based surveys, UAVs, and IoT-integrated field devices to generate real-time, high-resolution insights. Departments such as Agriculture, Water Resources, Soil Conservation, Revenue, and Disaster Management will utilize this platform to enable precision targeting of schemes and interventions. This engine will support a broad range of applications including:



AI/ML algorithms will enable change detection, anomaly spotting, and predictive analytics. The system will be modular, API-enabled, and aligned with national and state platforms such as Mahavedh, FASAL, and Bhuvan. Output dashboards will be made accessible to field-level officers, while field verification will be supported via a dedicated mobile app. This infrastructure will drive convergence across departments, ensure better targeting of public investments, and support real-time decision-making at scale.

04 Operationalize Generative AI and Emerging Technologies for Farmer-Centric Advisory and Simulation through the Virtually Integrated System to Access Agricultural Resources (VISTAAR) Initiative

To transform agricultural extension services and empower farmers with timely, personalized, and actionable information, Maharashtra will implement the VISTAAR initiative. This initiative aims to leverage Generative AI (GenAI) and emerging technologies to provide real-time, hyperlocal, and multilingual advisory services tailored to the diverse needs of farmers across the state. Building upon the national framework of VISTAAR, Maharashtra's implementation will focus on:

AI-Powered Multimodal Advisory Services in local language: Deploying chatbots, voice assistants, and vernacular content generators to deliver personalized advice on crop production, disease and pest management, weather forecasts, market trends, and government schemes.

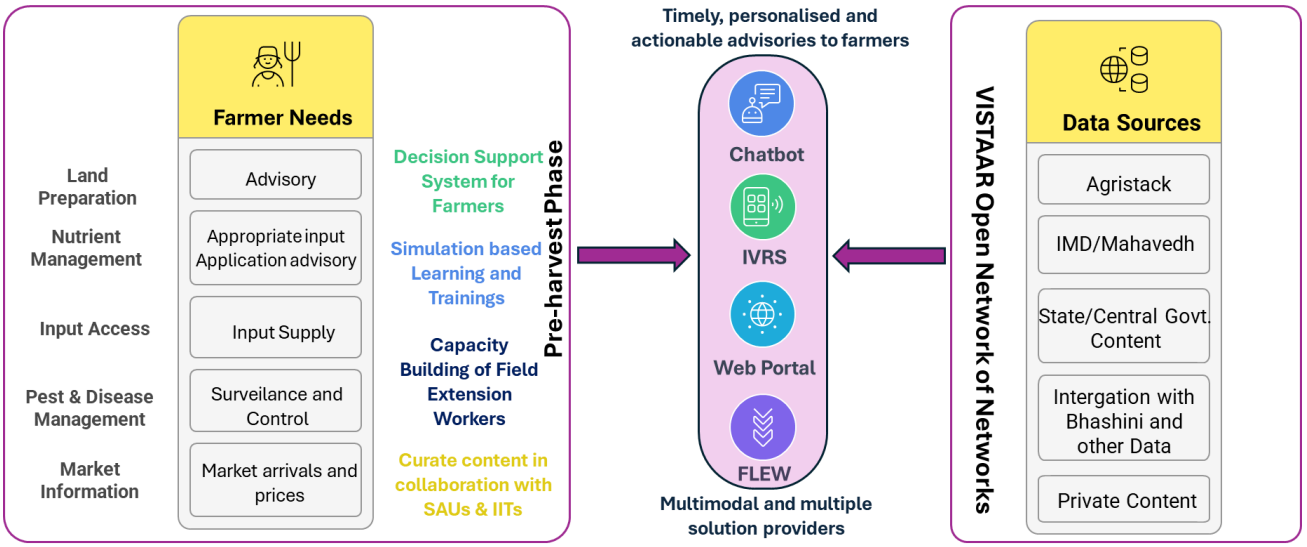
Simulation-Based Learning Tools: Developing interactive modules that enable farmers to simulate various farming scenarios, aiding in decision-making for crop planning, risk mitigation, and input optimization.

Integration with Digital Public Infrastructure:

Aligning with national platforms like Agristack and Bhashini to ensure seamless data exchange, language translation, and content dissemination.

Capacity Building and Training: Conducting training programs for Frontline Extension Workers (FLEWs) to effectively utilize AI tools and disseminate knowledge to farmers.

Collaborative Content Development: Partnering with institutions like IIT Mumbai, IIITs, State Agricultural Universities and other stakeholders to curate and validate content, ensuring relevance and accuracy.



By operationalizing the VISTAAR initiative, Maharashtra aims to bridge the information gap in agriculture, enhance the reach and effectiveness of extension services, and foster a more resilient and informed farming community.

05

Build a Statewide AI-Enabled Agri-Food Traceability and Quality Certification Platform

To ensure food safety, supply chain transparency, food quality assurance, and improved global market access, Maharashtra will establish a Statewide Traceability and quality certification Platform leveraging AI, Blockchain, and QR-code technology. The system will track produce from farm to fork, documenting input use, cultivation practices, harvest data, post-harvest handling, and quality certification records through a digital and geotagged record-keeping system.

Initially launched for export-oriented and high-value crops—such as grapes, pomegranates, bananas, and specialty rice—the platform will be extended to more crops and geographies in a phased manner. Integration will be enabled with FPOs, exporters, packhouses, certification agencies, logistics providers, and digital commerce platforms. Core features will include:

- **Digitized farm and batch-level traceability using mobile and IoT tools**
- **AI-driven anomaly detection and verification of claims (e.g., organic, residue-free, certified grade)**

- **QR-code generation for packaging and market linkage**
- **Compliance with global standards (e.g., APEDA, Codex, EU Farm-to-Fork), including recognition of valid certification systems for food safety and quality)**

By enabling real-time traceability and validation, the platform will strengthen Maharashtra's positioning as a trusted source of agri-exports, improve price realization for farmers, and reduce rejection rates in domestic and international markets.

06

Support to Innovative Digital Solution Providers for Farmer-Centric AI Innovation

Department of Agriculture, Government of Maharashtra will provide differentiated support to both startups and established companies working on AI and emerging technology-based solutions across the agricultural value chain. This support will be tailored based on the maturity of solutions and their potential to address critical challenges such as yield variability, post-harvest losses, adverse weather management, and market inefficiencies.

Startups will be onboarded through an innovation pathway model and supported via grants, incubation, and technical mentorship. Dedicated facilities such as cloud-based testing environments, access to curated datasets, and sandbox deployment zones will accelerate iterative development and validation of early-stage solutions. Capacity-building initiatives and farmer outreach through targeted IEC activities will be undertaken to ensure that innovations are user-informed and field-tested.

For established companies with validated solutions, the policy will extend co-financing, fast-track integration into government schemes, and outcome-linked scaling opportunities. These companies will also be eligible for access to the Agricultural Data Exchange (ADeX), participate in AI model benchmarking exercises, and contribute to the expansion of solution repositories for public-sector adoption.

This comprehensive support architecture will ensure that Maharashtra not only fosters a pipeline of innovative AI applications but also incentivizes farmer-centricity, interoperability, and measurable field outcomes from both emerging and mature solution providers.

07 Build Institutional Capacity, Community Collaboration, and Last-Mile Adoption

To enable meaningful and inclusive adoption of AI in agriculture, the Department of Agriculture, Government of Maharashtra will implement a comprehensive capacity-building and community engagement framework targeting all critical stakeholders in the agricultural innovation ecosystem. The policy recognizes that sustainable technology adoption depends on localized awareness, accessible knowledge systems, and farmer participation at every stage of the AI lifecycle.

- **Strengthening Institutional Capacities:** The State will invest in enhancing AI capabilities across State Agriculture Universities (SAUs), technical institutions, and research partners. Faculty, researchers, and students will be trained in AI/ML, data science, and domain-specific agri-technologies through modular training programs, global fellowships, and inter-institutional collaborations. These centres will act as knowledge hubs for agri-AI and contribute to a skilled human capital base for the long term.
- **Upskilling the Agriculture Department Workforce:** The AI and Agritech Innovation Centre will develop and deploy AI-focused training toolkits for officials across the Department of Agriculture. This includes foundational AI literacy, use-case-specific modules, and leadership tracks for mid and senior level officers. Training will be embedded into service delivery roles, supported by digital toolkits and continuous learning platforms. Additionally, the AI and Agritech Innovation Centre will also identify AI and Data Science training programs in various national/international institutions for which state government officers can be nominated and supported.
- **Farmer and FPO Enablement:** Continued training programs will be conducted for farmers, FPOs, and collectives, emphasizing hands-on usage of AI tools for crop planning, disease detection, input optimization, and market access. Delivery will be done through district-level AI Champions, field demonstrations, multilingual digital content, and ongoing farmer helpdesks to ensure sustained adoption. Personalized support and post-training follow-up will also be institutionalized to reinforce learning.
- **Collaboration with Academia and Industry:** The State will actively partner with technology providers, academic institutions, and extension networks to co-design training content, validate pedagogy, and update skill frameworks based on evolving needs. Special emphasis will be given to leveraging private sector innovations and integrating GenAI tools in training workflows.
- **Community Engagement and Participatory Innovation:** The policy will institutionalize stakeholder engagement forums involving farmers, researchers, agritech firms, and civil society to gather feedback, co-design use cases, and address barriers to adoption. Farmers will also be represented in advisory processes to ensure AI applications align with real-world field conditions and cultural contexts.

Through this multi-level, collaborative capacity-building ecosystem, Maharashtra aims to ensure that AI becomes an enabler of empowerment and inclusion—reaching the last mile and building a digitally confident rural economy.

08 Launch the Global AI in Agriculture Conference and Investor Summit

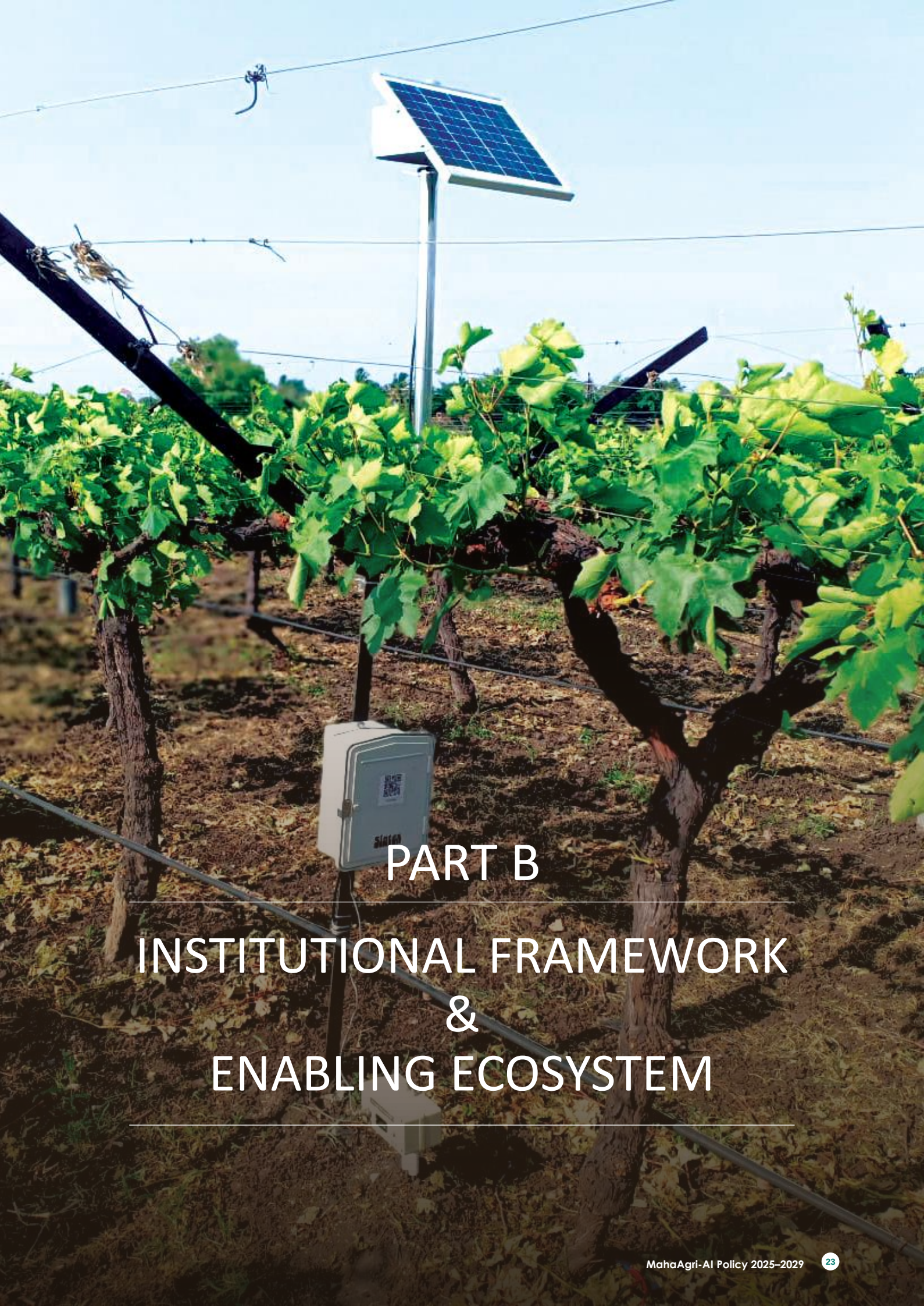
To elevate Maharashtra as a global nucleus for AI-driven agricultural innovation, the Department of Agriculture, Government of Maharashtra will institutionalize an Annual Global AI in Agriculture Conference and Investor Summit. This high-impact platform will catalyze partnerships, promote knowledge exchange, and mobilize both domestic and international capital into the state's agri-tech ecosystem.

The conference will be hosted under the leadership of the Department of Agriculture and anchored by the AI and Agritech Innovation Centre. It will convene a diverse cross-section of stakeholders, including global thought leaders, frontier technology firms, venture capitalists, multilateral agencies, state delegations, policy think tanks, and farmer producer organizations (FPOs). Participants will engage in strategic dialogues, policy roundtables, pitch sessions, product showcases, and field demonstrations. Key objectives of the initiative include:

Through this multi-level, collaborative capacity-building ecosystem, Maharashtra aims to ensure that AI becomes an enabler of empowerment and inclusion reaching the last mile and building a digitally confident rural economy.

The event will be hosted in rotating locations across the state to highlight regional innovations and agro-climatic strengths and will include immersive farm-tech tours and site visits to Research & Innovation Centres, Sandboxes, and pilot zones.

This initiative will not only amplify Maharashtra's visibility as a preferred destination for agri-AI innovation but also drive structured capital and partnerships that support long-term policy implementation, inclusive technology adoption, and export-oriented growth.



PART B

INSTITUTIONAL FRAMEWORK & ENABLING ECOSYSTEM

To ensure the effective realization of the policy priorities outlined in Part A, Maharashtra will establish a dedicated institutional and governance framework supported by a robust enabling ecosystem. This framework will facilitate coordination across departments, standardize data governance and infrastructure, accelerate innovation, and ensure last-mile delivery of GenAI and emerging technologies driven agricultural solutions. Anchored by a state-level AI and Agritech Innovation Centre and guided by a multi-tiered governance structure, this ecosystem will integrate public institutions, private innovators, farmers, and global partners into a shared architecture for responsible, scalable, and inclusive AI deployment in agriculture. It also delineates the supporting systems—digital infrastructure, regulatory enablers, capacity-building mechanisms, and collaborative platforms—that will drive sustained innovation and adoption across the agricultural value chain. The detailed Institutional framework is as provided below:

01 Governance and Oversight Mechanism

Maharashtra will adopt a three-tiered institutional framework to ensure strategic oversight, technical review, and seamless execution of its AI in Agriculture Policy. The structure will include:

- A State-Level Steering Committee (SLSC) for policy alignment, implementation guidance, convergence and overall monitoring.
- A multi-disciplinary State-Level Technical Committee (SLTC) for technical and commercial feasibility evaluation of AI projects and to give recommendations to SLSC
- An operational AI and Agritech Innovation Centre under the Principal Secretary (Agriculture) or Commissioner (Agriculture) for identification of projects, incubation, execution, coordination and monitoring and evaluation of sanctioned projects.

State Level Steering Committee (SLSC)

The State-Level Steering Committee (SLSC) will function as the apex decision-making and oversight body for the MahaAgri-AI Policy in Maharashtra. Its core mandate will be to ensure strategic alignment of AI-driven agricultural projects with the state's broader policy objectives and developmental priorities. The SLSC will facilitate high-level approvals, interdepartmental convergence, and resolution of implementation bottlenecks, thereby serving as the principal mechanism for institutional coordination and impact assurance. The composition of the SLSC will be as under:

S. N.	Members of the Committee	Particulars
1	Chief Secretary	Chairperson
2	Principal Secretary (Agriculture)	Member
3	Additional Chief Secretary (Finance)	Member
4	Additional Chief Secretary (Planning)	Member
5	Principal Secretary (Marketing)	Member
6	Principal Secretary (IT)	Member
7	Project Director, Nanaji Deshmukh Krushi Sanjeevani Project	Member
8	Commissioner (Agriculture)	Member Secretary
9	Representative from ICAR/IITs/State Agriculture Universities (SAUs)	Invitee Member
10	Representative from multilateral institutions, private sector, and civil society	Invitee Member

Roles and Responsibilities

1. **Approval of guidelines and Frameworks:** The committee will approve the operational guidelines and various frameworks to be prepared by AI and Agritech Innovation Centre to ensure its smooth functioning and structured framework for effective implementation.
2. **Staffing pattern:** The committee will grant authorization for the recruitment of staff on deputation from SAUs, Agriculture Department and on contractual basis for AI and Agritech Innovation Centre.
3. **Project Sanctioning:** The SLSC will be vested with powers to approve the AI based projects / initiatives in Agriculture. SLSC will take into account the recommendations of SLTC while approving AI-based initiatives across all phases—incubation, piloting, deployment, and scale-up, and ensures projects are aligned with policy priorities and thematic objectives.
4. **Funds Sanctioning:** The SLSC will sanction financial allocations for various components, including infrastructure, farmer support mechanisms, and innovation grants, approve funding frameworks, and disbursement modalities.
5. **Policy Direction and Improvements:** As artificial intelligence is a rapidly evolving field, introducing newer technologies, it becomes critical for the policy to adapt in response. Hence, the SLSC will modify and approve the Policy as and when required to address these emerging technologies. SLSC will also approve revisions in operational guidelines and various frameworks periodically, as per the need.
6. **Performance Monitoring:** SLSC will oversee biannual reviews of project outcomes and milestone progress, facilitate third-party impact assessments and advise on course corrections.
7. **Strategic Guidance:** SLSC will provide policy-level input to guide the appraisal and prioritization of projects.
8. **Institutional Convergence:** Promotes cross-departmental collaboration and alignment, facilitates engagement with national and global partners for R&D, financing, and capacity building.

State Level Technical Committee (SLTC)

The State-Level Technical Committee (SLTC) will serve as the core expert evaluation and technical advisory body under the MahaAgri-AI Policy. Multisectoral experts will facilitate evaluation of the project proposal from technical, financial and commercial perspective. Its primary function will be to ensure that all project proposals, innovations, and institutional initiatives brought before the State Level Steering Committee (SLSC) are rigorously assessed for feasibility including technical, financial & commercial scalability, alignment with policy objectives, and potential for measurable impact. The SLTC will provide recommendations to SLSC for approving the projects / innovations. It will act as the policy's quality filter, balancing innovation with risk, ensuring compliance with technical, legal, and ethical standards, and promoting cross-sectoral knowledge integration. SLTC meetings will be convened on regular basis for scrutiny of project proposals, the composition of the SLTC will be as under:

S. N.	Members of the Committee	Particulars
1	Principal Secretary (Agriculture)	Chairperson
2	Commissioner (Agriculture)	Member
3	Project Director, Nanaji Deshmukh Krushi Sanjeevani Project	Member
4	CEO, Maharashtra State Innovation Society	Member
5	Director (IT)	Member
6	MD/CEO AI and Agritech Innovation Centre	Member Secretary
7	Representatives from ICAR, SAUs, IITs (as needed)	Member
8	One representative from investors	Member
9	One representative from Industry Associations	Member
10	Representative from (Financial / legal advisors / IP and data governance specialists / AI/ML domain experts from academia & industry etc.)	Invitee Member
11	Representative from Farmer producer organizations (FPOs), startups, and private sector	Invitee Member
12	Representative from multilateral institutions, think tank, donor agency, private sector, and civil society	Invitee Member

Roles and Responsibilities

1. **Technical Appraisal of Projects:** Review concept notes, project proposals, primary assessment and evaluation reports submitted by the AI and Agritech Innovation Centre, evaluate the feasibility, scalability, and technology-readiness levels (TRL) of proposed AI solutions, and recommend phase-based support based on predefined innovation and maturity criteria.
2. **Innovation Validation and Use Case Prioritization:** Identify high-impact AI use cases and approve thematic innovation challenges, validate sandbox performance reports and outcomes before projects advance to scale.
3. **Financial and Operational Review:** Recommendation on costing, financial modelling, co-funding arrangements, and sustainability of proposed initiatives, assess compliance with funding guidelines and expected returns (economic, environmental, and social). SLTC will recommend financial support to be provided across all phases—incubation, piloting, deployment, and scale-up. The SLTC will also provide specific recommendations with respect to extend any other handholding support from the government based on requirement of each project.
4. **Ethical, Regulatory, and Risk Assessment:** Ensure adherence to data privacy regulations (e.g., DPDP Act), ethical AI principles, and IP norms, Conduct bias audits, model explainability checks, and red-flag high-risk deployments.
5. **Technical Assistance to SLSC:** Submit detailed recommendations on technical and financial aspects of each project / initiatives, evaluation reports, and risk flags to the SLSC for final sanctioning, suggest policy-level amendments based on recurring technical observations and global learnings.
6. **Capacity Strengthening and Knowledge Integration:** Recommend skill-building priorities for SAUs, AI and Agritech Innovation Centre, field machinery of Agriculture Department and farmers / FPOs based on project insights, Facilitate partnerships between state institutions and national/global R&D bodies.

State AI and Agritech Innovation Centre

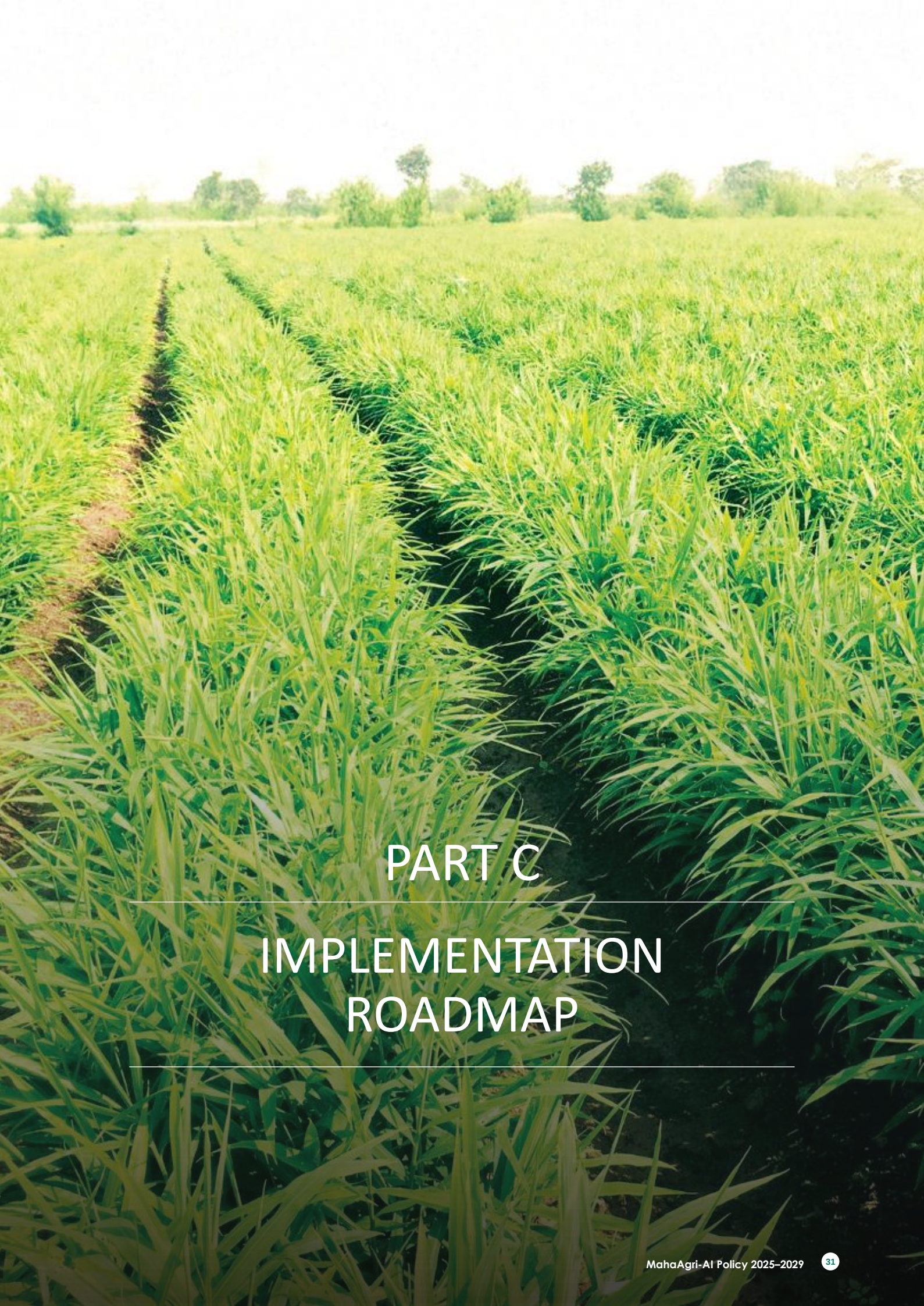
The State level AI and Agritech Innovation Centre will serve as the full time dedicated Program Management and Innovation Delivery Unit for the implementation of the Maharashtra's MahaAgri-AI Policy. It will be positioned under the administrative control of the Principal Secretary (Agriculture) or Commissioner (Agriculture). It will be the operational backbone of the policy and be responsible for day-to-day execution, interdepartmental coordination, stakeholder engagement, innovation facilitation, and performance monitoring. Its core mandate will be to translate the policy priorities into actionable programs, projects, and partnerships while maintaining end-to-end visibility into all initiatives under the policy. The AI and Agritech Innovation Centre will also function as the full time secretariat to the State-Level Technical Committee (SLTC), facilitating project design, documentation, evaluation, and policy feedback. A full time Managing Director (MD) and Chief Executive Officer (CEO) will be appointed through a transparent selection process and will serve under the administrative control of Principal Secretary (Agriculture) or Commissioner (Agriculture). MD will administer, supervise and manage day to day office functioning of the AI and Agritech Innovation Centre and will be vested with sufficient administrative and financial powers to facilitate smooth functioning of the AI and Agritech Innovation Centre and to deliver the roles and responsibilities assigned under this policy. The AI and Agritech Innovation Centre may include deputed staff from government departments, State Agricultural Universities, consultants from partner institutions, contractual staff, or fellows hired through technical assistance programs. Principal Secretary (Agriculture) will submit a detailed proposal of staffing pattern for approval of the SLSC. The proposed team shall have domain experts and functional specialists to deliver the roles assigned to the AI and Agritech Innovation Centre. An indicative organizational structure of the AI and Agritech Innovation Centre is as under:

S. N.	Core Team
1	**Managing Director**
2	Chief Executive Officer
3	Chief Technical Officer
4	Field Operations Coordinators /Nodal Officer from Agriculture Department
5	AI/ML Specialist
6	Data Architect & API Integration Lead
7	Agriculture Domain Experts (Agronomist / Climate Scientist / Agricultural Engineer / Soil Scientists)
8	Design Thinking and UI/UX Specialist
9	Finance Specialist
10	Legal Advisor (with expertise in data, IP, and procurement)
11	M&E and Outcome Measurement Expert
12	Communication & IEC Lead
13	Partnership and Ecosystem Manager

Roles and Responsibilities

1. **Identification of Projects:** Identify problem statements in collaboration with SAUs KVKs, NRCs, Industry partners, FPOs, farmers and other stakeholders for various crops cultivated in Maharashtra, host regular hackathons to uncover fresh ideas and invite targeted proposals. The AI and Agritech Innovation Centre will establish a dedicated online portal for submission, review and management of proposals aimed at addressing agricultural challenges through AI solutions and emerging technologies.
2. **Secretariat Functions:** Undertake primary assessment of the project proposals received, evaluate each project on technical merit, feasibility, and support required from the Government for projects. Submit evaluation report and observations to SLTC in order to assist them in project selection. Convene meetings of the SLTC, prepare documentation, and maintain records of decisions and recommendations, ensure follow-through on actions approved by the governance committees.
3. **Program Management and Coordination:** Oversee the implementation of approved projects and pilots, ensuring that the timelines, budgets, and KPIs are met, Coordinate with line departments, startups, research institutions, and field officers to ensure cohesive delivery, facilitate handholding support from the field functionaries in project execution at field level.
4. **Technical and Project Support:** Draft project concept notes and provide handholding support to applicants (startups, departments, research bodies) during proposal development, Assess project feasibility, resource requirements, and alignment with policy objectives before submission to SLTC.
5. **Sandbox and Infrastructure Management:** Manage operations of the Agricultural Data Exchange (ADeX), the AI Sandbox, the Traceability Platform, Onboard and support startups, research teams, and private innovators in testing and validating solutions.
6. **Capacity Building and Farmer Engagement:** Design and implement training programs for extension workers, farmer groups, and ecosystem stakeholders, Conduct field demonstrations, multilingual digital campaigns, and awareness drives to support technology adoption.
7. **Monitoring, Evaluation, and Learning:** Develop and operate dashboards for real-time project tracking and performance reporting, Implement outcome-based M&E frameworks and support third-party assessments.
8. **Outreach, Partnerships, and Resource Mobilization:** Forge strategic partnerships with national programs (e.g., IndiaAI, Bhashini), international donors, CSR partners, and coordinate investor engagement for scaling up innovation. Create synergies with the digital initiatives and innovations led by Nanaji Deshmukh Krishi Sanjeevani Prakalp, Commissioner (Agriculture), and SMART project and exchange the knowledge, products, and services with them.
9. **GLOBAL AI in Agriculture Conference and Investor Summit:** The AI and Agritech Innovation Centre will organize an annual global AI in Agriculture conference and investor summit, creating a premier platform for innovation and collaboration. Additionally, it will host a dynamic hackathon to discover and nurture groundbreaking ideas, guiding them from incubation to successful scale-up.

As the policy ecosystem matures, the AI and Agritech Innovation Centre may evolve into an autonomous Special Purpose Vehicle (SPV) or Mission Implementation Unit (MIU), subject to approval by the SLSC. This transition will provide operational flexibility in talent acquisition, procurement, and financial management to support long-term sustainability and scalability.



PART C

IMPLEMENTATION ROADMAP

Building on the strategic priorities defined in Part A and the governance mechanisms detailed in Part B, this roadmap translates vision into action through a phased, mission-mode approach. It identifies the key milestones, institutional responsibilities, funding architecture, and capacity-building pathways that will enable the state to deploy scalable, farmer-centric, and ethically governed AI solutions across the agricultural value chain.

The roadmap is designed to ensure agility, accountability, and impact. It establishes a predictable program cycle—from pilot to scale-up—while leveraging digital public infrastructure, innovation ecosystems, and public-private partnerships. The implementation strategy integrates robust monitoring, real-time learning, and outcome-linked governance to ensure that technology adoption remains inclusive, responsible, and aligned with Maharashtra's long-term agri-development goals.

01 Phased Implementation Plan (2025 – 2029)

This section provides a time-bound execution strategy for rolling out MahaAgri-AI Policy. It adopts a phased implementation model to ensure that policy ambitions are delivered through practical, measurable, and risk-managed actions. Drawing on global best practices in mission-mode project management, the roadmap incorporates elements such as pilot-based validation, institutional capacity ramp-up, milestone-based funding, and adaptive feedback loops. The phased design ensures simultaneous strengthening of the institutional framework of AI and Agritech Innovation Centre, SLSC, SLTC) and systematic rollout of strategic priority areas including GenAI adoption, DPI-A deployment, remote sensing, traceability, and startup engagement.

The phases are designed to be cumulative and iterative, enabling each stage to build on lessons and capacities developed in the previous one. Each phase is accompanied by corresponding investments in data infrastructure, human capital, regulatory readiness, and ecosystem partnerships. This staggered approach supports agility while ensuring long-term sustainability.

Phase I: Foundation and Institutional Setup (T+ 3 months)

Institutional Activities

- Constitution of the State-Level Steering Committee (SLSC) and Technical Committee (SLTC)
- Recruitment of core expert teams for program management, data governance, legal and M&E
- Operationalization of the AI and Agritech Innovation Centre
- Development of operational guidelines, templates, and grant frameworks

Priority Actions

- Baseline diagnostics of AI data availability across departments and agro-climatic zones
- Establishment of the Agricultural Data Exchange (ADeX) architecture and metadata standards
- Identification of initial use cases and sandbox themes in consultation with stakeholders
- Onboarding of academic and research institutions for innovation centers
- Mainstreaming of AI-powered advisories through VISTAAR initiative

Expected Outcomes

- Institutional architecture functional
- First cohort of use cases and solution providers identified and funded
- Readiness benchmarks and monitoring KPIs finalized

Phase II: Pilot Implementation and Platform Launch (T+9 months)

Focus Areas

- Launch of pilot projects in selected districts across GenAI and emerging technologies, traceability, and remote sensing use cases
- Operationalization of Sandbox environments and ADeX developer portal
- Launch of the AI Research & Innovation Centres in SAUs

Priority Actions

- Call for proposals and phased grants to early-stage solution providers
- Capacity-building programs by AI and Agritech Innovation Centre for extension officers, SAU faculty, and farmers
- Field-level testing of traceability pilots in 3–4 key commodity value chains
- Beta version of Remote Sensing Engine deployed for real-time crop monitoring

Expected Outcomes

- Working prototypes deployed in field
- State-level DPI-A stack activated and sandbox ecosystem functional
- Core institutional actors trained and mobilized

Phase III: Statewide Scale-Up and Ecosystem Integration (T+12 months)

Focus Areas

- Expansion of AI solutions across all agro-climatic zones in Maharashtra
- Full-scale rollout of the AI-powered Traceability Platform
- Integration of DPI-A with AgriStack, Bhashini, and other national platforms

Priority Actions

- Institutionalization of data sharing protocols across departments
- Continuous refinement of sandbox performance validation protocols
- Launch of Global AI in Agriculture Conference & Investor Summit

Expected Outcomes

- Significant farmer coverage across priority AI use cases
- Public-private innovation partnerships anchored and scaled
- National and international visibility for Maharashtra's Agri-AI ecosystem

Phase IV: Consolidation, Policy Evolution, & Cross-Sector Replication (T+36 months)

Focus Areas

- Independent impact evaluation and cost-effectiveness analysis
- Policy refinement based on third-party learnings and farmer feedback
- Replication of AI models in allied sectors (e.g., fisheries, horticulture, livestock)

Priority Actions

- Development of Version 2.0 of the MahaAgri-AI Policy
- Framing of SPV or autonomous mission structure, if recommended
- Publication of a "State of AI in Agriculture" report
- Replication toolkit for other states and potential exports of Maharashtra's model

Expected Outcomes

- Sustainable and institutionalized Agri-AI governance model
- Documented outcomes, cost-benefit ratios, and policy learnings
- Roadmap for next-generation policy evolution and sectoral convergence

PART D

PROJECT IMPLEMENTATION STRATEGY

Artificial intelligence (AI) is a rapidly evolving field, offering a diverse range of solutions to address the complex challenges in agriculture—from precision farming and crop disease detection to yield prediction and automated irrigation. Each AI-driven solution comes with its own unique set of requirements in terms of funding, Hardware (IoTs, Sensors etc.), infrastructure and handholding support from the Government. For instance, deploying drone-based crop monitoring may require significant investment in aerial equipment and data processing systems, while AI-powered mobile apps for farmers might need robust backend infrastructure and digital literacy support. As a result, a one-size-fits-all approach is not feasible. Hence to support a wide range of use cases and help promising ideas to succeed in benefiting Maharashtra's farmers, tailored strategies and flexible policy frameworks are essential to ensure that each AI application receives the appropriate level of investment and operational support to succeed and scale effectively across different agricultural contexts. In this context, the Governance mechanism incorporates agility and flexibility to determine the support for the solution on a case-to-case basis.

01 Identification of Projects

The AI and Agritech Innovation Centre will establish a dedicated online portal for the structured submission of proposals aimed at addressing agricultural challenges through AI solutions. It will proactively identify key problem statements in collaboration with State Agricultural Universities (SAUs), Krishi Vigyan Kendras (KVKs), National Research Centers (NRCs), Industry partners, and other stakeholders for various crops cultivated across Maharashtra and invite targeted proposals from startups, companies, State Agricultural Universities (SAUs), Krishi Vigyan Kendras (KVKs) etc. In this endeavor, the AI and Agritech Innovation Centre will also host regular hackathons to uncover fresh ideas. While the focus will be on solving the identified problem statements, the platform will also remain open to innovative solutions beyond the listed problem statements. All the proposals received on portal will be categorized into two segments: one for **Novel ideas requiring incubation support**, and the other for **scaling up proven technologies**. The AI and Agritech Innovation Centre will undertake the initial assessment of the projects and evaluate each proposal based on technical merit, feasibility, and the specific financial and infrastructural support required from the Government. These evaluations, along with detailed observations, will be submitted to a State Level Technical Committee (SLTC) for further consideration and recommendation for final selection. This structured and inclusive process aims to foster innovation while ensuring that promising AI solutions receive the necessary support to be developed and implemented effectively.

02 Feasibility evaluation (Technical and Commercial)

The proposal evaluation from technical and commercial perspectives will be overseen by a State Level Technical Committee (SLTC), comprising a multidisciplinary panel of experts, including agricultural scientists, IIT/ IISc representative, AI/ML and data science professionals, finance experts, venture capitalists, investors, and representatives from banks. This diverse composition ensures comprehensive evaluation from both technical and commercial perspectives.

a. Proposals shortlisted for Incubation Support:

For Novel ideas seeking incubation, the SLTC will assess the technical feasibility, potential impact, investment needs, and commercial viability of the proposed solution. Based on this analysis, the committee will recommend appropriate funding or investment for incubation, which may include support for proof of concept development, access to trial fields, laboratories, digital infrastructure, equipment, and office space. Clear timelines, milestones, and an evaluation framework will be defined to monitor progress. Upon successful incubation, the SLTC will recommend the solution for piloting through multi-location field trials. It will also propose the necessary financial support for the pilot phase, including assistance for startups and farmers in installing essential hardware such as IoT devices, sensors, or automatic weather stations. These recommendations will be duly considered by the SLSC and approved projects will be taken up for pilot phase. If the pilot proves successful, the solution can move to full-scale implementation. At this stage, government support will be limited, and startups will be encouraged to raise funds from private investors or the market. Any additional government funding will be subject to SLTC's recommendation and approval by the State Level Steering Committee. This structured, multi-stage process ensures that only viable, scalable, and impactful AI solutions receive sustained support and reach widespread adoption in agriculture.

b. Proposals shortlisted for scaling up proven technologies:

For proposals received under the category of scaling up proven solutions or technologies developed by companies or startups, the State Level Technical Committee (SLTC) will undertake a thorough validation process. This includes assessing the effectiveness, reliability, and impact of the technology based on field performance data and documented outcomes. Once validated, the SLTC will recommend the solution for wider deployment. To facilitate adoption by farmers, the committee may also propose necessary financial support measures, such as subsidies for hardware installations (e.g., IoT devices, sensors) and subscription fees for digital services. These subsidies will be provided directly to farmers through the Direct Benefit Transfer (DBT) mode to ensure transparency and efficiency.

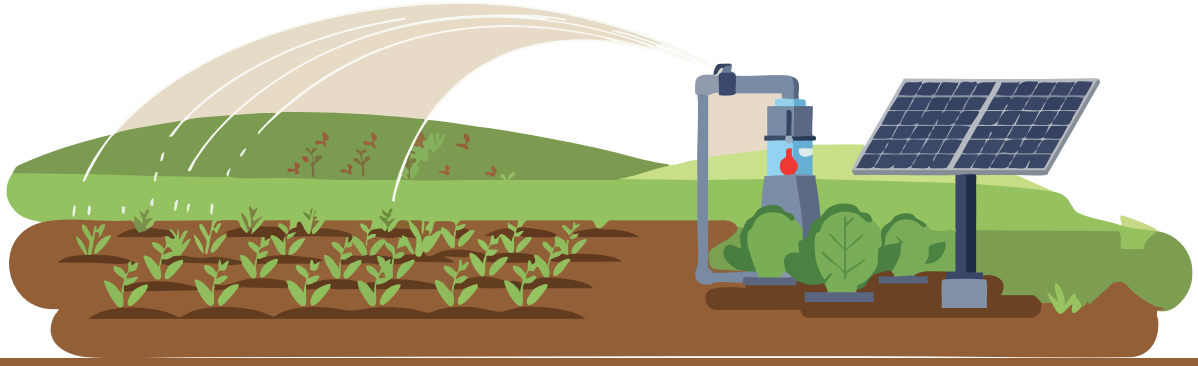
All government funding and support recommendations made by the SLTC will be subject to approval by the State Level Steering Committee. This process ensures that only impactful and field-tested technologies are promoted at scale, with targeted support mechanisms to drive adoption among the farming community.

The Government of Maharashtra will adopt a collaborative and inclusive approach to drive the development and deployment of farmer centric AI-powered agricultural solutions across the state. Recognizing that impactful innovation thrives through partnerships, the government will actively encourage joint proposals from startups, companies, and industry leaders, State Agricultural Universities (SAUs), Krishi Vigyan Kendras (KVKs), and National Research Centers (NRCs). SAUs will be specifically encouraged to collaborate with industry players, startups, and both national and international research institutions to co-develop market-ready, farmer-centric AI solutions. This ecosystem-driven strategy aims to leverage the strengths of each stakeholder—research expertise, technological innovation, and real-world applicability—to create scalable and sustainable solutions. Furthermore, Public-Private Partnerships (PPPs) will be promoted to ensure that AI solutions not only reach farmers effectively but also address their real needs through robust, field-tested applications. Through this unified and strategic collaboration, the government aims to position Maharashtra as a leader in AI-driven agricultural transformation. The detailed implementation guidelines will be issued separately and various frameworks for assessment of the proposals will be developed.

PART E

BUDGET ALLOCATION

Implementing MahaAgri-AI Policy necessitates a comprehensive funding to support various components integral to its success. An initial allocation of ₹500 crore is proposed, a periodic review of the policy implementation and progress made will be undertaken, an additional funds will be made available as per the requirements. To implement the policy in the state, there would be funding requirements for various aspects of this policy such as-set up AI and Agritech Innovation Centre at State level with requisite manpower and dedicated office space, manage day to day operational expenses of this Centre, to establish a public digital infrastructure to facilitate innovations in AI this includes Agri-Data-Exchange, Sandbox and Cloud services), AI Innovation and incubation Centers at four SAUs, support for operationalization of Virtually Integrated System to Access Agricultural Resources (VISTAAR), setup remote sensing and geospatial intelligence engines, and develop AI-enabled agri-food traceability and certification platform. Further, it is also proposed to allocate funds to provide financial assistance to various AI projects in agriculture which will ultimately benefit farmers of the state impactfully. Hence a separate budget line for this purpose will be created. Policy also aims to organize annual Global AI in Agriculture Conference and Investor Summit to keep pace with the global technological developments in AI and its application in Agriculture and organize hackathons on regular basis to identify novel ideas for further supporting them from incubation to scale up.



Sr. No	Particulars	Amount (In Rs. Crore)
1.	**Setting up the AI and Agritech Innovation Centre**	**30**
2.	**Digital Public Infrastructure for Agri AI**	**50**
	a. Digital Public Infrastructure (ADeX/Sandbox/Cloud)	10
	b. Virtually Integrated System to Access Agricultural Resources (VISTAAR)	10
	c. Agri AI innovation and incubation Centre at SAUs	20
	d. Remote Sensing and Geospatial Intelligence Engine	5
	e. AI-Enabled Agri-Food Traceability and Certification Platform	5
3.	**Financial support to Projects on AI in Agriculture**	**350**
4.	**Capacity Building**	**50**
	a. Staff	
	b. Farmers	
5.	**Global AI in Agriculture Conference and Investor Summit / Hackathon**	**20**
	Grand Total	**500**

The AI and Agritech Innovation Centre will prepare a detailed estimates for each component of the various aspects of this policy for approval of the SLTC and SLSC. After three years, this policy will undergo a midterm review.


FILE
EDIT
SELECT
START
FINISH

Agriculture Department,
Government of Maharashtra