

GOVERNANCE SOLUTIONS FOR AGRICULTURE

With advances in sciences - biotechnology, genetics, soil study, pest control, fertilizers, and machinery, agriculture and livestock food production increased dramatically in the 20th century to meet the global demand. Food scientists believe that next jump in food production and its supply chain will be enabled by the new technologies of Sensors, IoT, Drones, Big Data analytics, Machine to Machine learning and Block-chain

It is also important to connect the Agricultural Sector through E-Governance solutions which simply means using Information and Communication Technology (ICT) for delivering government services, exchange of information, electronic transactions, and integration of stand-alone systems to bring the agrarian community closer!

M	MANAGING	S	SCHEDULING	T	TRACKING	A	ANALYZING	R	REPORTING
People	Tasks	Processes	Outcomes	Real time & Dynamic					
Data & Information	Resources	Workflows	Data	Statutory					



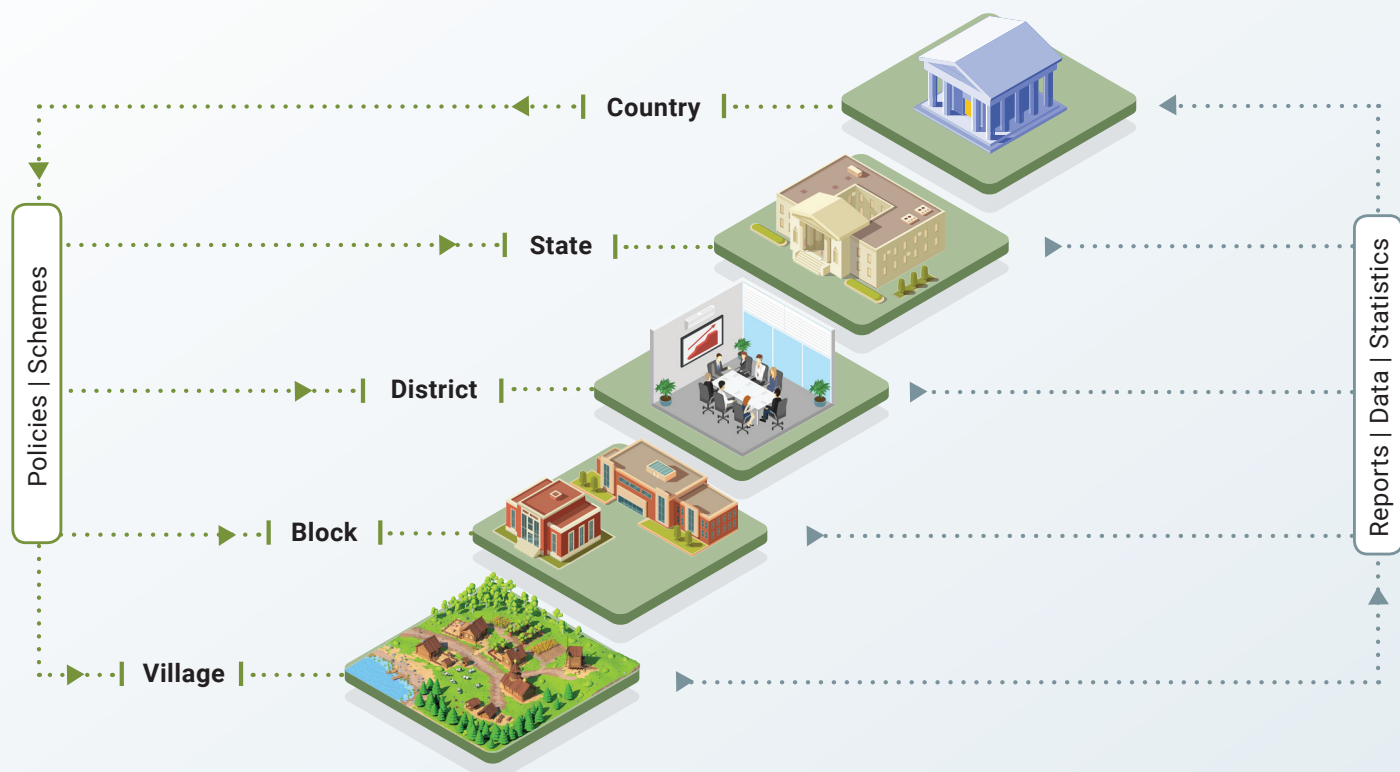


Stakeholder Lifecycle

Farmers

Traders

Government & Agencies

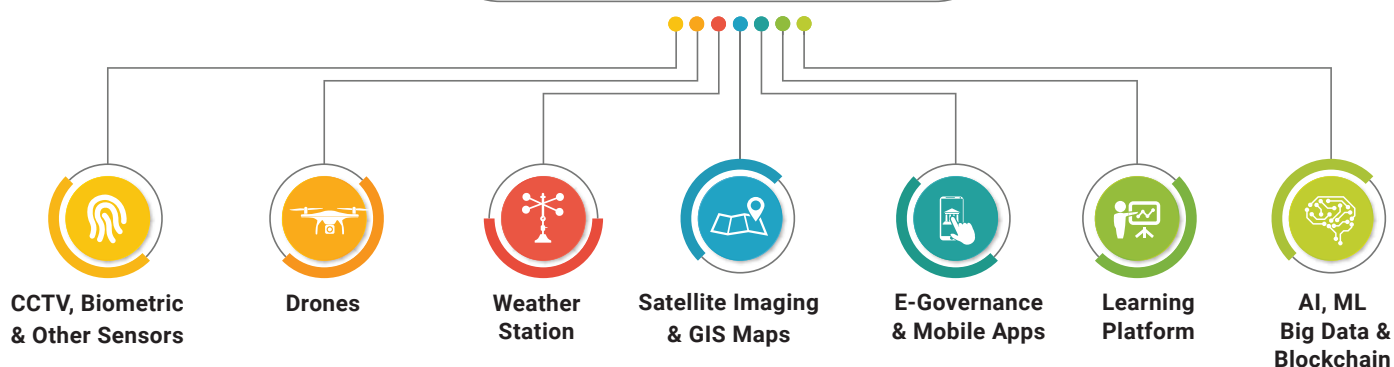


APPLICATION & USES

Precision Farming	Yield Prediction	Yield Monitoring	Produce Supply & Demand Management	Irrigation Management
Disease & Pest Management	E-Governance	Education, Awareness & Training	Seeds & Fertilizer	Waste Reduction & Management

... and more

MGRM Technology Edge





Agriculture E-governance

- Farming training and awareness
- Build farmer communities
- Empowerment to farms
- Data consolidation & statistics
- Common framework across states
- Monitoring of government schemes
- Agricultural Informatics and Communication
- Improving access of farmers to information and services throughout crop-cycle



E-Learning

- Student Learning Management
- Live virtual classrooms
- Online courseware
- Focussed & interactive content
- Multimedia integration
- Competency based learning
- Online assessments
- Auto-Gradebook generation
- Learner's analysis



Harvesting & Markets

- Identify best time to harvest
- Yield measurement & Crop insurance
- Agriculture machinery reservation
- Track transport location
- Track market prices with supply & demand analysis
- e-Mandi online marketplaces
- Warehouse management & security
- Food processing factories automation
- Control pilferage during transport and warehousing



Agriculture Universities Management

- Integrated University Governance
- Standardisation of institutes' processes
- Management of processes & procedures
- Data digitization
- Scheduling of resources and time
- Tracking workflows
- Roles based secure access controls
- Real time data updates
- Reporting and Analysis



Crop Cultivation

- Seed, fertilizer, pesticide selection & procurement
- Identify best crop based on analytics of soil, weather
- Soil health analysis using soil nutrient sensors
- Locate trouble spots in field with aerial images
- Spot spraying of pesticides
- Yield monitoring crop health status check
- Weather and yield prediction
- Irrigation supply & demand management
- Ground water availability using remote sensing
- Labour management



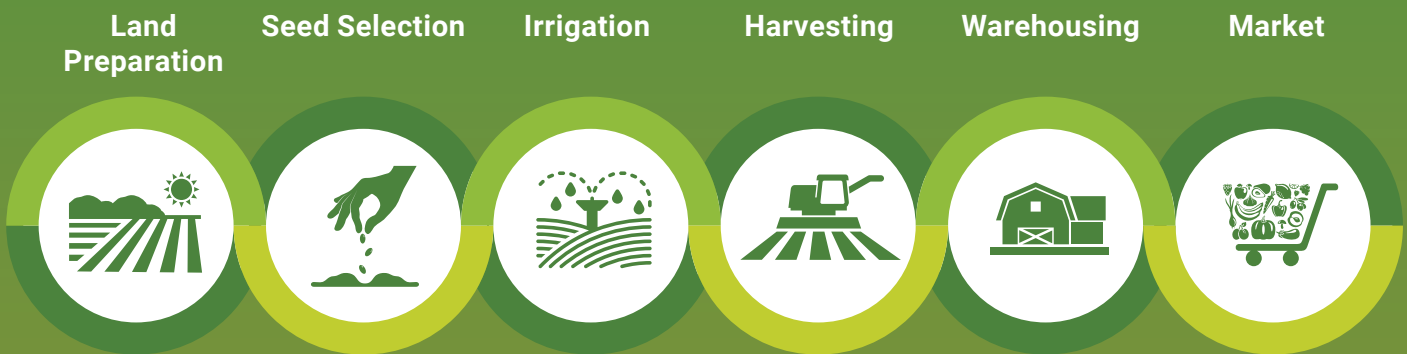
Livestock, Dairy, Poultry Farms & Fisheries

- Health monitoring, behaviour analysis
- Prevention & treatment of diseases
- Livestock counting and tagging
- Feed management
- Waste management
- Climate control, salinity control
- Yield management: e.g., milk, eggs, meat, prawns, fish produce
- Track market prices with supply & demand analysis

Benefits

Farmers	Traders	Government & Agencies
Select crop, seeds, feeds as per market requirements and weather conditions	Monitor timely supply & demand to avoid wastage and storage costs	National and regional yield monitoring, prediction and actuals measurement
Avoid losses due to diseases, pesticides, bad weather and storage issues	Ease of doing business by following Govt Policies	Timely policies based on stakeholders feedback
Awareness on Government information for farmers e.g., crop insurance	Focus on R&D in agrochemical and pesticides to maximize yield and healthy citizens	Approvals of new agrochemicals, pesticides & seed varieties
Crop growth monitoring, yield prediction and actual measurements	Bridge the farmers and end consumers by providing best prices to both	National & regional announcements on subsidies and weather forecasts
Maximize yield based on technology input measurements	Avoid pilferage during transport & storage	Control hoarding and preferred markets

Life-Cycle Approach



ONE WORLD, ONE SOLUTION



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