

Watershed Planning for Climate Resilient Agriculture

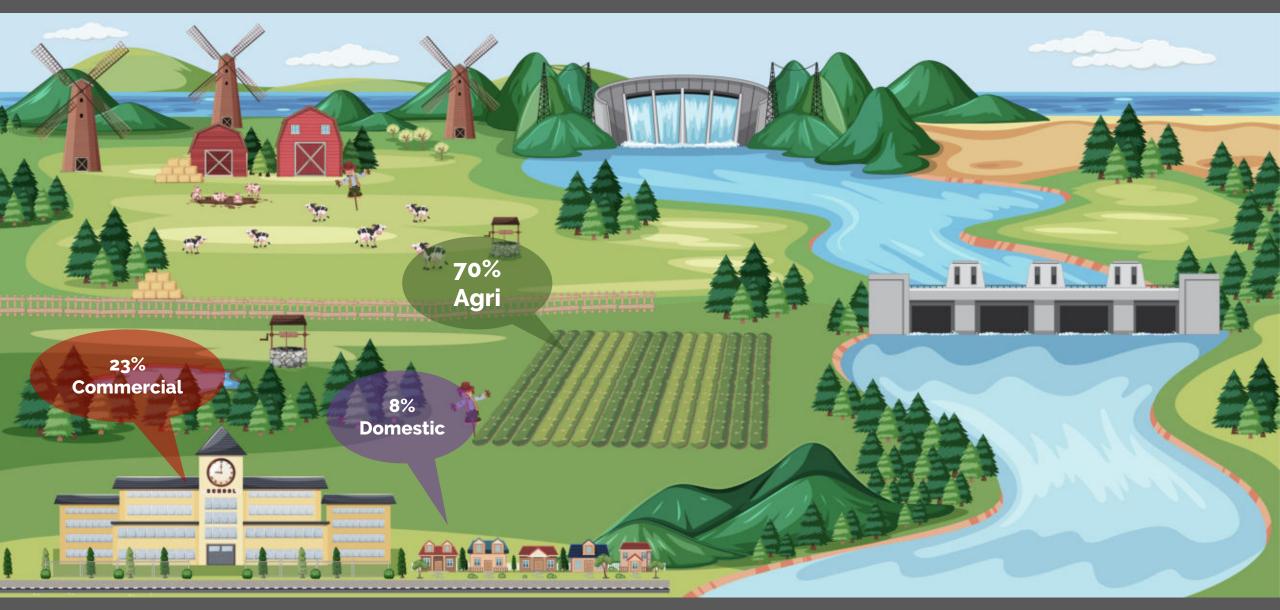
Amit Mishra Vice President – Marketing Vassar Labs amit@vassarlabs.com



Need of the Hour Sustainability for water resources







UNDERSTANDING SOLUTIONS

DEMANDS AND RELEASES



Awareness is key -Transparent water accounting and auditing



Making better use of rainwater in rainfed areas



Investing in sustainable irrigation for improved water productivity

UNDERSTANDING SOLUTIONS

DEMANDS AND RELEASES



Non-consumptive uses and non-conventional sources of water



Guaranteeing environmental flow requirements



Policies that foster innovation



Solution Innovation with technologies



Unified Visibility

Visualizing water resources / Digital Water



One Authoritative System for integrated water resource management

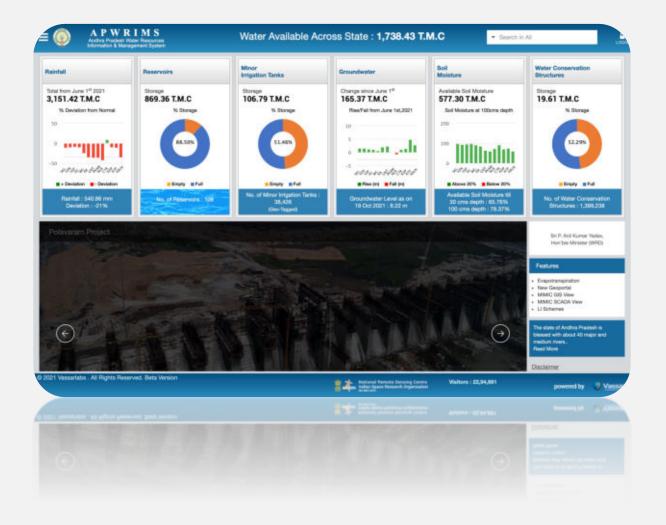


Integrated real-time visibility on 90% of the Water resource



Managing water resources remotely in near real-time

Empower farmers to make water smart decision



Scientific Watershed Planning

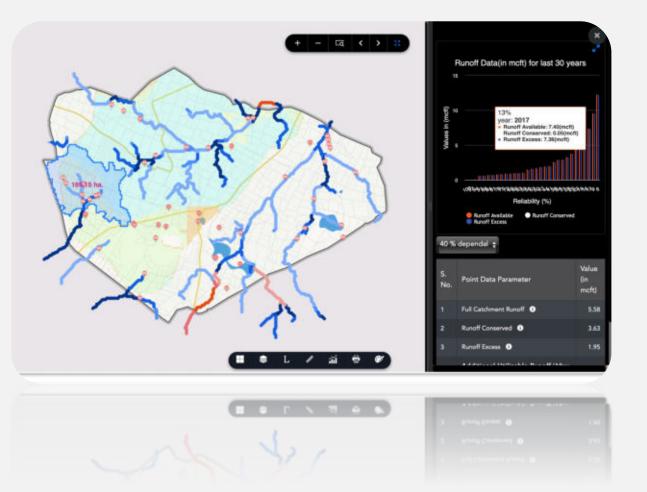
Holistic planning by considering downstream demands



Al to predict structures to be built



Hydrological assessment to predict reliable runoff that can be conserved

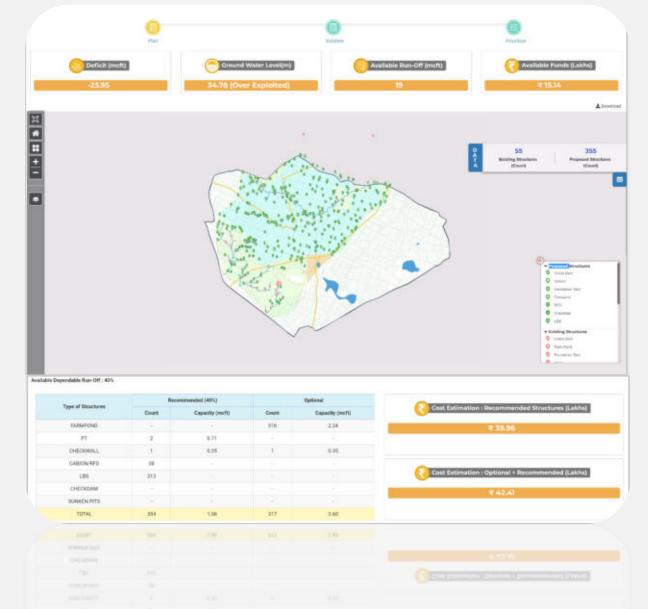


Smart fund management with e-workflows

Unified planning and management for various funds and plans



- Validate through mobile app
- Helps in tracking validation process in real-time
- Prioritise and sanction the WCS structures

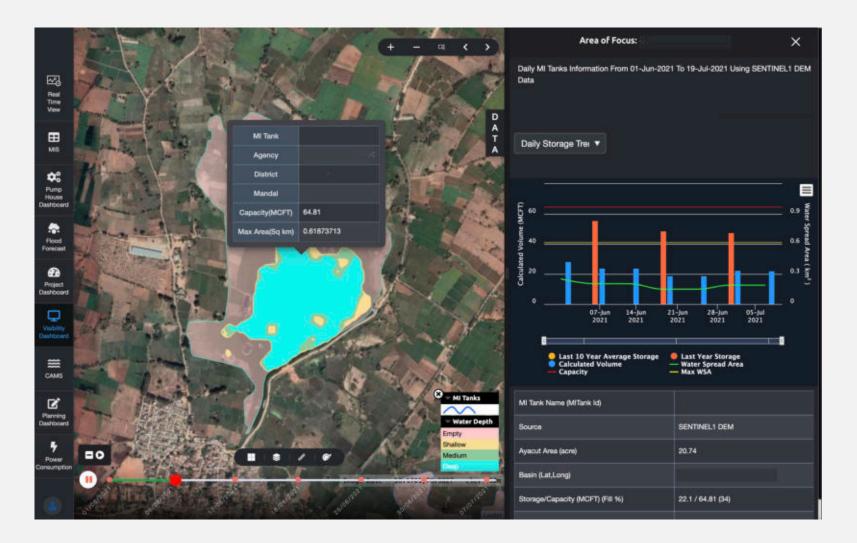


Realtime Water Bodies Monitoring

Near Real-time Monitoring of Surface Water Sources



By using remote sensing data, identify and monitor water bodies like MI Tanks, reservoirs and ponds with respect to their storage capacity and current storage.



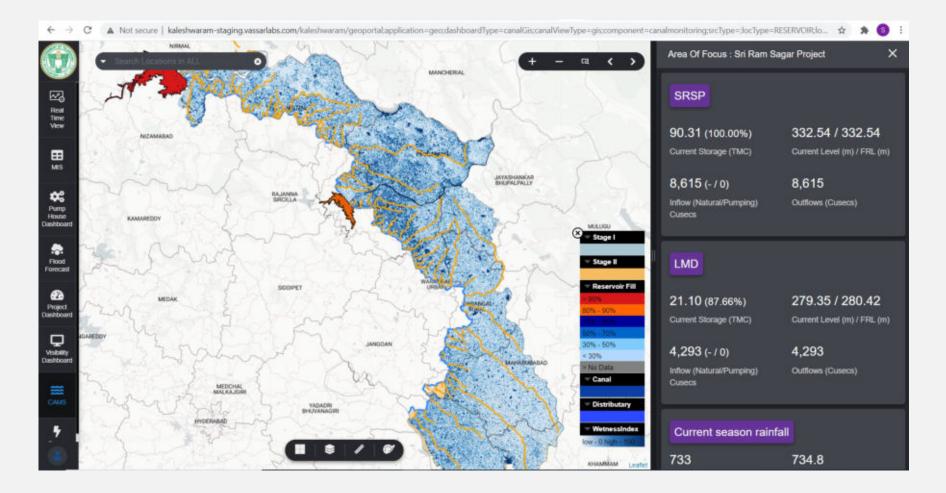
Irrigation Efficiency of Canals Leveraging Remote Sensing

Monitoring Performance of Canals Made Easy



Identify total irrigated area and stressed area to get the understanding of irrigation efficiency and demand

Near Realtime wetness index monitoring



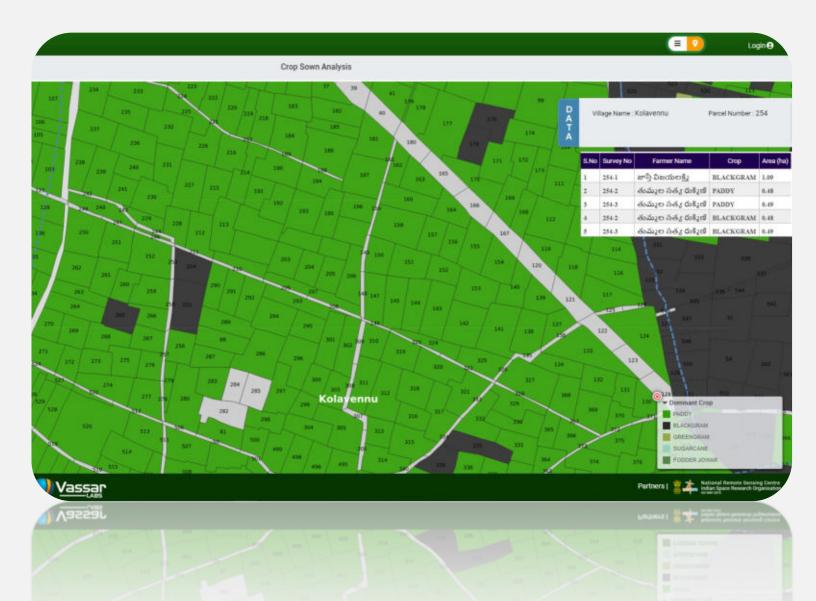
Satellite Based crop area estimation and realtime health monitoring

Ensuring Crop Success by Estimating Crop and Irrigation Demand



Crop type identification by using crop specific signature leveraging multi spectral satellite data.

Crop health index to monitor crop health in near real-time



Smart Crop Planning & On-field Advisories

Empowering farming decisions with the power of technology



WHAT TO SOW

Agro climatic zone planning with the help of various static and dynamic input layers



Based on soil moisture, weather parameters, crop phenology and historical success rates



Which nutrient fix is most important for selected crop



IRRIGATION

Realtime crop stress monitoring



PEST INFESTATION

Early alerts on pests with the help of AI



CROP ACERAGE & YIELD

Crop wise cultivated area and yield estimation for major crops

Way forward

Moving towards sustainability of water resources

There is no "one-size-fits-all" approach to addressing water shortages and scarcity. So we are inviting you to talk to use and let us learn.....