

Yuktix GidaBits®

Data driven farmer productivity

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Benefits Card

Activity	Problems	Solutions
<p>1 Timely land preparation</p>	<p>Optimal soil moisture is critical for efficient tillage otherwise, farm energy (diesel/ bullock) is wasted to the tune of costing 10-15% more.</p> <p>Improper soil tilth leading to poor crop stand after sowing due to reduced moisture storage into soil and crop yields.</p> <p>More weed infestation that increases weeding cost at least 10-15% and weeds compete for moisture and nutrients with main crops that results poor productivity.</p> <p>Most cases, rainwater use efficiency is around 45-50% with present practices.</p>	<p>Advisory on Pre-monsoon off-season rains for land preparation will mitigate the consequences.</p> <p>Allows timely sowing; allows double cropping (kharif & rabi).</p> <p>Rainwater use efficiency increased to 60-70%.</p> <p>Reduced runoff by 30-40% and soil loss by 50-60%, as soil is receptive to absorb rainwater.</p>
<p>2 Date of sowing/ transplanting of Kharif crops based on onset of monsoon</p>	<p>Poor germination due to insufficient moisture and extended dry spell after sowing severely affects productivity</p>	<p>Weather forecast will help farmers in overcoming germination failure by providing information on optimum soil moisture and probability of receiving rains after sowing.</p> <p>Forecast on onset and withdrawal of rains will help in planning to accommodate kharif and rabi crops.</p>
<p>3 Sowing of Rabi crops using residual soil moisture</p>	<p>Rabi crops sowing fails due to lack of moisture</p>	<p>Advisory will help farmers to provide supplemental irrigation at rabi sowing and subsequent growing period in case of insufficient moisture condition.</p>
<p>4 Fertilizer application based at optimum moisture and rain free day and wind condition</p>	<p>Many a times, fertilizer applied is not efficiently used by crops due to lack of moisture at application; or rain shower immediately after application washes away fertilizers applied leading to reduced fertilizer efficiency by 40-50%.</p>	<p>Appropriate moisture level and rain-free period at least 3-4 days after fertilizer application enhances the use efficiency 40-50%; This weather and moisture advisory is very helpful.</p>
<p>5 Delay in fertilizer application based on rainfall</p>	<p>40-50%.</p>	

	forecast for conducive condition		
6	Early warning system for pest and disease management	<p>Pest and disease infestation is a major cause of loss of productivity.</p> <p>Cost on pesticide application is huge.</p> <p>Indiscriminate spraying to control</p>	<p>Early warning of pest and disease infestation will help in implementing proper control measures and further spreading.</p> <p>Reduced number of sprays and cost of cultivation.</p> <p>Less adverse impact on environment and human health.</p> <p>Better quality of produce and increased productivity</p>
7	Appropriate pest and diseases control measure	Pesticide application efficiency is low.	Appropriate timing for spray is advised based on wind speed and direction.
8	Pesticide spray timing and direction	<p>Health hazards.</p> <p>Increased cost of operation.</p>	<p>Increased application efficiency and less cost on spraying operation.</p> <p>Less health hazards;</p>
9	Weeding/ thinning at regular interval	Cost on weeding is high and improper control measure leading to low productivity.	Advisory on right time of weeding with conducive soil condition based on weather data will help in reducing cost of operation and improved the crop stand due to better availability of moisture and nutrients to crops otherwise weeds would have consumed it.
10	Irrigation quantity and interval at critical stage of a crop based on soil moisture and weather data	<p>Water is limited and critical resource, but farmers tend to over irrigate wasting the water, that affects:</p> <ul style="list-style-type: none"> • Crop growth • Fertilizer leaching • Leads to soil salinity 	<p>Proper advisory on irrigation quantity and interval will help:</p> <p>Save water, energy, and cost of operation (> 50%).</p> <p>Area irrigated can be increased.</p> <p>Soil health improves and fertilizer leaching is prevented.</p> <p>Limits groundwater exploitation.</p> <p>Higher crop yields and retunes.</p>
11	Advisories for timely harvest of crops	Many a times crops are lost due to unseasonal rains or shattering. Extent of loss varies huge.	Appropriate timely weather advisory can avoid shattering or crop loss due to rains.

