

## Vegetation and Water Body Inspection and Monitoring Using Multispectral Drone Imagery

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**Abstract:** The continuous crop condition monitoring at a regional scale is critical especially for private investors which should apply land reclamations measures regarding the soil degradation and modern methods of irrigation for optimizing the water use efficiency and crop yield production. Multispectral images have numerous applications in agriculture, in the calculation of vegetation indices in precision agriculture, whose interpretation is useful in the analysis of the state of vegetation or health of crops and the estimation of production near red. Any plant condition, such as stress caused by lack of water or the presence of pests, is reflected in the plant's ability to carry out photosynthesis.

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