Application of Drones in Agriculture

Authors : Reza Taherlouei Safa, Mohammad Aboonajmi

Abstract : Agriculture plays an essential role in providing food for the world's population. It also offers numerous benefits to countries, including non-food products, transportation, and environmental balance. Precision agriculture, which employs advanced tools to monitor variability and manage inputs, can help achieve these benefits. The increasing demand for food security puts pressure on decision-makers to ensure sufficient food production worldwide. To support sustainable agriculture, unmanned aerial vehicles (UAVs) can be utilized to manage farms and increase yields. This paper aims to provide an understanding of UAV usage and its applications in agriculture. The objective is to review the various applications of UAVs in agriculture. Based on a comprehensive review of existing research, it was found that different sensors provide varying analyses for agriculture applications. Therefore, the purpose of the project must be determined before using UAV technology for better data quality and analysis. In conclusion, identifying a suitable sensor and UAV is crucial to gather accurate data and precise analysis when using UAVs in agriculture.

Keywords : drone, precision agriculture, farmer income, UAV

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