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IMPROVING DATA COLLECTION TECHNOLOGY IN RURAL AREAS USING DRONES

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Abstract. This article about drons and technologies. Drone technology does not bypass agriculture, currently the most conservative branch of industry. The Association for Unmanned Vehicle Systems International AUVSI predicts that the agricultural sector will soon become the largest consumer of drones. Approximately 80 percent of these devices can be considered to be agricultural. UAV (unmanned aerial vehicle) usually refers to a drone that includes computer vision, artificial intelligence, object-avoidance technology, and other technologies.

Keywords: dron, NDVI, GPS, GSC, GDP

Introduction

Defense organizations and technology-based consumers have long used drone technology for a long time. The advantages of this technology can be widely used beyond these areas [1].

With the development of drone technology, the most dangerous and high-paying jobs in the commercial sector are expected to be done using unmanned technology. It is used in the field for safe and cost-effective solutions from data collection to delivery. As drones' autonomy and collision avoidance technologies improve, their ability to perform increasingly complex tasks will increase [2].

The drone has a powerful impact on society: from development to weather forecasting. Drone technology is a technology that includes a rotor, infrared built-in batteries, chargers, parts and an infrared camera, as well as a variety of software.

The drones are equipped with a variety of modern technologies such as infrared cameras, GPS and lasers (domestic, commercial and military aircraft) and are controlled using ground-based remote control (GSC) systems. The UAB system includes: the aircraft itself and the control system. The drone has all the sensors and navigation systems. Since there is no need to place a person inside, the rest of the case is filled with IAV systems. The structural materials used to create a drone are very complex compositions designed to absorb the vibrations that reduce the noise produced [3].

Drones with small wingspan and requiring a runway are also widely used. They are typically used to photograph large areas, such as geography, or to combat poaching in the wild. Gross domestic product drones are quadcopters, but not all. GDP planes can take off, fly, rotate in the air, and land vertically. The net value of GDP is the vertical pull and landing, which is a function of radar output and return home. The latest unmanned models are equipped with global navigation satellite systems (GNSS). Drones can fly in GNSS and non-satellite modes. There are also drone technologies that do not use satellite navigation. When using unmanned three-dimensional maps, terrain, and SARs (Search & Rescue), high-resolution navigation during flight is critical. At initial charge, the quadcopter searches for and identifies GNSS satellites. Uses high quality GNSS systems technology. In fact, a satellite series is a group of satellites that work in sync and provide coordinated coverage. Radar technology signals the following on the remote control display; detects a sufficient number of GNSS satellites and determines their readiness for flight; determines the current

position and location of the pilot relative to the pilot; Sets the starting point for the home function [3].

Drones are used to inspect and monitor the appearance of test sites.In addition, they have a larger model, which is equipped with infrared cameras that detect stressful crops or weeds and normalize the digital plant index (NDVI) using third-party software) - help create programs that process data from a drone. We use these programs for biographs and NDVI maps and place them on the drone, saying that when the drone functions are performed correctly, they can lead to effects such as saving chemicals. Obtaining an NDVI map produced by a drone with the appearance of a sufficient amount of leaf material to build up can lead to cultivation in areas where infrared light is low, showing some stress problems. cases, we have seen that due to the size of the cotton plant, the cotton grower was infected with bugs that did not exist and led to the loss of a large crop. We researched the drones a bit before investing and I wanted to see if they could do what I wanted. It was to take pictures and recommend nitrogen to the sprayer, he says, adding that the technology is not yet available to us.

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