UAV for Post-Disaster Quick Assessment

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ABSTRACT

Unmanned Aerial Vehicle (UAV) is commonly konown as Drone. Its usability and popularity in Nepal has increased a lot since the devastating earthquake that struck Nepal in April, 2015. It is fast and cost effective way to perform spatial survey which provides ultra high resolution images. After any disaster, a quick assessment of the affected area is of utmost impartance for planning rescue operation and supply of relief materials. With traditional surveying techniques, it is impossible to do quick assessment within short time and with associated risk. Remote sensing images have their own limitations in terms of spatial resolution, presence of potentail cloud cover, and temporal resolution. Thus, deploying a UAV can be the best option for acquiring ultra high resolution images of the area. Such images can be utilized for quick damage assessment. This paper outlines and discusses the use of Unmanned Aerial Vehicle (UAV) in landslide monitoring and post earthquake building damage assessment.