

RESTRICTED

ABSTRACT

Responding to disasters is a critical function for the initial responders and the emergency management authorities. The primary mission when responding to disasters is saving lives, which often requires the use of multiple resources. Rotary and fixed-winged aircraft have traditionally performed disaster response missions, such as overhead damage assessments, reconnaissance, and missing person searches. However, with the advancement of Unmanned Aircraft Systems (UASs), there is an opportunity to perform many conventional aerial missions in a safer, more expeditious, and cost-effective manner. The UAV regiment has newly risen in the Sri Lanka Army in order to enhance the efficiency in military and nonmilitary aspect. This study explores the characteristics, capabilities, limitations and possible methods to employ the UAV Regiment of Sri Lanka Army for effective disaster management. Basically this is a qualitative research based on in-depth interview, and the sampling technique is purposive under nonprobability sample. Further, this study exam the views and experiences of organizations which are dealing with disaster management with the UAV capabilities in order to bring down certain recommendations to UAV regiment for sound disaster response system in the future. And also, this includes a review of disaster response missions and opportunities for the utilisation of UAVs, a comparison of UAV programmes, as well as international UAV programmes and a review of barriers to implementation. This also, offers policy and programme considerations for UAV regiment to consider when implementing a UAV programme, and also recommends modern UAV systems for future benefits. Lastly, this study provides a decision guide to assist policy makers and relevant authorities with determining the need and feasibility of UAVs for effective disaster response operation.