2019

The Role of GIS, Mobile App and Satellite Technologies to Enhance Data Collection Process: A Case of Environmental Factors and Epidemics Linkages

Leo, Judith

Springer Fachmedien Wiesbaden

The Role of GIS, Mobile App and Satellite Technologies to Enhance Data Collection Process: A Case of Environmental Factors and Epidemics Linkages

Judith Leo, Kisangiri Michael

To download a complete text, please click the clink below;

DOI: https://link.springer.com/book/10.1007/978-3-658-25210-6

Abstract

Enhancement of health data collection and presentation to support epidemic analysis can benefit many aspects of healthcare in terms of diseases control, decision making and action to be taken. The epidemic analysis is the science that studies the patterns, causes, and effects of health and diseases conditions in defined populations. In most hospitals, there is increasing demand to improve quality of data, the efficiency of collection and presentation. In this study, we aim at integrating new module in the existing Health Information System (HIS) in order to improve data collection and presentation. The module takes advantage of the emerging technologies of mobile application, satellite technology and Geographical Information System (GIS) to capture environmental data. As part of the module we have developed, the mobile app which is integrated with GIS and satellite technology for remote data collection and hence the module can play a vital role in enhancing epidemic analysis.

Keywords: Epidemic analysis, Environmental factors, , Satellite technology, Mobile app