ABSTRACT

WEBGIS CLUSTERING MAPPING PRIORITY AREAS FOR VACCINE DESTINATIONS WITH THE K-MEANS CLUSTERING METHOD

(CASE STUDY : BENGKULU PROVINCE)

By

Happy Year

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With the increasing spread of the COVID-19 virus at this time, prevention efforts are also being stepped up. Therefore, vaccination efforts by the government are a top priority to resolve the COVID-19 pandemic. In carrying out various efforts, the term zone is used where monitoring and response to outbreaks and vaccination activities can be more effective. In this study, there are four zone codes for identification, namely the Green Zone, Yellow Zone, Orange Zone, and Red Zone. So, to monitor the vaccination process in Bengkulu Province Regency in four zones, we need a method that can support the vaccination monitoring process so that the vaccine distribution can be evenly distributed. This research was designed to be web-based with the aim of making it easier for the public to access anytime and anywhere. With this WebGIS (Web Geographic Information Systems), it can provide convenience in mapping priority areas that are the destination of vaccination in all districts in Bengkulu Province based on the high level of spread of COVID-19, or what can be said to be red zones. So that the results of the K-Means Clustering evaluation in the WebGIS system for priority vaccine destinations were found, it was found that the areas that were priority vaccine destinations with the red zone classification were Kaur, Lebong, and Central Bengkulu Regencies, with an average number that had not been vaccinated of around 87%.

Keywords : COVID-19, Vaccination, K-Means Clustering, and WebGIS