

ABSTRACT

Responsiveness is the primary metric to measure humanitarian logistics performance and the logistics facilities pre-positioning is one of the strategies that significantly support its improvement. West Java which happens to be the province with the highest frequency of catastrophes, is facing a problem of the lack of response times to distribute relief supplies to 70.37% of demand nodes in the district/city. This delay was allegedly caused by the adoption of an inaccurate inventory policy. Initially, the distribution of relief supplies was carried out by a single-echelon scheme, which made the service range blur as the demand points expanded.

To ensure the response time can be minimized to come close to a 60-minute standard, the author recommends a buffer warehouse be located as an intermediary of the humanitarian relief distribution between BPBD Jawa Barat and BPBD/Damkar kabupaten/kota. In this case, the MCLP method is used to determine the suitable location of the buffer warehouse within a specific range of services. The precept of the BNPB warehousing and some other relevant characteristics were added as an elect criterion. As the solving process settles, it's concluded that the buffer warehouses will be opened in 6 different cities, including Bekasi City, Cimahi City, Cirebon City, Bogor City, Tasikmalaya City, and Sukabumi City.

Keywords— Humanitarian Logistics, Humanitarian Relief Warehouse, Multi-Echelon, MCLP