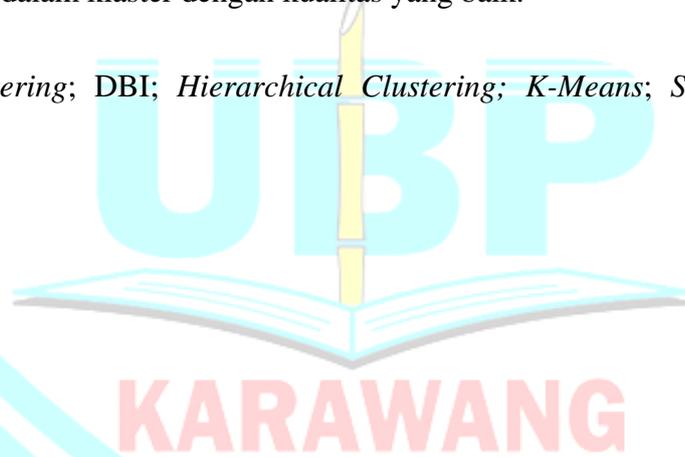# ABSTRAK

Data Dinas Kesehatan Jawa Barat (2019) mencatat 1.986.890 balita mengalami masalah gizi, dan hasil Studi Status Gizi Indonesia (SSGI) menempatkannya pada kategori tinggi. Peningkatan jumlah kasus gizi buruk setiap tahun menimbulkan ancaman serius terhadap kesehatan anak-anak, yang menimbulkan masalah seperti tubuh kurus, wasting, stunting, hingga kematian. Adapun tujuan penelitian ini yaitu, untuk mengelompokan kabupaten/kota di Jawa Barat berdasarkan kategori gizi buruk kedalam 2 klaster menggunakan teknik data mining dengan algoritma *K-Means* dan *Hierarchical Clustering*. Berdasarkan hasil perbandingan Algoritma *K-Means* membentuk 2 klaster, klaster 1 (14 kabupaten/kota) dan klaster 2 (13 kabupaten/kota). *Hierarchical Clustering* membentuk 2 klaster, klaster 1 (3 kabupaten/kota) dan klaster 2 (24 kabupaten/kota). Adapun hasil evaluasi klaster terbaik berdasarkan *Silhouette Coeficient* dan *Davies Bouldin Index* adalah *K-Means* dengan nilai 0.5955 dan *Davies Bouldin Index* 0.5046. Hasil nilai Evaluasi tersebut termasuk kedalam klaster dengan kualitas yang baik.

Kata Kunci: *Clustering*; DBI; *Hierarchical Clustering; K-Means*; *Silhouette Coefficient*.

ABSTRACT

Data from the West Java Health Office (2019) recorded 1,986,890 toddlers experiencing nutritional problems, and the results of the Indonesian Nutritional Status Study (SSGI) placed it in the high category. The increasing number of cases of malnutrition every year poses a serious threat to children's health, which causes problems such as thinness, wasting, stunting, and even death. The purpose of this study is to group districts/cities in West Java based on the category of malnutrition into 2 clusters using data mining techniques with the K-Means algorithm and Hierarchical Clustering. Based on the comparison results, the K-Means algorithm formed 2 clusters, cluster 1 (14 districts/cities) and cluster 2 (13 districts/cities). Hierarchical Clustering formed 2 clusters, cluster 1 (3 districts/cities) and cluster 2 (24 districts/cities). The best cluster evaluation results based on the Silhouette Coefficient and Davies Bouldin Index are K-Means with a value of 0.5955 and Davies Bouldin Index of 0.5046. These evaluation results are included in the cluster with good quality.

Keywords*: Clustering; DBI; Hierarchical Clustering; K-Means; Silhouette Coefficient.*