

Abstract

Agriculture is one of the important sectors for human life, because most of the human needs of agriculture, namely food needs. Over time, food prices are often unstable, especially the price of rice, because rice is the staple food of Indonesian people. This of course has a big effect on the community and farmers. The cause of this rice price instability can be caused by several factors, such as environmental factors, pest and plant hopper attacks, and drought land. In this observation, will be discussed regarding the application of one data mining method in the process of predicting rice prices by comparing the 2014 - 2019 rice prices from BPS Bandung. The dataset used is from the Bandung City BPS from 2014 to 2019 and BMKG Bandung City in the same year. The method used is the K-Nearest Neighbor (KNN) regression algorithm and for testing using RMSE. The results of this study, the K-Nearest Neighbor method with a regression model can predict rice prices in 2014 - 2019 with an RMSE value of 0,125 and parameter $K = 2$ which has been normalized.

Keywords: rice price prediction, data mining, K-Nearest Neighbor (KNN) regression algorithm
