

## **Abstract**

Red chili is an important type of spice in Indonesia. Based on the Ministry of Agriculture (MoA) stated that red chili has contributed to the Indonesian economy both locally and nationally. Chili plants from year to year experience price inflation. This price change have been influenced by several factors such as the number of requests, and changes in weather that can affect production. In this study, the prediction of chili prices was carried out using K-Nearest Neighbors (KNN) based on chili price data and weather data. Data obtained in the form of data with classes that are not balanced, so that the Adaptive Synthetic (ADASYN) algorithm is used to overcome the imbalance of data classes. From the results of classification research using KNN reached the highest accuracy of 93% but with F1-Score 0%, different from the performance of classification research using KNN and ADASYN, which was obtained 100% accuracy with F1-Score 100%.

Keywords— ADASYN, Oversampling, K-Nearest Neighbors, Data Mining, Forecasting.