APPLICATION OF LINEAR REGRESSION FOR FOOD PRICE PREDICTION

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ABSTRACT

The price of nine basic necessities (sembako) can rise and fall at any time (fluctuating), as well as the need for daily basic food price information. Therefore, it is necessary to forecast the daily basic food prices for some time ahead. One method that can be used to predict continuous numerical prices is by using the regression method. This study aims to implement the multiple linear regression method in predicting daily basic food prices, using a sample of basic food data in Bengkalis District. With a data set for the last 5 years, namely from January 1, 2020 to February 28, 2024, which was obtained from the Government data portal of Bengkalis Regency at the website address https://bapokting.bengkaliskab.go.id/. There are 5 variables in the data set, namely, date, month, year, commodity and price variables. The date, month, year and commodity variables are independent variables (predictor), while the price variable is the dependent variable (response). The result of prediction accuracy R^2 score: 0.873 or 87.3%. The application can be used to predict future food prices and help the Bengkalis government to take more effective steps to control inflation.

Keywords: Groceries, Price, Prediction, Linear Regression