ESTIMATION OF FOREIGN WORKERS IN MALAYSIA BY USING EULER'S METHOD AND LEAST SQUARE METHOD

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ABSTRACT

Malaysia has seen an increase in foreign labour inflows as a result of the country's consistent economic expansion and demographic changes. Foreign labour is concentrated in low-skilled occupations, and the term "foreign worker" in Malaysia specifically refers to a foreigner doing low-skilled work. Every year, the rate of increase and decrease in the number of foreign workers is similar, and the number always remains high. Data for the number of foreign workers can be seen in the open data at Department of Statistic Malaysia Official Portal. This data can be used to estimate the number of foreign workers for the coming year. For this project, a mathematical model was used to estimate the data on the number of foreign workers in Malaysia. The Euler's method and the Least Square method are two mathematical models that are used. These two methods were used to estimate the data and compare the errors of the methods in order to determine which method is the best. Based on this study, it was found that cubic least square method is the best method because it has high accuracy. The total number of foreign workers in Malaysia was then estimated using the best method for the year 2020.

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