

Title : Meteorological and Economic Factors Affecting the Number of Tourists Visiting Chiang Mai Province from 2014 to 2023.

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ABSTRACT

This study aims to examine the factors influencing the number of Thai and foreign tourists visiting Chiang Mai province and create a forecasting model for tourist arrivals there. The study uses secondary data, monthly data collected from January 2014 to December 2023. The data used in this study include the number of Thai and foreign tourists visiting Chiang Mai, meteorological factors including rainfall, temperature, PM10 and PM2.5 levels, seasons, and economic factors including exchange rates of the US dollar, South Korean won, and Chinese yuan, global crude oil prices, the occurrence of pandemics like COVID-19, the number of injuries and fatalities from road accidents, and the number of road accidents in Chiang Mai each month. Three approaches, multiple linear regression, Poisson regression, and negative binomial regression, are used in modelling and forecasting.

The results show that the most effective model for forecasting this dataset is the negative binomial regression model. The factors that influence the number of Thai tourists include temperature, PM2.5 levels, exchange rate of the US dollar, exchange rate of the Chinese yuan, global crude oil price, pandemic occurrence (COVID-19), seasons. Factors influencing the number of foreign tourists include rainfall, temperature, PM10 levels, exchange rate of the US dollar, exchange rate of the South Korean won exchange rate of the Chinese yuan, global crude oil price, pandemic occurrence (COVID-19) and number of injuries and fatalities from road accidents.

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