



# LOGISTIC MODELING OF INDONESIAN ECONOMIC AND SOCIAL FACTORS TO THE INTEREST IN PURCHASING FLOOD-IMPACTED INSURANCE PRODUCTS

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## ABSTRACT

Indonesia is a country located on the equator and in the form of an archipelago. It has a high potential for various types of hydrometeorological-related disasters, such as floods, flash floods, droughts, extreme weather, etc. Almost all cities in Indonesia experience flooding every year, including DKI Jakarta, the capital city of Indonesia. Based on data from the National Disaster Management Agency (BNPB) in 2020, East Jakarta is a city that is prone to flooding. According to BNPB (2013), flooding is a disaster that relatively causes the most losses. Losses caused by floods, especially indirect losses, may rank first or second after the earthquake or tsunami. Floods cause so many losses, and it is necessary to have disaster mitigation efforts to minimize the possibility of flood risks. One of the risk mitigation due to natural disasters is to buy insurance products. However, not everyone buys flood impact insurance products due to economic and social factors. This study aims to create a model with the Logistics Regression Model to determine the factors that influence Indonesian people's interest in purchasing flood-impact insurance products. Furthermore, with a significance level of 10%, the logistic regression model obtained 14 significant regression coefficients. In the end, the obtained model is evaluated based on its level of accuracy. The results showed that the accuracy rate was almost excellent, namely 89.3%.

**Keywords:** *Flood; Risk Mitigation; Logistic Regression Model; Insurance Products*