

# BAMBOO DISTRIBUTION IN BANGLI REGENCY – BALI (A MODELLING WITH BINARY LOGISTIC REGRESSION TECHNIQUE)

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## Background

Bamboo Indonesia is one of the largest biodiversity in the world. Base on area, Indonesia is number 5 in Asia with bamboo vegetated area. Approximately 2.081 million hectares of bamboo vegetation. From these figures, Indonesia is trying to keep the existence and preservation of bamboo, with bamboo planting area of 1.4 million hectares .

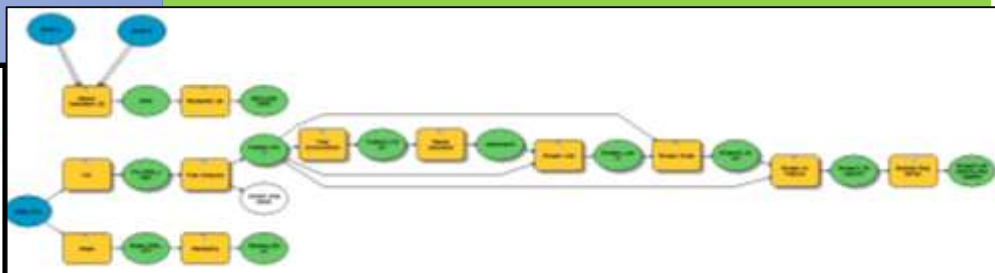
Nevertheless , there area some problems to improve bamboo utilization, i.e. bamboo distribution information that exists in nature and planted. Utilization of geographic materials are available free of charge on the internet such as Landsat 8 OLI and Aster DEM can reduce system development costs such information . Spatial statistical modeling approach can be used . One of these binary logistic regression modeling approach

## The Aims

Guessed the distribution of bamboo in Bangli - Bali to formulation of plans the use of bamboo can be both effective and efficient.

## Research Methodology

Conducting measurement plots with plot size of 30 x 30 m. Overlaying the field data with ASTER DEM maps and Landsat 8 OLI. Results Overlay treated with MINITAB Help Version 16.0 to obtain a binary logistic regression model.



$$Bamboo = \frac{1}{1 + \exp(0,019 + (0,117 \cdot NDVI) - (0,037 \cdot Slope) - (0,000014 \cdot Stream))}$$

