

System dynamics analysis of the determinants of the Malaysian palm oil price

ABSTRACT

This paper investigates the major determinants of the Malaysian palm oil price using a system dynamics approach. System dynamics methodology is very relevant for examining the feedback relationships, non-linearity and delays exist in palm oil market. It helps understand the palm oil market structure and the resultant behavior and performance particularly On crude Palm Oil (CPO) price. The simulation results indicate that the Malaysian CPO price is significantly affected by the local CPO production as well as the world CPO and soybean oil prices. It is also found that CPO price is less sensitive to biodiesel production, as biodiesel currently accounts for small portion of total CPO demand in Malaysia.

Keyword: System dynamics; Commodity systems; Palm oil; Malaysia