



AN ECONOMIC ANALYSIS:
THE IMPACT OF BIOFUEL (BIODIESEL) DEMAND
ON THE MALAYSIAN PALM OIL MARKET.

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ABSTRACT

The Agriculture sector especially the Oil Palm is the backbone of the Malaysian economy. In terms of export earning, this sector contributes more than 30 percent of the total income from exports. Palm oil is used as edible oil and soap. The value of palm oil has been increasing ever since the import tariffs for palm oil were reduced and the hectares for palm oil plantation were increased. The Malaysian palm oil industry has gained effective competitive strength. In the last few years, against the background of increasing concerns regarding the energy supply security as well as environmental concern has increased the interest for renewable energy sources. This has resulted Malaysia to look for bio – based alternative energies which lead to increase in demand for bio – based feed stocks such as palm and rapeseed oil (for bio – diesel) and sugar can and corn (for ethanol). Due to the increased importance of biodiesel in Malaysia, the impact of this new demand has added a new dimension in the fats and oils market model particularly palm oil. This paper seeks to describe a model of Bio – diesel demand on the Malaysian Palm Oil market, to examine the impact of biodiesel demand on Malaysian palm oil industry, attempts to integrate the econometric and system dynamics approaches in modeling the palm oil market in Malaysia. The limitation with the econometric modeling is its inability to deal with the interrelationships of the real world scenario if there is no data given. The system dynamics on the other hand provides alternatives platform to handle multi – loop and nonlinear feedback system that exists in a complex market such as palm oil. It analyses the behavior of the commodity system by identifying the cause and effect relationship and feedback control that creates the dynamics in the system. The system elements included in the model are supply, domestic demand, export demand, world price, domestic price and stock.

Keywords: Biofuel, System Dynamics, Econometrics Analysis