Abstract

Soybean price fluctuations become an important problem in Indonesia every year. The demand for soybeans increases every year in line with population growth and the soybean processing industry. The current problem is that soybean demand is increasing, but domestic production cannot match it, local soybean production is still low and cannot meet demand. The problems that arise in the logistics of the Central Java soybean supply chain are interrelated. Another logistical obstacle often faced by farmers in the long chain of the trade from farmers to consumers is the distribution and marketing of soybeans. In terms of distribution of market price competition, the price of imported soybeans is much cheaper than local soybeans. Soybean dependence on imported products has consequences on local soybean prices that are not able to compete, resulting in price instability. This study will develop a dynamic system model that aims to support soybean price stability with several policy simulations (case study: in Central Java Province). The relationship between variables that will be simulated with a dynamic system is about food needs (demand), total soybean availability (supply), and soybean prices (distribution) using a dynamic system framework. The result of the model scenario is the Bulog intervention policy (re-functioning Bulog's role as a soybean procurement agency). These policies can be used as supporting material for government and stakeholder decisions in developing strategies for
implementation to increase the competitiveness of local soybeans in the national market and stabilize soybean commodity prices.

**Keywords**
System dynamics, Simulation, Price Stability, Supply Chain, Soybean.

**Biographies**

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