

## **The mandarin orange industry in Indonesia: a policy evaluation**

### **ABSTRACT**

The mandarin orange industry experienced an increasing trend during the period of 1999 to 2007, with an average annual rate of growth of 25%. However, after 2007 to 2012 there was a significant decline from 2.5 million mt to 1.4 million mt. This makes the local production's ability to meet mandarin orange consumption reduced from 98% in 1999 to 92% in 2012; while, the gap was fulfilled by imports. The increase of mandarin orange imports from 27 thousand mt to 179 million mt from 1999 to 2012 became a government concern. The government tried to give a stimulus to the local production by issuing protection policies. These interventions will make a change in the mandarin orange industry landscape. The general objective of this study is to evaluate the impact of the selected policy interventions on the mandarin industry in Indonesia. The system dynamics methodology was used because of its ability to accommodate causal relationships, non-linearity and delays that exist in the Indonesian mandarin orange industry. The findings of this research indicate that the protection policy that was implemented was estimated to help to preserve local mandarin orange production and consumption from a sharper decline, which were 899% and 112%, respectively, in the next 22 years.

**Keyword:** Consumption; Indonesia; Mandarin orange; Production; System dynamics