

## **BEEF SUPPLY DEMAND ANALYSIS USING DINAMIC SYSTEM APPROACH**

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### **ABSTRACT**

The productivity of beef cattle in Indonesia grows in a number of 2% per year, but in the other hand the demand of beef in Indonesia rises rapidly in a number of 4 % per year (BPS,2015) This unbalanced condition could have a negative impact to food security in this country. The government of Republic Indonesia has been promoting many kind of programs to increase the numbers and the productivity of domestic cattle herd and to import beef from other countries to fullfill the demand regarding the growing of population in middle class economic. The purpose of this study was to inquaery supply-demand of beef in Indonesia especially in Yogyakarta region especially in Sleman Yogyakarta. We incorporated dynamic system approach. A Causal-loop model was proposed to achieve the objective of the study. The result of the research showed that there are four sub-systems in system of beef supply-demand : (1) the veterinity beef on farm; (2) the slaughtered house of cattle; (3) the marketing and agro-industry and (4) the consumer. By using the causal-loop model, we could concluded that if the demand of beef increase, the veterinity beef on farm will also increase and it will be a positive (+) influence. For this, the slaughtered house must prepare more cattle that ready to be slaughtered (+). The supply stock, on the other hand, must be increased too, both imported from other region of Indonesia and from other countries (+). All of the sub-systems influenced the market and agroindustries so that the price of beef will be decreased (-).

**Keywords** : Beef, Demand,Supply, Dynamic System,Sleman.