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Spatial System Dynamic Modelling of Land Availability to Cover Beef Demand

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Abstract

System Dynamic Model (SDM) is an effective approach model to solving problem of system complex. Although There have been development in expanding System Dynamic to include spatial system model, most application have been restricted to simulation many chances and get the wise argumentated policy. This study conduct to analyze the land availability in Yogyakarta Indonesia to cover the increasing of beef demand in this area. The background of the study is the condition of beef supply- demand gap. Recently demand of beef in Yogyakarta rises rapidly in number of 4 %/year but the production growth in 2,38%/year (Indonesia Statistical Data Beaurea, 2016). This research focus in how far land availability cover dinamic change condition. We Used Spatial System Dynamic to close the objection study. We incorporated a partial dynamic System Approach especially a Causal Loop Model (CLD) was proposed to achieve the goal of reseach. Our result generally suggest that in Yogyakarta Area the land have not been availability enough to cover of beef demand . The many policy must be taken to solve the problem. Many of the solution are we must keep land wise and also we must handle of agriculture land to other purpose seriously.

Keywords System Dynamic , Spatial , land, Beef , Availability.

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