ABSTRACT

Economic growth is an important indicator for measuring the success of regional development. However, Mojokerto City has experienced fluctuations in its Economic Growth Rate (EGR) in recent years, especially after the pandemic. This condition is influenced by the low contribution of the agriculture, forestry, and fisheries sector, as well as the high Open Unemployment Rate (OUR). This study aims to model a Smart economy strategy to improve the EGR in Mojokerto City using a system dynamics approach. The model is developed based on five main submodels, namely Gross Regional Domestic Product (GRDP), Human Development Index (HDI), investment, poverty, and smart economy, supported by Causal Loop Diagram (CLD) and Stock and Flow Diagram (SFD). The HDI is also a crucial aspect, as improving the quality of human resources is essential to support smart economy strategies. Simulation results show that the combined scenario of improving the agricultural sector through provision of facilities, technology adoption, and digital training, reducing unemployment through digital labor services, and improving the HDI through strengthening non-formal education such as PKBM, results in the highest EGR of 10.13 percent in 2035, compared to 8.39 percent in the Business As Usual (BAU) scenario. These findings indicate that an integrated Smart economy strategy can encourage sustainable economic growth in Mojokerto City and support the achievement of SDG 8.

Keywords: *Economic Growth, Mojokerto City, Smart economy, System Dynamics*