ABSTRACT

This study aims to recommend alternatives to improve production cost efficiency through the application of forecasting methods and production planning strategies that are more optimal in Sekar Tani Pandeglang. Sekar Tani Pandeglang is a home industry company that produces processed biopharmaceuticals and non-biopharmaceuticals with the strategy used, namely the inventory and utilization of part-time labor. Production cost efficiency efforts are carried out by applying aggregate planning to determine the most cost-efficient production planning. Aggregate planning aims to produce comprehensive, flexible, and optimal production planning. There are two strategies in aggregate planning, namely Level Workforce Inventory (inventory level) and Chase Demand Strategy (Hire and Lay-off). And the forecasting method used is the Moving Average (n=6) because it produces the smallest Mean Absolute Deviation (MAD), Mean Square Error (MSE) and Mean Absolute Percentage Error (MAPE) among other methods, which are 35.056, 34443.25, and 20.5%. From the results of the study, it can be seen that the use of 2 methods, Level Workforce Inventory and Chase Demand Strategy for empon sari products, resulted in costs of IDR 373,755,000 and IDR 368,985,000, respectively. From this study, it can be concluded that more efficient planning is by using the Level Workforce Strategy with a total cost of IDR 373.755.000.

Keywords: Aggregate Planning, Forecasting, Production Cost Efficiency.