ABSTRACT

An Optimization Production Planning In Cinta Manis Sugar Factory
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The purpose of this research is to identify the constraints that limit efforts to achieve the production target at a Cinta Manis sugar factory. Determining the optimal level of sugar and molasses production. Knowing the performance of the Cinta Manis sugar factory Planning for the optimal combination of resource utilization Cinta Manis sugar factory to achieve production targets. Data collected from secondary and primary in Cinta Manis Sugar Factory, analysis data using Goal Programming. These results indicate that the constraints that limit the production of sugar and molasses are raw materials, plant capacity, the number of days of mill, land area, production costs, profits, the number of worker in harvest cane, raw material quality, variety and production of liquid waste. Based on the analysis of outcomes, scenario raw cane milled all (I) shows the results of sugar production above target, which is as much 78,737.34 tons or 101.5% above the target. Milling capacity scenario (II) shows the results of sugar production above target, which is as much 86,842.59 tons or 112% above the target. Scenario-the number days of mill (III) shows the production of sugar under the target set, that is counted only 60,290.32 tons or 77.7% achieved the target. Scenario minimization of production costs (IV), shows the results of sugar production that is as much above the target 78,213.25 or 100.08% above the target. Scenario achievement gains (V) shows the results of sugar production that is above the target of 77,578.09 or 100.01% above the target. Scenario minimize the deviation between the varieties grown in maturity characteristics (VI) shows the results of sugar production reached 100.8 tons, or 78,213.35% above target. The last scenario is the scenario area for cultivating sugar cane, sugar production showed only achieved by 73,370.38 tons or 94.6% from target. Based on external factors to optimize production by comparing the performance of the Cinta Manis sugar factory by several sugar factories in Indonesia which has a total area of over 10,500 ha, it is known that the performance of the Cinta Manis sugar factory is still less efficient. Thus benchmarking is needed to couple the sugar factory has been an efficient performance. Benchmarking carried out on input factors of the Cinta Manis sugar factory, cover area, the capacity of milled, and the number days of mill to improve variable output of crystal sugar and molasses. Benchmarking can be done in the sugar factories of Pesantren Baru, Trangkil, and Sweet Indo Lampung.