

ABSTRACT

The bread agroindustry is a food industry that processes agricultural products using wheat flour as raw material. In Bireuen Regency, there are currently many bakery factories that are present to satisfy bread and cake fans. One of them is the Adil Bakery factory which was founded in 2019 in Meusee Village, Kuta Blang District. The obstacles experienced by bread marketers are in the form of erratic bread sales every day, such as bread that is not sold out in a day because currently the Adil Bakery business produces the same amount of bread for each bread variant, but consumer demand is for each type of bread variant. It's not the same because there are some variants that are in great demand and there are also those that are less popular. Therefore, Adil Bakery requires optimal production quantity planning to determine the number of products that will be produced for each type of bread variant in a day. This planning needs to be done so that a business can get optimal results. This research was conducted to analyze the optimal combination of bread production quantities and to determine the maximum amount of profit obtained by the Adil Bakery bread agroindustry in Meusee Village, Kuta Blang District, Bireuen Regency. This research uses primary data and secondary data. The data analysis method used is quantitative with a linear programming model using the simplex method with the help of QM For Windows software. The results of the research show that in one production the optimal number of bread production combinations to be produced by the Adil Bakery bread agroindustry in order to achieve maximum profits is 460 pcs of Tiramissu flavored bread, 750 pcs of blueberry flavored bread, 750 pcs of strawberry flavored bread, 1.080 pcs of chocolate flavored bread. pcs and 750 pcs of srikaya flavored bread. Meanwhile, the maximum profit that will be obtained by the Adil Bakery bread agroindustry in one production is IDR 6.541,12 per five flavor variants. If production is under optimal conditions, the profit contribution that Adil Bakery will receive will increase by IDR 3.105.236 per five flavor variants from the profit contribution under actual conditions.

Keywords: Agroindustry, Bread, Optimization, Profit