

ABSTRACT

Palm oil is one of the national strategic commodities that plays an important role in driving economic growth and increasing farmers' income in the plantation sector. Kualuh Leidong Subdistrict in North Labuhanbatu Regency is a potential area with increasing palm oil production, but the sustainability of farming faces challenges in terms of financing and market price fluctuations. Therefore, a financial feasibility analysis and sensitivity analysis to changes in prices and production costs are needed to assess the sustainability of smallholder oil palm farming. This study aims to analyze the financial feasibility and sensitivity of smallholder oil palm farming. The study was conducted using stratified random sampling with 26 farmer respondents. Data were analyzed descriptively and quantitatively using the Net Present Value (NPV), Net Benefit Cost Ratio (Net B/C), Internal Rate of Return (IRR), and Break-Even Point (BEP) indicators. The results of the study indicate that smallholder oil palm farming is viable, with an NPV of Rp131,482,473, a Net B/C of 2.59, an IRR of 14.42%, and a BEP achieved in the 13th year, 7th month, and 1st day. The results of the sensitivity analysis for three scenarios—a 10% decrease in selling price, a 10% increase in input costs, and a combination of a 10% decrease in selling price and a 10% increase in input costs—show that the business remains viable in all scenarios. Of the three scenarios, the best scenario is a 10% increase in input costs, which still yields a positive NPV of Rp112.637.161, a Net B/C of 2,24, and an IRR of 11,93%. This shows that smallholder oil palm businesses in the study area have sufficient financial resilience despite increases in production costs.

Keywords: Oil Palm Farming, Financial Feasibility, Sensitivity Analysis