

INTISARI

Budidaya bawang merah membutuhkan banyak tenaga kerja serta ketersediaan air yang memadai agar hasil panen optimal. Hal ini menjadikan efisiensi sumber daya dan akses pembiayaan sangat penting bagi petani. Penelitian ini bertujuan mengevaluasi penerapan sistem irigasi pancar pada lahan terbatas, dengan fokus pada aspek teknis dan kelayakan finansial. Sistem irigasi pancar dipilih karena dinilai mampu meningkatkan efisiensi penggunaan air dan produktivitas, namun kelayakan ekonominya perlu dikaji lebih lanjut terutama terkait pembiayaan melalui Kredit Usaha Rakyat (KUR).

Metode penelitian dilakukan melalui analisis teknis dan ekonomi pada dua skala lahan, yaitu 200 m² dan 1.000 m². Perhitungan mencakup biaya investasi awal, biaya produksi, depresiasi, serta proyeksi pendapatan berdasarkan harga jual bawang merah Rp35.000/kg. Analisis finansial dikombinasikan dengan simulasi pembiayaan KUR dengan variasi tenor, besaran pinjaman, dan jumlah tanggungan keluarga, serta kebutuhan hidup layak petani sebesar Rp1.020.000/bulan. Selain itu, dilakukan analisis sensitivitas terhadap skenario harga terendah Rp27.610/kg dan percepatan tenor pinjaman menjadi tiga tahun untuk menilai keberlanjutan usaha.

Hasil penelitian menunjukkan bahwa pada lahan 200 m² dengan harga Rp35.000/kg, sistem irigasi pancar menghasilkan pendapatan bersih Rp2,23 juta per musim, namun belum mampu secara konsisten memenuhi kebutuhan hidup petani jika dimasukkan komponen biaya hidup layak. Sebaliknya, pada lahan 1.000 m², berbagai skema KUR (Rp45–70 juta) terbukti layak dijalankan, bahkan dengan tanggungan hingga empat orang tanpa mengalami defisit kas. Penurunan harga jual menjadi Rp27.610/kg secara signifikan mengurangi kemampuan pemenuhan kebutuhan, terutama pada rumah tangga dengan tanggungan lebih besar. Sementara itu, percepatan tenor pinjaman menjadi tiga tahun tidak layak dijalankan karena menimbulkan beban finansial berlebih. Dengan demikian, sistem irigasi pancar dapat meningkatkan efisiensi dan produktivitas, tetapi kelayakan finansial sangat dipengaruhi oleh skala lahan, harga jual, dan struktur pembiayaan.

Kata kunci: bawang merah, irigasi pancar, KUR, kelayakan ekonomi, arus kas, kebutuhan hidup layak

ABSTRACT

Shallot cultivation requires substantial labor and adequate water availability to achieve optimal yields. This condition makes resource efficiency and access to financing highly important for farmers. This study aims to evaluate the application of a mist irrigation system on limited land, with a focus on technical aspects and financial feasibility. Mist irrigation was selected because it is considered capable of improving water use efficiency and land productivity; however, its economic viability needs further assessment, particularly in relation to farmer financing through the People's Business Credit (KUR) program.

The research method was carried out through technical and economic analysis on two land scales, namely 200 m² and 1,000 m². The calculations included initial investment costs, production costs, depreciation, and projected income based on a shallot selling price of Rp35,000/kg. The financial analysis was combined with simulations of the People's Business Credit (KUR) scheme with variations in loan tenor, loan amount, family dependents, and the farmer's minimum living cost of Rp1,020,000 per month. In addition, a sensitivity analysis was conducted for the lowest price scenario of Rp27,610/kg and accelerated loan repayment within three years to assess business sustainability.

The results showed that on a 200 m² plot with a selling price of Rp35,000/kg, the mist irrigation system generated a net income of Rp2.23 million per planting season, but it was not sufficient to consistently meet farmers' living needs when minimum living costs were considered. In contrast, on a 1,000 m² plot, various KUR schemes (Rp45–70 million) were proven feasible, even with up to four dependents, without experiencing cash deficits. A decrease in the selling price to Rp27,610/kg significantly reduced the ability to meet household needs, particularly for families with more dependents. Meanwhile, accelerating the loan tenor to three years was not financially feasible as it created excessive financial burdens. Thus, the mist irrigation system can improve efficiency and productivity, but its financial feasibility is strongly influenced by land scale, selling price, and financing structure.

Keywords: *shallot, sprinkler irrigation, KUR, economic feasibility, cash flow, minimum living needs*