

ABSTRAK

Usahatani padi merupakan salah satu sektor pertanian yang memerlukan analisis kelayakan untuk mengetahui tingkat keuntungan usaha. Di Dinas Pertanian Kabupaten Ogan Komering Ulu Timur, proses pengolahan data usahatani dan analisis kelayakan masih dilakukan menggunakan *Microsoft Excel* serta perhitungan secara terpisah sehingga kurang efisien dan berpotensi menimbulkan kesalahan perhitungan. Penelitian ini bertujuan membangun aplikasi SIPADI (Sistem Informasi Analisis Kelayakan Usahatani Padi) berbasis *website* untuk membantu pengelolaan data dan analisis kelayakan usahatani padi. Data yang digunakan meliputi data petani, biaya produksi, jumlah produksi, dan harga jual. Pengembangan sistem menggunakan metode *Agile*, sedangkan analisis kelayakan dilakukan menggunakan metode *Break Even Point* (BEP) dan *Revenue Cost Ratio* (R/C Ratio). Aplikasi dibangun menggunakan *CodeIgniter 4* dengan basis data *MySQL* dan diuji menggunakan *Black Box Testing*. Hasil penelitian menunjukkan bahwa aplikasi SIPADI dapat menghitung nilai BEP Produksi, BEP Harga, dan R/C Ratio secara otomatis serta menghasilkan informasi status kelayakan usahatani dan laporan analisis. Berdasarkan hasil pengujian, seluruh fitur aplikasi berjalan sesuai dengan kebutuhan fungsional sehingga aplikasi SIPADI dapat membantu proses analisis kelayakan usahatani padi secara lebih cepat, terstruktur, dan mengurangi potensi kesalahan perhitungan.

Kata Kunci : Usahatani Padi, Analisis Kelayakan, *Break Even Point* (BEP), *Revenue Cost Ratio* (R/C Ratio), Aplikasi Berbasis *Website*.

ABSTRACT

Rice farming is one of the agricultural sectors that requires a feasibility analysis to determine the profitability of farming activities. At the Department of Agriculture of East Ogan Komering Ulu Regency, the processing of rice farming data and feasibility analysis is still carried out using Microsoft Excel and separate calculations, making the process less efficient and increasing the risk of calculation errors. This study aims to develop SIPADI (Rice Farming Feasibility Information System), a website-based application designed to support the management of rice farming data and feasibility analysis. The data used in this study include farmer data, production costs, production yield, and selling prices. The system was developed using the *Agile* method, while the feasibility analysis was conducted using the Break Even Point (BEP) and Revenue Cost *Ratio* (R/C *Ratio*) methods. The application was developed using CodeIgniter 4 with a MySQL database and tested using Black Box Testing. The results show that SIPADI is capable of automatically calculating BEP Production, BEP Price, and R/C *Ratio* values, as well as providing information on farming feasibility status and analytical reports. Based on the testing results, all application features functioned in accordance with the specified functional requirements. Therefore, SIPADI can support the rice farming feasibility analysis process more efficiently, systematically, and with a lower risk of calculation errors.

Keywords : Rice Farming, Feasibility Analysis, Break Even Point (BEP), Revenue Cost *Ratio* (R/C *Ratio*), Website-Based Application