

Perancangan Unit Pengolahan Tepung MOCAF (*Modified Cassava Flour*)
(*Mocaf Flour Processing Unit Design*)
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ABSTRACT

MOCAF is a diversification product of cassava flour which is processed by a fermentation process using lactic acid bacteria to modify cassava cells. The characteristics of the resulting mocaf flour are almost similar to wheat flour, so it can be a substitute for wheat flour to reduce wheat flour imports from other countries. Purpose of this study was to obtain the process design unit and the feasibility in establishing a mocaf flour business. The establishment of a mocaf flour process unit was located in Ponorogo Regency – East Java with a space requirement area of 402 m², results of the selected layout blockplan 19 (R-Score 0.80 close to 1) and optimization with winQSB cannot be applied, so total area of 1,107 m². The production capacity of mocaf flour to be established is 8000 kg of cassava per production cycle and produces 2.588 kg of mocaf flour. The production process was carried out for 8 hours of work every day. The results of the financial aspect analysis obtained an NPV value of Rp 2,282,328,223, a B/C ratio of 1.11, an IRR value of 33% , a MIRR value of 24%, and a PBP of 2.98 years. Based on the results obtained, the establishment of a mocaf flour processing unit is feasible to be realized because the value of financial feasibility criteria is met with NPV > 0, B/C > 1, IRR and MIRR > 13%, and PBP < 6 years.

Key Word: *B/C Ratio, IRR, MIRR, Mocaf, NPV, PBP*