

Perancangan Unit Pengolahan Tepung Pisang Kepok (*Musa paradisiaca L.*)

*(Design of Kepok Banana (*Musa paradisiaca L.*) Flour Processing Unit).*

Ir. Didiek Hermanuadi, M.T.

Yudea Zefanya Yusuf

Study Program of Food Engineering Technology

Majoring of Agriculture Technology

Program Studi Teknologi Rekayasa Pangan

Jurusan Teknologi Pertanian

ABSTRACT

Bananas are one of the fruits that spoil easily. One effort to extend the shelf life of bananas is by processing them into flour. The processing of banana flour becomes easier with the help of factory design. The objective of this study was to design a processing unit and the feasibility of establishing a banana flour business. The establishment of a banana flour processing unit is located in Malang Regency, East Java with a space requirement of 1,095m². The production capacity of the banana flour to be built is 20,000 kg of banana per cycle and produces 6,764 kg of banana flour. The results of the financial aspect analysis obtained an NPV value of Rp15.356.688.191, a B/C Ratio of 1.15, a MIRR of 44.39%, and a PBP of 1.1 years. Based on the results obtained, the establishment of a banana flour processing unit is feasible to be realized because the value of financial feasibility criteria is very much fulfilled with $NPV > 0$, $B / C \text{ Ratio} > 1$, $MIRR > 13\%$, and $PBP < 6 \text{ years}$.

Key Words: *NPV, B/C Ratio, MIRR, PBP*