

## ABSTRACT

*PG Madukismo is a company engaged in the primary needs that produce sugar. Within this company there is no well-coordinated need for raw material needs. Thus, resulting in less controlled product demand due to lack of raw material needs. With the existence of the problem, then to calculate sugarcane raw material requirement using method of Distribution Requirement Planning (DRP).*

*Distribution Requirement Planning (DRP) is a method that determines supply demand at distribution centers, combines historical demand, and as inputs for production and material systems. This system helps get the total distribution needs (Planned Order Release) and product demand for the next year.*

*The result of research was obtained by Planning of Raw Materials Needs by company in 2017 demand of sugar 33,154,9 ton with requirement of raw material as much as 510.075,38 ton of sugarcane and land area of 7,286,79 and PG Madukismo can produce 32,326.3 sugar with raw material requirement 497,327.6 tons of sugar cane with a land area of 7,104.68 hectares. So the shortage in the production of sugar as much as 828,6 tons of sugar with the need of raw materials as much as 12,747.7 tons with a land area of 182.1 hectares.*

***Keywords: Distribution, Distribution Requirement Planning (DRP).***