

## **IMPLEMENTATION OF SIX SIGMA METHOD IN PRODUCTS TO IMPROVEMENT DESIGNS OF NATA DE COCO QUALITY**

### **ABSTRACT**

Six Sigma is a quality improvement method to 3,4 failure per million opportunities target for each product transaction (goods and/or services). Six Sigma suits for improving nata de coco quality because it focuses in decrease defects into zero.

Method that is used define costumer wants and determine it as Critical to Quality (CTQ). The defining method is done by giving questionnaire to the customers and interviewing the company. Then the CTQ is measured and the result is baseline performance in Defect per Million Opportunities (DPMO) and Sigma Capability. The data of CTQ is being analyzed by control chart to shows the product stability and searching what cause the defects using cause-effect diagram. The causes of defects are used as a base to design the improvement and make it as a work guide to product and process controlling.

The research results shows there are three biggest CTQ of nata de coco product. They are elasticity, hygienic product and there are not strange microbial and fungus in one nata de coco pack. The major causes of CTQ are workers, engine, work methods, medias and supplies. Some improvements that have been done to solve the defects causes are workers training, hygiene controlling in engine, supplies, work area and improving the work methods. Those improvement designs are determined as a work guide and can be used by company to improve the quality of nata de coco.

Key word : Product Quality, Six Sigma.