

**Analisis Metode Six Sigma pada Produk Bubuk Kakao Vicco di Pusat Penelitian Kopi dan Kakao Jember (Six Sigma Method Analysis on Vicco Cocoa Powder Product at Indonesian Coffe and Cocoa Research Institute Jember).**

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**ABSTRACT**

*Indonesian Coffe and Cocoa Research Institute (ICCRI) is a national institution that conducts research and development on coffee and cocoa commodities. The challenges faced by ICCRI is maintain and improve the quality of the products, one of which is cocoa powder products. This research aims to 1) determine the type of incompatibility that occurs in the cocoa powder production process is still within the control limit or not , 2) Determine the DPMO value and sigma level of cocoa powder products, 3) Identify the factors that cause the occurrence of product mismatches so that quality improvement plans are determined on cocoa powder. The data was analyzed by using Six Sigma method. Six Sigma is a tool to improve product quality by reducing the level of product mismatch through 5 stages (DMAIC), there are Define, Measure, Analyze, Improve, and Control. The result of this research shows that the incompatibility that occurs in vicco cocoa powder production process is still stable within the control limit and the resulting DPMO value is 126667 with sigma 2.64 level it means that in one million opportunities there will be a damage possibility of 126667 units produced. Some factors that caused incompatibility, there are, human error, raw materials, machine and environment.*

**Key words:** *ICCRI, Cocoa Powder Product, Six Sigma Method*