

Robusta Roasted Coffee Bean Quality Control Using Six Sigma Method at Bedhag Kopi Small Enterprise Jember Regency

Risky Oktaviliana Putri

Agroindustry Management Study Program
Agribusiness Management Department

ABSTRACT

Bedhag Kopi is a Small Enterprises producing coffee from upstream until downstream, like farm maintaining, post-harvest process, roasting, product for specialty cafe coffee standard situated in Jawa Street 2 Number 4 Rt. 03 Rw. 36 Tegalboto Kidul, Sumber Sari Sub-district, Sumber Sari District, Jember Regency, East Java. Bedhag Kopi business hasn't applied the overall quality control towards quality requirements for roasted robusta coffee bean. Therefore, the overall and more detail quality control is needed in robusta coffee bean roasting through Six Sigma Method. Six Sigma is a tool to fix product quality by reducing the defect level through 5 steps (DMAIC), which are: Define (Problem Identifying), Measure (Quality Performance Measurement), Analyze (Analyzing Towards Defect Causes), Improvement (Doing Repairing Effort to Improve the Quality), and Control (Controlling). Based on the p control chart map result, can be concluded that all of roasted robusta coffee bean defect product data are statistically still in the control level, because from the entire p control chart map there are no points surpassing the upper control limit and lower control limit. In the DPMO score calculation, gained 170.000 as the result with sigma level 2,45 which means in every million unit/process produced, there are defect products probability for 170.000. In Capability Process (Cp) score calculation for entire variables gained Cp result = 0,49 which means the company ability to produce high quality roasted robusta coffee bean is 49%. The factors causing incompatibility in this research are environment, material, and human factors.

Key Words: Bedhag Kopi, Roasted Robusta Coffee Bean, Quality Control, Six Sigma Method