

ANALISIS RISIKO PRODUKSI PADA USAHA TAHU ATB DI KECAMATAN KURANJI KOTA PADANG

SKRIPSI

Oleh :

NAZWA HABIBI TANJUNG

NIM. 2210222048

Dosen Pembimbing:

Pembimbing I : Cindy Paloma, S.P., M.Si.

Pembimbing II : Dr. Yulistriani, S.P., M.Si.



**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2026**

ANALISIS RISIKO PRODUKSI PADA USAHA TAHU ATB KECAMATAN KURANJI KOTA PADANG

Abstrak

Usaha Tahu ATB di Kecamatan Kuranji, Kota Padang merupakan agroindustri tahu berskala kecil yang menghadapi fluktuasi jumlah produksi, dengan produksi tertinggi sebanyak 3.624 peti dan terendah 824 peti. Penurunan produksi disebabkan oleh banyak faktor: risiko selama proses produksi seperti rendahnya ketelitian pekerja, ketidakstabilan kualitas bahan baku, kerusakan mesin dan peralatan, ketidaksesuaian proses produksi, serta perubahan kondisi eksternal. Penelitian ini bertujuan mengidentifikasi penyebab risiko produksi, menganalisis dan mengukur tingkat penyebabnya, serta merumuskan strategi manajemen risiko produksi pada Usaha Tahu ATB. Metode yang digunakan adalah analisis deskriptif dengan pendekatan kuantitatif dan kualitatif melalui studi kasus. Identifikasi penyebab risiko dilakukan menggunakan Fishbone Diagram, pengukuran tingkat risiko menggunakan Failure Mode and Effects Analysis (FMEA), dan penentuan prioritas risiko menggunakan Diagram Pareto. Hasil penelitian menemukan 17 penyebab risiko produksi yang berasal dari lima kelompok sumber risiko, yaitu sumber daya manusia, bahan baku, mesin dan peralatan, proses produksi, serta faktor eksternal. Berdasarkan hasil FMEA dan Diagram Pareto, diperoleh sembilan risiko prioritas dengan persentase kumulatif $\leq 80\%$, yaitu sistem kerja satu shift malam tanpa jeda istirahat teratur, keterbatasan air, perendaman kedelai yang tidak tepat waktu, bencana alam, ketidaksesuaian suhu dan waktu pemasakan, kerusakan mesin penggiling, rendahnya ketelitian pekerja, perubahan permintaan pasar, dan ketidakkonsistenan tahap pencetakan. Strategi preventif yang dirumuskan meliputi penyusunan SOP tertulis, penjadwalan istirahat kerja, pemasangan CCTV, penerapan preventive maintenance, penggunaan termometer dan stopwatch, serta cetakan bersekat ukuran seragam. Strategi mitigasi meliputi kerja sama jangka panjang dengan distributor bahan baku, penyediaan tandon air cadangan, dan penyesuaian volume produksi berdasarkan perubahan permintaan pasar.

Kata kunci: Agroindustri, Diagram Tulang Ikan, *Failure Mode and Effects Analysis* (FMEA), Risiko Produksi, Tahu

PRODUCTION RISK ANALYSIS IN ATB TOFU BUSINESS IN KURANJI DISTRICT, PADANG CITY

Abstract

The ATB Tofu business in Kuranji District, Padang City, is a small-scale tofu agro-industry that experiences fluctuations in production volume, with the highest production reaching 3,624 crates and the lowest at 824 crates. The decline in production is caused by various factors: risks during the production process such as low worker precision, instability in raw material quality, damage to machinery and equipment, nonconformity in the production process, as well as changes in external conditions. The aims of this study is to determine the sources of production risk, analysis and measure their level, and develop risk management strategies for the business. This study used a descriptive method that combined quantitative and qualitative case-study approaches. Risk causes were identified using a Fishbone Diagram, risk levels were measured using Failure Mode and Effects Analysis (FMEA), and risk prioritization was determined with a Pareto Diagram. The study found 17 causes of production risk coming from five sources: human resources, raw materials, machinery and equipment, production processes, and external factors. Nine priority risks with a cumulative percentage of less than 80% were found based on the Pareto Diagram and FMEA results. These risks include a single night shift work system without regular breaks, water limitations, late soybean soaking, natural disasters, non-compliance with cooking temperature and time, grinder machine malfunctions, low worker accuracy, shifts in market demand, and inconsistent steps pressing tofu. Preventive strategies include the preparation of written SOPs, scheduling work breaks, installing CCTV, implementing preventive maintenance, using thermometers and stopwatches, as well as uniform-sized partitioned molds. Mitigation strategies include long-term cooperation with raw material distributors, provision of backup water tanks, and adjustment of production volume based on changes in market demand.

Keywords: Agroindustry ,Failure Mode and Effects Analysis (FMEA), Fishbone Diagram, Production Risk, Tofu