

Food safety systems are essential for protecting public health by ensuring food products are free from hazards. The Hazard Analysis and Critical Control Points (HACCP) system is a globally recognized for managing food safety risks, but local ASEAN food manufacturers often face challenges with its implementation due to limited know-how, resources, inadequate infrastructure, and lack of digital tools. The extensive documentation, hazard analysis, monitoring, as well as verification are particularly overwhelming for small manufacturers, leading to non-compliance and increased risks of foodborne illnesses. As ASEAN food products have the enormous potential to access global markets, non-compliance to HACCP restricts growth and national income. To address these issues, a cloud-based and intelligent HACCP Management System is proposed to simplify implementation for local manufacturers by providing analysis assistance, real-time monitoring, streamlined documentation, and user-friendly dashboards. This digital solution will enhance food safety compliance, facilitates global market access and strengthens supply chain resilience. It also aligns ASEAN food industries with international standards, reinforcing regional food safety governance and public health.



CONTENTS OF THE PROPOSED CLOUD-BASED HACCP MANAGEMENT SYSTEM

PROJECT MEMBERS

- DR. NOOR ZAFIRA NOOR HASNAN (UNIVERSITI PUTRA MALAYSIA)
- DR. ROSELIZA KADIR BASHA (UNIVERSITI PUTRA MALAYSIA)
- DR. NOR AMAIZA MOHD AMIN (UNIVERSITI PUTRA MALAYSIA)
- MR. DEGO YUSA ALI (UNIVERSITAS BRAWIJAYA, INDONESIA)
- ASSOC. PROF DR. SHINYA IKENO (KYUSHU INSTITUTE OF TECHNOLOGY, JAPAN)

PROJECT PARTNERS

- PROF. DR RYOZO NOGUCHI (KYOTO UNIVERSITY, JAPAN)
- DR. SOUVIA RAHIMAH (UNIVERSITAS PADJADJARAN, INDONESIA)
- ASSOC. PROF. DR NIZAM LANI (UNIVERSITI MALAYSIA TERENGGANU)
- THARA ASIA SDN BHD
- CUBIXI WORLDWIDE (M) SDN BHD
- MS. SHARIFAH HAFIZA MOHD RAMLI (MARDI, MALAYSIA)

CONTACT PERSON:
DR. NOOR ZAFIRA NOOR HASNAN
(PROJECT LEADER)
noorzafira@upm.edu.my
Department of Process and Food Engineering
Faculty of Engineering
UNIVERSITI PUTRA MALAYSIA, 43400 SERDANG.

