

Environmental Safety and Sustainable Practices in Export Operations among Micro Enterprises

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Abstract

Environmental safety and sustainable practices are increasingly critical in global export operations, with buyers demanding compliance, responsible resource use, and reduced environmental risks. For food-industry micro-enterprise exporters in Parañaque City, these expectations present both opportunities and challenges due to limited resources, simple organizational structures, and fewer formal management systems. This study explores how micro enterprises describe and implement environmental safety and sustainability practices in their export operations, guided by ISO 14001:2026 and the Plan-Do-Check-Act (PDCA) cycle. Using a qualitative approach through semi-structured interviews, the research examines practices, experiences, constraints, and improvement needs. Findings reveal that micro-enterprise exporters recognize environmental safety as an integral responsibility shared by management and employees, expressed through compliance efforts, waste management, pollution prevention, and operational controls. However, effectiveness depends on resources, employee participation, and management commitment. Documentation and compliance obligations are essential for credibility and continuity, yet micro enterprises require stronger systems and clearer guidance. While basic safeguards such as sanitation, waste segregation, and recycling are present, continuous improvement, training, and monitoring remain limited. Resource efficiency, sustainable packaging, and green logistics are valued but constrained by financial, technological, and infrastructure gaps. Monitoring and continual improvement are acknowledged as necessary but weakened by limited expertise and weak systems. The study concludes that food-industry micro-enterprise exporters demonstrate strong commitment to environmental protection and sustainable operations, but this commitment must be reinforced through financial assistance, technical training, simplified documentation support, access to sustainable materials and technologies, improved logistics, and stronger monitoring systems. A Sustainable Export Operational Enhancement Framework is proposed to strengthen regulatory compliance, environmental protection, and competitiveness, contributing to Sustainable Development Goals 12 (Responsible Consumption and Production) and 13 (Climate Action).

Keywords: Environmental safety, sustainable practices, micro enterprises, food export, PDCA cycle

