

Investing Wisely *in* Food Safety: How to Maximize the Benefits *and* Reduce Costs



MARCH 2026

About IFC

IFC — a member of the World Bank Group — is the largest global development institution focused on the private sector in emerging markets. We work in more than 100 countries, using our capital, expertise, and influence to create markets and opportunities in developing countries. In fiscal year 2025, IFC committed a record \$71.7 billion to private companies and financial institutions in developing countries, leveraging private sector solutions and mobilizing private capital to create a world free of poverty on a livable planet. For more information, visit www.ifc.org.

Table of Contents

| | |
|---|----|
| Foreword..... | 4 |
| Acknowledgements..... | 4 |
| Abbreviations and Acronym..... | 5 |
| Introduction..... | 7 |
| Why You Need a Food Safety Management System..... | 9 |
| Market Challenges..... | 11 |
| Systems Approach..... | 14 |
| What the CEO Should Know..... | 16 |
| Lesson 1: Planning..... | 18 |
| Lesson 2: Financing..... | 22 |
| Lesson 3: Changing Behavior..... | 26 |
| Lesson 4: Do You Need a Consultant?..... | 30 |
| Lesson 5: Typical Mistakes and How to Avoid Them..... | 32 |
| Mistake 1: Pursuing Certification Without a Clear Goal..... | 32 |
| Mistake 2: Inadequate Planning and Budgeting..... | 33 |
| Mistake 3: Overlooking Culture, Communication, and Team Buy-In..... | 34 |
| Mistake 4: Over relying on Consultants Instead of Building Internal Capability..... | 34 |
| Mistake 5: Ignoring the Business Case for Food Safety Management Systems..... | 35 |
| Indicators of Success..... | 36 |
| Main Conclusions..... | 39 |
| Annexes..... | 41 |
| Annex 1: The Food Certification Process..... | 41 |
| Annex 2. Quiz: Do You Have a Thorough Understanding of Your Facility?..... | 43 |
| Annex 3 – Case Studies..... | 44 |
| Nafoods Group – Viet Nam..... | 44 |
| Twiga Foods – Kenya..... | 45 |
| Bel Ga – Viet Nam..... | 46 |
| MHP – Ukraine..... | 47 |
| PAN Food – Viet Nam..... | 48 |
| PRAN Group – Bangladesh..... | 49 |
| Gaselia Group – West Africa..... | 50 |
| Kaufland – Romania, Bulgaria, Moldova..... | 51 |
| References..... | 52 |

Foreword

In today's rapidly evolving food industry, investing in food safety is more than a regulatory requirement, it is a strategic imperative for business growth, resilience, and consumer trust. This brochure distills practical lessons and real-world insights from IFC-supported projects, guiding food businesses on how to build effective food safety management systems that deliver measurable value. By treating food safety as an investment, companies can unlock new markets, strengthen operational performance, and safeguard their reputation. Whether you are just beginning your food safety journey or seeking to enhance existing systems, the guidance and case studies presented here will help you invest wisely for long-term success.

Anup Jagwani,
WBG Director, Farming and Agribusiness

Acknowledgements

The brochure, "Investing Wisely in Food Safety: How to Maximize the Benefits and Reduce Costs," reflects the collective efforts of IFC's Global Agribusiness team and was authored by Noreen Hobayan, IFC Food Safety Consultant.

We extend our thanks to the following IFC colleagues for their rigorous review of the brochure's content: Yuriy Zvazhenko, IFC Global Food Safety Expert; Jacqueline Njonjo, Africa Lead, IFC Food Safety and Food Loss Prevention Advisory; Uy Duc Pham, IFC Operations Officer, Viet Nam MAS Upstream and Advisory; and Ghislaine Muyangata, IFC Global Food Safety Consultant. Their expertise and guidance strengthened the analysis and recommendations throughout.

We are also grateful for the support and strategic direction of Anup Jagwani, WBG Director, Farming and Agribusiness, and Natia Mgeladze, Platform Lead, Food Safety, Food Loss Prevention and Food Fortification Advisory, Farming and Agribusiness, Solutions & Impact, WBG.

This work was made possible by financial support from the **Global Agriculture and Food Security Program (GAFSP)**, the **Facility for Investment Climate Advisory Services (FIAS)** and the **Government of Canada**, for which we express our sincere appreciation.

We extend special thanks to Aliza Marcus, IFC Global Senior Communications Officer, and Faher Fawaz Faleh Elfayez, IFC Global Communications Officer, for their assistance in preparing and finalizing this brochure.

Abbreviations and Acronyms

| | |
|------------|--|
| FSMS..... | Food Safety Management System |
| GFSI..... | Global Food Safety Initiative |
| HACCP..... | Hazard Analysis Critical Control Point |
| IFC..... | International Finance Corporation |
| KPI..... | Key Performance Indicator |
| SMEs..... | Small And Medium Enterprises |
| SOP..... | Standard Operating Procedure |



Introduction

Investing in food safety is not only a matter of compliance, but a strategic necessity in the environment of the modern interconnected food supply chain. The food industry is facing growing pressure because of evolving consumer expectations, regulatory demands, and global market shifts. Businesses must also navigate mounting risks, including supply chain disruptions, food fraud, climate-related shocks, and reputational vulnerability. These challenges underscore the need for resilient, science-based food safety management systems (FSMSs) that protect consumers and support long-term business performance.

Modern consumers prioritize health, transparency, and sustainability. Food safety management is thus directly linked to brand trust, customer retention, and access to high-value markets. Companies that demonstrate leadership in food safety are thereby able to gain an advantage in domestic and export markets.

Recent engagements of the International Finance Corporation (IFC) across Africa, Asia, Eastern Europe, and Latin America demonstrate that treating food safety as an investment, not only a cost, yields measurable benefits to businesses. These benefits range from enhanced productivity and lower compliance-related costs to expanded market reach enabled by better supplier alignment and globally recognized certification.

This guide draws on lessons from IFC-supported clients and reflects the current realities of the global food industry. It offers practical insights on how to build an effective FSMS, align it with business goals, and foster a culture of continuous improvement that delivers long-term value. Whether entering new markets, cultivating supply chain reliability, or protecting brand integrity, the case for investing wisely in an FSMS is stronger than ever.



Why You Need a Food Safety Management System

Food safety incidents can cause immediate and lasting harm to a company's reputation, customer trust, and market access. In a competitive global marketplace, businesses that cannot demonstrate control over food safety risks may be excluded from major retail supply chains or lose access to export markets.

A modern FSMS, grounded in internationally recognized standards, such as hazard analysis critical control point (HACCP) or GLOBALG.A.P., is essential to demonstrating accountability, ensuring consistent quality, and reducing operational and financial risks. FSMS certification assures buyers, regulators, and consumers that a company has embedded food safety at every stage of operations, from sourcing to delivery. Without a credible FSMS, companies may struggle to attract investors, who increasingly view food safety as a core ingredient in operational and reputational integrity.

A modern FSMS must not only assure basic compliance. Customers, consumers, investors, and other stakeholders now expect food companies to demonstrate traceability, transparency, and proactive risk management as part of their commitment to responsible operations. Consumers have become more well informed and value-driven, and brands are now often being judged by how visibly and consistently they manage food safety and quality across the supply chain.

A certified FSMS is a prerequisite for many businesses, but especially for those seeking growth through exports or retail partnerships. An FSMS can unlock access to new markets, boost operational performance, and reduce waste and the losses associated with product recalls. These outcomes support long-term business growth through better supplier alignment and greater recognition by global buyers.

Trade in food is difficult to imagine without standards. Food standards give confidence to consumers about the safety, quality, and authenticity of what they eat. By setting out a common understanding on different aspects of food for consumers, producers, and governments, harmonization on the basis of international standards makes trade less costly and more inclusive.

— FAO and WTO (2017)

Implementing an FSMS helps avoid food safety issues while building a competitive advantage (refer to figure 1). Companies that approach food safety as part of their strategic vision position themselves to respond to change, meet evolving regulations, and grow sustainably.

Figure 1

Benefits of food safety management systems



SOURCE: IFC 2025.

Market Challenges

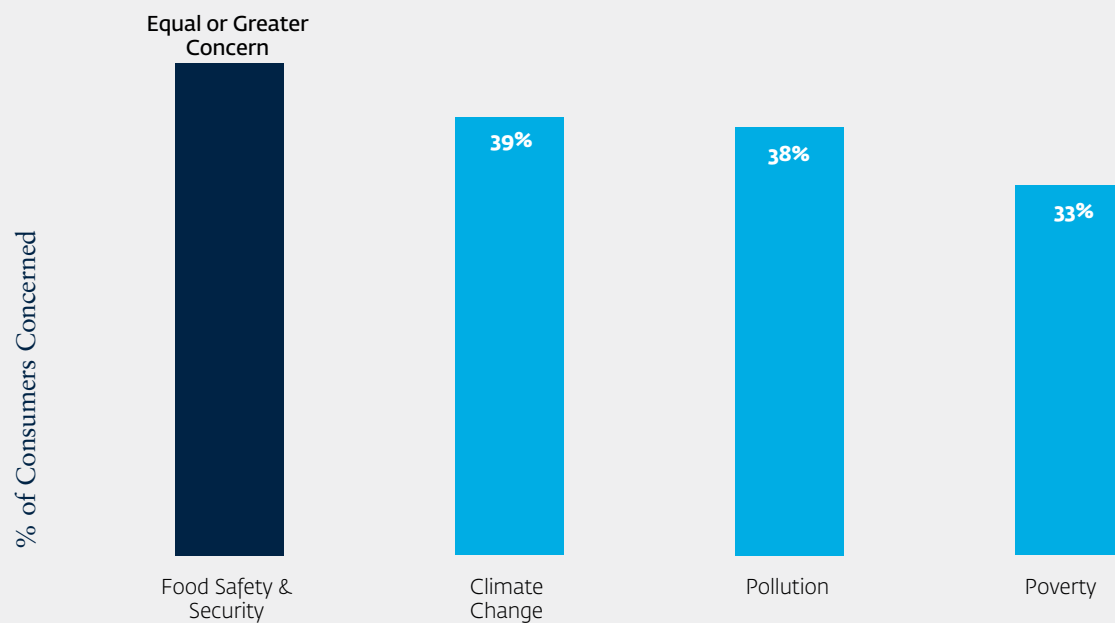
Food businesses are facing a complex and rapidly changing environment that is shaped by evolving regulations, demanding buyers, and value-driven consumers. Shoppers now expect more than safe products. They want to know the source of their food, how it is produced, and whether the producers are sufficiently trustworthy to uphold high

safety and ethical standards (refer to figure 2). Consumers quickly respond to negative news and are more likely to reward their business to companies that are transparent and proactive about food safety and that are certified.

Figure 2

Most consumers rank food safety and security among their top global concerns

Consumers Rank Food Safety Among Top Global Concerns



SOURCE: Adapted from Mars GFSC 2020.

A persistent challenge among small and medium enterprises (SMEs) is securing investment by demonstrating growth and risk management. Investors frequently view food safety as a proxy for operational maturity and brand integrity.

Companies without formal food safety systems often struggle to attract financing or expand beyond local markets.

Businesses must also navigate a confusing array of public and private food safety regulations (refer to table 1). National regulations, voluntary certification schemes, retailer protocols, and the import standards of the European Union, the Gulf States, and the United States can overlap or conflict,

making it difficult for companies, especially SMEs, to follow the requirements. These complexities can delay compliance, raise costs, and limit access to high-value markets.

Table 1

International requirements and food safety legislation

| | |
|--|---|
| | Codex Alimentarius |
| | European Union |
| | Customs Union and Eurasian Economic Union |
| | National legislation |
| | Laws |
| | Regulations |
| | Rules |

Food safety failures, such as contamination, recalls, or failed audits, can lead to contract losses, reputational damage, and regulatory penalties. Consumers are also becoming less

forgiving. Complaints and online backlash can erode brand trust and reduce customer retention.

As we grow, food safety is the biggest risk to our business and a high priority for us.

—Amit Sagar, CEO, Pearl Dairy (Uganda), IFC Client Testimonial

Adding to this pressure is the continued reliance by some businesses on outdated food safety controls that focus solely on the final product. Traditional approaches often detect problems only after they occur. In contrast, a modern FSMS takes a proactive, process-based approach that helps prevent problems throughout production, storage, and distribution. Companies without such systems face greater operational and reputational risks.

Certification has become another critical threshold. Many large buyers and retail chains require suppliers to be certified by a recognized food safety standard as a condition of doing business. This expectation is especially true in export markets, such as the European Union, where entry may require certification. Standards benchmarked by the Global Food Safety Initiative (GFSI), including FSSC 22000, BRC Global Standards, and GLOBALG.A.P., are widely accepted by multinational manufacturers and retailers.

Emerging challenges are also reshaping the risk landscape, as follows:

- *Supply chain disruptions* because of health crises, climate events, or geopolitical tensions expose sourcing and traceability vulnerabilities.
- *Cybersecurity threats* increasingly affect digital quality systems and operational data integrity.
- *Sustainability and transparency* now influence buyer decisions, even if regulation lags.
- *Investors focused on environmental and social governance* include food safety in their assessments of social and operational risk.

In this environment, businesses are seeking more than mere ad hoc compliance. They are seeking clear systems that ensure consistency, demonstrate reliability, and support long-term growth. Building a strong food safety foundation is critical to managing these risks and remaining competitive.

Systems Approach

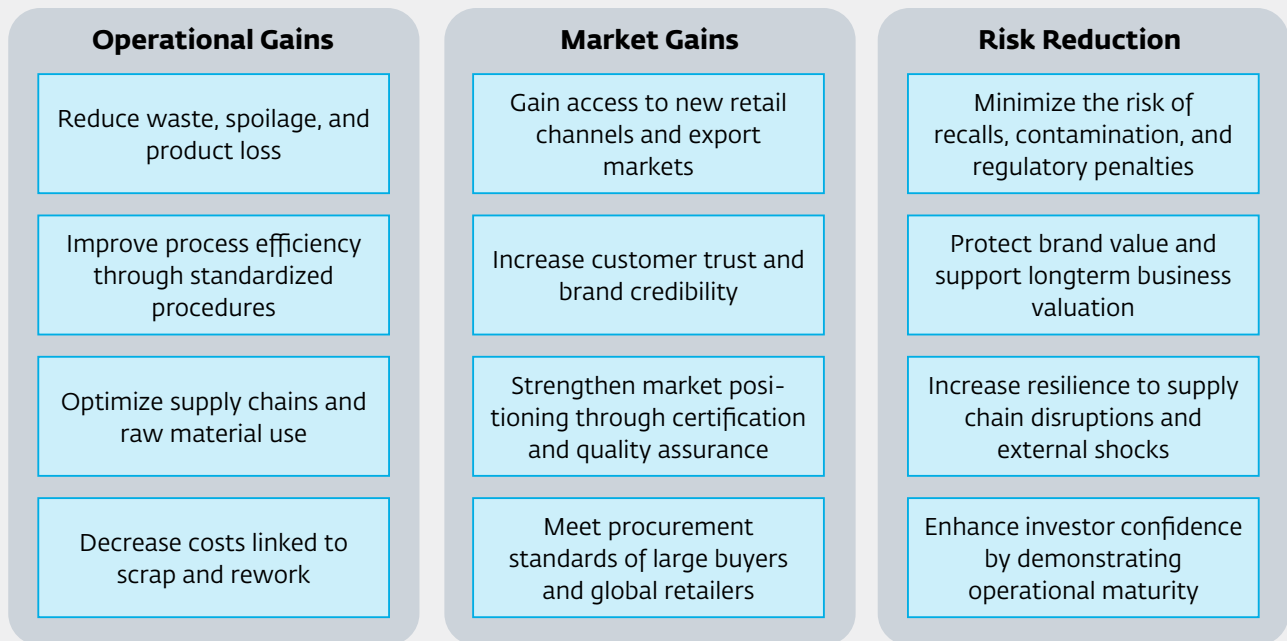
Traditional food safety practices often rely on inspecting finished products to detect problems after they occur. While this reactive model may resolve some issues, it cannot ensure consistency or prevent safety failures before they happen.

An integrated FSMS reflects a preventive, process-based approach. Systems such as HACCP are designed to identify potential risks early and implement controls throughout the production process, from sourcing and handling to

packaging and distribution. This allows companies to prevent contamination, reduce waste, and ensure consistent product quality (refer to table 2). By embedding food safety into each stage of operations, companies shift from compliance-driven checklists to a culture of accountability and continuous improvement. This approach helps reduce the cost of poor quality, avoid product recalls, and improve operational efficiency.

Table 2

How a food safety management system strengthens a business



SOURCE: IFC, Strengthening the Business Case for FSMS (2025)

Certification is no longer optional for many businesses, especially those seeking to access formal retail channels or export markets. Buyers and regulators often require suppliers to demonstrate adherence to recognized food safety standards. Certification through GFSI-benchmarked

schemes, such as FSSC 22000, BRC Global Standards, or GLOBALG.A.P., reassures international partners and opens doors to high-value markets.

FSMS implementation . . . sends a clear signal to buyers and business partners about a company's commitment to risk management, product quality, and long-term resilience.

—IFC (2025)

Establishing an integrated FSMS is about processes, but also about people. A successful system depends on a strong internal food safety culture, whereby staff at all levels understand their roles, follow procedures, and take

ownership. This culture requires leadership commitment, ongoing training, and accountability. It involves turning food safety from an obligation to a shared value.

Success Story: Nafoods Group, Embedding Food Safety across Operations

Nafoods Group, a leading fruit and vegetable processor in Viet Nam, partnered with IFC to reach beyond basic hygiene controls and adopt a fully integrated FSMS. With training and technical guidance, the company implemented HACCP principles and obtained FSSC 22000 certification.

By embedding food safety into each production stage, from sourcing to packaging, Nafoods shifted from a reactive approach to a systemic, preventive model. This reduced

operational risks, improved process efficiency, and enhanced product consistency. The transformation also enabled Nafoods to meet the requirements of high-value markets in Asia and the European Union, thereby strengthening its position with international buyers and securing long-term sales growth.

The investment and technical advice of IFC came at the right time as we are trying to add more value to our products by applying the principles of safe and sustainable agricultural practices and improving production facilities.

—Nguyen Manh Hung, quoted in Nafoods King (2019)

What a CEO Should Know

A CEO needs a clear vision of where a company is headed in the medium to long term. Once the CEO and board determine the company's strategic direction, the next question should be: What are the food safety and quality requirements for the markets we want to serve?

For example, if the goal is to double sales over the next few years by entering new export markets, the CEO must understand the food safety requirements in these destinations. If the aim is to supply products to a national

retailer, the CEO should know the retailer's expectations, including formal audits and certification according to internationally recognized food safety standards.

Food safety cannot be overlooked even at companies focused on maintaining their current market position and minimizing risk. Formal certification may not be required in such cases, but a robust HACCP-based system should still be implemented to ensure compliance with national regulations and proactively manage risk.

What is HACCP?

HACCP is a tool to assess hazards and establish control systems that focus on control measures for significant hazards along the food chain, rather than relying mainly on end-product testing.

—FAO and WHO (2023, 32)

As companies improve food safety performance, a significant challenge is often resides in undertaking and realizing the effort to change ways of thinking among employees and senior management. As observed in IFC-supported firms, committed leadership is the starting point. The keys to success for business leaders are commitment, consistency, and an informed, step-by-step approach to implementation.

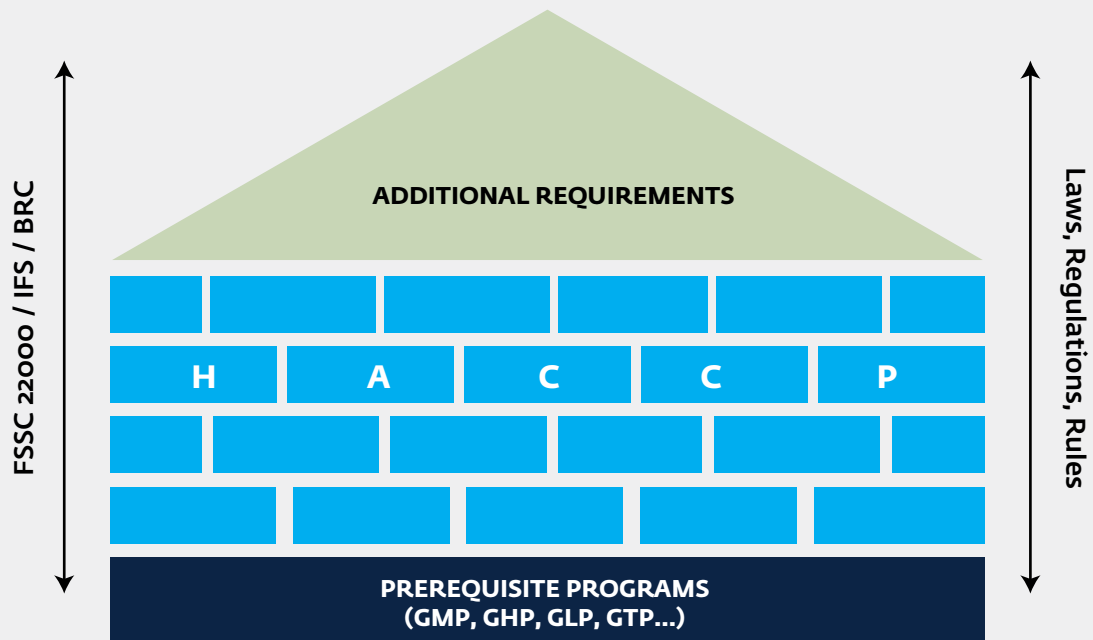
Careful planning with realistic timelines, clear roles, defined deliverables, and an appropriate budget helps staff understand what leaders expect and take ownership of the system. An FSMS will only be sustainable if leaders develop it with active staff involvement and a clear understanding of the long-term benefits. Frequent communication and regular checks on progress against the plan are essential to building trust and momentum.

While implementing a food safety system may involve high up-front costs, including staff training, external support, and, in some cases, capital investment in new equipment or facilities, the long-term gains, such as improved product safety, reduced waste, higher production efficiency, reduced recall risk and access to more profitable markets, often offset the burdens.

In evaluating the returns on investment, CEOs should take a systemwide view. They can implement HACCP across the value chain, from primary production to retail. Each segment presents different risks and requirements. Many food safety failures arise not from poor execution, but from poorly designed systems. It is therefore essential to weigh the cost of implementing the right system, not only the cost of a particular intervention.

Figure 3

An FSMS is built in layers in line with business strategy and market demand



Lesson 1: Planning

Start with Strategy

Once a company decides to implement an FSMS, the first step is to ensure alignment with the broader business strategy. Certification should not be the end goal. It should

be a tool to support growth, efficiency, risk reduction, and market access. A clear business plan can secure the commitment of leadership and staff, guide investment, and enable success to be measured.

Food safety must be part of Azalai's growth strategy as we continue to grow as a leader in the West African hotel industry.

—Mossadeck Bally, CEO, Azalai Group, Côte d'Ivoire, IFC Client Testimonial

Key Planning Actions

- Clarify why the system is needed and how it supports your company's medium- and long-term business goals.
- Develop SMART objectives—specific, measurable, attainable, realistic, and time-bound—for implementation, operational improvement, access to specific buyers or markets, and risk reduction.
- Form a cross-functional HACCP team led by a qualified HACCP team leader.
- Create a detailed implementation plan with clear milestones, roles and responsibilities, and timelines and a realistic estimate of costs, including for staffing, training, infrastructure, and certification.
- Secure executive approval for the plan and budget and define the reporting structure.
- Report regularly to management—monthly is recommended—and revise the plan as needed.
- Apply for certification if required by the target market or supply chain partner.

Moving from Strategy to Execution

Once a company has a clear business rationale and the buy-in of leadership, the focus should shift to execution. Translating strategy into practice requires a strong cross-functional team, realistic budgeting, and a clear implementation roadmap. The goal is to embed food safety into daily operations to support long-term value creation.

Management plays a central role in this phase. Leaders must communicate goals, allocate resources, and build staff awareness and engagement.

Before starting implementation, it is important to understand the foundational building blocks of an effective FSMS. These steps represent the core activities that translate strategic goals into daily practice and set the stage for measurable improvements.

Proper allocation of resources, including financial, people and time, demonstrates leadership's dedication to food safety.

— GFSI (2018, 12)

The success of any FSMS depends on people. A competent cross-functional HACCP team is essential. It would draw on members in production, quality control, maintenance, procurement, and senior management. The team leader must be trained, respected, and empowered to drive

implementation across departments. External consultants can support this process, but companies that rely on internal ownership are more likely to realize improvements beyond initial certification.

Before developing an HACCP plan, companies should establish programs in sanitation, hygiene, good manufacturing practice, pest control, and supplier management. These would form the operational backbone of the system and help reduce audit failures and implementation risks. For example, the IFC-supported Gaselia Group in West Africa achieved more than

US\$500,000 in cost savings by adopting standard operating procedures (SOPs) and training staff early in the process. A well-functioning FSMS builds on these foundations by following structured HACCP steps (refer to table 3). These steps translate food safety goals into action.

HACCP-based procedures provide businesses with a cost-effective system for control of food safety, from ingredients right through to production, storage, and distribution to sale and service of the final consumer. The preventive approach of HACCP-based procedures not only improves food safety management, but also complements other quality management systems.

—Benefits of HACCP (web page), Food Safety Authority of Ireland, <https://www.fsai.ie/business-advice/running-a-food-business/food-safety-management-system-%28haccp%29/benefits-of-haccp>

Table 3

Foundational steps in FSMS implementation

| Step in the process | What it involves |
|----------------------------------|--|
| Form your HACCP team | Appoint well-trained cross-functional staff Include representatives from key departments Assign clear leadership and authority roles |
| Establish prerequisite programs | Implement good manufacturing practice and hygiene protocols, including <ul style="list-style-type: none"> ● Training ● Practice for personnel ● Sound facilities and equipment ● Good manufacturing practice ● Cleaning, sanitation, and pest control ● Receiving, transportation, and storage ● Supplier control ● Handling hazardous materials |
| Complete HACCP preparation tasks | Describe a product and its distribution Describe planned use and product users Design a process flow diagram Validate the process flow diagram |
| Apply the seven HACCP principles | Analyze hazards Determine critical control points Establish limits for critical control points Establish monitoring procedures for critical control points Establish corrective actions Establish verification procedures Keep the records |

Good Planning Saves Money and Time

Careful up-front planning prevents costly mistakes and operational rework. Develop a detailed roadmap specifying timelines, milestones, documentation, training needs, internal audits, and certification schedules. Budgeting is critical because implementation usually costs more than companies estimate initially.

Early FSMS investments often include training, documentation systems, certification fees, and facility upgrades. Underestimates of these needs risk implementation delays or poor compliance. Planning should identify key cost categories and build in flexibility to avoid surprises.

Tracking Progress

Food safety systems are not static. Regular check-ins, internal audits, and simple key performance indicators (KPIs) can help companies stay on track and resolve issues early (refer to table 4). To measure progress meaningfully, companies should establish baseline values for key indicators early in the planning or implementation phases. Tracking allows teams to quantify improvement over time and link results to specific interventions.

Table 4

Key performance indicators for FSMS implementation and monitoring

| Category | Examples of indicators |
|-------------------|--|
| Implementation | Completion of HACCP milestones and corrective actions Staff training completion rates Internal audit pass rates and readiness trends |
| Operational gains | Reduction in product rework, waste, or nonconforming units Decrease in downtime because of safety issues or rework Improved process yields |
| Market gains | Buyer feedback on food safety reliability Increase in order volumes from safety-conscious buyers Entry into new markets or buyer approval |
| Risk reduction | Incident reports, near-misses, or customer complaints Number of recalls or noncompliance notices Corrective action closure rates |

Tracking a mix of operational, quality, and customer-focused indicators provides real-time feedback, supports timely adjustments, and demonstrates a company's commitment to continuous improvement, a key expectation of buyers and investors.

Planning Checklist: Are You Ready to Implement?

Use this checklist and your implementation roadmap to ensure you are on track.

- Have you aligned food safety with your strategic goals?
- Do you have senior management approval and an agreed budget?
- Is a cross-functional HACCP team formed and trained?
- Are core prerequisite programs (good manufacturing practice, hygiene, sanitation) established?
- Do you have a clear implementation plan with timelines and responsibilities?
- Have you assessed training, infrastructure, and documentation needs?
- Are you tracking implementation through regular internal reports?
- Have you selected a certification scheme aligned with your target market (if applicable)?

Lesson 2: Financing

Investment alignment ensures that the organization is properly resourced for food safety initiatives.

—GFSI (2018, 13)

Implementing an FSMS requires technical readiness and financial foresight. However, many companies, especially SMEs, approach budgeting reactively by focusing on short-term costs, while overlooking the long-term value a well-designed FSMS can deliver. Limited financial planning tools and internal expertise often make estimating actual costs difficult, particularly in the cases of less visible needs, such as staff time, verification procedures, and ongoing maintenance.

In contrast, successful companies consider FSMSs as a staged investment and strategic asset rather than merely

a requirement to achieve compliance. Their budgeting process is intentional, used to prioritize improvements, justify funding, and unlock value across operations and markets. The budgeting process starts with an accurate assessment of internal capacity: how much staff time can be dedicated, can appropriate decisions be realized, and what technical resources are available. Tracking FSMS-related costs separately from general operations supports oversight, strengthens the analysis of returns on investment, and lays the groundwork for future investments.

From Practice: Track FSMS Costs Separately

Successful companies open separate cost codes or cost centers for FSMS-related expenditures. This includes staff time, consultant fees, audits, and equipment. Clear tracking enables better decision-making and makes future food safety investments and upgrades easier to justify.

Understand the Full Cost

Company leadership should consider FSMS costs in distinct stages to plan effectively and avoid surprises. Such stages might involve system planning, implementation, and ongoing management. Each phase requires unique expenditures, from early assessments and staffing to equipment upgrades and

long-term system maintenance (refer to table 5). Breaking down the budget this way helps companies match spending to the actual rollout timeline, prioritize resources, and make smarter financial decisions. It also allows management to track returns on investment more accurately.

Table 5

Costs, by phase and type

| Phase | Cost type | Examples |
|--------------------|-----------------------------------|--|
| Planning | Needs assessment and auditing | Baseline audits, gap analysis, consultant scoping |
| | Personnel and planning time | HACCP team formation, planning meetings, project management |
| | Budget development | Finance team engagement, cost-benefit analysis |
| Implementation | Capital investments | Facility renovations, drainage, lighting, ventilation, equipment |
| | Training and documentation | SOP development, hygiene manuals, staff training sessions |
| | Testing and validation | Environmental and product testing, lab analysis |
| | Certification services | Scheme applications, pre-audits, third-party audit costs |
| Ongoing management | Internal labor and oversight | Monitoring, verification, corrective actions, internal audits |
| | Digital and recordkeeping systems | Traceability software, monitoring logs, data storage systems |
| | Refresh training and SOPs | Staff retraining, SOP updates, new hazard protocols |
| | External support (as needed) | Periodic consultants, refresher audits, scheme renewals |

From Practice: Plan Smart, Spend Smarter

Set priorities based on what is most critical and cost-effective. Start with hygiene and staff training before large infrastructure upgrades. Know what you need and when. Early planning can unlock discounts from suppliers and avoid last-minute costs.

Use Budgeting to Drive Performance

Instead of budgeting reactively, treat the FSMS as a performance-driven investment. Strong food safety budgets accomplish the following:

- Tie costs to specific improvement objectives
- Assign responsibility for managing each cost area

- Separate one-time implementation costs from ongoing operating costs
- Involve both the finance and operations teams early

Revisiting your KPIs from the planning phase and connecting budget items to those targets strengthens both accountability and your internal business case (refer to table 6).

There is real value in tracking many of these items and the costs of the management strategy. What you cannot measure, you cannot manage.

—Stuart Kearns, CEO, Agrivision Zambia, IFC Client Testimonial

Table 6

Common budgeting pitfalls and how to avoid them

| Pitfall | What to do instead |
|--|---|
| Underestimating internal time requirements | Budget for coordination, documentation, and follow-up, not only materials |
| Overengineering early solutions | Focus on basic sanitation and hygiene improvements before major infrastructure spending |
| Relying too much on external consultants | Invest in internal capacity and phased support |
| Delaying action because of funding gaps | Start with staged improvements; seek cofunding or SME finance options |

From Practice: Build Internal Capacity

Avoid overreliance on consultants. Train your HACCP team, involve the finance department, and assign internal leads early. Companies that build internal expertise save money and respond more quickly if challenges arise.

Case Example: PAN Food, Viet Nam

PAN Food approached food safety not as a checkbox exercise, but as a deliberate growth strategy. By adopting a phased rollout plan, budgeting realistically, and focusing on supplier and market readiness, the company achieved measurable returns within only two years. It reduced

nonconforming products by 60 percent, saved more than US\$30,000 in contamination-related costs, and unlocked US\$19.5 million in new revenue by meeting the expectations of high-value buyers. Their performance-driven strategy helped position food safety as a source of competitive advantage rather than as a compliance burden.

We are now convinced that food safety is our competitive edge.

—Nguyen Quoc Hoang, CEO, PAN Food, IFC Client Testimonial

Explore Flexible Financing Options

Financing does not have to be a barrier among companies with limited working capital. Consider the following:

- *Reallocation*: Link the FSMS to existing budgets (for example, rework, waste, quality).
- *SME credit or bank loans*: Position food safety as an investment in risk reduction.
- *Buyer or retailer support*: Some supply chain partners co-finance upgrades.
- *Public or donor grants*: Government or IFC-supported programs may offer cofunding.

Food safety implementation can and should be staged. Companies planning, budgeting, and adapting with a long-term view are more likely to avoid costly rework, retain customer trust, and unlock new markets (refer to box 1).

Box 1

Smart FSMS Budgeting Checklist

Plan Wisely

- Conduct an unbiased audit of business needs.
- Phase improvements by urgency and impact.
- Keep the budget flexible and update it regularly.

Budget Strategically

- Involve finance and operations teams.
- Track FSMS costs and operations separately.

Build Internal Capacity

- Align upgrades with team time and skills.
- Use consultants strategically to fill gaps, not to run the show.
- Involve staff in finding low-cost solutions.

Stay Practical

- Use temporary fixes (for instance, extra cleaning) where needed.
- Stage implementation to match available funding.

Use this checklist, derived from IFC project experience, to manage costs, reduce rework, and build a solid foundation for food safety success.

From Practice: Think Creatively About Financing Solutions

If permanent upgrades are not feasible, consider low-cost alternatives. Temporary partitions, procedural scheduling, and phased certification can still meet requirements if they are documented and well managed. Resourcefulness can reduce risk without overspending.

Lesson 3: Changing Behavior

Why Behavior Matters

If appropriate food safety behaviors break down, the cost is more than operational. This can lead to consumer harm, brand damage, lost customers, and regulatory penalties. Leading companies view behavior change as a key component of risk prevention and business continuity planning.

Strong FSMSs depend on more than checklists and procedures. They also rely on people acting appropriately

every time. The design of the FSMS may be optimal, but the system will not protect your business or your customers if employees are not following procedures or reporting issues. Recent food safety research and regulatory guidance agree that behavior is critical to food safety (FDA 2024; Pai, Jaiswal, and Jaiswal 2024). Current international frameworks, including those aligned with GFSI and national food safety authorities, emphasize that lasting improvements depend on cultivating a strong food safety culture and consistent behavior throughout the relevant organization.

Food safety equals behavior.

—Frank Yiannas (2009, 1)

Common Barriers to Behavior Change

There are several reasons why people may not follow food safety rules. They may not fully understand the risks or procedures involved. The proper tools or adequate time may not be available; people may not feel their actions make any real difference; or managers may not consistently enforce or model the correct behavior.

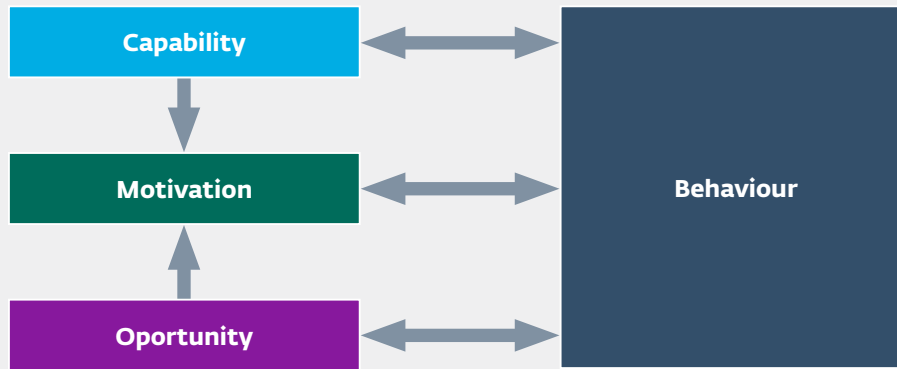
These issues can be understood using the COM-B model, a foundational behavioral science framework for understanding behavior change and designing interventions (Michie, van Stralen, and West 2011). The model identifies three essential conditions for behavior change: capability, opportunity, and motivation, as follows (refer to figure 4):

- *Capability* refers to whether people have the necessary knowledge, skills, and mental or physical ability to perform the behavior. For example, do workers know the correct handwashing procedure, and are they physically able to perform it consistently?

- *Opportunity* relates to external factors that make the behavior possible or prompt it, such as the availability of resources, time, social support, and environmental design. In the handwashing example, external factors include the existence of an available space with a sink, hand soap, towels, or hand dryers.
- *Motivation* includes the internal processes influencing decision-making, such as habits, emotional responses, and perceived importance. Employees are likelier to follow safety procedures if they believe in the value and feel personally accountable for the outcomes. If one or more of these elements are lacking, employees are less likely to exhibit appropriate food safety behaviors consistently and reliably.

Figure 4

The behavior change model



SOURCE: Michie, van Stralen, and West 2011.

The Role of Leadership in Food Safety

Addressing such gaps starts with leadership that sets the tone, shapes the culture, and influences priorities and practices. Leadership plays a critical role in shaping food safety behavior and culture. What leaders say, and, more importantly, what they do directly influences how food safety is valued and practiced across an organization. If leaders visibly prioritize food safety, allocate adequate resources, and consistently model expected behaviors, they create an environment in which the proper behavior is the norm.

Supervisors and managers, in particular, serve as daily role models. Their responses to food safety concerns, their recognition of good practices, and their responses to noncompliance send strong signals to employees about what matters. Leadership determines whether a system supports or hinders safe practices and whether people have the time, tools, and encouragement to follow through.

Food safety leadership is about inspiration, alignment, and action. Leaders at every level must foster trust, empower teams, and make food safety a shared responsibility.

Leadership is one of the most important factors determining the effectiveness of [food safety] systems and enabling the improvement of results.

—Szekiel (2023)

Embedding a Culture of Food Safety

Food safety culture embodies how people think, act, and feel about food safety. It is “the shared values, beliefs, and norms that affect mind-set and behavior toward food safety” (GFSI 2018, 3). A strong culture means food safety is deeply embedded, understood, valued, and practiced consistently.

Leaders cannot create a food safety culture through a single training session or a memo. A strong food safety culture emerges through consistent reinforcement: visible priorities, fair accountability, strong communication, and shared

ownership. Everyone, from senior leaders to front-line workers, must see that food safety is nonnegotiable.

Culture also needs to be measured and managed. GFSI-aligned certification schemes now expect companies to assess their food safety culture using structured tools, such as employee surveys, leadership assessments, and behavior-based audits, to identify where alignment is strong and where it is at risk.

Food safety is a mind-set. It is the first and last message our people consider.

—Uzma Chowdhury, Director (Finance), Pran-RFL Group, IFC Client Testimonial

Practical Strategies for Behavior Change

The following strategies strengthen one or more of the COM-B model building blocks, that is, capability, opportunity, and motivation.¹ Leadership is essential to activating these strategies and embedding them in a daily routine, thereby turning principles into practice. By aligning with the goals of food safety, leaders create a basis for meaningful behavior change. Building on strong leadership, these practical strategies reinforce desired food safety behaviors in an organization.

Train for understanding. Go beyond rule-based instruction. Effective training connects behavior to risk, relies on visual and interactive methods, and is reinforced regularly, especially after product or process changes.

Design for success. Create an environment that makes the appropriate behavior easy. Place handwashing stations and gloves where needed, keep tools such as thermometers and sanitizers accessible, and ensure that the SOPs are clear, visible, and easy to follow.

- *Provide real-time feedback.* Conduct short routine walk-throughs to observe behavior and coach as required. Feedback is most effective if it is timely, fair, and constructive.
- *Reinforce with recognition.* Employees are more likely to repeat behaviors that are acknowledged. Managers can offer verbal praise, highlight food safety champions, or reward teams that meet hygiene and audit goals. Recognition helps embed food safety in the daily routine.
- *Foster communication.* Encourage employees at all levels to report problems, near misses, or ideas for improvement without fear of reprimand. An open environment strengthens accountability and builds trust.
- *Involve employees in solutions.* Engage front-line workers in designing hygiene practices, signage, or training materials. Codesigned solutions tend to be more practical and more likely to be embraced.

¹ Refer to COM-B Model for Behavior Change (dashboard), Decision Lab, <https://thede-cisionlab.com/reference-guide/organizational-behavior/the-com-b-model-for-behavior-change>; Michie, van Stralen, and West (2011).

Measuring Progress

Behavior change should be tracked and measured as with any other KPI. Practical measures might include scores based on observations of behavior, employee surveys on attitudes toward food safety, participation rates in training sessions, and trends in incidents or nonconformances linked to human error (refer to box 2). Companies are now expected to evaluate and strengthen their food safety culture as part of certification schemes recognized by GFSI, such as the BRC Global Standards and FSSC 22000. Guidance documents and tools are available to support this effort and identify areas for improvement through the GFSI (2018).

Takeaway Messages

Effective food safety management depends on consistent human behavior. Even the most advanced FSMS cannot succeed if the people using it do not follow procedures or uphold its values.

Leadership and systems shape behavior. Changing behavior requires clarity, reinforcement, and trust. By investing in relevant training, real-time recognition, and strong communication, companies create an environment in which food safety becomes second nature. Food safety culture takes time to build, but it becomes embedded and is sustained through daily practice.

Behavior change is the foundation of success. To change food safety behaviors successfully, leaders might undertake the following:

- Model food safety leadership at every level by aligning expectations, resources, and daily practices.
- Invest in transparent systems and training that make the correct behavior easy and expected.
- Recognize and reward food safety behaviors, not only results, to reinforce a strong culture.
- Make food safety a formal part of performance metrics and accountability structures.
- Measure food safety behavior and culture regularly to identify gaps, track progress, and drive continuous improvement.

Box 2

Food Safety KPIs

Track behavior-based and performance-based indicators to understand how food safety is practiced and how outcomes are influenced.

Behavior Indicators (Leading)

- % of correct practices observed (such as handwashing, glove use)
- Frequency of supervisor coaching
- Participation in team huddles or refresher training
- Worker engagement in safety improvement ideas

Performance Indicators (Lagging)

- Audit findings
- Food safety complaints or trends in customer satisfaction
- Production quality and packaging defect rates
- Material use, water/energy/waste ratios
- Number of employees trained

Insight: Measuring behavior shows whether systems and culture are working as intended before issues appear in audit or business results.

Lesson 4: Do You Need a Consultant?

Of course, you can implement an FSMS on your own. However, you may find that doing so costs more time and money than engaging a qualified consultant. The decision often depends on your business's size and complexity and your team's familiarity with food safety systems.

Smaller or less complex operations may be able to handle implementation internally if leadership is strong and committed. Nonetheless, a consultant's experience can help companies avoid costly mistakes and missteps, especially companies that are new to food safety standards.

Consider how a consultant might help, and whether you, as an FSMS newcomer, might benefit from an expert's experience and knowledge (refer to box 3). A consultant can accomplish the following:

- Determine which system is most suitable to achieve your objectives
- Steer your implementation with the proper focus in the proper direction
- Save your resources and prevent costly mistakes

Engaging a consultant can accelerate the return on the investment in an FSMS by compressing timelines, preventing costly errors, and improving audit outcomes. What may seem like a high upfront cost can pay off through more rapid progress and better long-term results.

In looking for a good consultant, talk to businesses similar to yours that have faced the same conditions and challenges in implementation. Ideally, they have dealt with consultants with expertise in your product area.

Box 3

Factors to Weigh Before Hiring a Consultant

1. Internal Capacity and Time

Do you have staff with food safety expertise, or would they need to learn from scratch?

Can your current team dedicate focused time to the project without sacrificing daily operations?

2. Complexity of Operations

Are you producing high-risk foods (such as dairy, seafood, ready-to-eat products)?

Are you operating multiple lines or sites?

3. Regulatory and Market Demands

Are buyers or regulators requiring certification by a specific deadline?

Is there internal pressure to pass audits or meet new standards quickly?

4. Experience with Implementation

Has your team ever led a successful FSMS implementation process?

Do you understand the documentation and other requirements of your target certification?

5. Risk of Missteps

Would a delay or failed audit have significant cost or reputational consequences?

Have you already tried and struggled with implementation on your own?

6. Cost-Benefit Balance

Would consultant fees be outweighed by the cost of inefficiency, noncompliance, or rework?

Can a short-term investment save long-term time and resources?

7. Long-Term Learning

Will the consultant transfer knowledge and build your capacity rather than merely delivering documents?

Rule of Thumb: If the system is new to you, the timeline is tight, or the stakes are high, a consultant can be a worthwhile investment.

IFC's . . . technical assistance will help us meet international standards in an industry where our international clients' quality requirement is very high.

—Simballa Sylla, Managing Director, Mali Shi (Mali), IFC Client Testimonial

In making your choice, pay attention to the background and record of accomplishments of the candidates and the organizations for which the candidates work. Globally renowned companies tend to hire experienced experts. The key is finding a good fit for your needs. Before hiring a consultant, ask the candidates about the following:

- The successes they have had in implementation
- Their experience in the industry, the specialization, and entities of similar size and with similar standards
- Their references and any feedback from companies with which they have worked
- How they will recognize that the implementation stage has reached an end
- How you will learn from them
- Their methods and their approaches to the task

Always define clear roles, timelines, and deliverables in any consultant agreement. This ensures that consultants, managers, and staff all understand their responsibilities.

Good consultants will not replace your internal team. They will empower it. Consultants should train people and teach them to continue the work after the support of the consultant has ended. Consultants are advisors. They will help you, but they should not replace you.

Your company should still carry out certain core responsibilities, as follows:

- *Design procedures and draft documentation.* Consultants can help develop procedures, but these tools must reflect the reality of your operations. You know your business best. Your input is essential to ensuring policies are practical, relevant, and sustainable.

- *Establish a recordkeeping system.* Such a system supports daily management and will be essential in maintaining compliance.
- *Lead behavior change from within.* Consultants can guide and train, but employees are more likely to adopt new habits if their own managers and peers lead.
- *Maintain and improve the system.* Monitoring, internal audits, corrective actions, and system updates must become part of daily operations, not tasks consultants perform for you.

Consultants: Enabling Internal Excellence

External expertise can be crucial in FSMS implementation, but genuine food safety excellence is built and maintained internally. Use consultants wisely to empower your team with the essential knowledge and tools, ensuring that the capability to manage risks and drive continuous improvement are firmly rooted within your organization.

Lesson 5: Typical Mistakes and How to Avoid Them

Mistake 1: Pursuing Certification Without a Clear Goal

"We want to become certified," is what the leadership says at many companies as they begin their food safety journey. This is understandable, but this focus often clouds the strategic clarity needed to deliver long-term value, particularly if there is uncertainty about which certification is appropriate or supports the business goals of the companies. Certification should not be the goal, but should serve as a milestone along the path toward the realization of a broader business strategy.

Without strategic alignment, companies risk achieving only limited returns. The selected certification may not meet the requirements of target buyers and importers, thereby failing to take advantage of available market opportunities. Complex, poorly understood, or inadequately implemented systems built to meet audit criteria rather than strategic business needs may be inefficient and difficult to sustain. From a risk perspective, mismatched or weakly integrated certifications can result in audit failures and reputational damage.

Companies should start with the basics. Building a strong HACCP structure before pursuing advanced certification allows companies to develop core systems and a core culture without overextending resources. A phased approach—starting small and scaling up based on clearly defined goals—often leads to more cost-effective systems and sustainable results.

A strategic starting point is a clear definition of your objectives. Ask yourself what you are trying to achieve. One relevant and proven method is to set SMART objectives, that is, goals that are specific, measurable, achievable, relevant, and time-bound (refer to box 4). This may help clarify target markets, key risks, and buyer or regulatory expectations. If it is grounded in SMART goals, certification becomes a tool that supports commercial and operational priorities. Certification should serve a goal, but not be the goal.

Box 4

SMART Objectives

Specific: Concrete, detailed, and well defined so that you know where you are going and what to expect when you arrive

Measurable: Numbers and quantities provide means of measurement and comparison

Achievable: feasible and easy to put into action

Realistic: Considers constraints, such as resources, personnel, cost, and time frame

Time-bound: A time frame helps set boundaries around the objective

Examples

Reduce production waste by 2 percent **by the end of the second quarter**

Increase international market sales by 50 percent **over 12 months**

Reduce customer complaints by **20 percent over 12 months**

Achieve **99 percent audit compliance by the fourth quarter**

Complete hygiene training among **100 percent of line staff within three months**

Mistake 2: Inadequate Planning and Budgeting

The leadership in many companies underestimate what it takes to achieve and sustain certification. They commit without a clear implementation plan, timeline, or budget and must then scramble to meet requirements or backtrack to fill gaps. Even well-intentioned efforts can stall if resources are stretched or competing business priorities are allowed to take precedence.

Without proper planning, companies may fail to realize the full returns on investments in FSMS implementation and certification because of delayed entry into target markets, missed opportunities to improve operations, and struggles to reduce risk.

Effective implementation depends on proper planning, clear ownership, realistic timelines, and consistent follow-through (refer to box 5). Assigning responsibility to a trained HACCP team leader with access to the necessary resources helps maintain momentum. Involving finance early and allocating human and financial resources ensures the plan is achievable. Build in KPIs, track progress regularly, and celebrate small wins to keep teams engaged. Significant improvements do not always require large investments. Well-prioritized, low-cost actions can often deliver meaningful results.

Strong planning also recognizes that food safety systems are not static. Buyer expectations, regulatory standards, and business needs evolve. Companies that build the capacity and budget for continuous improvement are more well positioned to adapt and grow.

Companies should treat FSMS and certification as any other strategic investment. An FSMS needs resourcing, leadership support, and a realistic, phased timeline. If companies plan well, they reduce costly setbacks, increase internal buy-in, and show partners that the FSMS is part of their business and not merely a topic of documentation.

Plan for more than certification. Plan to build an FSMS that will support your business well beyond the audit.

Box 5

Minimal / Zero Cost Food Safety Improvements

- Clear goals and objectives
- Planning the process
- Time and resources
- Management commitment
- Awareness of the workers on employee behavior and Food Safety aspects
- Using free online videos, other materials

Mistake 3: Overlooking Culture, Communication, and Team Buy-In

Strong FSMSs are built on procedures, but depend on people. One of the most common and costly mistakes companies make is treating FSMS implementation as a technical project, rather than a team effort that requires leadership, communication, and a change in culture.

Motivation suffers if senior leadership remains distant from the process or leaves staff out of key decisions. Signs of weak internal support include employees who follow rules only if they are being supervised, confusion about roles, or resistance to change. These are cultural gaps that leaders cannot fix by adopting procedures and checklists.

From the perspective of the returns on investment, weak engagement undermines operational efficiency and increases risk. Without shared ownership, companies struggle to sustain systems, detect problems early, or adapt to new demands. Implementation drags on; audits become stressful; and long-term value is lost.

Leadership sets the tone. If senior managers understand the purpose of the FSMS, actively participate in planning and reviews, and model expected behaviors, such as hygiene and documentation, they send a clear message: food safety is part of how we do business. Their visible commitment is often the tipping point between superficial compliance and lasting adoption.

Building support also requires consistent communication and capacity building at every level. Staff should understand what is expected, why it matters, and how they can contribute to the achievement of the company's goals. A skilled team leader can play a central role by answering questions, guiding training, addressing concerns, and encouraging teamwork.

Recognition matters, too. Celebrating early wins, highlighting strong performers, and involving staff in audits or problem-solving help shift the mind-set from "this is a burden" to "this is an endeavor we own."

Culture building is not an optional activity. It is an integral part of the FSMS. The more that people who are invested, the more the FSMS can deliver.

Mistake 4: Overreliance on Consultants Instead of Building Internal Capability

Hiring a consultant may be a good idea, especially if time is short or internal expertise is limited. However, if a company hands over too much control to external experts, it risks creating a system that is fine on paper, but lacks internal mastery, ownership, and long-term sustainability.

A consultant can write the procedures, prepare the forms, and train the team, but without internal capacity, the system will stall if the consultant leaves. Staff may not fully understand what is required, why it matters, or how to maintain the system. Leadership may view the FSMS as the consultant's project rather than as an important business asset.

If viewed through the lens of long-term value, overdependence on consultants increases costs, limits efficiency, and weakens risk control. Companies that spend money on short-term compliance, but fail to build the necessary internal capability will struggle to sustain or improve the system. The result is recurring problems, weak audit performance, and reactive rather than proactive management.

Companies should rely on consultants in appropriate circumstances. A consultant may provide critical technical guidance and can help avoid costly mistakes. However, the role of a consultant should be to support and strengthen internal teams, not replace them. Consultants are most effective if they help staff learn, rather than help staff merely comply.

Assign internal leads to work alongside any external advisor to realize the most value from the arrangement. Ensure your team is involved in developing procedures, identifying risks, and preparing for audits. Ask questions. Review thoroughly. If your business cannot run the system without outside help, the system is not truly yours. Internal capability, not outside expertise, sustains the system and delivers long-term value.

Mistake 5: Ignoring the Business Case for Food Safety Management Systems

Companies too often view an FSMS as a technical requirement or a business expense rather than a strategic investment that can strengthen the bottom line. If a company views the FSMS and certification purely through the lens of compliance, the company tends to underresource the system, underestimate its value, or abandon it after achieving certification.

The reality is that FSMSs, if properly implemented and supported, contribute to business success in measurable ways. An FSMS can contribute to reduced rework and waste, prevent disruptions, improve audit outcomes, and support customer confidence. In addition, an FSMS is often the key to accessing new buyers and new export markets.

The risk adjusted return on investment framework clarifies this connection (refer to box 6). FSMS delivers value in three dimensions, that is, through improved operational efficiency, by enabling greater market access, and by reducing risk. If these benefits are quantified and clearly communicated, the FSMS will no longer be seen simply as a cost of compliance. It will be reframed as a strategic investment. This shift strengthens internal decision-making by helping stakeholders ask not only “how much will this cost?” but also “how can we maximize the value of this investment?” Building the business case is especially important in securing leadership buy-in, attracting investment, and aligning departments around a shared goal, from operations to finance to sales. It also helps companies justify phased upgrades or external financing.

The more clearly FSMS implementation is tied to business priorities, the more likely the system will receive the support, funding, and follow-through it needs to succeed.

Making a solid business case ensures that the FSMS receives the investment, priority, and ongoing support it needs to deliver lasting returns.

Box 6

How an FSMS Creates Business Value

The risk adjusted return on investment framework describes how a well-managed food safety system contributes to performance across three key areas of business return, as follows:

Operational Gains

- Improve efficiency and reduce costs by minimizing waste, rework, and downtime

- Streamline documentation and internal processes to lower operating overhead

Market Gains

- Access new buyers, retailers, and export markets

- Support increased sales through preferred supplier status and customer confidence

Risk Reduction

- Decrease exposure to recalls, regulatory actions, and reputational damage

- Strengthen brand resilience and reduce the financial impact of food safety failures

Indicators of Success

An FSMS delivers value by improving how a business operates, competes, and protects itself. The following indicators, supported by data from IFC client results, illustrate the areas in which food safety investments make a measurable difference.

Benefits of Investments in a Food Safety Management System

Implementing an FSMS is a strategic business decision. If it is well-executed, an FSMS delivers measurable benefits in operations, market access, and risk reduction. The key categories of impact, supported by real-world results from IFC client companies, are outlined below.

Operational Indicators

If food safety practices are integrated into daily operations, companies often realize meaningful improvements in efficiency, consistency, and resource use. The gains may include a decline in product loss, fewer production delays, lower rework rates, and enhanced staff performance, which all foster streamlined, cost-effective operations, as shown in the following examples:

- **Twiga Foods in Kenya** reduced food losses by 751 metric tons and saved US\$100,000 annually after improving supply chain and land management practices.
- **Nafods in Viet Nam** applied traceability and root cause tools to achieve over US\$700,000 in actual and expected savings.

These improvements reflect systems that are functional, cost-effective, and internally owned.

What has been extremely impactful has been the cost of nonquality, which has become an integral part of everything we do. It highlighted areas of inefficiencies that led us to build our internal initiative, called elimination of waste, based on the philosophy of the cost of nonquality.

—Peter Njonjo, CEO, Twiga Foods, IFC Client Testimonial

Market Indicators

Access to new markets and higher-value buyers is one of the most visible benefits of matching FSMS certification and internal capacity.

- **PRAN Group** expanded its export footprint to 134 countries and grew sales by US\$233 million after implementing BRC Global Standards. Farmer suppliers also gained from this investment, increasing sales by US\$920,000.

- **Korinzka in Uzbekistan** realized a 10.5 percent sales increase from four pilot stores that undertook FSSC 22000 implementation.

These cases illustrate how strategic FSMS implementation translates into real revenue growth.

Implementation of the food safety management system with IFC support enables Korzinka.UZ to strengthen our position on the local market and gain the trust of our customers.

—Alisher Turaev, Korzinka Deputy Director, IFC Client Testimonial

Risk Reduction Indicators

FSMSs are most powerful in reducing the likelihood and severity of food safety incidents.

- **Metro in Kazakhstan** reduced nonconformities sevenfold after joining a GFSI Global Markets Program for food suppliers, greatly lowering the risk of food safety incidents through improved supplier oversight and traceability.
- **Nafods Group in Viet Nam** enhanced traceability, which lowered recall risk and enabled rapid response to potential safety issues, thereby promoting the brand and export access.

These results show that cost avoidance through risk reduction is a measurable outcome of the appropriate system and training.

This [IFC] project will help us work with our suppliers to ensure we deliver the safest food possible.

—Lyazzat Sarbassova, Head of Quality, Metro Cash & Carry, Kazakhstan, IFC Client Testimonial

In every case, the most critical signal of success is ownership. If food safety becomes part of how a business operates, trains its people, and engages its partners, the benefits multiply, leading to more efficient operations, stronger sales, and fewer risks.



Main Conclusions

An FSMS can generate concrete and lasting business benefits. A World Bank Independent Evaluation Group survey of six SME food companies in Ukraine that had received IFC food safety advisory services found measurable improvements in performance across several areas. Among the companies surveyed, two reported improved profitability; five experienced enhanced product quality; three reduced waste; three improved productivity; four reported that sales would have been lower without the FSMS; and five expected the benefits to increase over the next five years.

These findings reflect broader trends across IFC client companies. If FSMS investments are aligned with strategic goals and supported by internal commitment, they consistently deliver value across three dimensions: operational efficiency, market access, and risk reduction. Companies report reduced production costs, improved productivity, fewer defects, and gains in shelf life. They also report access to new customers and export markets, higher-value contracts, and greater buyer confidence. Significantly, FSMS strengthens a company's ability to prevent incidents, reduce liability, and comply with increasingly demanding regulatory and audit requirements.

In many cases, the benefits extend beyond what is immediately measurable. Clients cite enhanced brand reputation, improved employee morale, and increased investor attractiveness as additional outcomes of a well-integrated FSMS. While implementation may require infrastructure upgrades, particularly in older facilities, companies with a strong food safety culture may experience a more rapid, more efficient, and less costly transition. Other companies have reported that early investments in an FSMS helped them avoid future costs by anticipating retailer expectations or mitigating emerging risks.

Ultimately, companies maximize the return on FSMS investments if implementation is tied to business strategy, driven by internal capacity, and phased for sustainable success. If it is embedded in daily operations and guided by clear SMART goals, an FSMS becomes more than a tool for compliance. It becomes a foundation for growth, resilience, and long-term competitive advantage.



Annexes

Annex 1. The Food Certification Process

The food certification process follows eight standardized steps, regardless of the scheme or certification body. Understanding this process helps executives plan resources, timelines, and budgets for achieving food safety certification.

The Eight-Step Process

1. *Select the relevant scheme:* All food safety schemes follow a standard, which is a set of fixed requirements that is applicable to a food business and that may be audited. The first step in certification is the selection of the scheme with a standard that is most appropriate to the products and processes of the business and conforms to customer needs. The scheme and standard may be requested by a retailer, food service business, or manufacturing customer. It confirms the adequacy of the business's internal food safety protocols and controls.
2. *Assess the current level of readiness (optional; recommended):* Many organizations have benefited from a gap assessment, which is used to evaluate an FSMS against the chosen standard before the application for certification. The assessment identifies areas that need improvement, helps estimate implementation timelines and costs, and can prevent delays during the certification process. Gap assessments can be conducted internally or by external consultants.
3. *Engage a certification partner:* Each scheme authority maintains a list of accredited certification bodies. The availability of qualified auditors and their regional presence, seasonality, scheduling, audit duration, and overall costs should be considered.
4. *Submit the application:* Whatever scheme or certification body is selected, the certification process is essentially the same. It starts with the submission of the application documents, which allow the certification body to understand the scope of a facility's operations and the products to be covered by the certification. They also form the basis of the contract between the certification body and the food business. They are critical to the assignment of an auditor with expertise in the appropriate food sector and to the calculation of the duration of the audit.
5. *Schedule the date of the audit:* The certification body contacts the facility to schedule the certification audit on a date that suits both the facility and the auditor. The date should be within a peak production period to ensure that the auditor can observe representative operations.
6. *Conduct the certification audit:* All standards require an on-site third-party certification audit to determine how well a facility implements food safety controls and complies with the requirements of the applicable standard. Certification audits are always nonconsultative. This means that the auditor does not advise the facility about the way to meet

the requirements of the schemes. The auditor reviews HACCP plans, procedures, policies, physical conditions, and records and observes the implementation of food safety plans within the facility. After the audit, a report on nonconformances is submitted to the company.

7. *Address the audit findings and receive certification:* To achieve certification, the food business must correct any nonconformance that has been reported and prevent recurrence. The certification body reviews the evidence submitted. Only after a successful certification decision can a certificate be issued. This process—from completion of the audit to the issuance of the certificate—typically takes about 45 days.

8. *Maintain certification:* A certified food business is required to undertake annual recertification audits. These audits usually take place near the anniversary of the initial certification audit. As in the initial audit, the facility must address nonconformances before a certificate can be reissued.

Business Considerations

The certification process typically requires 6–12 months for organizations with established food safety systems or 12–18 months for organizations launching systems from scratch. Key success factors include early planning, adequate resource allocation, and sustained management commitment throughout the certification journey.

Figure 1.1

The certification scheme selection and eight-step process

a. How to choose the appropriate scheme



b. The eight steps of certification



Annex 2. Quiz: Do You Have a Thorough Understanding of Your Facility?

Table 2.1

The quiz on knowledge about the facility

| No. | Statement | Yes | No |
|-----|---|-----|----|
| 1 | I can describe all the products manufactured at my facility. | | |
| 2 | I can list the main ingredients, incoming materials (such as processing aids), and packaging materials of all these products. | | |
| 3 | I can describe the processes used in the production of all these products. | | |
| 4 | I can describe the main food safety hazards (chemical, biological, physical, cross-contamination) of all the products and processes at my facility. | | |
| 5 | I can describe the purpose of each piece of equipment at my facility and how each is used. | | |
| 6 | I understand the maintenance and calibration requirements of each piece of equipment at my facility. | | |
| 7 | I am fully aware of the physical condition (for instance, the state of repair) of my facility inside and out. | | |
| 8 | I understand how each area of my facility is used. | | |
| 9 | I can describe the flow of people and products through my facility. | | |
| 10 | I understand the role each employee plays in the processing of products and in the handling of products and ingredients. | | |

SOURCE: Elliott et al. 2005.

How well did you do?

If you answered "Yes" to all of the above, you have a thorough understanding of your facility. This will assist you in developing a successful system.

If, however, you could not answer "Yes" at this point to all of the above, now is the time to gain a greater understanding before you proceed farther into the development of your system.

Failing to understand your facility will hinder and jeopardize your HACCP system. For example, you may misunderstand certain hazards, overlook key cross-contamination areas, or miss certain impacts of employees.

Annex 3. Case Studies

IFC works with food companies globally to strengthen FSMSs as a pathway to market growth, operational efficiency, and investment readiness. The following case studies highlight successful engagements in Africa, Asia, and Eastern Europe, showcasing companies that consider food safety as a strategic investment with measurable business returns.

In each case, IFC provided tailored advisory services, including diagnostic assessments, staff training, and hands-on implementation support, to help companies

meet internationally recognized food safety standards. The outcomes demonstrate that food safety investments deliver measurable gains across operations (such as cost savings and process efficiency), markets (including expanded sales, stronger brand reputation, and access to new buyers), and risk management (through reduced exposure to food safety incidents).



Bel Ga, Viet Nam

Bel Ga was established in 2013 in Viet Nam and expanded to Myanmar in 2017. It specializes in producing high-quality day-old chickens and layers for farmers in Cambodia, Myanmar, and Viet Nam. The chicks originate from Aviagen and Hendrix Genetics, which are leading global breeding companies.

Bel Ga benefits from the wide expertise of its European parent companies: De Heus Group, a global leader in animal nutrition, with over 100 years of experience, and Belgabroed, Belgium's top producer of premium chicks and hatching eggs, with over 80 years of industry leadership. Together, they bring world-class genetics, biosecurity, and supply chain standards to Southeast Asia's poultry sector.

Bel Ga aimed to strengthen food safety practices and agricultural operations across its supply chain. The company sought support in adopting food safety measures and good agricultural practices at its breeder farm and three broiler farms. Specific assistance was needed to implement the GLOBALG.A.P. Integrated Farm Assurance standard across 54 poultry houses, helping to ensure more consistent quality and biosecurity in chick production.

Results

Bel Ga's adoption of GLOBALG.A.P. standards across its operations and supply chain drove measurable improvements in business performance. The company and its partner farms saw strong commercial benefits, internal efficiencies, and enhanced risk management.

- *Operational gains:* Improved farm management practices and better biosecurity led to US\$307,000 in avoided costs.
- *Market gains:* Bel Ga and two affiliated farms reported a total of US\$25 million in incremental sales. This reflected increased buyer confidence and market expansion.
- *Risk reduction:* GLOBALG.A.P. implementation strengthened traceability and disease prevention, thereby significantly reducing food safety and animal health risks, while boosting audit readiness across the value chain.

We are extremely excited to cooperate with IFC Food Safety Project on achieving GLOBALG.A.P. certification for 54 poultry houses to fulfill our mission to produce safe, affordable, and traceable poultry products for the Vietnamese consumers.

—Kay De Vreese, CEO, BEL GA JSC, IFC Client Testimonial

IFC supported Bel Ga through technical advisory services to achieve GLOBALG.A.P. certification for its breeder and broiler farms. IFC also facilitated tailored training on food safety management, supported traceability improvements, and enhanced biosecurity protocols. This included capacity building among farm staff and structured guidance on compliance with global standards.

These outcomes highlight the financial and strategic advantages of implementing international food safety and agricultural standards, including not only unlocking new revenue streams, but also minimizing risk and increasing operational resilience.

Gaselia Group, West Africa



Gaselia Group is a regional beverage manufacturing and distribution leader with operations in Côte d'Ivoire, Guinea, and Mali. The company produces a wide range of carbonated and noncarbonated drinks, including mineral water, soft drinks, and energy beverages. It serves a growing consumer base in West Africa. With ambitious growth targets and a reputation to uphold, Gaselia recognized the need to strengthen its food safety practices if it was to remain competitive.

Gaselia wanted to align its production systems with international food safety standards to consolidate its market leadership and expand into new regional markets. In addition, the company sought to reduce operational inefficiencies, cut packaging-related losses, and boost consumer confidence by improving traceability and hygiene practices across its bottling plants.

IFC provided custom advisory services to help Gaselia align with international food safety standards. These advisory services included on-site coaching and mentoring, guidance on food safety standard implementation, and staff training on food safety principles. IFC also introduced tools to evaluate and reduce the costs of nonquality, including operationalizing the failure mode and effects analysis approach to identify critical control points and prevent production failures.

Results

Gaselia successfully transitioned to international food safety standards, while reducing waste and maintaining its competitive edge.

- *Operational gain:* Gaselia saved over US\$500,000 in costs through improved packaging management, reduced maintenance needs, and lower product loss rates.
- *Market gain:* Maintained market leadership, while gaining access to new regional channels, backed by stronger consumer trust and quality assurance.
- *Risk reduction:* Enhanced internal food safety capacity through staff training and structured risk analysis, thereby supporting better preparedness for future audits and improved process control.

By investing in food safety, Gaselia strengthened its reputation as a trusted beverage supplier in West Africa, setting a strong precedent for regional manufacturers aiming to scale responsibly.

As major players in the beverage industry in West Africa, the IFC Food Safety advisory has been pivotal in derisking the market for NBB Gaselia. It has supported the business in maintaining our market leadership and consumer base, while ensuring access to new regional markets and business sustainability.

—Yves Fosso, General Manager, NBB, Gaselia Group, IFC Client Testimonial



Kaufland, Bulgaria, Moldova, Romania

Kaufland is a German hypermarket chain with a significant footprint across Bulgaria, Moldova, and Romania. In these markets, Kaufland aimed to strengthen food safety practices and reduce food loss by improving factory performance and supporting local suppliers to meet the company's food safety requirements.

The company sought to reduce food loss at the processing level, boost operational efficiency, and realize cost savings. At the same time, it needed to ensure that local fresh produce suppliers complied with Kaufland's food safety standards to maintain product quality and brand trust.

To address these challenges, IFC implemented a food safety training and mentoring program for more than 50 fresh fruit and vegetable farmers in Kaufland's supplier network. The program was based on the GLOBALG.A.P. standard, a globally recognized benchmark for sustainable and safe farming. Through this initiative, farmers received practical support to improve practices, enhance compliance, and raise their capacity to meet Kaufland's sourcing requirements consistently.

This case highlights the business value of food safety investments: from reducing costs and expanding market access to building a more resilient and trusted supply base.

Results

Kaufland's investment in supplier development and food safety delivered clear operational and commercial benefits, while reducing exposure to food safety risks.

- *Operational gains:* Kaufland improved practices and reduced losses among suppliers, resulting in US\$66,000 in cost savings, which reflects better operational performance and supply chain efficiency.
- *Market gains:* The training enabled producers to meet Kaufland's standards and supply more consistently, leading to an estimated US\$10.3 million in increased sales across participating suppliers.
- *Risk reduction:* The adoption of GLOBALG.A.P.-based practices enhanced traceability and compliance, significantly reducing the likelihood of food safety incidents and strengthening audit readiness.

GLOBALG.A.P. is the natural evolution of farming. We understand that what we do has impact and concerns human health, that we have a responsibility to our people. We now feel more comfortable and calm and have an inner vision on how to do things in the right way.

—Zlati Gorchev, Gorchev-Agro FOOD, IFC Client Testimonial

MHP, Ukraine



MHP is a leading vertically integrated food and agroindustrial company in Ukraine. It operates across poultry farming, grain cultivation, feed production, and food processing and has a growing export footprint. As a strategic player in Ukraine's agricultural sector, MHP contributes significantly to national food exports and serves as a model for integrated supply chain management and sustainability practices in Eastern Europe.

MHP needed to meet stringent food safety and sustainability requirements to access new high-value markets, including those in the European Union. The company sought to improve its FSMSs across poultry and grain operations, enhance its credibility with international buyers, and ensure control over environmental and social risks.

IFC supported MHP through a wide-ranging advisory service that assisted in the implementation of GLOBALG.A.P. standards across 77,000 hectares of grain production and poultry farms that housed 32 million birds. IFC also worked with MHP to improve internal systems, clarify operational roles and responsibilities, and reduce contamination risks. At the national level, IFC engaged with policymakers to promote food safety standards that supported the export ambitions of Ukrainian producers.

In addition to business outcomes, MHP played a role in shaping Ukraine's food safety policy. IFC-supported recommendations helped inform national-level frameworks that enabled broader agricultural exports to the European Union.

Results

By adopting internationally recognized food safety practices, MHP significantly enhanced its operational efficiency and expanded market access, including entry into the European Union poultry market for the first time.

- *Operational gain:* Saved over US\$700,000 in costs at its grain farms through improved crop management and systemized operations.
- *Market gain:* Achieved the first poultry exports from Ukraine to the European Union. This was enabled by strengthened food safety systems and GLOBALG.A.P. certification.
- *Risk reduction:* Improved food safety oversight, clarified internal responsibilities, and controlled environmental and social governance risks, all of which supported regulatory confidence and future export readiness.

I believe this program can help our company reach a new level of sustainability, while reducing costs on chemical inputs.

—Luidmila Shevchuk, Head of Food Safety Management System Department, MHP, IFC Client Testimonial



Nafoods Group, Viet Nam

Nafoods Group, founded in 1995, is a leading fruit processing and exporting company in Viet Nam. It is known for its vertically integrated supply chains and deep engagement with smallholder farmers. Specializing in tropical fruits, such as passion fruit, mango, and dragon fruit, the company exports to over 70 countries and operates multiple facilities across the region.

As consumer expectations and export standards increased, Nafoods needed to strengthen food safety across its operations and supplier base to reduce loss, meet certification requirements, and access higher-value markets.

To address these needs, Nafoods received targeted advisory support to build a robust FSMS that integrated good manufacturing practices, process control, and supplier development. Investments included advisory services for five factories, GLOBALG.A.P. consulting for smallholder farmers, and the application of tools for failure mode and effects analysis and to determine the cost of nonquality. The company also strengthened its crossborder supply chains by coaching suppliers in Cambodia and Laos on food safety standards and certification.

Together, these changes helped Nafoods build a more resilient and globally competitive food safety system.

Results

Nafoods strengthened its food safety culture and systems from farm to factory, resulting in reduced losses, improved cost control, and enhanced market access through international certification.

- *Operational gain:* Realized US\$233,000 in cost savings through food loss reduction and process improvements. Additional savings and food loss reduction are expected in the future.
- *Market gain:* Secured US\$4 million in facilitated financing, strengthened export competitiveness, and increased supplier sales by US\$390,000.
- *Risk reduction:* Improved traceability and compliance across five factories and supplier networks, reducing exposure to food safety-related losses.

IFC's long-term funding and technical advice could not be more timely as we are trying to develop higher value for our products by adopting safe and sustainable practices and by improving our production facilities.

—Nguyen Manh Hung, Nafoods Group Chairman, Client Testimonial (VIR 2019)

PAN Food, Viet Nam



PAN Food is a subsidiary of PAN Group JSC, a vertically integrated agribusiness in Viet Nam. The company produces packaged foods, including confectionery products, frozen vegetables, sauces, and snacks. It serves domestic and export markets. As part of its growth strategy, PAN Food invested in a new production facility and aimed to enhance its FSMSs to meet global certification standards and enter high-value regional markets.

PAN Food recognized the need to adopt an internationally recognized FSMS to support food safety, quality assurance, and business expansion. The company sought to implement FSSC 22000 to improve internal food safety capacity, reduce product nonconformance, and build stronger supplier relationships. Elevating its competitive position in Viet Nam, while expanding to new export markets was a core strategic priority. The company identified FSMSs as a key enabler of such growth.

IFC conducted a comprehensive food safety assessment to support these goals and developed a tailored action plan for FSMS implementation. PAN Food's teams received targeted training and coaching to embed best practices in hygiene, risk control, and documentation. IFC also provided technical assistance to reduce the risks of contamination and improve quality performance, while helping the company establish a supplier risk assessment process and more robust oversight of raw materials.

These efforts laid the groundwork for certification and positioned PAN Food as a trusted supplier to domestic and international buyers.

We decided to apply FSSC 22000 with the support from IFC in building the new factory. This certification really helps us stand out from other Vietnamese food manufacturers, making it easier to work with foreign partners because we follow the world's leading food safety standards.

—Nguyen Quoc Hoang, General Director of PAN Food Manufacturing Joint Stock Company, Client Testimonial (Pan Group 2019)

Results

Following the successful implementation of an FSMS, PAN Food obtained FSSC 22000 certification in 2018, which laid the foundation for measurable business gains. The company improved operational efficiency, market performance, and risk management, highlighting the value of treating food safety as a growth investment.

- *Operational gain:* Over US\$30,000 in cost savings were achieved in 2019–20 by reducing nonconforming products and improving production efficiency.
- *Market gain:* The company generated over US\$19.5 million in additional sales revenue in 2019–21, driven by certification-enabled access to export markets.
- *Risk reduction:* Strengthened contamination controls and traceability systems, significantly reducing the risk of food safety incidents and enhancing buyer confidence.

Together, these results helped PAN Food reinforce its leadership in Viet Nam's food industry and opened new pathways for long-term export growth.



PRAN Group, Bangladesh

PRAN Group was founded by Amjad Khan Chowdhury in 1981 as a modest food processing business. It has since grown into one of Bangladesh's most prominent agroindustrial conglomerates. Operating across farming, food processing, beverages, and packaging, PRAN Foods, the flagship subsidiary, exports to 145 countries, making it a leading player in South Asia's food export sector. The company employs tens of thousands and plays a significant role in rural economic development through deep engagement with contract farmers.

PRAN needed to build a more robust FSMS to guarantee market access, manage risk more effectively, and increase international buyer trust. Building an FSMS required improvements at the factory level and throughout the agricultural supply chain.

To support PRAN's goal of meeting international food safety standards and strengthening the supply chain, IFC provided end-to-end technical assistance. This included designing and delivering customized support to help PRAN subsidiaries prepare for BRC Global Standards certification and advising on manufacturing and quality control system improvements. IFC also helped develop and implement the PRAN assurer scheme, a structured farm-level training and audit system aligned with GLOBALG.A.P. Integrated Farm Assurance standards, to enhance traceability and compliance with international good agricultural practices. As part of its gender-inclusive approach, IFC designed tailored training modules and built capacity by training lead farmers, with a focus on empowering women in the supply chain.

To support this transformation, PRAN and IFC trained 2,935 staff and more than 5,600 farmers; more than 4,300 of these farmers successfully passed PRAN assurer audits.

Growth is a journey best traveled with the right partners. IFC has been instrumental in fueling PRAN-RFL Group's expansion with strategic financing and invaluable advisory support. From corporate structuring to food safety and sustainability, their tailored solutions have helped us build a stronger, more responsible business that now reaches 145 countries.

—Ahsan Khan Chowdhury, Chairman and CEO, PRAN-RFL Group, Client Testimonial (Chowdhury 2025)

Results

Through its multitiered food safety investments, PRAN strengthened its business resilience, regained export competitiveness, and reduced risk across its operations.

- *Operational gain:* PRAN achieved US\$1.5 million in cost savings through improved process control, contamination prevention, and workforce capacity building.
- *Market gain:* Realized US\$233 million in incremental sales growth and expanded exports to 145 countries, supported by global food safety certification.
- *Risk reduction:* PRAN implemented an internationally benchmarked FSMS across its processing facilities and supply chain, significantly reducing future risk exposure.

Explore the impact of this food safety partnership through the following:

- Watch the video: "Making the Difference for Women Farmers in Bangladesh" (IFC 2024).
- Read the article: "Making the Difference for Women Farmers in Bangladesh" (Berman 2023).

Twiga Foods, Kenya



Twiga Foods is a technology-driven agricultural company that connects farmers directly with urban retailers to provide a streamlined distribution channel for fruits and vegetables in Kenya. Known for its innovative logistics and market model, Twiga operates at the intersection of food safety, food loss reduction, and inclusive supply chains.

To reduce food loss, meet growing concerns around urban food safety, and increase supply chain efficiency, Twiga needed a structured approach to improve sourcing practices, farmer training, and food safety compliance.

With support from IFC, Twiga implemented GLOBALG.A.P. standards and built internal capacity to train and audit its network of smallholder farmers. A key innovation was integrating food safety into its cost-of-nonquality initiative, which aimed to reduce losses and improve performance visibility.

These improvements have become embedded in Twiga's operations and culture of continuous improvement.

Food safety is an important consideration in our mission to provide affordable, quality, and safe food to Kenya's urban consumers and reliable markets for farmers. This is the reason we are constantly reviewing our operating procedures, making strategic investments, and striking strategic partnerships with institutions such as IFC to deliver and surpass global standards.

—Peter Njonjo, CEO, Twiga Foods, Client Testimonial (Namunwa 2019)

Results

Twiga significantly strengthened its operational performance and supplier engagement, while building a food safety culture grounded in measurable cost savings and reduced risk.

- *Operational gain:* Reduced food losses by 751 tons, resulting in over US\$100,000 in cost savings. The company streamlined its procurement process and improved product quality.
- *Market gain:* Certified 22 farmers, thereby strengthening the consistency of supply to meet market standards and expand reach.
- *Risk reduction:* Implemented farm-level risk assessments, supplier screening criteria, and mitigation plans to reduce food safety and supply risks.

References

Chowdhury, Ahsan Khan. 2025. "Growth Is a Journey Best Traveled with the Right Partners." *Facebook* (post), March 4, 2025. <https://www.facebook.com/share/v/1FUqbGV2Mf/>.

Berman, Daphna. 2023. "Making the Difference for Women Farmers in Bangladesh." *Impact Stories* (blog), November 8, 2023. <https://www.gafspfund.org/news/making-difference-women-farmers-bangladesh>.

Elliot, Molly, Troy Jenner, Pat Johnson, and Cynthia Menyhart. 2005. *HACCP Advantage: Program Manual Version 2.0*. Toronto: Ontario Ministry of Agriculture and Food.

FAO (Food and Agriculture Organization of the United Nations) and WHO (World Health Organization). 2023. "General Principles of Food Hygiene." Codex Alimentarius Code of Practice Series CXC 1-1969, Codex Alimentarius Commission. <https://doi.org/10.4060/cc6125en>.

FAO (Food and Agriculture Organization of the United Nations) and WTO (World Trade Organization). 2017. "Trade and Food Standards." FAO. <https://openknowledge.fao.org/server/api/core/bitstreams/6c886bbf-66a8-4687-ba9f-12d01123f16f/content>.

FDA (Food and Drug Administration, United States). 2024. "Food Safety Culture (Core Element 4 of the New Era of Smarter Food Safety Blueprint)." December 5, FDA. <https://www.fda.gov/food/new-era-smarter-food-safety/food-safety-culture-core-element-4-new-era-smarter-food-safety-blueprint>.

GFSI (Global Food Safety Initiative). 2018. "A Culture of Food Safety: A Position Paper from the Global Food Safety Initiative (GFSI)." Version 1.0 (November 4), GFSI, Consumer Goods Forum. <https://mygfsi.com/wp-content/uploads/2019/09/GFSI-Food-Safety-Culture-Full.pdf>.

IFC (International Finance Corporation). 2024. "Making the Difference for Women Farmers in Bangladesh." Vimeo, IFC Conferences and Events, Washington, DC, December 2, Video, 2 min., 52 sec. <https://vimeo.com/1035295651>.

IFC (International Finance Corporation). 2025. "Strengthening the Business Case for Food Safety Management Systems." Internal white paper, IFC.

Mars GFSC (Mars Global Food Safety Center). 2020. "Mars GFSC Consumer Survey: Food Safety and Security Is Top of Mind in 2020." *News & Stories* (blog), October 13, 2020. <https://www.mars.com/news-and-stories/articles/global-food-safety-center-food-security>.

Michie, Susan, Maartje M. van Stralen, and Robert West. 2011. "The Behaviour Change Wheel: A New Method for Characterising and Designing Behaviour Change Interventions." *Implementation Science* 6 (April): 42. <https://doi.org/10.1186/1748-5908-6-42>.

Nafoods King. 2019. "Nafoods Group Held a Ceremony to Announce Investment Cooperation with IFC and 2022 Strategy." *Event* (blog), June 19, 2019. <https://kingfoods.com/nafoods-group-successfully-held-a-ceremony-to-announce-investment-cooperation-with-ifc-and-2022-strategy/>.

Namunwa, Kevin. 2019. "IFC Partners with Twiga Foods to Boost Kenya's Food Safety." *Business Today: Featured Story* (blog), June 3, 2019. <https://businesstoday.co.ke/ifc-partners-with-twiga-foods-to-boost-kenyas-food-safety/>.

- Pai, Ashwini Sadashiv, Swarna Jaiswal, and Amit K. Jaiswal. 2024. "A Comprehensive Review of Food Safety Culture in the Food Industry: Leadership, Organizational Commitment, and Multicultural Dynamics." *Foods* 13 (24): 4078. <https://doi.org/10.3390/foods13244078>.
- PAN Group. 2019. "PAN Food Can Conquer Multiple Markets Thanks to Food Safety Certification." *News-Events* (blog), June 26, 2019. <https://thepangroup.vn/pan-food-co-the-chinh-phuc-nhieu-thi-truong-nho-chung-nhan-an-toan-thuc-pham-2524.htm>.
- Szkiel, Agata. 2023. "The Importance of Leadership in ISO 22000:2018 Compliant Food Safety Management Systems." *Scientific Journal of Gdynia Maritime University* 126/23: 45–60. <https://doi.org/10.26408/126.04>.
- VIR (Vietnam Investment Review). 2019. "IFC Supports Nafoods Group to Improve Processing Capacity and Exports." *Media OutReach Newswire* (blog), June 29, 2019. <https://vir.com.vn/ifc-supports-nafoods-group-to-improve-processing-capacity-and-exports-68889.html>.
- Yiannas, Frank. 2008. *Food Safety Culture: Creating a Behavior-Based Food Safety Management System*. Food Microbiology and Food Safety Series. Springer.

The material in this work is copyrighted.

Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. IFC does not guarantee the accuracy, reliability or completeness of the content included in this work, or for the conclusions or judgments described herein, and accepts no responsibility or liability for any omissions or errors (including, without limitation, typographical errors and technical errors) in the content whatsoever or for reliance thereon.

The findings, interpretations, views, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the Executive Directors of the International Finance Corporation or of the International Bank for Reconstruction and Development (the World Bank) or the governments they represent.

© International Finance Corporation. March 2026. Some rights reserved.