



INVESTING WISELY IN FOOD SAFETY: HOW TO MAXIMIZE THE BENEFITS AND REDUCE COSTS

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INTRODUCTION

The goal of this publication is to help companies learn to build such a strong food safety culture, learn from others, and get the most out of their investments in time and money.

In an increasingly interconnected global market, common standards for food quality enable importers and consumers to put their trust in the goods being offered.

These common standards are not only embodied in laws, such as those governing EU import requirements, but also in private voluntary standards. While producers hoping to enter international markets may view these standards as obstacles, adhering to them can lead to concrete rewards, such as expanded market share and recognition of their brands as trustworthy.

Even firms that only seek to extend their markets within their own regions will find that today's consumers in all markets demand stringent safety standards in the goods they buy. Companies in agribusiness are especially exposed, since contamination and product recalls can damage reputations permanently and place the entire sector at risk.

While an investment in a food safety management system based on HACCP principles requires institutional change and additional short-term costs, the results can also lead to increased product quality and reduced risks.

IFC has worked in a number of countries in Eastern Europe / Central Asia to support the implementation of systems that will make their products more safe and competitive.

In IFC's experience, the companies that received the most quantifiable financial benefits were the ones that treated the implementation of a food safety management system as an investment, with clear investment goals, an expected return in quantifiable terms, and concrete deadlines. For these companies, better food safety was a key component of the company's strategic vision.

Certification was not the end goal but a means, a preliminary milestone to achieve growth. Furthermore, the most successful companies did not just receive high audit scores or important internationally-recognized certifications, they built a strong food safety culture based on continuous improvement.

WHY YOU NEED A FOOD SAFETY MANAGEMENT SYSTEM

In the food business, food safety incidents can result in immediate market loss. A strong, effective food safety management system is a sure sign of a sound and sustainable business – and convincing evidence that risks are being identified and controlled.

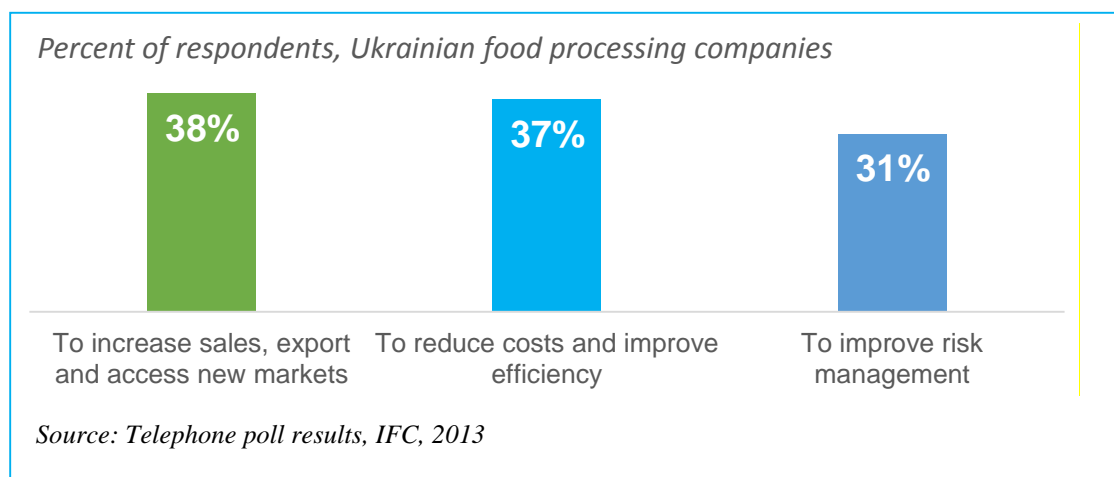
“Many of the emerging public and private standards are viewed as a necessary bridge between increasingly demanding consumer requirements and the participation of distant (and international) suppliers. Many of these standards provide a common language within the supply chain and promote the confidence for consumers in food product safety. Without that confidence, the market for these products cannot be maintained, let alone increased, in turn jeopardizing international trade.”

Source: Steven Jaffee and Spencer Henson, “Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate”. World Bank Policy Research Working Paper 3348, June 2004.

Market Challenges

Small growing companies face similar challenges: to raise financing, they need to demonstrate that sales are growing and risks are being managed. However, many companies can get confused by the myriad of food safety standards required.

Why do you need a modern food safety system?



Unlike other types of business, food companies are prone to special risks associated with their product safety that can kill the company overnight. Food company managers are well aware of issues that can potentially drive sales down:

- Recalls, returns and conflicts with retail chains
- Complaining and dissatisfied customers, resulting in a drop in sales
- Lower customer confidence and loyalty
- Weaker brand image
- Fines and frequent audits.

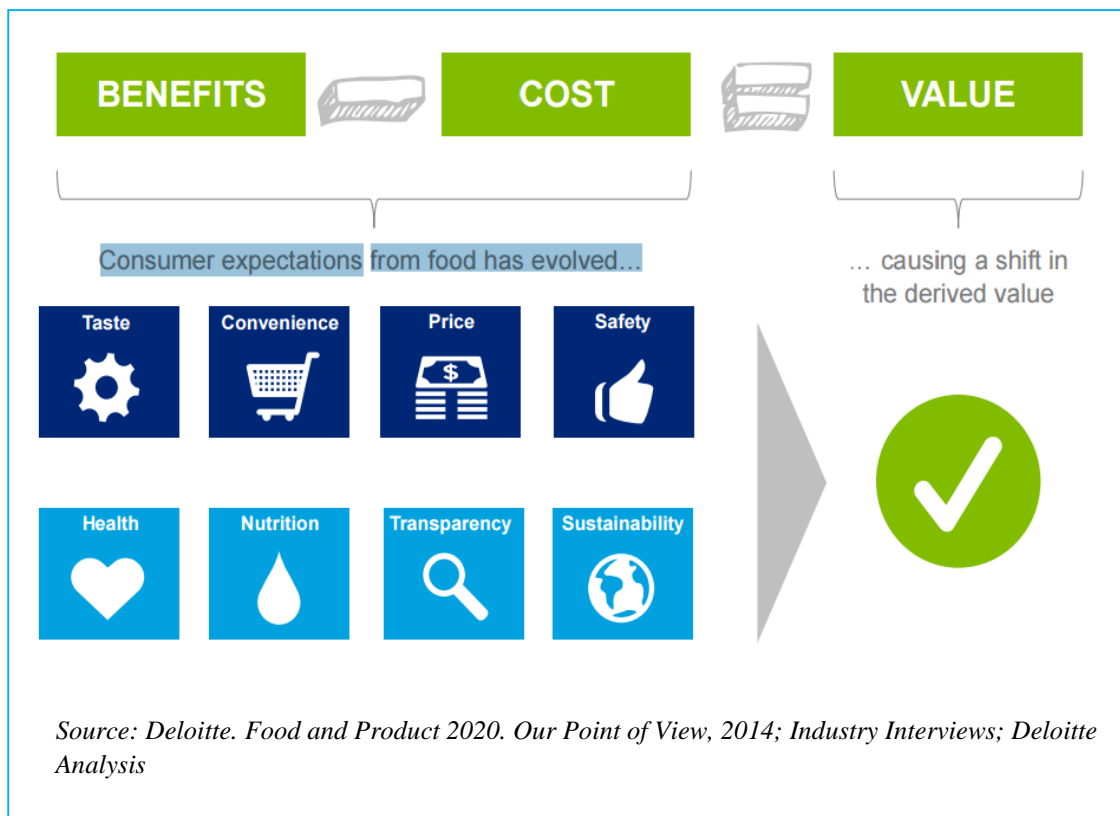
Modern food safety management systems based on HACCP provide a competitive advantage to businesses in the agriculture and food processing sectors by opening up new international markets for high, value-added food products and increasing the efficiency of domestic markets. They improve company reputation and increase customer loyalty, thus increasing sales.

”For 87 percent of consumers, clear labeling was a very important purchase driver for a given food product. Furthermore, almost 70 percent were more likely to buy brands that were actively communicating their commitment to food safety in a broader sense.”

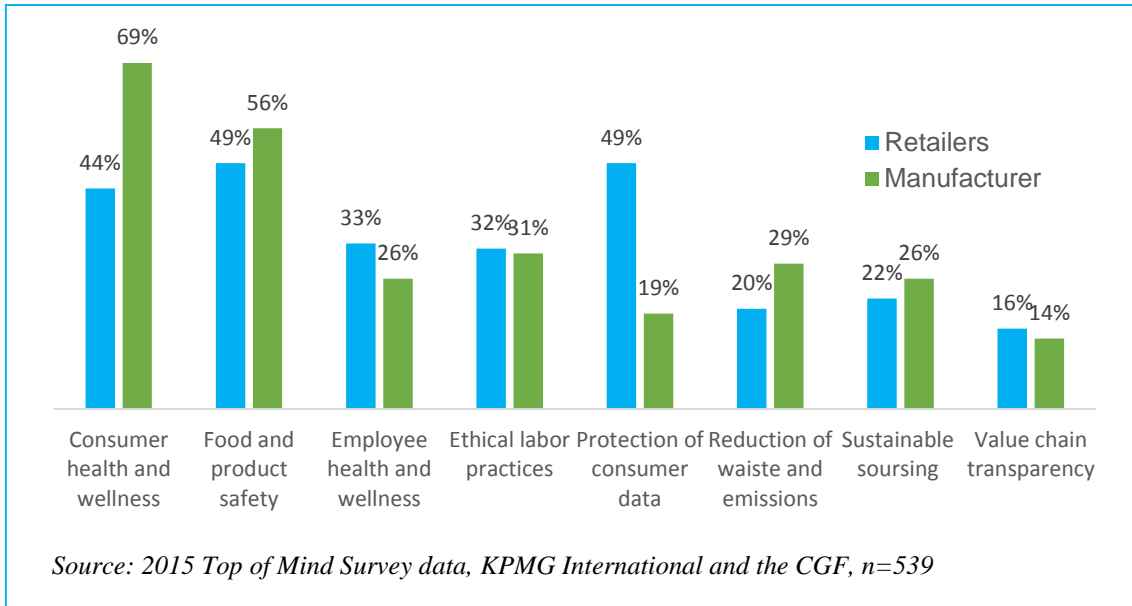
Source: Deloitte (2015): “Consumer product trends, Navigating 2020”

Recent studies from Deloitte suggest that consumer expectations are evolving. The definition of food safety has also expanded to include health and wellness, sustainability and ethical values. This implies challenges that go beyond implementing HACCP and a food safety culture; the ‘systemic approach’ will increasingly have to address other risks beyond food safety.

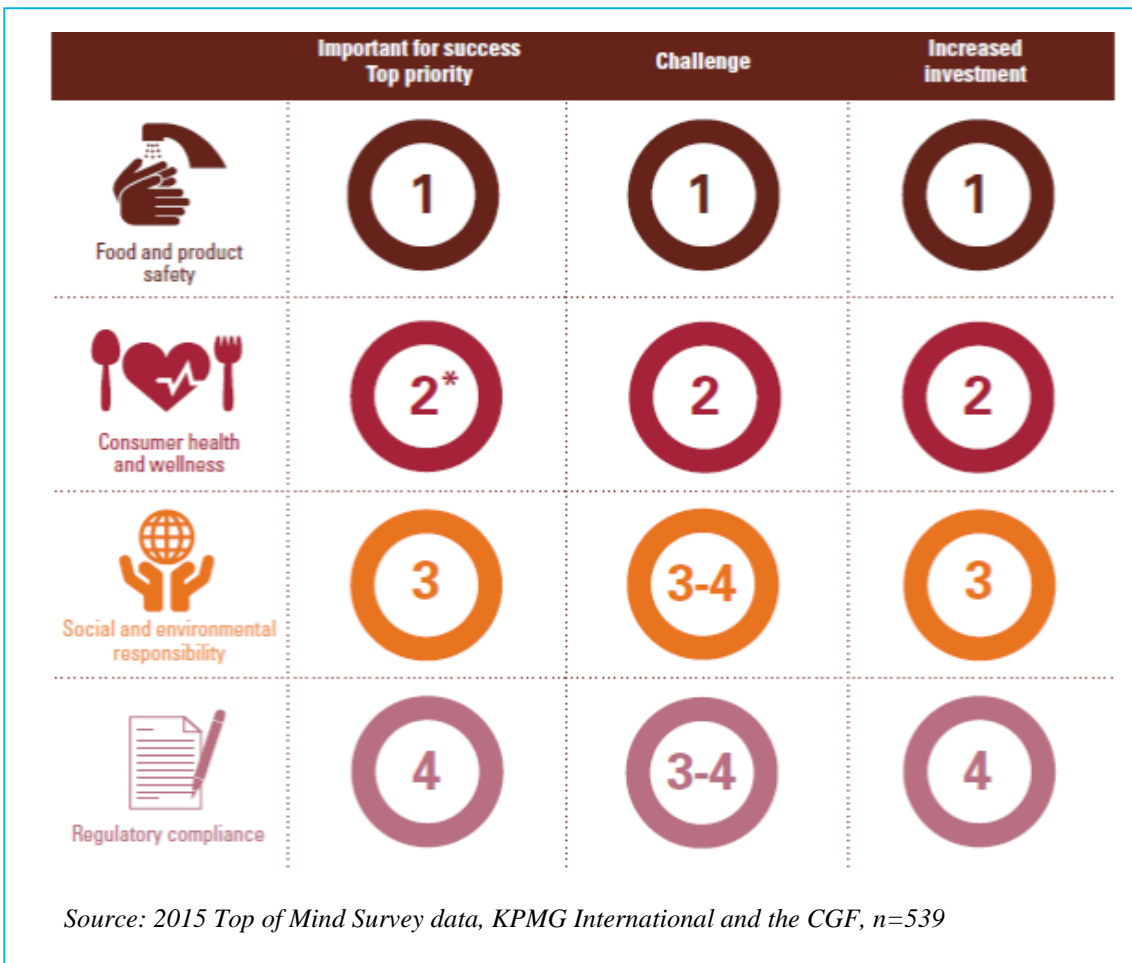
Consumer value equation for food has fundamentally shifted



Areas of importance in building consumer trust (top 3)



Rank order of areas related to sustainability and corporate responsibility



While traditional food safety controls focus on the end product, and only identify problems as and after they occur, an HACCP-based system focuses on controlling the entire production process, ensuring that quality is consistent, and preventing problems. This system establishes safeguards against potential hazards during manufacture, storage, and distribution.

Additional requirements may include certification. Suppliers and retailers may require certification for entry into certain markets, the EU, for instance. Once certified against one of the GFSI (Global Food Safety Initiative), recognized standards/schemes accepted everywhere - multinational retail chains and big manufacturers.

International requirements and food safety legislation

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

A Systemic Approach

A company with a sound food safety management system in place will be better able to control risks and deliver dependable products. This can result in a stronger company image in the eyes of important retailers and investors, which, in turn, contributes to market appeal and market growth. IFC has found that managing food safety through the production process lowers risk, reducing the costs of materials and financial loss from product recalls. A stronger system builds employee loyalty, reducing turnover, which leads to lower administrative costs.

Research:

“Numerous studies have found that standards are second only to capital accumulation in their contribution to growth.”

Source: World Bank, 2007

Systems are important but the stronger the overall food safety culture is at an enterprise, the easier, cheaper and faster it is to realize the full benefits of the system and reduce food safety risk over the long-term. A company known for its strong market position and brand, and known for thoroughly controlling risk, becomes attractive to investors. The benefits, as spoken by IFC clients, are summarized below:

Food safety management is a business tool that hones your competitive edge

Benefits		
Sales	Costs	Risk Management
<ul style="list-style-type: none"> • Additional retail outlets • Access to export markets • Increase in number of customers, greater consumer trust resulting in a stronger market position 	<ul style="list-style-type: none"> • Cost decrease due to better control of inputs • Reduced waste, spoilage • Greater control via standardization of procedures, optimization of process and flows • More tailored laboratory testing • Savings on penalties, fines • Less frequent facility and/or product consignment inspections 	<ul style="list-style-type: none"> • Higher worker morale, increased loyalty, higher level of responsibility of staff, self-discipline, and interchangeability • Better-protected brand, brand value increase = higher business value • Fewer consumer complaints, fewer recalls • Resilience to internal and external crises and risks • Renewed investor interest
<p>Higher manageability and efficiency of business in general even in circumstances of economic uncertainty</p>		

Source: IFC client interviews 2009-2015

From the investor:

“When contemplating an investment, the investor assesses various risks. A food business operating a modern food safety management system sends a clear signal to the investor that the company treats the organization of production processes responsibly and makes all efforts to minimize operational risks. As experience shows, gaining customer trust may take a long time, and one may lose everything in the blink of an eye, especially in the food business.”

- *Rufat Alimardanov, IFC Country Manager for Ukraine and Belarus, investor*

Success Story: Morozprodukt

Morozprodukt is Belarus' second largest ice cream and desserts producer, and the leading importer of frozen foods. In August 2012, Morozprodukt worked with IFC to implement an internationally recognized food safety management system. In June 2013 Morozprodukt successfully passed an audit and received FSSC 22000 certification, which ushered in better opportunities for the company in Belarus along with new export horizons. Improved food safety has enabled Morozprodukt to become the largest and most technically advanced ice cream producer in Belarus, increase its presence across the Customs Union, and realize its ambition to become an ice cream supplier for the Sochi Winter Games in 2014.

From the director:

"Food safety is the consumer's greatest requirement today. That's why implementing a food safety management system was our goal from the outset. Not only does it enable us to convince consumers that our food is safe, gaining their loyalty and trust, it will also help us expand our export geography, strengthen our presence in the domestic market, increase sales, and improve our overall competitiveness."

- *Sergey Dobudko, General Director, Morozprodukt, Belarus*

What the CEO Should Know

First and foremost, the CEO needs to have an idea where he/she wants the company to be in the medium to long term. After the CEO and board determine the strategic direction for the company, the first question should be: What are the quality and safety requirements for our desired markets?

For example, if the CEO and board aim to double sales over the next few years by exporting the company's products to a particular country, then the CEO needs to have a clear understanding what the food safety requirements are for that particular market.

If, on the other hand, the CEO aims to extend beyond the immediate region and access a national retailer, then the CEO needs to understand the requirements for that retailer, which may require audits and internationally-recognized certification.

A third scenario is that the CEO is concerned about maintaining his/her current market and reducing risk. In this last case, voluntary certification may not be required but a robust HACCP system should be implemented to comply with local regulations.

As companies have improved food safety, the greatest challenge has proved to be changing the mindsets of both employees and management. As has been pointed out, committed leadership is the starting point; the keys to success for business leaders are commitment, persistency, and an informed, systemic step-by-step approach to change.

Careful planning, which produces realistic deadlines, budget, scope of work and deliverables, and clearly defined roles for all involved, will help the personnel take ownership of the food safety management system. The system will only be sustainable

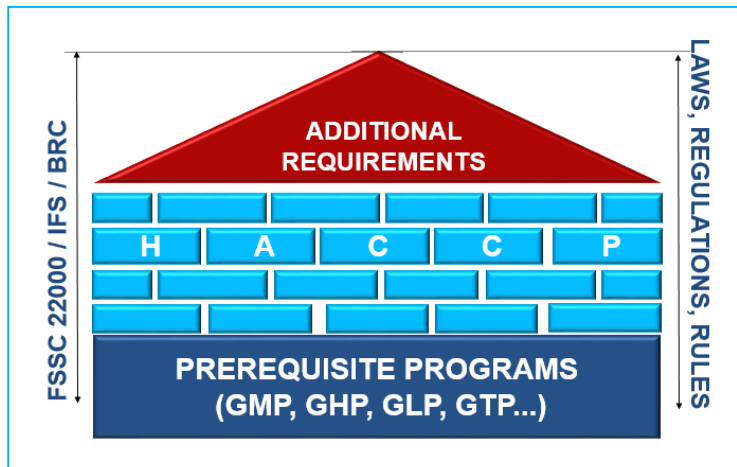
What is HACCP?

The Hazard Analysis and Critical Control Point is a system which identifies, evaluates and controls hazards significant for food safety.

Codex Alimentarius

if it is developed with active staff involvement, and to this end, all must understand the benefits. Constant communication, with status checks on the original plan, is crucial.

Implementing an HACCP-based system will incur expenses. Initial costs can be high because a large fixed investment will be involved to develop a food safety plan and to



train staff, and may also require new capital equipment and rebuilding. Reconstruction may entail greater costs if a facility is older and requires extensive work, or if a company must upgrade equipment.

Companies considering an HACCP system need to make a realistic estimate of the costs, but they should

do so with the understanding that the costs of complying with HACCP requirements can be more than offset by the benefits of greater food safety.

The calculations of risk and reward can be difficult to estimate because of the complexity of the operations and the variations in implementation across industries and sectors. First, HACCP can be implemented across the value chain — such as primary agriculture, food processing, retail.

Second, food safety hazards are different for different industries. For instance, expecting zero risk from raw meat processing is not feasible.¹

Third, more food-related problems arise from a poorly designed process than from poor execution of the process — so setting up a good system is paramount.² Thus, a company must weigh the costs and benefits of implementing an overall process, and not merely of executing a particular intervention within that overall process.³

Lesson 1 — PLANNING

Research:

“Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represent the wise choice of many alternatives.”

- *William A. Foster*

Once you decide that you are ready to implement a food safety system and that there is clear alignment with the company’s strategic vision, you should:

¹ Strategy and Policy in the Food System: Emerging Issues, J. Caswell and R. Cotterill, ch. 18, p. 225.

² *ibid* p. 226.

³ *ibid*

1. Articulate why for the systems helps the company achieve its strategic goal and develop SMART objectives to align with the strategic goal
2. Form an HACCP team, and assign an HACCP Team Leader
3. Develop an implementation plan with clear milestones
4. Seek approval from senior executives for the implementation plan and budget; obtain the necessary resources and develop schedule for reporting
5. Report to management on regular basis (IFC recommends monthly) and adjust schedule/budget as required
6. Apply for certification (if needed).

“One should start with a clear understanding of why it is important.”

- *Food safety consultant, Ukraine*

The responsibilities of management involve planning and setting goals, with deadlines, procuring resources, and promoting personnel awareness of the value of the food safety system. Those responsibilities can be summarized as follows:

Food safety management system components and prerequisites

Purpose of use	Content of purpose
HACCP Preliminary steps	<ul style="list-style-type: none"> • Set up a HACCP team • Describe a product and its distribution • Describe planned use and product users • Design a process flow diagram • Validate the process flow diagram
Prerequisites for HACCP	<ul style="list-style-type: none"> • Training • Practice for personnel • Sound facilities and equipment • Good manufacturing practice (GMP) • Cleaning, sanitation and pest control • Receiving, transportation and storage • Supplier control • Handling hazardous materials
Seven HACCP Principles	<ol style="list-style-type: none"> 1. Analyze hazards 2. Determine critical control points (CCPs) 3. Establish limits for critical control points (CLs) 4. Establish monitoring procedures for CCPs 5. Establish corrective actions 6. Establish verification procedures 7. Keep the records

Good Planning Saves Money and Time

Planning is a key to success. When you have a plan of changes and reconstructions put on paper, you can involve your staff and consultants to review and avoid expensive re-do.

“It is better to agree and change the paper plan, even a third or fifth time, to meet sanitary/fire safety/cross-contamination and other requirements ... than move the wall in a newly reconstructed building.”

- *Bakery owner, Ukraine*

“Along with developing the detailed action plan, it is necessary to regularly review and make adjustments as necessary, because this is a real life process and it is often closely related to human factor. We had to make changes to the plan several times because of some unforeseen factors.”

- *Food safety consultant, Georgia*

A consistent, step-by-step approach will help you to save money and avoid mistakes.

“I would give it a second or even third thought before I started. I would implement it all the same, but before that I would carefully take it all in and think it over, not to redo it later.”

- *Director of juice and canning company, Ukraine*

A checklist for successful implementation:

- ✓ Management is fully involved and interested
- ✓ Deadlines are clearly set, the scope of work and deliverables outlined step-by-step
- ✓ Roles for consultants, management, and staff are clearly defined at the time of system implementation
- ✓ The consultants' role is understood: “We help you, but don't do your work for you”
- ✓ The staff is actively involved
- ✓ Consultants and management mutually understand the objectives of anticipated changes
- ✓ The benefits of food safety management systems are understood
- ✓ There are realistic expectations about the time required for achieving results.

Source: IFC training materials for food safety consultants

Food and product safety in your organization: key questions to consider

	Is it a consumer centric function or just a technical product quality function?
	Is it considered a business and shareholder value driver or just a necessary cost?
	Are you ahead of the consumers and regulators or just meeting compliance requirements?
	Is the responsibility and ownership in the C-suite or is it relegated to mid-management?

Source: Deloitte. Food and Product 2020. Our Point of View, 2014.

Role of the HACCP team leader and the HACCP team

To effect such change in an organization requires the supervision and guidance that the HACCP-trained team exercises, under a team leader trusted and accepted by the staff. The team and its leader will be charged with implementing the food safety management system, and must be knowledgeable in HACCP. See a sample of terms of references for HACCP Leader in Annex 4.

“Implementation of the system changed the outlook and approaches of everyone in our company. The company as a whole changed from the very top to the bottom: from me personally to a shop floor worker. This is a comprehensive approach that changes everything.”

- *Director of meat factory, Ukraine*

The leader will be a key person within the system, and must be chosen carefully from among existing staff, but not from among top management. The leader must understand the food safety issues of the company product, and understand hygiene management and the implementation of HACCP principles. The team leader will represent the food safety management system to external stakeholders.

Source: FAO Codex

“We selected the HACCP leader together with the decision to implement the system. If this candidate had not been available, I would never have agreed to start. She was a co-owner, a well-respected and authorized person at the company. She is easy to deal with, and able to take decisions and responsibility. People respect her and listen to what she says.”

- *Director of juice and canning company, Ukraine*

Team members are drawn from among the current employees of the business; they should ideally represent the areas of production/sanitation, quality assurance, laboratory, engineering and inspection – personnel who are directly involved in daily processing activities, and are as such more familiar with the specific variability and limitations of the operations. It is essential to assemble the right blend of expertise and experience, as the team will collect, collate and evaluate technical data and identify hazards and critical control points.

Source: FAO Codex

The leader's role is to put together the team with an eye to providing for the following tasks: hazard identification, determination and monitoring of critical control points, verification of operations and samples. After that, the leader coordinates the team's work and chairs meetings at which ideas are openly exchanged and necessary adjustments made. The team leader represents the team to the management, and provides management with estimates of time, money and labor required.

Source: FAO Codex

In particular instances it may be necessary to call in an outside expert, but under no circumstances should the entire implementation be placed in the hands of outsiders. To do so would be to risk losing the support of plant personnel. Their representation by members of the HACCP team will foster a sense of ownership among company staff.

Source: FAO Codex

Lesson 2 — FINANCING

How to Save Money

A major challenge faced by managers and owners is lack of resources for system implementation. Here is some advice on saving resources, from companies that have successfully implemented a system:

- Undertake an unbiased audit with a list of required improvements, to understand the scope of work involved
- Take a holistic approach to planning changes throughout your company
- Set priorities and determine the order of changes, subject to their importance and urgency, reflecting everything in your budget
- Prepare a budget to your plan, and make sure that revisions of the plan are reflected in changes in the budget
- Split implementation into stages, and reflect them in the budget in order to plan the required resources in time
- Hire consultants and agree with them on your changed plan before beginning work: determine the location of a wall while it is still on a blueprint
- Realistically evaluate capabilities and resources of the enterprise
- Approach improvements creatively: engage personnel in finding efficient solutions to effect the spirit of the change rather than merely following prescriptions
- Discuss with colleagues and consultants which expenses can be deferred and more intensive procedures introduced in the meantime (i.e., wash an ugly floor more often until it can be renovated)

Advice from others' experience:

"You can save by buying used equipment. However, first you need to consider, consult with experts and make sure that you are given all the documentation. You will need it both for installation and operation, and later on for certification."

- *Food safety consultant, Ukraine*

"Sometimes you can look at things creatively. If you do not have resources for permanent walls, you can put up temporary partitions, for example. Or find an alternative solution. To prevent cross-contamination between a dirty and clean processes, separate them in time. All this must be clearly defined and organized."

- *Food safety consultant, Belarus*

"A well-planned timetable for a standard implementation can help you save time and the cost of hiring a paid-for consultant. Strict observation of standards during construction and remodeling will help to prevent the cost of rework... Involvement of the HACCP team in the design process of premises remodeling helped a lot to save investment into reconstruction."

- *Director, Belarus*

"It is important to introduce a system on an integrated basis across the enterprise, while a phased certification can save a lot of money."

- *Food safety consultant, Ukraine*

Key recommendations

1. Use the Rule of Three Ps: planning, premeditation (reflecting on details) and priorities
2. Split stages and shape budget
3. Learn and understand requirements
4. Consider available capabilities
5. Think over details, engage HACCP team in all stages, particularly to planning
6. Treat changes creatively (“top down and build up” is not always the only correct solution)
7. Avoid re-doing.

Budgeting and Tracking

Preliminary planning and budgeting is the key to resources. An action plan based on diagnostics and approved by all participants of the process is complemented with a budget.

Each point of the plan should have financial justification (how much each change costs); a timeframe (when the resources will be needed); and who is in charge (for the particular point of the plan and for making the resources available).

Ideally, the investments in food safety should be viewed by the financial department as an investment project, with clear targets for return on these investments which should be monitored at the executive level and adjusted when necessary.

Managers who have been through this process offer the lessons of their experience:

“It is important to set priorities, so that nothing is put aside. One should plan the sequence of actions depending on their importance, and estimate when and how much money will be needed.”

“To save money on equipment and structures, one should find out how much and when one will need them. Financial planning will help find resources, and one can ask suppliers to give a discount for a large order or early placement.”

Only then will it be clear whether the investment in better food safety has helped improved the business. Examples can include sales targets, reduced costs, and reduced recalls.

At this stage, it is critical to engage the finance department and clear with them the stages and expenses (priority ranking/deadlines/ costs).

Another important aspect that has been underestimated by managers and owners, is recording the costs of implementation. This is important to see whether the company is within the original budget. Such record keeping will enable the computation of total costs, aligning them with the market and strategic goals of the company, which is important

to avoid disappointments, calculate payback parameters, and make economically justifiable management decisions.

“We were keeping records of implementation costs from day one and monitored them separately from customary operations. The financial manager was in charge of this process.”

- *Director of juice and canning company, Ukraine*

“We were monitoring system implementation costs separately. Moreover, we kept separate tracks of consultants' costs and certification costs.”

- *Production manager of dairy plant, Belarus*

“We kept both accounting and separate record-keeping of money allocated and spent for system implementation. These costs were monitored separately from operational activities”.

- *Director of grain growing farm, Ukraine*

Key recommendations

1. Plan the budget, in order to help find resources, evaluate the economic efficiency of a project and financially substantiate a business' strategy
2. Split the budget into stages to see when and what exact amounts will be required
3. Keep records of expenses related to system implementation, in order to ensure control over expenses, and give information for making strategic management decisions
4. Have regular reviews of the budget to keep expenses under control and ensure that targets are being met
5. Ensure regular communications between all the departments, especially finance, and look for proactive ways to trouble-shoot potential issues before the project gets off track.

Major Costs

When investing in better food safety, a business manager should understand the cost implications of proposed improvements.

Although all businesses are different, the most expensive changes are usually related to the improvement of infrastructure (renovation, remodeling of premises and replacement of equipment), staff training, and sanitary hygiene and housekeeping conditions for personnel (washbasins, showers, toilets, locker rooms, dining space for personnel).

It is also important to make a distinction between non-recurring costs (e.g. reconstruction of premises, laboratory equipment etc.) and recurring costs (e.g. costs of hygiene measures, record keeping, lab testing).

Main costs typically include:

- **Introduction of pre-requisite programs** start-up costs, fixed costs for new equipment, renovation of premises (CAPEX)
- **Development and implementation of HACCP action plan** costs of developing HACCP action plan, staff training, evaluation of HACCP plan (Man hours/staff time)
- **Maintaining HACCP system** costs of record keeping and verification of HACCP plan, corrective actions (Man hours/staff time).

Example: A sample dairy industry - case study in Ukraine

- HACCP plan development and implementation cost an estimated \$6,000
- Operational costs in the first year were about \$6,500
- The pay-back period was one – two years, as evidenced by international implementations in the dairy industry
- The main benefits were increased revenues and access to new markets and retail expansion; reduction in overall costs; better management, staff motivation and responsibility; streamlined production processes; increased product stability, shelf life and product characteristics (less waste and spoilage)

Source: IFC survey findings: Implementing food safety management systems in Ukrainian food processing enterprises. A cost-benefit analysis, 2010

Significant expenses will be borne in relation to infrastructure, which is always the most expensive (renovation, construction /reconstruction, new equipment). Other expenses are much smaller, such as training, description of procedures and certification.

“The most expensive thing for us was remodeling and coming into compliance with standards for storing crop protection chemicals, mineral fertilizers, grain, workshops, and gas stations. The second most expensive category was consulting on standard implementation and documentation.”

“If it is an old facility with old equipment, the greatest expenses are going to be for renovation and buying new equipment. For the validation of the system, we are often asked to verify the primary ingredients and final products in the third party laboratory, which can also be expensive.”

“Our company operates in the rented building. Renovation of the premises cost us more than we estimated. If I were to start the business today, I would mobilize the financial resources to develop own premises and plan the facility according to the food safety requirements from the outset. ”

- *Director of ice-cream-coffee shops, Georgia*

Key recommendations

1. Recognize that all companies are different, and implementation costs will depend on the original state of an enterprise⁴
2. Appreciate the fact that the stronger the food safety culture at an enterprise, the easier, cheaper and faster it is to build a full-fledged food safety system
3. Understand that, as a rule, the bulk of financing will be required for infrastructure (premises and equipment), and for creating good conditions and training for staff.

Lesson 3 — CHANGING BEHAVIOR

Research:

“Quality is about people, not products.” - *E. Deming*

No matter the type of food business, whether a meat-processing plant, a juice factory, or a retail outlet, it will need people who will follow proper procedures on a daily basis and at each level of the company. Trained people, dedicated to the concept, following procedures on a constant basis.

As noted earlier, the single greatest challenge is changing personnel mindsets. To that end, management at the top level must be fully involved and interested, giving support, commitment and re-enforcing the key messages over time.

Realistic deadlines, budget, a clearly defined scope of work and deliverables, create an informed, systematic step-by-step approach to changes which encourage their acceptance. A good HACCP leader with adequate access to the resources must be appointed. All personnel must be taught to understand the benefits of food safety management, and come to appreciate that the system is only sustainable if it is developed with active staff involvement.

Achieving Buy-In

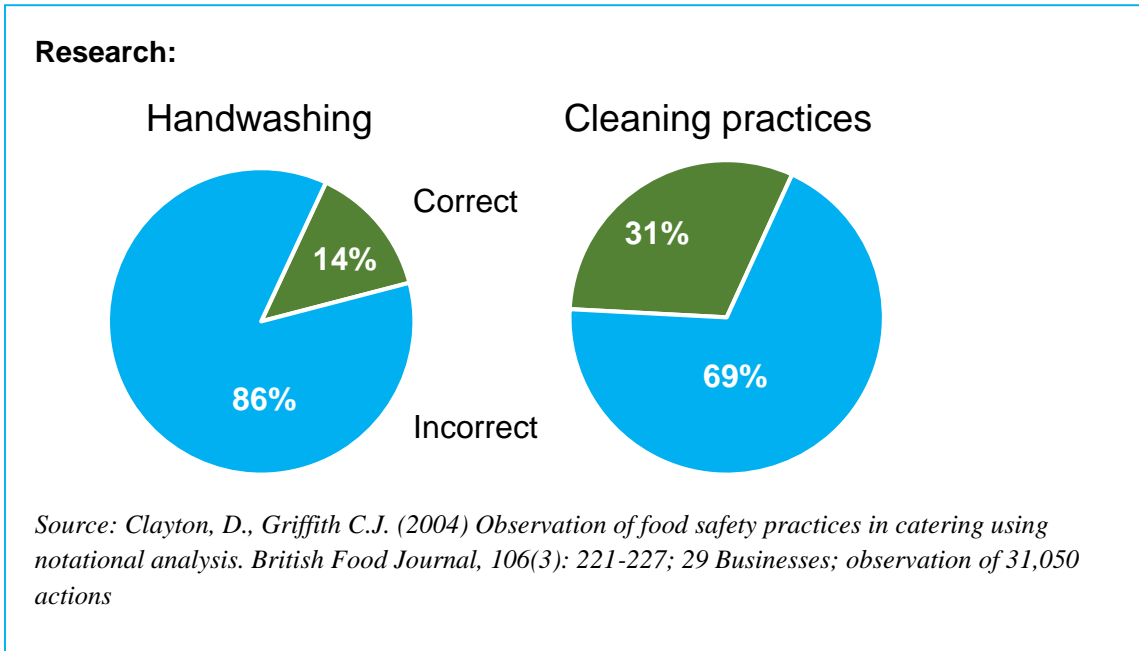
Research:

“Staff often do not follow procedures they already know - 59% of food handlers do not carry out all the food safety behaviors they have been taught at all appropriate times. “

Source: University of Wales, 2009

As the following illustrations show, the existence of regulations does not guarantee adherence in practice:

⁴ See more about differences in the required compliance costs for enterprises in fishery and horticulture firms in South Asia and Africa: “The Costs and Benefits of Compliance with Food Safety Standards for Exports by Developing Countries: The Case of Fish and Fishery Products” by Steven Jaffee and Spencer Henson. “Global supply chains, standards and the poor: how the globalization of food systems and standards affects rural development and poverty,” 2007.



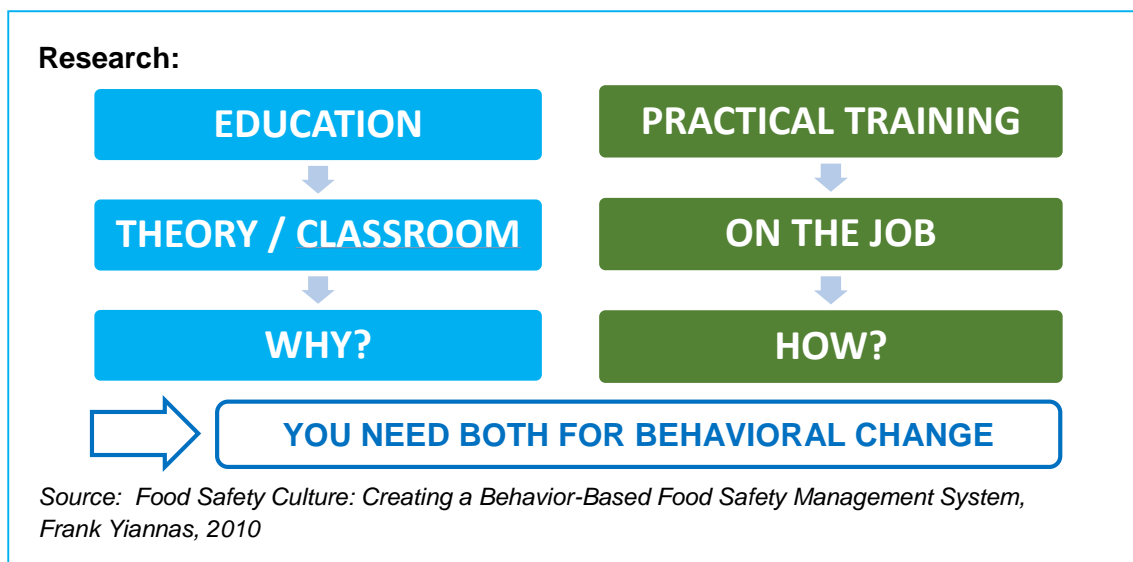
People may not follow procedures because

1. The environment does not encourage compliance
2. They do not have the proper motivation
3. Their education, knowledge and training are inadequate

Source: Food Safety Culture: Creating a Behavior-Based Food Safety Management System, Frank Yiannas, 2010

All personnel need to understand their role in ensuring food safety, and follow applicable company policies and procedures. Individuals, while very skilled with respect to their current duties, may not have a working knowledge of HACCP. Different personnel will require varying levels of HACCP knowledge.

Many HACCP trainers would be willing to train at your facility and can customize to your needs. If you choose this route, you may want to ask the trainer to include examples specific to your facility in the training material. It is also possible for the HACCP team leader to train the rest of the facility employees, after becoming adequately knowledgeable and comfortable in delivering such training.



Training will help to counter the arguments of those who oppose new policies.

“This is next to impossible...”

“One of the employees was constantly grumbling that it was impossible to develop specifications for all raw materials and inputs: “There are hundreds of them, it is next to impossible!” After training and clarifications, the employee and a colleague from the purchasing department designed a template based on which all necessary specifications were prepared easily.”

- *Food safety consultant, Ukraine*

One consultant guided the skeptical into acceptance of the new system through organized education:

Dealing with Nay-Sayers

“Our client company decided to adopt food safety standards in order to access the largest retail chain in the country. The CEO considered the recommended procedures and requirements burdensome and impractical. However, once we started the work and launched the training, step-by-step all requirements were put in practice. Today the company is a successful medium-sized business, which supplies not only the local retail chains, but exports their products throughout the region.”

- *Food safety consultant to a confectionary producer, Georgia*

Motivation and compliance can also be achieved through engaging the staff and finding out their perceptions of weak points in the production process that inhibit progress⁵. For example, there might not be constant access to hot water or the hand washing sinks are not in the right place. Maybe the cleaning tools are too far from the shop floor and locked up. These resources need to be available, and staff should be empowered to provide input on a regular basis on how to make the system more efficient.

Employees may not care about regulations because they see the factory director coming into the factory without washing his hands or wearing sanitary clothes. The manager needs to be a role model to help form healthy habits among the employees. Besides following proper sanitary procedures, the manager should give positive reinforcement in addition to negative comments, and reward "champions" – those who follow procedures. In good conditions, proper behavior spreads fast.

While businesses face special challenges when a considerable proportion of staff are seasonal or temporary, strong food safety culture can lower turnover due to stronger worker safety commitments.⁶

Good communication within a company is crucial. Organizations with strong food safety cultures communicate regularly with their employees about food safety using a variety of messages and mediums, such as posters, regular meetings to update staff on the

⁵ Often firms which have a strong food safety culture have lower turnover as they also have stronger worker safety commitments. - Steven Jaffee, Lead Rural Development Specialist, World Bank

⁶ Steven Jaffee, Lead Rural Development Specialist, World Bank

status of the program, awards for “champions”. As in commercial marketing, organizations with strong food safety cultures share information, not just to impart knowledge, but to motivate their employees to action with specific goals set and clear results expected. It is easier for people to change their behavior if they know why it is needed and what results are expected of them.

To better understand what causes staff resistance, and to turn your employees into advocates for change, consider conducting a staff survey. You will be able to understand what you should focus your training on; moreover, you will receive valuable insights and creative solutions, and your staff will be happy to know their voice was heard.

Example questions for a survey

- Have you received food safety training sufficient to perform well in your job?
- In your opinion, what in the company could have been improved but remains unchanged? Why? For what reasons?
- Do you feel motivated enough to follow the procedures, or do you think that you shouldn't bother with them when no one else actually does?
- Do you discuss with your colleagues food safety-related issues and how to improve them?
- What first comes to your mind when you hear the word “HACCP”?

One such survey yielded these answers on the question of compliance with sanitary procedures:

- 37% “I carry out all appropriate food safety behaviors I know at all times”.
- 59% “Sometimes I do not carry out all food safety behaviors I know at all appropriate times”.
- 4% “Often I do not carry out all food safety behaviors I know at all appropriate times”.

Source: Clayton & Griffith, BFJ 2004

Another way to obtain employee ideas is simply to walk around asking questions.

- What is working?
- What is not working and why?
- Do you feel that the company is producing safer food? If so, why (or why not?)

Carrots vs Sticks

"We will train them and they will leave! – It would be a lot worse if they were not trained and they stay..."

– *An HR director*

"Cost for staff training is much less than losses incompetent staff can cause the company."

– *Director of semi-ready food producing company, Georgia*

A Ukrainian manager reported that good performers were encouraged and incentivized materially. At the stage of planning and system design they received encouragement:

"We created an approach that compared how many mistakes were made. Then we distinguished best performers and held them up as examples for others. And when the system was implemented employees received material incentives. For example, each employee supportive of the system received UAH 1000 (US\$100-200) of monthly bonus."

"How did we punish employees failing to observe procedures? At first, we trained and advised them. Then we compared performance. And then ... Heck, we sacked them. We had to fire 60% of personnel in the first nine months, but we should have done it sooner. It's clear within the first three months who can and wants to change and who does not."

- *Director of juice and canning company, Ukraine*

One Belarus dairy company "gave bonuses to top performers. Thirteen employees were rewarded for implementation and successful certification of the system, depending on each person's contribution. Those who resisted changes reduced their work engagement in the company's operations."

"One study found that an important way to shape or reinforce proper food safety behaviors is through the use of consequences. For enhanced performance and results, however, the frequency of positive consequences or reinforcement should outweigh negative consequences. Consequences will not by themselves result in consistent and sustained behavioral change; they are most effective when they are an integrated part of a comprehensive behavior-based food safety management system."

Source: Food Safety Culture: Creating a Behavior-Based Food Safety Management System, Frank Yiannas, 2010

One Ukrainian company has in place an internal staff ranking system, where at the end of the year, staff performance is rated and a rating list is prepared. Rating influences the amount of wage through a monthly bonus coefficient and is the basis for judgment on one's adequacy for the job. Those who helped to implement the system were rewarded with a one-time bonus for contribution to a standard development and implementation, and preparation for certification. At the end of the year, by results of ranking, their bonus coefficient was increased. Those who stood in the way received disciplinary sanctions.

Key recommendations for creating a "Food Safety Culture"

1. Hire and then keep the right (hygienic) employees
2. Indoctrinate and "socialize" all /new employees to a hygienic way of thinking
3. Be a role model for hygienic behavior and make that central to the workings of the business
4. Create the right mindset: create expectations
5. Educate and train the workforce
6. Communicate the food safety messages frequently.

Source: Food Safety Culture: Creating a Behavior-Based Food Safety Management System, Frank Yiannas, 2010

Measuring Results

Key Performance Indicators (KPIs) allow you to measure how well your business is functioning. The KPIs you choose must realistically align with your goals, and the characteristics of your production. Some focus on financial status, such as sales by region, cost effectiveness, and of course, profits. Others measure changes in customer numbers, and employee turnover and satisfaction, allowing quantification of the changes brought about by the introduction of a food safety management system.

The question of which KPI's to track must be answered for your company and should tie back, again, to the company's overall strategic goals. Answering this question must be a part of your overall planning and assessment. Some specific KPIs examples for food manufacturers include:

- Production quality index
- Packaging material quality index
- Material usage
- Warehouse productivity, water/ energy/ waste ratios
- Customer satisfaction level and number of complaints
- Number of employees trained.

Lesson 4 —OUTSOURCING WISELY

"A consultant is like a driving coach. S/he can advise and help you, but cannot learn traffic rules or drive your car for you."

- *Food safety consultant, Belarus*

Do you need a consultant? Of course, you can cope on your own; however, you may find that you are spending more time and money than if you paid consultancy fees. The size and complexity of your business premises and operations will influence your decision, as will your degree of familiarity with food safety systems. A small business, or one with fairly simple production, might be able to manage its own implementation without outside help. It depends on the leadership and commitment to the goal.

Consider how a consultant can help, and whether as newcomers to food safety system, you might benefit from an expert's experience and knowledge. A consultant can:

1. Determine which system is most suitable for the objectives you set
2. Steer your implementation in the right direction and with the right focus
3. Save your resources and prevent costly mistakes.

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

In making your choice among candidates, pay attention to a consultant's background and record of accomplishment and the organization s/he works for. Globally renowned companies tend to hire experienced experts.

Prior to hiring a consultant, ask her/him:

- What success stories of implementation does s/he have?
- What is his/her experience in this industry, this specialization, with entities of this size and with which standards? Ask for references and call the reference for companies for feedback.
- How will we know that the implementation stage is over?
- How will we learn from you?
- What is your style of work?

Experience has shown that it is important to determine a clear timeframe and deliverables when drawing up an agreement, with clearly-designated roles and responsibilities for all parties (consultants, managers, staff).

A good consultant should be able to train people and teach them to continue the work without his/her support. The consultant is an advisor: "We help you, but don't do work instead of you." Your company should do the following on its own:

1. Design a framework and procedures and draft documents. These are areas in which you already have experience, and you know the realities of your own business
2. Develop a system of keeping and maintaining records. This will be necessary for the management of the business, and should be an element in adapting to the new system
3. Change attitudes and behaviors. The consultant is an outsider, and should not be expected to micromanage the employees; they would probably resist such an effort. Changing mindsets is best done from within the company, as outlined earlier.

Lesson 5 — TYPICAL MISTAKES AND HOW TO AVOID THEM

"Don't be afraid: there will be mistakes, one can't go without them."

- *Director of juice and canning company, Ukraine*

Lack of a clear goal

The leader lacks a clear understanding of which certification is needed.

Again, the choice of which certification to pursue must tie back directly to the company's strategic goal. Look first to the markets you wish to access, and then at those requirements – not the other way around. When in doubt, it is better to start smaller and ensure that the HACCP "house" is strong, before seeking certification systems that may be prohibitively expensive with no payoff in the short to medium term. It bears repeating that certification should not be the goal – it can be a milestone, but certification by itself will not bring significant benefits unless it is part of a SMART objective.

SMART Objective

- **S**pecific: Concrete, detailed, and well defined so that you know where you are going and what to expect when you arrive
- **M**easurable: Numbers and quantities provide means of measurement and comparison
- **A**chievable: feasible and easy to put into action
- **R**ealistic: Considers constraints such as resources, personnel, cost, and time frame
- **T**ime-Bound: A time frame helps to set boundaries around the objective

Examples

- Achieve 99% conformity rate on food safety parameters by December 31.
- Reduce number of customer claims by 20% for next 6 months.
- Get status of approved supplier by ABC company until June 30.
- Decrease number of equipment breakdowns by 50% during 3 next months

Speak with other companies in your sector/region to understand the challenges they may have had so that you can learn from their mistakes.

Bad planning of time, resources, and details

Inefficient timeframe and allotment of resources makes it impossible to monitor progress, and results in missed deadlines, shifted responsibility and lack of outcomes.

Counter this by implementing the new food safety management system in a systemic and realistic way: plans, deadlines, wins, responsible people, resources, monitoring of implementation. A systematic approach will cause the least disruption as the company takes on the food safety management system.

Allocate enough human and financial resources. Appointing a good HACCP leader who has adequate access to necessary resources is a critical factor. Bring the financial head into the planning, and see that a sufficient number of employees are assigned to the various tasks.

Set up a budget and select KPIs, then regularly revisit to make sure you are on track.

Measure what is important and celebrate the team’s success. Create opportunities to single out good performers.

Do not be deterred by costs. Lining up financing to improve the condition of production facilities and infrastructure may be necessary but should not be a deterrent. Significant food safety improvements may be achieved through measures at minimal or no cost.

Minimal / Zero costs 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.

Lack of involvement

Senior management is not fully invested in the implementation, and lacks understanding of the value of the food safety management system.

As has been noted, it is essential to ensure high-level support. Early involvement of senior management and their continued commitment is fundamental to the success of the system and the realization of benefits. To this end, they must understand the requirements and the benefits of the new food safety management system.

Senior management should take an active part in planning and implementation, and become role models by observing hygiene and other requirements. Their involvement should be visible through attendance at meetings of the implementation team.

Lack of internal support

Personnel lack an adequate understanding of the changes being introduced, and do not feel engaged in the process.

Increase awareness by spreading information and supporting capacity building. Ensure that everyone understands the benefits of food safety. Engender active staff involvement through asking questions and constant communications.

Training and building internal capacity is important so that the team not only understands the goal but develops the necessary skills to achieve it. The food safety management system will be effective if the people responsible for it are competent.

Some personnel will resist the proposed changes.

A good and proactive team leader will be of the greatest help here, to train your staff, and encourage team work. A successful system implementation is not one person's achievement. Reward the best people.

Indicators of success

Once a food safety system is in place, a company typically sees huge monetary gains resulting from access to increased markets or other benefits related to better food safety management. For instance, following implementation of an HACCP-based food safety management system, the Belarusian company **EuroPlast** was able to secure a long-term contract with Coca-Cola for €900,000.

After an initial investment, companies often see a per unit reduction in costs or an increase in production volume.

Morozprodukt, the Belarusian ice cream maker, increased production volume by more than \$2 million after implementing an HACCP system.

Categories of Benefits:

- Increase in revenue due to access to new markets
- Decrease in overall costs due to better management, lower product wastage
- Increase in investment attractiveness due to the above plus better risk management
- Increased personnel motivation and better communication.

Additionally, there are often many intangible benefits, such as increased brand reputation and customer loyalty, which are more difficult to quantify, experienced by companies who choose to implement a food safety management system.

Increased sales

Once a company has introduced a food safety management system, sales usually increase because the company is able to find new markets, both at home and abroad. For instance, according to **Shumi's** management, after implementing the HACCP system, the company experienced a sales increase of 37 percent, mainly through access to new markets in Kazakhstan, the European Union, and increased exports to existing clients in the U.S.

The Armenian company, **Euroterm**, saw a sales increase of \$1.2 million following its implementation of an HACCP system. Georgian water company, **Aquageo**, had sales increase by 42 percent after it adopted food safety practices, while **Morozprodukt** realized an additional \$3.65 million in sales following its implementation of HACCP. The following table provides a snapshot of the minimum and maximum sales increases experienced by the five IFC clients included in this analysis after they implemented an HACCP system.

Increase in total sales	Minimum	Maximum
Sales increase	5%	42%
Increase in production volume	0%	108%

It shows that all companies surveyed experienced sales increases and most experienced a jump in production volume as well.

Reduced costs

IFC clients included in this analysis have experienced large cost savings due to implementation of a HACCP system.

In Georgia, the Wine Company **Shumi** reported production costs had decreased by 11 percent while production volume more than doubled over one year period after implementing the system.

In Armenia, the food and juice producer **Euroterm** saw a reduction in total production costs of 5 percent per unit of production within a year following implementation of a HACCP system.

This also includes reductions in the costs associated with defective products and waste disposal, and of reduced maintenance and repairs to equipment. The following summary shows the IFC clients' reductions in production costs:

Cost categories	Minimum	Maximum
Reduction in total cost of production per unit	2%	57%
Reduction in cost of defective products	3%	56%
Reduction in cost of waste disposal	0%	35%
Reduced cost of maintenance/repair of equipment	22%	58%

New clients

Some benefits cannot be quantified: a company's enhanced image and brand reputation, its ability to attract investment and reduce risk, and its ability to improve personnel management and employee effectiveness.

Companies also find that they attract new customers, who view them as a viable and safe supplier of food. For instance, in 2013, Georgian Wine Company **Shumi** director, Akaki Tsopurashvili, announced that Russia had begun to import Shumi wines after inspecting the premises and determining that the company had complied with international food safety standards.

Some more examples

Turov Cheese – this Belarusian company has become known for its excellent food safety management system. The company was very open about its efforts in food safety and make food safety one of the brand characteristics. The company hosted many tours and excursions around the facility – for customers, retailers, and suppliers. Eventually, it got Turov Cheese on the radar of McDonald's in Belarus which seeks to increase the number of local suppliers but is not willing to compromise on food safety or quality. In December 2014, the quality assurance managers of McDonald's visited Turov Cheese and acknowledged full compliance with the most stringent food safety requirements.

International Beverages Tashkent (IBT) implemented a HACCP based food safety management system and soon afterward won a tender and become an exclusive supplier of Uzbekistan Airways, the national air carrier for Uzbekistan.

Investments

As noted earlier, investors will respond most positively to opportunities characterized by sound production practices. The presence of a strong food safety management system signals to investors, as well as to retailers, that the business is serious about product safety and quality, and is well-managed.

“The food safety incidents may occur like ‘black swan’ events and are difficult to predict. While HACCP and food safety certification systems cannot preclude such events, robust HACCP and food safety systems can improve business resiliency.”

- Barry Lee, Principal Industry Specialist, IFC

Better brand and business

Companies who have implemented the HACCP system note that they have experienced other recurring benefits:

- Reduced staff turnover due to personnel loyalty
- Cost avoidance (avoidance of future costs that would be incurred, compared to maintaining current operations. Improvements in operational flexibility and response to anticipated requirements from retailers)
- Increased staff productivity
- Improved communication and accountability in the company

- Avoidance of penalties, fines usually associated with food safety inspections.
- Better risk management and improved organizational resilience.

“Critical Incident Management’ systems, such as product recall plans, food defense plans (measures against sabotage, vandalism or terrorism) are critical to responding to and resolving the incidents and mitigating the damage from such events.”

- Barry Lee, Principal Industry Specialist, IFC

MAIN CONCLUSIONS

Food safety programs can lead to concrete business benefits. A survey by the World Bank’s Independent Evaluation Group (IEG) of six SME food companies that received the IFC food safety advisory in Ukraine demonstrates this. Respondents reported improvements due to food safety programs such as the following:

- Two companies reported improved profitability
- Five companies reported improved product quality
- Three companies have reduced waste because of the food safety program
- Three companies also reported improved productivity
- Four companies reported that sales would have been lower without the food safety program, and
- Five companies expect the impact of food safety program to increase over the next five years.

The benefits of investing in better food safety usually outweigh the costs. IFC client companies have recognized the benefits of food safety management systems, including increased production efficiency, improved risk management, and new markets and exports.

These include an increase in revenue, particularly as new retail chains and markets become accessible, a decrease in overall cost due to better management, less product waste and fewer food incidents, an increase in attractiveness to investors, and other intangible benefits, such as improved employee morale. Other benefits include longer product shelf life and reduced product liability.

Compliance with an HACCP system entails some costs, particularly if a facility is older and requires reconstruction or if a company must upgrade equipment.

Companies with a strong food safety culture already embedded in practice often find that instituting a food safety management system such as HACCP is easier, faster, and cheaper than companies where the food safety culture is weak.⁷

In order to maximize the benefits, the investment in food safety must fit squarely with the strategic goals of the company.

⁷ Implementing food safety management systems in Ukrainian Food Processing Enterprises

Better food safety alone will not help drive success for the company. For this to happen, employees at every level plus important company stakeholders must be involved in the planning process and keep the HACCP team accountable to the deadlines and budget. Some IFC companies encountered benefits along this journey quite by accident, particularly in cost reductions, but the best companies had clear goals in mind and made sure those goals were met.

Research:

“The enhancement of food safety capacity can also have more dynamic and wide-ranging impacts on private sector suppliers. For example, the implementation of a HACCP system and gaining third-party certification can send positive signals to both existing and potential customers. Firms can use these signals as a mechanism to reposition themselves in the marketplace and/or access new markets.”

Source: Steven Jaffee and Spencer Henson, “Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate”

ANNEXES

Annex 1. The Food Certification Process

- 1. Select the Right Scheme:** All food safety schemes include a standard, which is the auditable set of requirements that is applied to the food business. The first step in certification is selecting the scheme with a standard that best fits the products and processes of the business, and helps meet customer requirements. This may be requested by a retailer, food service business, or manufacturing customer, or to confirm the business's internal food safety protocols and controls.
- 2. Select a Certification Body:** Each of the scheme owners maintains a list of accredited certification bodies. It is important to consider the availability of qualified auditors, regional presence, seasonality, scheduling, audit duration, and overall costs.
- 3. Apply for Certification:** The certification process is essentially the same, whatever the scheme or certification body selected. It starts with completion of application documents, which allow the certification body to understand the scope of a facility's operations and the products to be covered by certification. It also becomes the basis of the contract between the certification body and food business, and is critical for calculating audit duration and assignment of an auditor with expertise in the appropriate food sector.
- 4. Schedule the date:** The certification body contacts the facility to schedule a date for the certification audit, a date that suits both the facility and the auditor, and within a peak production period.
- 5. Conduct the certification audits:** All standards require an on-site third-party certification audit to determine how well a facility identifies and implements food safety controls and complies with the requirements of the applicable standard. Certification audits are always non-consultative. This means that the auditor does not advise the facility on how to meet 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 non-conformances will be submitted to the company.
- 6. Close non-conformances and complete the certification decision:** To achieve certification the food business is required to correct any non-conformances noted, and to prevent their recurrence. The certification body reviews the evidence submitted. Only after a successful certification decision can a certificate be issued. The entire process from the completion of the audit to the issuance of the certificate is typically about 45 days.
- 7. Recertify annually:** Each year a certified food business is required to undertake a recertification audit. Typically, the recertification audit will take place very close to the anniversary of the initial certification audit. Just as in initial certification audits, the facility must address non-conformances prior to being reissued a certificate.

Source: Enhancing Food Safety Through Third Party Certification

http://www.mygfsi.com/gfsifiles/GFSI_White_Paper_Enhancing_Food_Safety_Through_Third_Party_Certification.pdf

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

Statement Yes or No?

1. I can describe all the products manufactured in my facility.
2. I can list the main ingredients, incoming materials (e.g., processing aids) and packaging materials of all of these products.
3. I can describe the processes used for all of these products.
4. I can describe the main food safety hazards (chemical, biological, physical, cross-contamination) of all of the products and processes in my facility.
5. I can describe the purpose of each piece of equipment in my facility and how each is used.
6. I understand the maintenance and calibration requirements of each piece of equipment in my facility.
7. I am fully aware of the physical condition (e.g., 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 the handling of products and ingredients

How did you score?

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

If, however, you were not able to answer "Yes" at this point to all of the above, now is the time to gain a greater understanding, before you are too far into the development of your system.

Failing to gain a greater understanding of your facility will hinder and jeopardize your HACCP system. For example, you may misunderstand certain hazards, overlook key areas of cross-contamination or miss the impact of certain employees.

Source: <http://www.haccpacademy.co.za/>

Annex 3. Case Studies

IFC worked with companies in Eastern Europe and Central Asia to support their efforts to implement food safety management systems, with the aim of increasing their competitiveness.

The following case studies highlight four projects in Belarus, Georgia, Armenia and the Ukraine that were particularly successful. They were chosen because of their investment potential and because they needed improvement in food safety practices. They provide examples of the challenges facing different food safety producers, including meat, dairy, bakery, fruit and vegetable, and processing and beverages.

In each instance, IFC's services included diagnostic visits, training, and consulting support for evaluation and certification. IFC also sought to harmonize local food safety regulations with international best practices, working with governments to develop effective food safety regulations. This included training workshops for state inspectors on how to conduct inspections according to international requirements and EU practice.

Euroterm

Euroterm is one of Armenia's main producers of natural juices, beverages, and canned vegetables and fruits. It sells its products domestically and exports to Russia, the European Union and the U.S. In 2011, its sales reached more than \$8 million. The company works with local and overseas distributors, and supplies more than 1,000 outlets in Armenia. In June 2012, Euroterm decided to establish an HACCP-based Food Safety Management System with IFC support.

"We view IFC not only as a source for a long-term financing opportunity, but as a strategic partner with a wealth of experience and knowledge of international best practices."

- *Vahe Ghazaryan General Manager of Euroterm, Armenia*

Results

After building new processing facilities according to international requirements for food processing, Euroterm experienced a \$1.2 million increase in sales, even before it had completed implementation of the food safety management system. Other results included:

- A 43% reduction in the overall cost of defective products
- A 5% percent reduction in the cost of inputs per unit of production
- A 15 % cost reduction due to better waste management
- Certification of compliance with international food safety standards
- Strengthened brand reputation as a result of the certification
- A 50 % cost reduction in state inspections and penalties
- A 4 % reduction in total cost per unit of production.

Euroterm received an investment of more than \$5 million in 2013, including \$2.5 million facilitated by IFC and \$2.5 million from Black Sea Trace and Development Bank.

Morozprodukt

Morozprodukt is the second-largest ice cream producer in Belarus, producing more than 50 different types of ice cream under various brand names.

Established in 1998, the company has grown due to solid management and marketing expertise, and in 2007 began exporting products to Russia.

In 2010, the company had 500 employees with production capacity of 30 tons per day and three production lines.

In 2012, the company finished construction of a new factory that doubled its production.

Following this expansion, the company sought to increase existing exports to Russia with a view toward supplying the 2014 Olympics in Russia and to reach out to European Union markets.

As part of this expansion, Morozprodukt sought to become certified according to FSSC 22000 requirements at the new production facilities, and sought IFC advisory services to support this goal.

“With IFC’s help we will effectively implement the food safety management system at our new production plant and also at a logistics center. It will help us increase production volumes, create new jobs, enter the European market, and also become an ice-cream supplier for the Olympic Games in Sochi in 2014.”

- *Sergey Dobud’ko, Director General of Morozprodukt, Belarus*

Results

Since 2010, Morozprodukt has continued to grow. Net sales in 2010 were \$32.8 million; this number increased in 2013 to \$42.8 million. Other results included:

- Supplying the Olympics in Russia in 2014
- Expanding exports to clients elsewhere in Russia
- Improving personnel management and control.

Approaching the European Union markets is still a long-term goal, but Morozprodukt has decided it made more economic sense to continue to expand to the Russian market, and so has put its plans to export to the EU on hold.

Shumi

Established in 2001, Wine Company Shumi is one of Georgia’s best-known wine and water bottling companies. The company has both domestic and international clients, located in Ukraine, Kazakhstan, the Balkans, Ireland, the United States, Spain and China. Annually, the company sells about 300,000 bottles of wine globally and in 2010 (before the implementation of the system) had sales of more than \$1 million.

In 2011, Shumi implemented a food safety management system. At this time, the company developed and delivered a training program on HACCP principles for

management and staff. The company also implemented a traceability system and an internal audit procedure and training of internal auditors.

Shumi hoped that by implementing a food safety management system it could reduce food safety-related risks, improve operations, increase its attractiveness to investors, strengthen its market position, and enhance its business reputation.

Results

After implementing the food safety system Shumi was certified according to ISO 22000. Shumi developed a documented management system, including GMP/GHP procedures.

Company management and staff attended training on food safety, and top management committed to implementing and continually improving the food safety management system. Other results included:

- Access to new markets in Kazakhstan and the EU
- Increased exports to the U.S.
- A 37% increase in sales revenue
- Total production costs were reduced by 57% per unit of production
- Improved personnel management
- Improved worker productivity

“Within a few months of implementing the food safety management system at our company the results were already visible. Our sales revenue has increased by 17 percent over the past several months. We have gained access to new markets, including countries in the European Union, as well as increased exports to the United States.”

- *Akaki Tsopurashvili, Director of Shumi, Georgia*

Globino

Globino was founded in 1998 as a small slaughterhouse and has grown into one of Ukraine’s main pig breeders, producing pork, sausages, butter and cheese. The company sought to expand its production and clientele, specifically aiming to boost the number of pigs on its farms from 90,000 to 400,000 and to increase its sausage-making capacity by nearly 50 percent. It also sought to expand production of butter and cheese at its dairy mills.

Globino decided to implement an HACCP-based food safety system to enhance its reputation for high quality, safe meat products, and to increase consumer confidence in its brand. Other incentives included increasing its attractiveness to investors and accessing new markets while expanding existing ones. The company also sought to reduce operational risks, to secure sales with a global retailer, and to export to CIS countries.

“The most difficult thing about introducing European standards is to change people’s mentality. It was easy for us to upgrade equipment and create the right logistics flows, but it was very difficult to change the habits and principles of the staff. The process of adapting the personnel to international standards of production is still going on.”

- *Alexander Bondarenko, Director of Globino Meat Factory, Ukraine*

Results

Globino invested about \$140,000 to upgrade its food safety system and completely revised its approach to production. The investments were recouped almost immediately: in the first year after receiving a certificate of compliance with international food safety standard, Globino's sales grew by \$34 million — an increase of more than 30% — as a result of moving into new and expanded markets. Sales increased by more than \$100 million over 2010-2013. The company calculated that it had saved \$45,000 in overall production.

Globino's results for the first year:

- 30% increase in sales in first year
- \$25 million investment facilitated by and in addition to IFC financing
- \$7 million potential IFC finance for Biogas Plant (payback 3-4 years)
- \$ 0.7 million in resource efficiency savings annually
- Savings of 18,000 tons CO₂e, 50 million l of water and 12 gigawatt hours energy per annum.

Globino secured sales to an important retailer, Metro Cash & Carry, which accounts for 80% of its fresh meat sales and a significant percentage of its processed meat sales. Metro requires third-party certification such as IFS, which Globino received as a result of the advisory support.

Globino's dedication to better food quality and safety helped sparked the interest of IFC Investment Services, which led to a \$25 million loan to the company. This enabled Globino to become the unrivaled leader in the industry; their adoption of best international practices will be a model for others and help to transform the market.

Annex 4. A sample of TOR for the HACCP Leader

HACCP TEAM LEADER - Position summary:

The HACCP Team Leader is a key role whose responsibilities include the successful implementation, on-going maintenance and continuous improvement of the company's FSMS.

Reporting to the FSQA (Food Safety and Quality Assurance) Leader, this role has overall accountability to develop a system that measures our food safety and quality programs against regulatory compliance and GFSI standards as well as industry best practices.

Positions reporting into this role include QA Systems and Quality Auditor, helping this individual lead, coach and support training programs that embed and sustain our food safety/quality culture and audit readiness on a daily basis.

Responsibilities:

- Oversee the HACCP team, its activities, training and education of its members
- Establish, implement, maintain and update the FSMS
- Perform HACCP pre-requisite program monitoring and verification as required
- Assist with HACCP and Food Safety and Quality program updates, maintenance, verifications and function as a cross functional liaison to ensure the plant is meeting regulatory and compliance requirements for all stakeholders
- Oversee and maintain all aspects of the Corrective Action and Verification Program and Tracker to ensure that all identified deviations are recorded, addressed, and verified as completed successfully
- Perform Risk Assessment as per the Internal Audit and Inspection Program, and develop, schedule, and conduct internal audits and inspections as required
- Establish strong relationships with work teams, including internal and external stakeholders and works with a collaborative style
- Works closely with site leadership team ensuring site audit readiness every day
- Oversee and maintain the plant Document Control system. Identify gaps, maintain tracker, ensure documents are complete and up-to-date, in correct format, properly stored and distributed
- Maintain an attitude of continuous process improvement and training of employees at hourly and salary levels. Includes new employee training and updating Food Safety and Quality training programs as required
- Provide functional support to crisis team including back-up for FSQA Leader as recall coordinator
- Maintain, update and ensure consistent execution of current QA programs and internal SOPs
- SOP verifications as required
- Assist FSQA Leader in changes, product launches, and regulatory changes, as required

- Assist with Root Cause Analysis and Investigation and Response to Customer and Consumer complaints
- Chair Food safety and management meetings as FSQA Leader designate (as required)
- Lead second and third party audits and prepare/coach cross functional managers before and during these audits
- Shall demonstrate full commitment to the implementation of the requirements of FSMS and to processes, which facilitate continual improvement of food safety and quality management.

EDUCATION, EXPERIENCE & COMPETENCY REQUIREMENTS:

- Bachelor of Science or Diploma in Food Safety/Science program or equivalent experience
- Understanding of HACCP, CCP's and GMP's. HACCP Trained and certified preferred
- 3-5 years experience in the food industry or similar preferred
- Must be self-managed and able to set priorities among conflicting priorities. Strong written, verbal and presentation communications skills
- Strong business, analytical, information system and computer skills
- Experience in Six Sigma methodologies
- Proven record for tracking and predicting reliability failures and implementing improvement strategies based off data before equipment failure.

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