Mike Robach leads Cargill's efforts across food safety, quality assurance, animal health and regulatory compliance. Mike graduated from Michigan State and Virginia Tech. He is a board member of the Global Food Safety Initiative, Safe Supply of Affordable Food Everywhere, the American Meat Institute, the National Turkey Federation, GMA's Science Institute Executive Board, U.S Poultry and Egg Association, International Association of Food Protection, Institute of Food Technologists, and American Society for Microbiology. He has worked with the OIE, FAO, USDA, FDA and global governments regarding food safety policy, HACCP, and regulatory reform based on science.

From 1995 through 2000, Mike was a member of the National Advisory Committee for Microbiological Criteria in Foods.

MICHAEL ROBACH

Vice President

Corporate Food Safety &
Regulatory Affairs
Cargill
USA

ONE HEALTH AND FOOD SAFETY

Mike ROBACH

Cargill is an international producer and marketer of food, agricultural, financial and industrial products and services. Founded in 1865, our privately held company employs 140,000 people in 65 countries. We help customers succeed through collaboration and innovation, and are committed to sharing our global knowledge and experience to help meet economic, environmental and social challenges.

In fiscal year 2011, Cargill had $119.5 billion in sales and other revenues. Earnings from continuing operations were $2.69 billion. The company also realized $1.55 billion in income from discontinued operations.

Cargill's purpose is to be the global leader in nourishing people. That takes into account health and nutrition, as well as food safety and food security. We have a mission to create distinctive value, and our approach is to be trustworthy, creative, and enterprising.

As an agricultural and food company, food safety is fundamental to Cargill's ongoing business. Our goal is to provide high quality, safe food every time, everywhere. We recognize that our work in this important area is never done. Every day we work to earn the trust of our customers and consumers, beginning with the safety of the products we produce and extending to improving food safety around the world.

Our definition of food safety is simple -- protecting people and animals from illness or injury from handling or consuming our food products. Our efforts to ensure this—all along the vast supply chain, from production to consumption—are much more complex. Because we touch the global food supply chain in so many ways and in so many places, we take a broad, comprehensive, science and risk-based approach to ensure the safety and integrity of all of our products. This comprehensive approach is designed to address biological, chemical and physical hazards.

Because we recognize that food safety practices, legislation and regulatory oversight vary between and even within nations, we have adopted one global systems approach to which we hold ourselves accountable across all of our business, in all of our geographies.

It's everyone's responsibility, and we take a very holistic approach from the farm all the way to the plate. We embrace the concept of One Health.

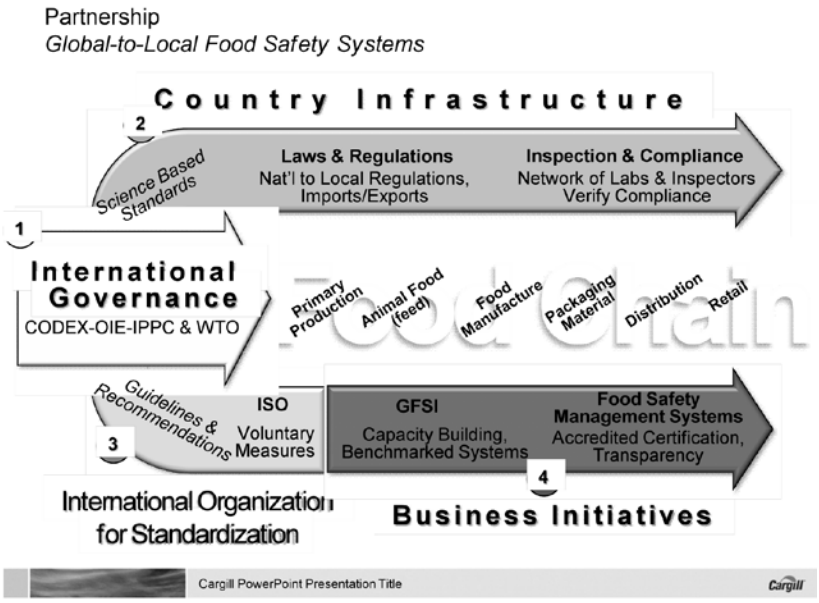

FIGURE 1 Roadmap for the components of global food safety.

I want to share this as a roadmap. It is an example of what One Health is all about. We've worked on this with a number of other colleagues in the food industry and through Michigan State University to create this map for the components around global food safety (Figure 1).

We begin with international governance on the left. There is a track that goes across the top around how governments can adopt the principles, guidelines and recommendations coming out of Codex Alimentarius, the OIE (World Organization for Animal Health) and the International Plant Protection Commission as a basis for the regulatory oversight programs. These organizations are the international standard setting bodies prescribed by the World Trade Organization's Sanitary and Phytosanitary Agreement.

The bottom track outlines how industry has taken those same principles, guidelines, and recommendations and through an ISO framework, and transformed them into food safety systems that can be implemented and then audited against to assure that the systems have been appropriately deployed. These systems can cover the entire food network going from the farm on the left all the way through to the consumer on the right. It's a shared responsibility, shared accountability thought process through the whole thing.

National governments established the WTO and the SPS agreements, and use CODEX, OIE, and IPPC, for the process for setting international food safety standards. Out of these organizations you have science-based standards that have been internationally vetted, discussed and adopted. From this process guidelines and recommendations are developed that can be utilized by both the public and the private sector in global food safety.

From a government standpoint we all know that strong systems are going to protect customers and consumers, and will also facilitate trade. A number of countries already used CODEX as a basis for a number of their regulations. Many of them reference ISO as voluntary measures, and as suggestions for the industry in terms of adoption. Regarding government inspections and compliance, if a regulatory agency is verifying compliance and evaluating a firm's preventative measures, and the focus is on the elements that come out of international governance, you will have industry and government looking at the same criteria and thus aligned as to what it is that is important as it relates to the safety of our food system.

On the private sector side, the rationale is to build on science-based standards coming out of Codex, OIE, and IPPC. A strategic partnership exists between ISO and WTO to facilitate market requirements. They're working together to make sure that there's a framework available for the private sector to adopt these principles.

The process standardizes implementation, provides harmonization, alignment and consistency across the food chain from origination through consumption. In some cases there may be a market requirement, or it may be referred to in regulations and legislation. For the industry it's a good framework, using the guidelines, recommendations and principles out of Codex, OIE, and IPPC and putting them into a framework that can be adopted then by facilities in their food safety systems.

Within the industry there has been a lot of discussion about food safety being competitive issue. Back in the mid '90s the US beef industry got together as they were struggling with E. coli O157:H7 and how to deal with the situation. The industry made a decision that food safety would not be a competitive issue.

Companies together shared insight, best practices, and data. Together we've driven 0157 presence down significantly focusing in on what were the important elements of a food safety system and getting alignment over how to address the challenge..

We work through an organization called the Global Food Safety Initiative. GFSI is a multi-stakeholder group that benchmarks food safety systems. We just came out with guidance document six earlier this year. It is based on the principles of good hygiene and HACCP from CODEX.

The guidance document has requirements for food safety systems and their delivery. It also has a component around capacity-building that allows these principles to be implemented in emerging markets where the capacity might not be there. There's a process that takes countries or individual facilities in countries through a step-wise progression so that they can achieve this certification process.

We think food safety management systems are really the way to go in terms of having a robust program, and an accredited certification gives us third-party assurances that we're doing the right thing. We strive to create transparency, and confidence in the supply chain. This has to be done through a partnership. We believe it's effective and efficient. We believe that it protects consumers around the globe. This has been implemented within Cargill (Figure 2).

Cargill

Cargill Food Safety Policy

Cargill is committed to providing safe food and animal feed products and services. We will use only those product development, procurement, supply chain, transportation, storage, production, manufacturing, and distribution systems and suppliers that ensure the safety and regulatory compliance of our products. We will communicate relevant food safety matters both internally and externally. We will adhere to the food safety requirements we have mutually agreed to with our customers. Every Cargill Business Unit, Function, and employee has a responsibility to ensure the production of safe products that comply with the applicable laws, regulations and Corporate Food Safety and Regulatory Affairs requirements. Cargill management will provide the resources and support necessary to enable our employees to fulfill this responsibility and continually improve our programs and processes.

Greg Page
Chairman and Chief Executi ve Offi cer

Mike Robach
Vice President
Corporate Food Safety & Regulatory Aff airs

FIGURE 2 Cargill Food Safety Policy.

This document is in every one of our facilities around the world. Everybody is aware of it. Everybody knows it and understands it. In most places around the world you're going to have both the business unit leader and the plant manager also signing this document. It's a true reflection of both top-down and bottom-up commitment to the policy.

We have based our policy and procedures on CODEX. It's a focus on food safety management systems. We have general requirements that are required to be documented. The next section describes management responsibility. Every business unit leader, every plant manager has a responsibility that they must achieve in order to be compliant with the policy.

We also have a resource management section. We have a section describing planning and realization of safe products. These may sound like strange section titles to you, but they're taken from ISO, coming right out of CODEX. These are very consistent all the way through. In fact, we just this past year renumbered our policy and procedures manual to be in line with CODEX, so it's quite clear.

In looking at planning and realization of safe products, the key is prerequisite programs, steps you must take to enable a hazard analysis, doing the hazard analysis, and then putting in your operational prerequisite programs and establishing your HACCP plan.

Plans are updated on a regular basis, and reassessed annually. Traceability is required, as is control of any nonconforming products. The next essential section includes validation and verification as well as continuous improvement of the management system.

You've got to be able to validate that what you've put in place is effective. Then you've got to verify that you're doing what you said you were going to do over time. These all become

important components. It's important for us to remain outcome-based so that we can drive continuous improvement.

When new technology becomes available, new interventions become available, we want to be able to take advantage of those and not be constrained by a regulatory construct that is prescriptive and telling me how to do it. Let's focus on outcomes. Let's agree on what those performance standards need to be. Let's agree what the outcome needs to be, and then let industry move forward and innovate and continuously improve and share that information across the supply chain.

In summary, I believe that we do have a path forward I think the One Health approach makes a lot of sense. Breaking down the silos between animal health, plant health, food safety, and public health are mandatory. We believe that we have a structure and a mechanism for effective global partnerships in place. We work closely not only with our supply chain and our competitors in the industry, but also with our customers and with the regulatory agencies. Working with academia, consumer groups, government, and industry is the way forward. We've all tried to do it alone. The private sector has tried to do it alone. Government has tried to do it alone. It doesn't work. We've got to work together. We've got to get on the same page. We've got to get aligned around some of these issues.

We believe that resources must be deployed based on risk. You must have a science base and a risk base to apply resources. We're all operating with reduced resources.

We're trying to do more with less, so it becomes even more important that we're focused on the science, we're focused on the risk, and we're applying resources against the areas of greatest need. Focus has to be on prevention. It has to be on preventing issues from happening in order to maintain confidence in the food supply and to have a shared goal of safe, affordable food.

Food security plays into this in a major way, and the more preventative measures we can have in place around the world, the more assurance we're going to have of an abundant, safe food supply. It builds confidence in food safety, enhances global trade. It enhances food security. It enhances people's enjoyment of their nutrition.

Lastly, I have to finish with this last statement. Business shoulders the responsibility for safe food. I know a lot of times government thinks they have the responsibility. They don't. We do. It's our product. It's our brand. They're our customers. We want to work together, and we want to work collaboratively. But at the end of the day, we're the ones who have the responsibility to produce safe food and protect public health, and we accept that.