

## FOCUSING THE FUTURE MAXIMIZING THE VALUE OF THE IRISH SEAFOOD INDUSTRY

BIM Report: Mary Shelman 2016

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### INTRODUCTION

Globally, the demand for seafood is projected to grow steadily over the next decades, with higher levels of international trade required to match supply with demand.

Food from the sea and from inland waters must play a larger role in the world's food system if we are to sustainably feed over 9.5 billion people in 2050.

At the same time, customer and consumer requirements for safety, traceability, and responsible and sustainable production are rising.

As a historic seafood producer and exporter, Ireland stands to benefit from these global trends.

Yet with constrained volumes – at least at the present – and few firms of global scale, how best can this be achieved?

The purpose of this paper is to describe one way to maximize the value to Ireland of today's scarce and precious resource while laying a strong foundation for future growth.

## BACKGROUND AND METHODOLOGY

BIM engaged Mary Shelman, an international expert on the global agri-food sector and former Director of Harvard Business School's Agribusiness Program, to do a high level assessment of the Irish seafood industry.

The premise was that a fresh set of eyes might provide a new perspective on growth opportunities over the next three to five years.

To understand the current situation, Shelman conducted 60 – 90 minute interviews (either in person or by phone) with 30 seafood industry leaders.

Instead of focusing on specific company situations or challenges due to current quota levels (which were not addressed), she asked respondents to put themselves in the position of CEO of Ireland Seafood plc. A summary of these observations is presented in Appendix 1.

Shelman combined these industry insights with her knowledge of global supply and demand, industry and consumer trends, and best practices of top international firms to produce the recommendations contained in this report.

Her work is grounded in Harvard Business School's 50-plus year involvement in the field of agribusiness and the School's commitment to the case method.

Over the past decade, she has developed over 50 "field" case studies covering every part of the chain from the farmer to the retailer, all manner of firms from large to small spread across six continents, many different commodity systems including seafood, and a range of critical issues including technology, sustainability, food security, retailer consolidation, consumer demand for organics and locally produced food, and the intersection of food with health and nutrition.

Three agribusiness case studies that are particularly relevant for this project are summarized in Appendix 2.



### THE OPPORTUNITY

# Globally, the seafood sector is projected to grow steadily over the next decades. Seafood is "on trend" with changes in the world.

- Increases in global population and income are driving growth in total animal protein demand. As wealth grows in developing regions, fish and seafood become more affordable.
  - The strongest growth of the middle class is in Asia, where consumers already include seafood in their diets and would like to have more.
- Fish is a high quality protein and
  is increasingly recognized for its
  nutritional benefits and convenience.
  It is perceived by many consumers
  as a healthier alternative to meats
  like pork and beef. As a result, fish
  is the only animal protein that is
  experiencing significant growth in
  consumption in developed countries.
- Farmed fish is the most efficient of all animal proteins in terms of feed conversion. Producing one kilogram (kg) of farmed fish requires 1.2 kilograms (kg) of feed, compared to 2.4 kg, 3.5 kg, and 7+ kg for 1 kg of poultry, pork, and beef, respectively. This positive sustainability story will become more important as rising demand for food runs into constraints on land and fresh water necessary for agricultural production.





International trade in seafood is increasing. Seafood is the world's most widely traded animal protein and seafood exports have doubled in value in the last five years (Rabobank 2015). Growth in value is stronger than growth in volume.

- The EU is by far the largest single market for imported fish and fishery products, importing about €22 billion (B) from outside the EU in 2012 plus another €20 billion in interregional
- The USA (€16 B) and Japan (€16.4 B) are the single largest importers. China (€6.7 B) is number three, but has the highest growth rate.
- China consumes 35% of global seafood and it is estimated that the country will soon become the largest seafood market in the world.
  - Domestic production is not keeping up with growth in demand. The Chinese seafood industry is also being challenged by sea pollution and an overfishing problem, which forces health-concerned, wealthy, middle class consumers to turn to safe imported seafood (Bord Bia 2014).
  - Continued urbanization in China is driving demand for higher value seafood, such as European salmon and African lobsters, and for convenience products.

- Norway has adopted a value-based strategy for its seafood sector.
- The website for the Ministry of Trade, Industry, and Fisheries notes that "The objective of the Government's industrial and seafood policy, therefore, is to maximise value creation in the Norwegian economy" and that the Ministry "promotes trade, research, innovation and entrepreneurial spirit.'

A dedicated website, www.fisheries.no. is Norway's official site for information about seafood safety, fisheries, and aquaculture management. In international markets, Norwegian wild catch seafood products are perceived as being higher quality even though much of the supply comes from the same fisheries as other countries.

Rising customer and consumer demands for food safety, traceability, and responsible and sustainable production will continue to push seafood firms towards integration and consolidation.

 Growing public concern about safety/ contamination, mislabeling/fraud (selling one species as another), the environmental impact of aquaculture, antibiotics in farmed fish, overfishing, illegal catch, and slave labor are driving tighter requirements for transparency, traceability, and sustainability.

- Consumers increasingly want to know "The integration of fish harvesting, where their food came from, what's in it, and how it was made and how the animals and people who were part of its creation were treated (The Hartmann Group 2016). In developed countries, there is a greater awareness of provenance and a trend towards "ethical consumption."
- Major retailers have introduced and endorsed private standards for seafood, including environmental and social objectives, to protect their brand reputations. The need for suppliers to demonstrate whole-chain traceability and sustainability pushes them to expand their control of the supply chain through direct or indirect
- According to the FAO, processing is becoming more capital intensive, geographically concentrated, vertically integrated, and linked with global supply chains. Processors are becoming more integrated with producers to enhance the product mix, obtain better yields, and respond to evolving quality and safety requirements in importing countries.

Recent seafood industry M&A trends illustrate the growing emphasis on strong, integrated value chains, as well as new links between wild catch and aquaculture.

Seafood players are increasingly aware of the need to become vertically integrated, as this provides greater control over production costs as well as the opportunity to cater to the changing demands of consumers

- processing and/or distribution activities into a single diversified entity is viewed by the seafood industry as an optimal business model. This is reflected in the ongoing consolidation in the industry across the value chain. The integrated business model is resilient to macroeconomic factors and capitalizes on the growth potential of the seafood industry." (M&A International 2013)
- "Seafood players are increasingly aware of the need to become vertically integrated, as this provides greater control over production costs as well as the opportunity to cater to the changing demands of consumers. It also helps to increase the traceability of the end product, a necessity given the greater emphasis on food safety these days." (M&A International 2013)
- Traditional partitions between wild fishing and farming operations are beginning to erode as firms see synergies in processing, storing, marketing, and branding, along with the possibility of ensuring year-round supply, reducing risk, and stabilizing cash flows and profitability.
- About 80% of the 212 M&A deals in the seafood industry between 2010 and H1 2013 were by strategic buyers. Most of the buying companies were European origin (52%), followed by Asian Pacific (21%), and North American (12%). Financial buyers were responsible for 14 transactions (6.6%). (M&A International 2013)
- (Quotes and data from "The Seafood Industry: A Sea of Buyers Fishing for M&A Opportunities Across the Entire Value Chain, M&A International Inc., 2013, https://www.mergers.net/sites/ default/files/MAI\_Food.And\_. Beverage\_Seafood.Industry. Report\_2013\_0.pdf)

## THE IRISH INDUSTRY CONTEXT

## Ireland is a small producer and exporter on the global stage.

- Global commercial fishing (wild catch) has remained stable at around 90 million tonnes since 2001.
   China (13.9 million tonnes in 2013), Indonesia (5.4 million tonnes), and USA (5.1 million tonnes) are the top producers.
  - Norway is the largest European producer (2.2 million tonnes). In comparison, the total seafood volume landed by Ireland in 2013 was 236,000 tonnes.
- Global aquaculture has grown rapidly, reaching 70 million tonnes in 2013.
   In 2014, human consumption of aquaculture products surpassed wild catch for the first time.
   Worldwide, 15 countries produce 93% of all farmed fish. China (41.1 million

tonnes in 2013), India (4.2 million

tonnes), and Vietnam (3.1 million

tonnes) are the top producers.

Norway is the top European aquaculture producer, producing 1.4 million tonnes in 2015 (95% is farmed salmon) with a value of NOK 47.7 billion (about €5 billion). In comparison, Ireland produced 40,140 tonnes through aquaculture in 2015 with a value of €150 million.

- > Ireland's global market share in farmed salmon is less than 1%.

  The entire volume of farmed salmon produced in Ireland in a year (12,000 tonnes) is covered by 3 days production in Norway (NESC report, p. 18).
- Ireland's seafood exports were €554 million in 2015, compared to world fishery exports of an estimated €130 billion.

## ASSESSMENT OF THE IRISH SEAFOOD SECTOR

Today, the Irish seafood industry is not structured to capitalize on global trends. The industry is fragmented, with many small firms spread around the coast.

There's a diversity of species and volumes are seasonal.

The main focus is on production, boats land at the same time, and "price is king."

Increasingly, the drive for efficiency at sea is not aligned with efficient utilization of processing capacity on the shore. With few firms of scale, a handful of co-ops, and 4 producer organizations (POs), there is no unified voice.

The government is heavily involved in the industry, but is not always seen as a supporter or enabler.

As a result, the industry is operating below its full potential. Supply chains are not aligned, resulting in loss of quality. Selling is done mainly through agents, and producers and processors lack connections with customers and consumers.

There's little differentiation and the majority of product (70%) is sold as a commodity.

Sometimes processors and co-ops — driven by the need to quickly pay their suppliers — compete to get business, which drives prices down.

The small size of most firms limits the ability to invest in innovation and brands. Getting and keeping good people is a problem at all levels, from skippers and crew to fish filleters in shops.

In general, however, things are okay – and in some sectors and enterprises they are very good. Yet there's a strong underlying belief that the industry can do more, that the ambition should be higher even with the quota levels that are in place today. As one processor remarked, "We have the best product in the world and we don't maximize it."

## MOVING THE INDUSTRY FORWARD

Ireland is volume constrained in a sector with growing global demand. It will never be a low-cost producer, even if the entire industry is organized into one entity.

How can the country best leverage its current raw material while building a stronger foundation for the future?

In other industries, firms turn limited quantities into an advantage via a strategy of "marketing scarcity" — deliberately using low production to make goods appear more precious in the eyes of consumers.

For example, the U.S. state of Kentucky is known for its Bourbon production. Currently, distillers are experiencing a surge in demand, driven by changing tastes, an improvement in quality, and popular TV shows such as Mad Men. Since Bourbon must be aged, there's a natural lag time for supply to respond, resulting in shortages of many products. Newspaper and magazine headlines proclaim "The shortage worth worrying about: great whiskey" and "Fear of a Bourbon shortage puts enthusiasts over a barrel," adding to the perception of scarcity and value.

Rather than selling on price, distillers are focusing on special attributes (longer aging, smaller batch size, single barrel) and telling their unique stories in advertising and new visitors centers. Sales of premium and super-premium Bourbons are booming and customers queue to pay very high prices for craft brands like Pappy Van Winkle.

The added publicity helped draw over a million visitors to the state in 2015 to experience the "Bourbon Trail."

The Irish seafood industry can achieve similar results by adopting a unified vision based on quality rather than scale. Building on the country's favorable reputation as a seafood supplier, good supporting organizations such as BIM, the Marine Institute, and Bord Bia, and the unique sustainability program "Origin Green," Ireland—and that includes everyone in the industry—should take on the ambition of becoming the international leader in high value, differentiated seafood products.

# VISION FOR THE IRISH SEAFOOD INDUSTRY

Ireland becomes the international leader in high value, differentiated seafood products that satisfy growing domestic and international demand for healthy, safe, responsibly and sustainably produced food.

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### STRATEGY

To achieve this vision. Ireland must create an industry focused on Value Creation and Profitability.

Fisherman and firms across the supply chain should work together and establish a comprehensive program to improve and enhance the quality of the supply base.

Technology, market knowledge, consumer insight, and the flexibility offered by smaller firms should be harnessed to develop and deliver unique, high-value offerings. The goal is to have Irish seafood

products recognized around the world as the highest quality or having some special attribute(s) and selling for a premium price.

To become a high-value supplier, seafood industry members must embrace three tenets: differentiation, customer choice, and alignment.

## Customer Differentiation Alignment Choice

#### **Differentiation**

- Differentiation involves making your products or services different from and more attractive than competitors. Valuable areas of difference result in higher prices, enhanced margins, and loyal customers. Ireland's salmon industry shows the results that can be achieved: by devoting the limited volume to organic products, Irish salmon garners a 33% premium over Scottish and Norwegian farmed salmon
- The first step in differentiating Ireland's seafood industry is to take an inventory of what Ireland can be different on. The next step is to decide the most valuable points of difference and how proof of difference can be
  - > Identify Ireland's unique advantages in seafood, overall and by species. How can this difference be enhanced and demonstrated?
- > What are the high-value segments within each category?
- Ireland's small size presents the ability to provide industry-wide verified sustainability and fullchain traceability that will address customer concerns about safety and responsible production.

- Origin Green provides a globally recognized, comprehensive approach to sustainability that will give additional levels of assurance beyond MSC. The addition of full-chain traceability (not currently required for Origin Green) will strengthen value and demand for fish caught legally and sustainably.
- Points of difference must be effectively communicated so that markets understand the benefits.
- Ireland must develop and promote a clear and authentic industry narrative that conveys the country's natural advantages and quality-based approach. As the CEO of This Fish in Canada (an initiative of EcoTrust Canada and industry partners) explains: "When you add information, storytelling, and especially rich artisanal traditions around food, consumers are willing to pay more. Seafood is a perfect commodity for that because most of the wild-capture fisheries have very long traditions and deep roots in coastal communities, and there is a great story to be told there."

(http://usa.oceana.org/sites/default/ files/fish\_stories\_report\_hi-res.pdf)

- > Create direct connections with customers and consumers, taking advantage of new capabilities in digital media.
- > Deepen and expand links between the seafood industry, tourism, and culinary experiences (such as the Wild Atlantic Way and Taste the Atlantic).
- > Once quality and sustainability programmes are underway, invite customers and consumers to "come see us" to demonstrate transparency and enhance the brand.
- Differentiation is interdependent with customer choice and alignment. Feedback loops that allow information to flow from customers and consumers to suppliers must be established to inform product development and marketing strategies.

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#### **Customer Choice**

- The simple idea behind customer choice is to sell to markets and customers that value your products the most. It's also about deliberately deciding who not to sell to. One Irish seafood processor has seen impressive results after assessing costs and margins on a customer-bycustomer basis and deciding to stop selling to less profitable accounts.
  - > Determine the best customers in Ireland and the world for seafood. Develop a plan to get into these markets.
- Once markets and customers are prioritized, supply should be matched with demand in order to maintain a premium price. This will require tighter coordination between production and marketing plans.
  - > Could one firm or organization act as "captain" and handle all export sales in a species or country on a commission basis?
  - > Consider national or international partnerships or acquisitions to ensure reliable, yearround supply of high-quality products.

#### **Alignment**

Alignment means the proper positioning of parts in relation to each other. Parts or systems that are aligned achieve higher performance.
 When the tires on an automobile are properly aligned, fuel mileage improves, the tires last longer, there's less wear and tear on other parts, and the car is easier to drive.

For Ireland to become a high-value seafood supplier, alignment must be achieved in two areas: supply chains and industry behavior.

- Supply chains must be aligned to preserve and enhance quality, ensure traceability, and achieve differentiation.
  - Map the supply chain for each category. Identify the determinants of quality, pinpointing where value is created and where it can be destroyed. How can technology improve the supply chain?
  - What would the category look like if it was managed as one firm?
     This determines the potential.
- Attain alignment in each supply chain through a combination of direct control (integration), communication/ education, and quality-based price signals.
- Industry behavior must be aligned to support the overarching strategy, with all parts of the industry working together to improve quality, support differentiation, satisfy customers, and maintain price premiums.
  - Make quality a core value of the industry, achieving a state where everyone involved is passionate about quality as a personal value rather than simply obeying rules.
  - > Match government programmes and funding to vision and strategy.
- > Practice co-opetition in international markets.

## STRATEGIC ENABLERS

### Strategic enablers are factors that help the industry reach new levels of performance and fulfill its ambition.

Four interrelated enablers are needed to support Ireland's vision: Innovation, Sustainability, Talent, and Government & Food Industry Support.



\*Government & Food Industry Support

#### **Innovation**

Innovation is the engine of differentiation, driving improved competitiveness and generating new products and processes to meet existing and emerging customer demands.

- Adopt a broader definition of innovation that includes products and packaging, processes, and business models.
- Develop a commercially driven research agenda focused on full utilization of catch, improved competitiveness, and new ways to add value.

 Increase the number of projects at the Seafood Development Center in Clonakilty, turning it into a dynamic hub of activity. Take a venture capital approach and be prepared to accept some failures.

#### **Sustainability**

Ireland's national sustainability program "Origin Green" offers a unique, globally recognized platform and should underpin the industry-wide differentiation effort.

- Adapt Origin Green to be more relevant to seafood. Address full-chain sustainability (fisheries management and supply chain) and "measure what matters." It should be attractive to fisherman rather than an administrative burden and/or cost.
- Conduct supply chain life cycle analyses of the top 10 species.
   Determine how Ireland's natural attributes can be turned into competitive advantages through unique customer specifications.
- Develop training programs to help firms embrace Origin Green and learn how to proactively engage in sustainability discussions with their customers.



#### **Talent**

Driving alignment, achieving valuable differentiation, and serving the best customers will be impossible without the right people and the right training.

Since much of the global seafood industry is relatively unsophisticated, increased professionalism at all levels can be a source of competitive advantage.

The challenge for the industry and for each enterprise – whether processors or boats – is to appropriately evaluate the return on investment in human capital, which is intangible, compared to the return on equipment.

- Develop the entire talent pipeline, from entry-level crew members to junior executives and industry leaders. Recognize and celebrate the craft of the industry.
- Increase the level of business sophistication through a range of education programs and learning opportunities designed to build business acumen, management skills, and a greater understanding of domestic and international market opportunities.
  - > Emphasize business economics, strategy development, and datadriven decision making. As one seafood processor remarked, "Seafood is a detail business. Information has the potential to be transformational."

- > Develop leaders through special programs for executives and junior managers. Leverage existing courses, such as Leadership 4 Growth, Diploma in Strategic Growth (Food Industry), and Bord Bia's Marketing Fellowship.
- > Create a platform for industry-wide conversations to share information, create stronger connections, and support complex problem solving.

## Government and Food Industry Support

Ireland has a dynamic and successful food industry and a government that supports domestic and international development. The seafood industry should strengthen its association with the Irish agriculture and food industry at all levels to leverage and learn.

- Elevate the profile of seafood within the Department of Agriculture, Food and the Marine. Keep BIM headquarters in Dublin to maximise visibility in both directions.
- Develop closer linkages between seafood industry members, BIM, and Bord Bia.
- Leverage and build from food industry investments in R&D, marketing, and education.
- Learn from what food processors have done to improve results, especially in the protein sector.

## A CALL TO ACTION

The goal of the plan outlined above is to transform Ireland's seafood sector into the world leader in high value products by focusing on quality.

Bringing industry members together around a unified and ambitious vision will inspire change, help firms and government organizations set priorities, and ensure development of the best industry level resources.

Ultimately, profitability and competitiveness will improve and this will become an attractive industry for existing firms, new entrants, potential investors, and talent at all levels.

A joined up approach has produced strong results in the Irish food industry. The Pathways for Growth program initiated in 2010 introduced an umbrella strategy based on differentiation, co-opetition, and branding that led to the introduction of Origin Green. Since Pathways was launched, food exports have increased by over 50%, firms have more confidence to invest in Ireland, and the industry's profile at home has substantially improved. Creating change at an industry level requires more than talk.

For transformation to take place, three "pivots" (changes in approach or business model) must take place:

- From commodity to value creation
- From short-term to long-term thinking
- From production driven to market driven

These pivots call for each industry member to challenge and break long-held industry beliefs. Is seafood really different from other agri-food chains? How can wild catch be a regular supply?

Other beliefs to examine include: We're small and retailers are powerful, so we can't be high margin; Fresh fish is highest value, you can't add on top of that; You can't get Irish people to work in the seafood industry; Fishermen are independent and won't work together; Seafood is overregulated compared to other industries; You can't get this traditional industry to change.

There is a significant opportunity at hand that can be gained by Irish seafood enterprises working together to build a differentiated position. The first step is for everyone to agree on a strategy for focusing the sector. This discussion must include the entire industry.

The government can help provide the enablers, with organizations such as BIM acting as a catalyst for change.

Now is the time for action.

Mary Shelman

September, 2016

BIM Report: Focusing the Future

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### APPENDIX 1: Observations about the Irish Seafood Industry

- Cap on production in many species.
- Seasonal fluctuations in volumes.
- Small enterprise/firm size, fragmentation by species, and geographically dispersed.
  - > Some categories primarily domestic, fresh; others are international, frozen.
  - > No firm has full set of products.
  - > Co-ops exist, but vary in effectiveness.
- Production driven. Typically use wholesalers and agents for sales. Limited industry contact with retailers and end consumers. No feedback loop for information on customer/consumer preferences.
  - Increasing scale of boats creating mismatch with efficient utilization of processing facilities.
  - > No strategic, long-term thinking. "Price is king".
  - > Majority of seafood sold as a commodity.
  - > Customers play off multiple suppliers within a category to get a better price, leading to "a race to the bottom".
  - > Perception in some sectors that innovation/ added value means "add a sauce".
  - > Limited understanding of role of middlemen in distribution chain.
  - > Easier to evaluate investments in equipment than in soft assets, such as training, branding, or marketing.

- Difficulty attracting and retaining talent at all levels.
- No unified vision or voice.
  - > Multiple POs that compete for members by striving to establish differentiated positions from each other.
  - > Government is heavily involved via regulation, licensing, policing and funding, but is not always seen as a supporter and enabler.
  - > Culture of strong independence, particularly in wild catch. See other Irish fishers as competitors. "I measure my results against fisherman next door." "They look out for themselves and like doing their own thing".
  - > The one common belief is "seafood is different".
- Industry in general is doing okay (some firms and sectors are doing very well while others are struggling).

No real urgency or ambition for change.

> "This industry is stuck in a rut."

"There's lots of talk, but no change."

### Case Study 1: Zespri

**APPENDIX 2:** 

**Case Studies** 

**Relevant Agribusiness** 

Zespri is a "corporatized cooperative" of New Zealand kiwifruit farmers. It is authorized by the government to be the single desk exporter for all of the country's production. The system came about after the kiwifruit industry went through a very difficult period in the early 1990s.

Although New Zealand was the first country to export the hairy, green fruit to Europe, other countries (Italy, Chile) had started to grow and ship them. "Kiwifruit" had not been protected as a brand name and New Zealand was no longer the largest producer. The country's distance from markets meant it could never be the low cost supplier.

Rather than cut back on production, the New Zealand kiwifruit industry – led by the main co-op – jointly decided to adopt a customeroriented strategy based on innovation, differentiation, and consumer branding.

The made-up word "Zespri" was chosen to convey energy and vitality. Market research showed that taste and health were the main reasons people bought kiwifruit.

To improve the taste of New Zealand products, the co-op introduced a grid pricing system that paid growers more for sweeter fruit. They also created an innovation program to develop better tasting, higher yielding varieties and invested in scientific research to substantiate health claims.

Importantly, Zespri studied each of their top markets to understand what was most important to consumers and used the results to develop targeted marketing campaigns.

In Korea, for example, Zespri advertising was associated with beauty, in Germany with physical energy, and in China with strong children.

Using strong forecasting and their tightly managed supply chain and distribution program, they send the optimal quality of fruit to each market in the optimal volume to support a premium price.

Japan consumers are willing to pay handsomely for exceptional quality, so the very best fruit is sent to Japan. Consumers in the USA are not willing to pay for quality, so Zespri only ships to the US if it has extra fruit.

By working together around a shared vision, Zespri has created a virtuous circle. Innovation based on consumer insight leads to differentiated products, which can be distinguished by a brand.

Cooperation means that premiums can be sustained, which can be invested back into R&D and marketing – and in higher payments to producers.

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### APPENDIX 2: Relevant Agribusiness Case Studies

### Case Study 2: Friona and the American Beef Industry

The US has around 800,000 cattle-raising farms, with an average herd size under 50.

The breeds are different, the feed is different, and the production cycle is ad hoc. There is no traceability as the cattle move through the system to the slaughterhouse.

The beef that reaches the consumer's plate is unidentifiable with respect to origin or production methods. It is graded as to quality only, if at all, by a visual post-slaughter inspection. The farmers have no incentive to improve their methods, because the system only pays them by the live weight poundage.

McDonald's initiated and provided seed money for a fully traceable and transparent partnership between a feedlot (Friona) and a packer (Cargill) to try and exercise quality control on the whole production method.

The entire chain was studied and practices that resulted in quality losses were identified at each step (findings showed that one-third of losses occurred on the farm, one-third at the feedlot, and one-third at the packer).

Because cattle are tagged and tracked individually throughout (feed, weight, medicines, final yield, and quality assessed at both the slaughterhouse and through store and consumer audits), a farmer can invest in herd improvements and be paid on the exact value of the meat produced at slaughter, and ideally, at retail.

Imagine a system whereby a consumer who enjoyed a particular cut of meat, could order it next time, just as she could a bottle of wine!

Most agricultural supply chains are like this one: they are based on early 20th century technology and logistics. Members of the chain don't trust each other. They fight viciously for their share of a small margin rather than working together to produce a better product or to reduce system cost.

They resist change because there is no central authority (read "for-profit business") or market mechanism to force change.

Only the promise of a company the size of McDonalds to buy if the change was made forced the experiment described above.

## Case Study 3: Domino's

Domino's Pizza is the world's second-largest pizza chain and the largest that offers home delivery.

For years, they were known best for their promise to deliver your pizza in 30 minutes or less. But in the late-2000s, sales were falling and profits were down. A market survey found that customers rated Domino's at the very top for customer satisfaction against all other national pizza brands.

Yet when it came to taste, Domino's was rated at the very bottom. As their CEO explained, "we had convinced ourselves that fast delivery and great taste were not compatible."

They set out to challenge this conviction.

After months of work and testing, Domino's introduced its "new and inspired" pizza with higher quality ingredients and a new recipe for the sauce. The product line was supported by a robust supply chain and improved training for franchisees, which owned and operated the majority of Domino's outlets.

Sales jumped over 14% in the first quarter after the launch and have continued to climb ever since – along with profits and their stock price.

By kicking out the long-held internal belief, Domino's proved that pizza could be both fast **and** good. Bord Iascaigh Mhara Irish Sea Fisheries Board T: +353 (0)1 214 4100 www.BIM.ie