

# OVERSEAS TRAVEL REPORT

For travel to Kuala Lumpur, Malaysia from 10<sup>th</sup> June 2015 to 14<sup>th</sup> June 2015

By Natalie Dowsett, SARDI Food Safety and Innovation, Livestock and Farming Systems.

## Executive Summary

In June 2015, I attended the first annual International Seafood Safety & Trade Conference that was held in conjunction with the 16th Malaysian International Food & Beverage Trade Fair, at the Kuala Lumpur Convention Centre (KLCC) in Malaysia. This travel was fully funded by SafeFish and is clear recognition of SARDI's expertise in the technical seafood safety and market access area. The conference was attended by a number of international and local delegates, all whom had an interest and expertise in seafood aquaculture, trade and processing innovation. The presentations were mostly of a high standard, however the conference was not as well attended as it was advertised to be (i.e. it was promoted that up to 500 delegates would be in attendance however at its peak there was probably only 50-60 delegates). The topics covered at the conference were all directly relevant to SafeFish and SARDI Food Safety Innovation however as the conference was held in Asia, there was sometimes a focus on this market (in relation to waste utilisation, product use in the marketplace, aquaculture practices and processing techniques used).

The conference provided a good platform for collaborating with international experts in seafood and trade, and helped to raise my profile as a young researcher in Australia. The presentations provided good market access information on export markets such as the United States, Vietnam and the European Union (including information on changing standards, labelling and entry requirements, as well as regulatory authorities and standard setting bodies – such as Codex Alimentarius). The most beneficial information gained however, was to do with minimising waste and the use of new packaging technologies to develop and enhance seafood products. While this is not directly my area of expertise, there are a number of colleagues that I will be passing this information on to and will be connecting them with the experts that I met. A good connection was also made with InfoFish (Intergovernmental Organisation for Marketing Information and Technical Advisory Services for Fishery Products in the Asia and Pacific Region), and this may allow for opportunities for SafeFish and SARDI to publish in their magazine in the future.

I believe that the information gathered and connections made at this conference will help me, SafeFish and the SARDI Food Safety & Innovation team to develop research projects and new business in the future. The key follow up actions resulting from this travel are:

1. Provide an overview to SafeFish industry contacts on the upcoming changes to the US FDA standards that could possibly affect seafood export to the US (Contact Mr. Charles Breen – EAS Consulting).
2. Provide SARDI FS&I Innovation group with an overview of the presentations given and contacts for Ms. Joelyn Sentina and Mr Sigurjon Arason, MSc to discuss waste utilization and potential collaborative efforts that could be made in the future.
3. Provide SARDI FS&I with the contact for Dr John Ryder. Given similarities in the programs that are run, potential collaboration or idea sharing could occur in the future (potentially with risk assessments).
4. Provide SARDI FS&I Innovation group with an overview of Mr. Lau's presentation. There is potential for a packaging trial to be undertaken using seafood products to see what kind of shelf-life could be achieved using their packaging technologies.

5. SafeFish and SARDI FS&I to approach Mr Abdul Basir Kunhimohamed (Director of Infofish) to discuss potential publications that could be printed in upcoming issues of infofish.

## **Introduction/Background**

The first annual Seafood Safety & Trade international conference was held in conjunction with The 16th Malaysian International Food & Beverage Trade Fair, at the Kuala Lumpur Convention Centre (KLCC) from the 11-12<sup>th</sup> June 2015. The conference focused on seafood quality, safety, trade, health, environmental issues, innovation as well as product development. A number of international and local representatives attended and presented at the event and the content was diverse and relevant to the work that Food Safety & Innovation, SafeFish and SARDI undertakes.

## **Opportunities and Value Assessment**

### **1. Benefits to SARDI Food Safety & Innovation, South Australia and SafeFish**

- This travel has assisted to demonstrate that SafeFish and SARDI Food Safety & Innovation have good capability in seafood safety and market access research, both nationally and internationally.
- Identification of potential areas of collaborative research between international researchers and SARDI. Key collaborative contacts were made within the FAO-UN, InfoFish and the University of Iceland. These contacts have agreed that collaboration and knowledge sharing would be beneficial to both parties and are happy to work together in the future.
- Information exchange with key international regulators (European Commission, Codex Alimentarius, FAO-UN, and USFDA) and researchers to assist in current Food Safety research projects.

### **2. SARDI and PIRSA**

This international travel has assisted SARDI meet the following PIRSA strategic priorities (which in turn also feed into the State Governments strategic priority – Premium Food & Wine from our Clean Environment):

**Theme 1 ‘Build our Brand’** (Part B) Further develop targeted local, national and international markets for food and wine.

- Information from this conference has helped to better understand the market access requirements to access the European Union, United States of America and Vietnam.

**Theme 2 ‘Grow our Capability’** (Part D) Drive innovation to improve productivity and differentiate our product.

- Sessions on waste utilisation have provided ideas of different waste streams that could be explored (e.g. extraction of calcium from bones, oil from livers, leather out of skin). New packaging technologies have also been identified that could be trialled for effectiveness, then offered to South Australian businesses whom want to explore providing food for airlines.

**Theme 3 ‘Secure Production’** (Part H) Maintain leadership in biosecurity, product integrity and food safety standards

- As detailed above, information was gained on export markets of interest to SafeFish and SA Industries.

### 3. Conference Value

As this was the first time this conference was run, there is room for improvement in future years (and the conference organisers have recognised this and would like to expand the program to include other areas of interest and relevance). Overall I believe that my attendance was successful and given the topics proposed at subsequent events I would consider attending or recommending other SARDI staff to attend in the future.

### Travel Objectives

The main objectives that I was aiming to achieve whilst attending this conference is described below:

- Sharing of new ideas and trends in seafood safety and trade to enhance product quality
- Gaining a better understanding of international regulations and compliance for seafood
- Identifying new research opportunities around improving product quality, minimising waste and conducting innovative research to assist SA business develop and enhance products
- Providing exposure to and facilitating collaboration with international experts in the field of seafood safety & trade
- Raising my profile internationally as a young researcher

### Trip Details, Activities and Key Observations

Dates		No. of days	Purpose and/or activity	Location / destination
From	To			
10/06/15	10/06/15	1	Travel from Adelaide to Malaysia	Kuala Lumpur
11/06/15	12/06/15	2	Attendance at MIFB Seafood Safety & Trade Conference	Kuala Lumpur
<b>Day 1: 11/06/2015 Plenary Session</b>				
Plenary Paper: Seafood Quality, Safety and Trade			<p>Dr. Iddya Karunasagar Senior International Consultant, FAO-UN</p> <p>Dr. Karunasagar presented a plenary paper providing an overview of the challenges in quality, safety and trade that aquaculture seafood producers face. The following key points were taken from this presentation:</p> <ul style="list-style-type: none"> <li>• Globally there is an increase in fish demand. As wild-catch is unsustainable, aquaculture production must increase to keep up with the growing demand for product.</li> <li>• Global market trends: <ul style="list-style-type: none"> <li>○ China is now the largest exporting country of seafood products and the 4<sup>th</sup> largest importer</li> <li>○ The United States has recently taken over Japan as the largest importing country</li> </ul> </li> <li>• Developed countries mainly rely on imports rather than</li> </ul>	

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			<p>producing products themselves.</p> <ul style="list-style-type: none"> <li>There are number of food safety &amp; hygiene standards and certifications for products that are available however as these can sometimes be incorrectly interpreted and used, this can lead to confusion. There is a new global food safety initiative that is looking to harmonize all of these in the future.</li> </ul>	
<b>Session 1 : Regulations and Compliance</b>				
			<p>Mr Charles M.Breen Senior Consultant - EAS Consulting Group LLC</p> <p>Mr. Breen's presentation provided an overview of the new food safety regulations that are being implemented in the USFDA in August 2015. The main changes that will affect seafood exporters are:</p> <ul style="list-style-type: none"> <li>HACCP will be renamed HARPC Hazard Analysis &amp; Risk Based Preventative Controls</li> <li>A new standard (US 21 CFR Part 117 sub-part C) is being developed however Seafood will be exempt to this as long as it meets the requirements of the current HACCP standard Part 123.</li> <li>Exporters will however have to meet the requirements of sub-parts A (General Provisions) and B (Good Manufacturing Practice) of Part 117</li> <li>There are also five new Good Manufacturing Practice requirements that seafood exporters will have to follow. These are: <ul style="list-style-type: none"> <li>1. Food-contact surfaces</li> <li>2. Microorganisms</li> <li>3. Plant</li> <li>4. Safe moisture level</li> <li>5. Sanitise</li> </ul> </li> </ul> <p><i>* Information for SafeFish and Industry contacts</i></p>	
			<p>Dr John Ryder Chief Technical Advisor, Food Safety Programme, FAO-UN</p> <p>Dr. Ryder provided a presentation around the European Union market access requirements relating to traceability and labelling. Some key points from the presentation included:</p> <ul style="list-style-type: none"> <li>The EU is one of the largest importers of seafood products</li> <li>Relating to fish labelling and traceability there are two new standards that need to be followed: <ul style="list-style-type: none"> <li>o EU 1169/2011 'Provision of food information to consumers' – relates to 'all foods' but there are</li> </ul> </li> </ul>	
			<p>Paper 2: US FSMA for the Seafood Industry</p>	
			<p>Paper 3: Food Safety Monitoring System in the EU : Labelling and Traceability</p>	

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			<p>specific references to fish.</p> <ul style="list-style-type: none"> <li>○ EU 1379/2013 – ‘Common organization of the markets in fishery and aquaculture products’ – chapter IV consumer information specifically relates to selling aquaculture product in the EU.</li> <li>• There is a new aquaculture handbook called ‘a pocket guide to the EU’s new fish and aquaculture consumer labels’.</li> </ul> <p><i>* Potential collaboration for FS&amp;I</i></p>	
			<p>Paper 4: Traceability and Halal in Aquaculture Practices and Products</p> <p>Prof Dr Mohd Salleh Kamarudin Head &amp; Professor, Aquaculture Nutrition, Department of Aquaculture, University Putra Malaysia</p>	
			<p>Paper 5: Causes of Detentions and Rejections of Fish Products in International Trade</p> <p>Dr Iddya Karunasagar Senior International Consultant, FAO-UN</p> <p>Dr. Karunsagar provided a presentation around common causes of detentions and rejections of seafood products. Some key points from this presentation included:</p> <ul style="list-style-type: none"> <li>• The highest cause of detentions of product into the EU market is caused by chemical residues (mercury, cadmium, dioxins). Histamine detentions are also high</li> <li>• Detentions due to parasites in products are increasing worldwide</li> <li>• For crustaceans the main detentions are caused by antibiotic residues (chloramphenicols, nitrofurans, nitromidazoles) and dyes (malachite green)</li> <li>• For bivalves the main detentions are caused by biotoxins and microbiological factors.</li> <li>• Worldwide, detentions are mainly associated with failure of hygiene implementation, use of additives, antimicrobials in aquaculture, heavy metals, parasites, labeling and other issues.</li> </ul>	
<b>Session 2 : Trade, Health and Environmental Issues</b>				
			<p>Paper 6: SEAFDEC’s Initiative in preventing the entry of fish and fishery products from IUU fishing activities into the supply chain</p> <p>Hjh Mahyam Mohd Isa Chief, Southeast Asian Fisheries Development Center/Marine Fishery Resources, Development and Management Department (SEAFDEC/MFRDMD)</p>	
			<p>Paper 7: Standards and Certifications</p> <p>Mrs Esther Garrido Gamarro Food Safety and Quality Specialist (FAO-UN)</p>	
			<p>Paper 8: Sustainable Aquaculture, Certification and Market Access</p> <p>Dr Chadag Mohan Senior Scientist Aquaculture, WorldFish</p>	

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Paper 9: Potential Food Safety Problems Associated with Aquaculture Products			<p>Dr Iddya Karunasagar Senior International Consultant, FAO-UN</p> <p>From this presentation it was shown that Histamine is the number one leading food poisoning issue in aquaculture products. Bacteria, Viruses, Parasites, Toxic Chemicals and Biotoxins are also other common causes of illnesses.</p>	
Paper 10: Seafood Safety and the Requirements			<p>Ms Roziaton Abd Wahab, Food Safety &amp; Quality Programme, Ministry of Health, Malaysia</p>	
Paper 11: Vietnam			<p>Mr Dinh Thanh Phuong Director, The National Agro-Forestry-Fisheries Quality Assurance Department, Vietnam</p>	
<b>Day 3: 12/06/2015: Session 3 : Product Development and Innovation</b>				
Paper 13: Seafood Processing Innovation			<p>Mr Sigurjon Arason, MsC Chief Engineer and Professor, Icelandic Food and Biotech R&amp;D &amp; the University of Iceland</p> <p>Mr. Arason's presentation provided an overview of the innovation of the fishing processes in Iceland that lead to streamlined processes and improved quality of their end product. He then went on to explain how they utilize the bi-products cod to make a profit. In addition to using the flesh, they also use the skin for leather, the liver to make fish oil and the heads to make a luxury Chinese snack (dried and salted).</p> <p><i>* Potential collaboration for FS&amp;I</i></p>	
Paper 14: The FAO – Thiaroye Fish Processing Technique			<p>Dr Yvette Diei Ouadi Fishery Industry Officer, FAO-UN</p>	
Paper 15: Utilization of Tuna By-products			<p>Ms Joelyn Sentina Trade Promotion Officer, INFOFISH</p> <p>This presentation also provided an overview of how bi-products of tuna are being utilized. Currently their bi-products are being used for the following:</p> <ul style="list-style-type: none"> <li>• Fish silage</li> <li>• Protein hydrolysate (bioactive peptides)</li> <li>• Blood (feed, food, lab, industrial &amp; fertilizer application)</li> <li>• Cooking juice (hydrolysate, tuna flavored powder)</li> <li>• Dark meat &amp; thigh meat (canned tuna meat)</li> <li>• Tuna bones (for the extraction of calcium)</li> <li>• Fish protein concentrate</li> <li>• Gelatin (from the bones)</li> <li>• Silo feed (fish feed)</li> <li>• Pig feed (from dark meat)</li> <li>• Tuna Kure (from dark meat)</li> <li>• Pet food</li> </ul>	

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			<ul style="list-style-type: none"> <li>• Heads (including eyes) and fins – fish soup</li> <li>• Visceral organs for tuna flavouring</li> <li>• Gonad and roe (sold as fresh/frozen product)</li> <li>• Tail (frozen) is used as fried and grilled product, soups)</li> <li>• Tuna belly (grilled/fried)</li> <li>• Collar bone – sold frozen used in stews</li> <li>• Skin – used as a snack (dried)</li> <li>• Trimmings &amp; white meat – used as mince</li> <li>• Value added products – sausages, burgers, hot dogs, spring rolls etc.</li> </ul> <p><i>* Potential collaboration for FS&amp;I</i></p>	
			<p>Paper 16: Milkfish Value-Addition (Production and Marketing)</p> <p>Ms. Rose T. Mueda University Research Associate, University of the Philippines Visayas</p>	
			<p>Paper 17: Ready-to-go Food</p> <p>Mr Chi Wai David Lau President and Co-founder, Do Food Co., Ltd – food manufacturer and exporter</p> <p>Mr. Lau provided an overview of his company Do Food Co, who are the major supplier of packaging materials for airlines. They have developed a container and processing technique that can produce a stable shelf-life on any food product used in it. The process involves high pressure, high temperature sterilization (121°C) and can achieve shelf-life of up to two years.</p> <p><i>* Potential trial project for FS&amp;I.</i></p>	
			<p>Paper 18: Molecular barcoding of aquatic products and its application on food safety</p> <p>Dr Christopher Marlowe Caipang Research Scientist, School of Applied Science, Tamasek Polytechnic, Singapore</p> <p>This presentation provided information about how they are using DNA barcoding to determine the identity of fish species. This can help with mis-labelling and mis-representation of product.</p>	
13/06/15	14/06/15	2	Travel from Kuala Lumpur to Adelaide	Adelaide

## Action Details

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## Contacts

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For details on costs incurred for travel, please contact SafeFish secretariat.

To be signed by traveller



Approved by Manager  
(date)



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