

REPORT

Workshop between Japanese and Norwegian researchers within traceability and food safety

Short presentation of tour program and scientific workshop

Jostein Storøy, Maitri Thakur

SINTEF Fisheries and Aquaculture

Aquaculture Engineering

Desember 2010

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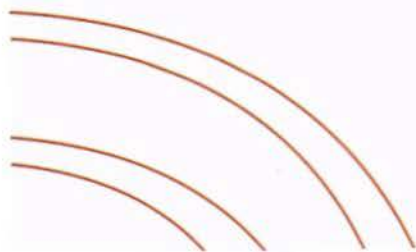
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SINTEF REPORT

TITLE

Workshop between Japanese and Norwegian researchers within traceability and food safety

- Short presentation of tour program and scientific workshop

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CLIENT(S)

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ABSTRACT

During the last 5 years SINTEF has taken part in the development of a bilateral research agreement with Japan, within food safety and traceability. The final agreement was signed in 2007. Two round table meetings took place in Japan in 2005 and 2006. In this period several research and industrial delegations visited SINTEF and Nofima. Since 2005, NRIFS (National Research Institute of Fisheries Science, Yokohama) and SINTEF Fisheries and Aquaculture have been closely cooperating within Traceability Control Mechanism research, and since 2006 FMRIC (Food Market Research and Information Center, Tokyo) have had a close relation with Nofima and SINTEF Fisheries and Aquaculture within food chain traceability research.

In 2007 and 2008, SINTEF and Nofima were granted with 2 BILAT pre-projects aiming at establishing research partners and to come up with relevant research topics. In 2009 a large bilateral consortium was granted with a large 3-year research project by the "Food program" in Norwegian Research Council, focussing on food safety and traceability within the mackerel supply chain between Norway and Japan. This was a significant milestone in the development of research cooperation between the 2 nations and the 4 research institutes. However, it still it a challenge to obtain funding of joint or connected projects in Japan.

This work shop aimed mainly at creating a platform for further and long term cooperation between the 4 research institutes.

KEYWORDS	ENGLISH	NORWEGIAN
GROUP 1	Food Safety	Mattrygghet
GROUP 2	Food Chain Traceability	Kjedesporbarhet
SELECTED BY AUTHOR	Traceability Control Mechanisms	Analytiske sporbarhetsteknikker
	Mackerel Value Chain	Forsyningskjeden for makrell

1 List of participants

Mr. Jun Sakai, Chief Researcher, Food Marketing Research and Information Center (FMRIC), Japan
Ms. Yuka Fukasawa, Researcher, Food Marketing Research and Information Center (FMRIC), Japan
Dr. Prof. Michiaki Yamashita, Chief, Food Biotechnology Section, National Research Institute of Fisheries Science (NRIFS), Japan
Dr. Shintaro Imamura, Researcher, Food Biotechnology Section, National Research Institute of Fisheries Science (NRIFS), Japan
Dr. Atsumi Furuya, Assistant Professor Hokkaido University
Mr. Keisuke Nakayama, Senior Market Advisor, Innovation Norway, Japan
Dr. Iciar Martinez, Profesora de Investigación, Instituto de Investigaciones Marinas (CSIC), Spain
Mr. Petter Olsen, Senior Researcher, Nofima, Norway
Ms. Kathryn Donnelly, Researcher, Nofima, Norway
Mr. Eskil Forås, Research manager, SINTEF, Norway
Dr. Finn Olav Bjørnson, Researcher, SINTEF, Norway
Dr. Maitri Thakur, Researcher, SINTEF Norway
Dr. Ida Aursand, Research Manager, SINTEF, Norway
Dr. Rasa Slizyte, Researcher, SINTEF, Norway
Dr. Inger Beate Standal, Researcher, SINTEF, Norway
Mr. Torgeir Edvardsen, Senior Adviser, SINTEF, Norway
Mr. Jostein Storøy, Research director, SINTEF, Norway

- The wife and 2 children of Mr. Jun Sakai also attended the guided tour to Hitra and Frøya.

2 Saturday, August 28 – Monday, August 30 - Guided tour to Hitra and Frøya

During the weekend, SINTEF researchers and Iciar Martinez (formerly at SINTEF, now at CSIC, Vigo) guided the Japanese visitors to the islands of Hitra and Frøya. The group stayed at Sula Rorbuer at the rural fishing village of Sula. During the trip, we visited 4-5 large fish farms. The Marine Harvest fish farm at Bogøya is most probably the largest production unit in the world. On the way back, a modern wellboat was operating at this site. At Sula, the Japanese delegates were offered a special ocean fishing experience outside Sula in fantastic weather conditions. The coastal fishing vessel M/S Sulabuen transported us to their secret fishing places, and fishing was really good. Researcher Dr. Shintaro Imamura caught a cod of 14 kg on his rod. On Sunday afternoon, the catch was prepared into an unforgettable meal by the participants.



The rural fishing village of Sula



Japanese delegation at Sula Rorbuer



Mr. Nakayama



The great fisherman Dr. Imamura



Prof. Yamashita, Mr. Storøy, Dr. Imamura outside island of Sula



Wellboat operating at Marine Harvest site at Bogøya, probably the biggest fish farm in the world

3 Monday, August 30 - Dinner in Smedstuveien 22, Trondheim

On Monday evening, project manager Jostein Storøy hosted a private reception at his house. A cross over Japanese/Norwegian style dinner was prepared by the researchers.

4 Tuesday, August 31- Scientific work shop at SINTEF Sealab

10:00 - 11:00 Welcome address and introduction; history and status for bilateral cooperation

Keisuke Nakayama, Innovation Norway, Tokyo and Jostein Storøy, SINTEF gave an overview of previous work that led to a bilateral research agreement between Japan and Norway, and close scientific cooperation between FMRIC, NRIFS, SINTEF and Nofima in particular.



Yuko Murata, Per Christer Lund, Per Engelseth, Prof. Yamashita in between meetings, Yokohama (November, 2006)



Mount Fuji as seen from the road – on our way to an “Onsen” and a fugu breeding station (November, 2006)



Signing of MainSafeTraceJapan consortium agreement at Norwegian embassy, Tokyo (May 2009): Mr. Storøy, Mr. Nakayama, Mr. Kristensen and Mr. Sakai

11:00 - 12:00 Status for national/regional traceability and food safety research in Japan, Norway, Nordic Countries and EU

7 presentations by: Jun Sakai, Petter Olsen, Kathryn Donnelly, Inger Beate Standal, Maitri Thakur, Eskil Forås and Jostein Storøy.

Food Safety and Food Traceability have been hot topics for the last 10 years and still a lot of projects are ongoing in both cooperating countries and in EU.



Mr. Nakayama, Dr. Standal, Dr. Slizyte, Mr. Olsen, Ms. Donnelly

13:00 - 17:00 Status and results from MainSafeTraceJapan work packages and specific activities

- Introduction – Jostein Storøy
- Project communication on different levels; eRoom, home page (Tracefood.org) - Eskil Forås, Jostein Storøy
- Traceability Control Mechanisms – Rasa Slizyte, Inger Beate Standal, Michiaki Yamashita, Iciar Martinez
- Stakeholder analyses – Jun Sakai, Maitri Thakur, Jostein Storøy
- Process mapping – Petter Olsen
- Critical quality points in the mackerel chain – Eskil Forås, Ida Aursand
- Simulated recalls – Jun Sakai, Kathryn Donnelly
- ICT solutions – Petter Olsen, Finn Olav Bjørnson, Eskil Forås

Altogether 13 presentations were given by the project participants. A lot of good discussions took place.



Mr. Sakai, Prof. Yamashita, Dr. Imamura, Mr. Forås, Dr. Furuya, Mr. Nakayama, Mr. Olsen, Ms. Donnelly, Dr. Thakur



Prof. Yamashita

19:00 Dinner at local sushi restaurant – The Sushi Bar

5 Wednesday, September 1 - Scientific work shop at SINTEF Sealab

09:00 - 11:00 Discussions on need for improvement of research methods applied in traceability and food safety oriented projects;

- Stakeholder Questionnaire – Maitri Thakur, Jun Sakai, Jostein Storøy
- Process mapping method – Eskil Forås, Maitri Thakur, Petter Olsen
- HACCP method – Eskil Forås, Ida Aursand, Rasa Slizyte
- Simulated recall method – Jun Sakai, Yuka Fukasawa, Kathryn Donnelly, Jostein Storøy
- Traceability Control Mechanism methods, Michiaki Yamshita, Shintaro Imamura, Iciar Martinez, Ida Aursand, Rasa Slizyte, Inger Beate Standal
- Cost Benefit analyses – present status on the area, Maitri Thakur, Petter, Kathryn, etc.

Most methods used in ongoing projects were discussed thoroughly. In this session we ran out of time. For certain methods a need for either improvement and/or combining with other methods was identified. This session shows that there absolutely is a need for long time cooperation between researchers from the two countries, in order to develop the research areas further.



Prof. Martinez

11:00 - 12:00 Discussion: How can we involve the industry more, and how can we cooperate better with our industrial partners? Experiences so far.

Experience from MainSafeTraceJapan shows that this topic can be a challenge. In some activities there is very strong interaction with the industry, and that researchers should take care so we do not push the industry too hard. In other activities some researchers obviously have to be cleverer to cooperate and communicate better with participating industry people. Solutions for how to deal with this were discussed and good ideas came up.

13:00 - 14:30 Further plans for project MainSafeTraceJapan

- Action plan next 12 months
- Large industry meeting in Tokyo April 2011 – Brainstorming on agenda points
- Research cooperation in the MainSafeTraceJapan project – room for improvements?

Mr. Forås presented action plan for the next 12 months with a focus on milestones and deliverables for the different work packages and corresponding activities.

Main subject in this session was to discuss ambitions for the large industry meeting which is planned to take place in Tokyo next April. Mr. Storøy led the discussions and several good ideas came up. Main attraction at the meeting will be presentation of the new tailor made traceability software for mackerel. We also like to invite Mr. Naess at the Norwegian Seafood Export Council to give a presentation of trends in the Japanese mackerel consumer market.



Mr. Sakai

14:30 - 15:30 Further plans and opportunities for project cooperation between Japan and Norway

Several models for further and closer cooperation between the research institutions were discussed; e.g. new national projects, internal institute projects, exchange of researchers, try to make it possible for Japanese institutes to participate in EU-projects, etc. Recently Mr. Sakai has been awarded with a new MAFF funded project which is fully in line with important activities in MainSafeTraceJapan. This is very promising and makes possible even closer cooperation between FMRIC, SINTEF and Nofima. However, we all agreed that such a visit to Norway and this workshop is a major event in a long term process to achieve more research cooperation between the to large fishing and fish consuming countries.

APPENDIX
Selection of workshop presentation titles

Japanese – Norwegian cooperation within Food chain Traceability and Food Safety

Research Director Jostein Storøy, SINTEF
Fisheries and Aquaculture

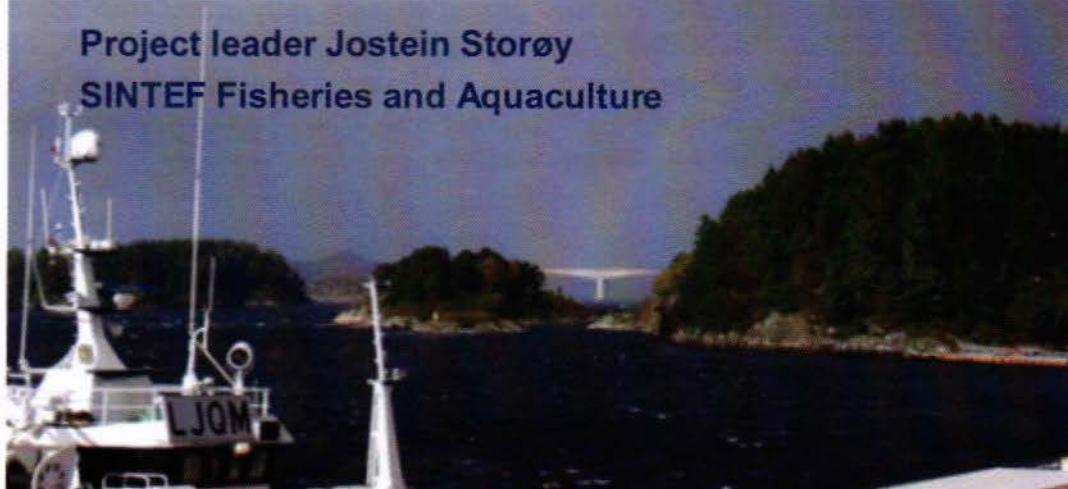
SINTEF Sealab

Trondheim, September 31. 2010

**Project title: Food safety and food chain traceability within
the mackerel food chain between Norway and Japan
(MainSafeTraceJapan).**

- Meeting at Norwegian Embassy Tokyo 01.06.2010

**Project leader Jostein Storøy
SINTEF Fisheries and Aquaculture**



Consejo Superior de Investigaciones
Científicas – CSIC

High Council of Scientific Research

Iciar Martinez
Research Professor

Iciar Martinez, Traceability-EUAT Workshop, 27th Aug-1st Sept 2020, Trondheim



MINISTERIO
DE CIENCIA
E INNOVACIÓN

CSIC

Traceability projects

■ eSporing

- Focus on establishing a national standard for electronic food traceability
- A nation-wide collaboration between the authorities and the food industry in Norway

■ eTrace

- Test and evaluate integration of EPCIS in food traceability
- SAFEFOODERA



**Status of traceability research in
Norway, the Nordic countries and EU**

**Senior scientist Petter Olsen
Nofima Market, Norway**

MainSafeTrace workshop
Trondheim, August 31st - September 1st 2010

Petter Olsen 31/08/10-01/09/10 - ©Nofima Market - May be copied if source is acknowledged

FMRIC

Food Marketing Research & Information Center

**Status for national traceability research
in Japan**

August.2010

FMRIC

Food Marketing Research and Information Center

Jun Sakai

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Critical Control Points and Critical Traceability Points

Workshop MainSafeTraceJapan
31st of August – 1st of September 2010
Eskil Forås



SINTEF Fiskeri og havbruk AS



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FMRIC

Food Marketing Research & Information Center

Stakeholder analyses
in mackerel supply chain
--importers, processors, and retailers--

August.2010

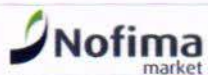
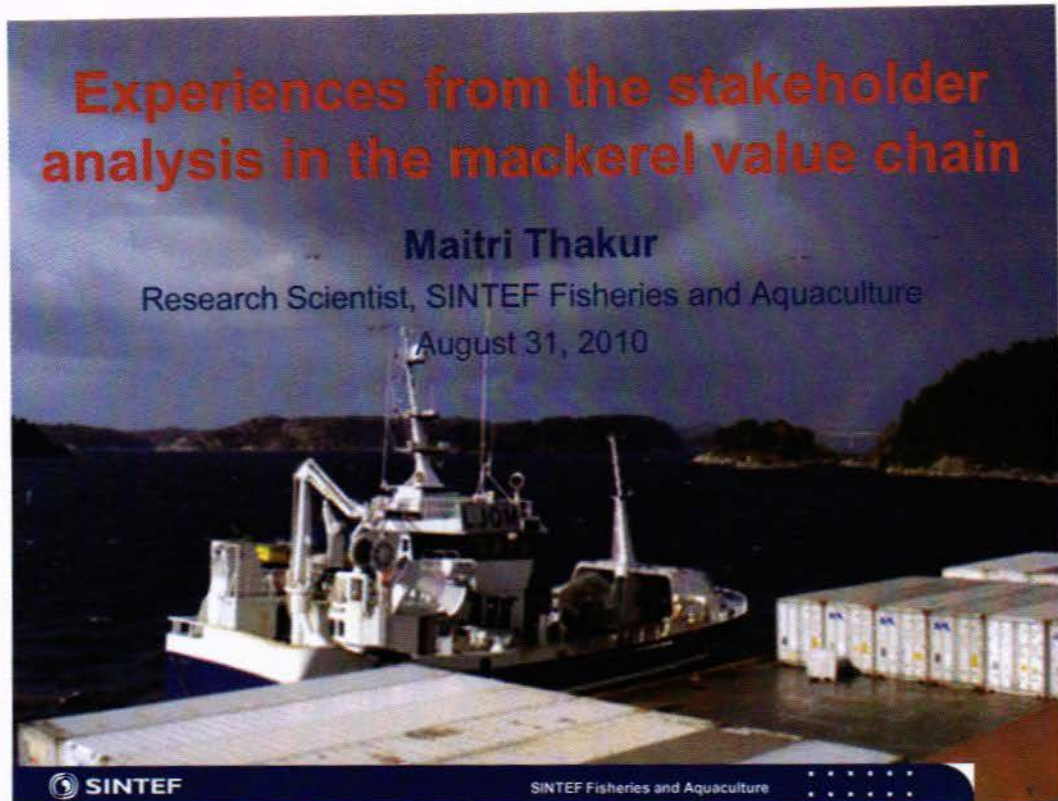
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**MainSafeTrace status and results
- Process mapping**

**Senior scientist Petter Olsen
Nofima Market, Norway**

MainSafeTrace workshop
Trondheim, August 31st - September 1st 2010



MainSafeTraceJapan

Simulated Recalls of 34 mackerel products

August. 2010

Jun Sakai, Yuka Fukasawa, Mariko Shiga (FMRIC)
Kathryn Anne-Marie Donnelly (Nofima), Jostein Storøy (SINTEF)



MainSafeTrace status and results - ICT solutions

**Senior scientist Petter Olsen
Nofima Market, Norway**

MainSafeTrace workshop
Trondheim, August 31st - September 1st 2010

BILAT project – TracCtrlMac

Traceability control mechanisms in the mackerel food chain between Norway and Japan

DNA-based Species Identification

Carmen G. Sotelo, Susana Otero, Carlos Carballeira,
Ricardo Perez-Martin & Iciar Martinez

Instituto de Investigaciones Marinas – CSIC, Spain

Iciar Martinez, Traceability-BILAT Workshop, 27th Aug-1st Sept 2010, Trondheim



WP 3: Traceability control mechanisms

Rasa Slizyte¹, Inger B. Standal¹, Ida G. Aursand¹, Stine W Dahle¹,
Iciar Martinez²

¹SINTEF Fisheries and Aquaculture, Processing Technology,
Trondheim Norway

²Institute of Marine Research (IIM), CSIC, Vigo Spain

September 2010



FMRIC

Food Marketing Research & Information Center

Action plan of MainSafeTraceJapan
co-funded by MAFF of Japan
From Sep 2010 to Mar 2011

August.2010

FMRIC

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