

IIFET 2022 Galicia Program

MONDAY, 18 JULY

Industry & Policy Day

1430 - 1500 hrs.

Policy Day and Conference Registration (Hall)

1515 - 1615 hrs.

DGMARE and FAO Sessions

(Auditorium)

Panel session 1 Socio-economic dimension of the artisanal fisheries and aquaculture

This session will be moderated by Frangiskos Nikolian. Head of Unit. Directorate-General for Maritime Affairs and Fisheries of the European Commission

- Giulia Gorelli: Fisheries and Aquaculture Division, FAO
- The socio-economic dimensions of small-scale fisheries and aquaculture: A global view
- Amber Himes Cornell: Fisheries and Aquaculture Division, FAO.

What is a fishing community? Should I care?

- Javier Ojeda: General Secretary of FEAP (Federation of European Aquaculture Producers)
- Brian O'Riordan: Executive Secretary of the LIFE platform (The Low Impact Fishers of Europe)

1645 - 1745 hrs.

DGMARE and FAO Sessions

(Auditorium)

Panel session 2

Challenges and opportunities for sustainable policies in artisanal fisheries and aquaculture

This session will be moderated by Angel Calvo. Deputy Head of Unit. Directorate-General for Maritime Affairs and Fisheries of the European Commission

• **Ernesto Penas**: Former director at the Directorate-General for Maritime Affairs and Fisheries of the European Commission.

Integration of the ecosystem approach in management of the artisanal fisheries and aquaculture

• Carlos Fuentevilla: Fisheries and Aquaculture Division, FAO.

Blue Transformation: Realizing full potential of Fisheries and Aquaculture

• **Will Symes**: OECD Fisheries Committee Secretariat. (Organisation for Economic Cooperation and Development).

The OECD perspective on the sustainable management of the artisanal fisheries and aquaculture

• **Stephen Hynes**: Head of the Socio-Economic Marine Research Unit. (National University of Ireland, Galway)

Economic valuation of the marine ecosystem services that are of relevance for the artisanal fisheries and aquaculture

2100 - 2355 hrs.

Blue Dinner

(Other location)

Gala dinner offered by the Directorate-General for Maritime Affairs and Fisheries of the European Commission (DG MARE). A service of shuttle will be provided for those registered. Updated information will be available in the Industry & Policy Day Registration Secretary.

TUESDAY, 19 JULY

0845 - 0900 hrs.

Opening Ceremony, ¹Best Paper Prize Announcements, IIFET Fellows and Distinguished Service Award Winner

(Auditorium)

Best Paper Award Winners

- 1. Robbert-Jan Schaap (Best Student Paper Award 2020): Restrictive quotas, risk, and income smoothing
- 2. Julide Ceren Ahi (Best Student Paper Award 2022): Estimating the socially optimal stock level: Incorporating society's prioritization of ecosystem services
- 3. Zahrah Izzaturrahim (Rosemary Firth Best Paper Award 2020): What it Means to be A Man and Woman in Our Society: Capturing Gender Construction Through Gender Division of Labour in Fisheries
- 4. Ayodele Oloko (Mosunmola Lydia Adeleke will be presenting for her Ayodele) (Rosemary Firth Best Paper Honourable Mention 2020): Challenges and the Prospects of Women Fisher Folk in Makoko, Lagos State, Nigeria
- 5. Moses Wambua (JIFRS-Yamamoto Best Paper Award 2022): A Game Theoretic Model and Solution for the Malindi Ungwana Bay Penaeid Conflict
- 6. Hiva Asadikia (JIFRS-Yamamoto Best Paper Honourable Mention 2022): Economic Efficiency Evaluation of Two-level Supply Chain of Rainbow Trout in Iran: A Focus on Use of Imported and Domestic Trout Eggs
- 7. Lawrence Oparinde (OSU International Aquaculture Best Paper Award 2020): Fish Farmers' Welfare and Climate Change Adaptation Strategies in Southwest, Nigeria: Application of Multinomial Endogenous Switching Regression Model

All Best Paper Award Winners are noted with ¹ in the conference program.

0900 - 1000 hrs.

Keynote Speaker Prof. Jon Sutinen (Auditorium)

1000 - 1200 hrs.

Closed Session: Mediterranean Aquaculture Integrated Development (MedAid). Social and economic implications

Chair: Jose Manuel Fernandez Polanco (Auditorium)

- Efficiency and business strategy in the sea-bass and sea-bream industry in the Mediterranean Sea (Rasmus Nielsen*, Ignacio Llorente Garcia and Isaac Ankamah-Yeboah)
- The Cost Structure of European Producers of Cultured Seabass and Seabream (Jose Luis Fernandez Sanchez*, Jose Manuel Fernandez Polanco, Ignacio Llorente Garcia, Manuel Luna, Elisa Baraibar Diez, Maria Dolores Odriozola Zamanillo and Ladislao Luna Sotorrio)
- Applications of artificial intelligence to support the decision-making process of seabream and seabass aquaculture companies (Manuel Luna*, Ignacio Llorente and Angel Cobo)
- Insights into the economic situation of seabream and seabass companies in the Mediterranean area (Elisa Baraibar Diez*, Maria Dolores Odriozola Zamanillo, Ignacio Llorente Garcia, Jose Manuel Fernandez Polanco, Jose Luis Fernandez Sanchez, Manuel Luna and Ladislao Luna Sotorrio)
- Price transmission in the Spanish value chain of seabream (Jose Manuel Fernandez Polanco*, Ignacio Llorente and Frank Asche)
- Differentiation and price in seabass and seabream: An application of the Hedonic model (Jose Manuel Fernandez Polanco*, Lamprakis Avdelas, Maria Cozzolino, Ignacio Llorente, Nada Bougouss, Elisa Baraibar Diez, Maria Dolores Odriozola Zamanillo, Jose Luis Fernandez Sanchez and Trond Bjorndal)
- Economics in the MedAid Project (H2020, GA #727315) (Jose Manuel Fernandez Polanco and Trond Bjorndal*)

Economic, Bioeconomic and Ecological-Economic Modeling (1)

Chair: Daniel Holland (Room Mar / Sea 2)

- Spatial choice modelling of the Icelandic Northeast Atlantic mackerel fishery What drives the behaviour? (Sandra Rybicki*, Pamela Woods, Bjarki Elvarsson, Sveinn Agnarsson and Daði Kristofersson)
- Bioeconomic stock assessment for de-facto open-access fisheries using catch and price data (Kira Lancker*, Martin Quaas and Rüdiger Voss)
- Is the Canadian lobster fishery in hot water? Assessing the impact of environmental variability on harvest of Homarus americanus (Dana Wright*)
- ¹Estimating the socially optimal stock level: Incorporating society's prioritization of ecosystem services (Julide Ceren Ahi* and Claire Armstrong)
- The impacts of access rules and synchrony in productivity in multi-fishery systems (Daniel Holland*, Kiva Oken and Andre Punt)

Managing Small-scale and Developing Country Fisheries (1)

Chair: Robbert-Jan Schaap (Room Terra / Land 2)

- Socio-economic characteristics of the sea cucumber fishery in Sri Lanka (Chamari Dissanayake*, Ganeshan Nishanthan, Ajith Kumara and Pahan Prasada)
- Characterizing livelihoods, food security, and sustainability of fisheries managed by local communities on marine protected areas in the Colombian Caribbean (Jorge Maldonado*, Rocio Moreno-Sanchez and Myriam Vargas Morales)
- Application of liquid ice on chilling and chilled storage of yellowfin tuna to reduce economic losses: Effects of salt contain of the ice on the fish quality (Nga Mai* and Luan Le)
- Bycatch assessment: Implications on fisheries management in coastal states of Nigeria: A case study of Bayelsa and Rivers States (Justina Obienu*)
- Seal damages and exits from coastal fisheries: Insights from a panel data survival analysis (Johan Blomquist* and Staffan Waldo)
- The welfare relevance of maximum sustainable yield in regulated open-access fisheries (Martin Quaas* and Anders Skonhoft)
- ¹Restrictive quotas, risk, and income smoothing (Robbert-Jan Schaap* and Florian Diekert)

Seafood Markets and Trade (1)

Chair: Minyan Shen (Room Mar / Sea 4)

- The Role of Imports in the US Shrimp Market (Atle Oglend*, Frank Asche and Martin Smith)
- Assessment of seafood market structure in the southwest coastline region of Nigeria (Mosunmola Adeleke*)
- Value creation in capelin fisheries in Iceland; What has changed since the 1990's (Magnús Víðisson*)
- Risky Business: Can Shellfish Farmers Defend Themselves Against Foodborne Illness-related Demand Shocks? (Hirotsugu Uchida*, Vivianne Mazzocco, Michael Weir and David Bidwell)
- The impact of high profile salmon related ecosystem disruptions on the demand for salmon in Puget Sound (Minyan Shen* and Chris Anderson)

1000 - 1125 hrs.

Certification of Fisheries and Aquaculture and Consumer Behavior (1)

Chair: Cecilia Hammarlund (Room Terra /Land 4)

- Seafood certification schemes in Japan: Examples of challenges and opportunities from three Marine Stewardship Council (MSC) applicants (Abigayil Blandon* and Hiroe Ishihara)
- State and needs of information about fish farming for consumers in European countries (Catherine Mariojouls*, Terhi Latvala, Rafael Gines Ruiz and Laurent Muller)
- Consumers' preferences in a multiple label framework: the case of fishery and aquaculture products (Jean-François Dewals*, Fabienne Daures, Sterenn Lucas and Pascal Le Floc'h)
- The effect of eco-certification in a Swedish fishery (Cecilia Hammarlund* and Anna Andersson)

1125 - 1200 hrs.

Open Session: Investment Behavior and New Technologies in Fisheries

Chair: Andries Richter (Room Terra /Land 4)

- Non-compliance behavior and use of extraction rights for natural resources (Linda Nøstbakken*, Florian Diekert, Yuanhao (Jack) Li and Andries Richter)
- Behavioral motives of investments in catch-share managed fisheries (Andries Richter*, Linda Nøstbakken, Florian Diekert and Yuanhao (Jack) Li)

1230 - 1330 hrs.

Keynote Speaker Prof. Ragnar Arnason

(Auditorium)

1430 - 1545 hrs.

Open Session: Gendered Value Chains in Fisheries and Aquaculture

Chair: Carmen Pedroza-Gutiérrez (Room Mar / Sea 2)

- Women's work in small-scale fisheries: A framework for accounting its value (Carmen Pedroza-Gutiérrez* and Holly Hapke)
- Mapping as a tool to revitalize the roles and status of women in small-scale fisheries in Tanzania, a Case Study of Kilwa and Kibiti Districts (Upendo Hamidu*, Lilian Ibengwe and Paul Onyango)
- Gender in tuna value chains: Case studies from Indonesia and Solomon Islands (Kate Barclay*, Nicholas McClean, Dedi Adhuri, Reuben Sulu and Michael Fabinyi)
- ¹What it Means to be A Man and Woman in Our Society: Capturing Gender Construction Through Gender Division of Labour in Fisheries (Zahrah Izzaturrahim*)
- Keeping it in the Family: Gender and Inheritance Norms in a Rural Alaskan Salmon Fishery (Jennifer Meredith*)

Open Session: Markets and market opportunities for small-scale fishery products

Chair: Cristina Pita (Room Terra /Land 4)

• The influence of supply chain dynamics in the West Coast rock lobster fishery on the livelihoods of small-scale fishers (Joseph Ginindza* and Moenieba Isaacs)

- Marketing strategies in small-scale fisheries: Efforts to differentiate and add value to small-scale fisheries products (Cristina Pita*)
- Mapping the structural value chain of the grouper fisheries in Yucatan, Mexico: actors and interactions (Silvia Salas*, Ma. Fernanda Cepeda, Eva Coronado and Juan Hernandez)

1430 - 1615 hrs.

Contribution of fisheries and aquaculture to nutrition, food security and poverty in developing countries (1)

Chair: Christopher Cusack (Room Mar / Sea 4)

- Conditions of access to the EEZs of third countries (Colin Barnes*)
- Livelihood enhancement of fishers through stocking of Scampi (Machrobrachium rosenbergii) juveniles in open water bodies of Telangana, India with special reference to Pocharam Reservoir, Medak District (Murali Savalla*)
- Does the Global Seafood Trade Enhance or Undermine Nutritional Access in Developing Countries? (Martin Smith*, Yaqin Liu, David Dietz, Dustin Colson Leaning and Sechindra Vallury)
- Risk Management Measures and Welfare of Aquaculture Farmers in Ondo State, Nigeria: Does Fish Biodiversity Play any Role? (Lawrence Oparinde*, Taye Amos and Igbekele Ajibefun)
- Marine ecotourism for small pelagics provides alternative income generating activities to fisheries in a tropical community (Christopher Cusack*, Suresh Sethi, Aaron Rice, Joseph Warren, Rod Fujita, Jose Ingles, Jimely Flores, Edwina Garchitorena and Sheryll Mesa)

Fishery Governance, Policy and Management (1)

Chair: Akbar Marvasti (Room Terra / Land 2)

- Productivity, technical efficiency and technological change in Vietnamese oceanic tuna fisheries (Thanh Nguyen*)
- Resilience for whom and according to what criteria? An examination of adaptations to changes in the Bay of Biscay anchovy fishery (Jennifer Beckensteiner*, Sebastian Villasante, Christelle Le Grand, Anthony Charles and Olivier Thébaud)
- Species, space and time: a quarter-century of fishers' diversification strategies on the US West Coast (Joshua Abbott, Yutaro Sakai and Daniel Holland*)
- Moral Hazard and Self-Selection in Insurance Markets: Evidence from Commercial Fisheries (Akbar Marvasti*)

1545 - 1615 hrs.

Gender Dialogue Session

Chairs: Holly Hapke and Carmen Pedroza-Gutiérrez (Room Mar / Sea 2)

How might we as a research community promote the development of gender analysis in fisheries economics and trade research? What are the key concepts and critical lines of inquiry to be developed? What role might training play in building capacity for rigorous and robust gendered economic analysis? The organizers will lead a discussion on strategies to advance feminist and gender economic research in fisheries, present a proposed online course for training in gender economic analysis, and invite feedback and ideas from participants.

Open Session: Concentration, fishing rights and equity in the fisheries sector

Chair: Sebastian Villasante (Room Terra /Land 4)

- Who owns what? A methodology for ownership analysis in the fishing industry and its application to French Atlantic fisheries (Arne Kinds*, Olivier Guyader and Mathieu Merzéréaud)
- Who owns the tuna fishing fleet operating within the Exclusive Economic Zones of Peru and Ecuador? (Arne Kinds*, Natali Lazzari, Rashid Sumaila, Sebastian Villasante, Daniel Skerritt, Adriana Carvalho and Patricia Majluf)

1645 - 1815 hrs.

Value chains in fisheries and aquaculture

Chair: Joao Ferreira (Room Mar / Sea 2)

- ¹Challenges and the Prospects of Women Fisher Folk in Makoko, Lagos State, Nigeria (Ayodele Oloko, Kafayat Fakoya and Mosunmola Adeleke*)
- Transforming activity groups to business units Emerging Fisherwomen managers in Kerala, India (Shyam Salim*, Sreelu S and Shinu M)
- Riding the Storm The effect of wind conditions on fuel consumption in the Norwegian trawler fleet (Irmelin Helgesen*)
- Does value addition have heterogeneous effects on livelihood security? Empirical evidence from artisanal fisherfolks in Ondo State, Nigeria (Lawrence Oparinde*, Adebiyi Daramola and Jimoh Afolabi)
- The economic impacts of seafood imports in the US economy a value chain perspective (Joao Ferreira*, Taryn Garlock, Christa Court and James Anderson)

Economics of Recreational Fisheries and Tourism

Chair: Russel Dame (Room Mar / Sea 4)

- Attribute Processing and Respondent Uncertainty in a Stated Preference Choice Experiment of Alaska Marine Recreational Fishing (Dan Lew*)
- Assessing Dimensions of Recreational Angling Value for Steelhead in Washington State, USA (Robby Fonner* and Leif Anderson)
- Estimating the recreational values of sea trout fishing: a case study from Norway (Yajie Liu*)
- Tourist Preferences for Whale Watching and Rule Changes in the Salish Sea (Abby Schamp*, Chris Anderson, Melissa Knox and Hem Morzaria-Luna)

- Racial distance matters too: home bias and racial influence in trip destination choice (Jesse Backstrom* and Richard Woodward)
- Linked Site Choice, Trip Duration, and On-Site Cost Model for Non-Resident Alaskan Anglers (Russel Dame*, Dan Lew and David Kling)

Ecosystem-based Management and Integrated Assessments (1)

Chair: Félix Evain (Room Terra /Land 4)

- Maximum Economic Yield and Non-Linear Catchability (Minling Pan*)
- Bounties of Lake Victoria: a case for blue economic investment (Chrispine Nyamweya*, Christopher Aura and James Njiru)
- omega-3 vs Instagramers (Raúl Prellezo*)

Fishery Governance, Policy and Management (2)

Chair: Kimberly Oremus (Room Terra / Land 2)

- Complexity of fisheries and implications for their governance (Gert Van Santen*)
- Fish or Flight: The Role of Accident and Fatality Risk in Commercial Fishing Decision Making (Thamanna Vasan*)
- Why are we illegal fishers? Inland and marine fishers' attitudes towards an illegal fish-trading system (Carmen Pedroza-Gutiérrez* and Jorge López-Rocha)
- Brexit, Climate change and landing obligation economic reasons for changes in the relative stability key of the EU Common Fisheries Policy (Ralf Doering*)
- The Magnuson-Stevens Act: How much has the US rebuilt its fisheries? (Kimberly Oremus* and Eyal Frank)

WEDNESDAY, 20 JULY

0900 - 1000 hrs.

Keynote Speaker Prof. Gunnar Knapp (Auditorium)

1000 - 1200 hrs.

Closed Session: EU fisheries in distant waters: Lessons learned from the FarFish project
Chair: Rosa Chapela
(Room Terra /Land 4)

- Southwest Atlantic high-seas fisheries: the viewpoint of Brazil (Juliana Galvao*, Thong Nguyen, Duarte Vidal, Ingrid Kvalvik, John Isaksen and Jónas Viðarsson)
- The evolution of European distant water fleets (Sebastien Metz*)
- Needs assessments and capacity building to support EU SFPA success (Mary Frances Davidson*)
- Institutional challenges for sustainable governance of EU fisheries in distant waters (Juliana Arias-Hansen, Ingrid Kvalvik, Marianne Svorken, Unn Laksá, Jónas Viðarsson, Duarte Vidal, Karin Olsen and Juliana Galvao*)
- The current stakes of the use of small pelagics in Mauritania (Jónas Viðarsson, Grégoire Touron-Gardic* and Pierre Failler)
- The FarFish project (Jónas Viðarsson and Rosa Chapela*)
- Squaring the circle: How to integrate stakeholder's knowledge into academic and scientific research - the example of FarFish Project (Alexandre Rodriguez*, Sonia Doblado Martín and Jónas Viðarsson)

Fishery Governance, Policy and Management (3)

Chair: Hreidar Valtysson (Room Mar / Sea 4)

- An investigation of economic, environmental, and social aspects of myctophid fishing for feed/ food applications in the Oman Sea (Amir Reza Shaviklo*)
- Structure of the governance of two MSC certified fisheries in Northwest Mexico (Claudia Fumero-Andreu*, José Zepeda-Domínguez and Manuel Zetina-Rejón)
- Drivers of Geographical Consolidation: The Case of Quota Holdings in Norwegian Fisheries (Mads Wold*, Keita Abe and Linda Nøstbakken)
- The quest for fisheries governance: Lessons from the Faroe Islands (Hans Ellefsen* and Daniel Bromley)
- Incorporating Socioeconomic Information in Fisheries Stock Assessments (Andrea Chan, Alan Haynie* and Patrick Lynch)

- Fighting their corner in the value chain community based social protection mechanisms specific to women (Aliou Sall and Simona Boschetti*)
- The status of fish stocks around Iceland and their current and historic value (Hreidar Valtysson*)

Closed Session: Special session in honor of the contributions of Jon Sutinen to marine resource economics

Chair: Kathryn Bisack (Auditorium)

- Recovery timelines of species under moratoria with uncertain levels of illegal fishing (Juan Carlos Seijo*, Fernando Aranceta-Garza and Raúl Villanueva)
- Management of common resources, ITQs, resource rent and taxation: the Greenlandic case (Peder Andersen*)
- The Political Economy of Fishery Management (Chris Anderson*)
- History of the journal Marine Resource Economics (Jon Sutinen*, Håkan Eggert*, and Dan Holland*)

Economic, Bioeconomic and Ecological-Economic Modeling (2)

Chair: Sara Cuenda (Room Mar / Sea 2)

- Productive performance of Lake Victoria fisheries Uganda: Technical efficiency of the fishing fleet (Veronica Mpomwenda*, Anthony Taabu-Munyaho, Herbert Nakiyende, Tumi Tómasson, Daði Kristofersson and Jon Petursson)
- Assessment of Vietnamese fisheries' productivity growth incorporating weather effects (Thanh Nguyen*)
- Investing in the commons: transient welfare creates incentives despite open access (Sunny Jardine*, Jacob Ziegler, Stuart Jones, Brett van Poorten, Marco Janssen and Christopher Solomon)
- Individual quotas and revenue risk of fishing portfolio in the trawl fishery (Tannaz Alizadeh Ashrafi*, Shaheen Syed and Arne Eide)
- Bioeconomic analysis of Pacific hake (Merluccius productus) in Baja California Sur, Mexico: management alternatives for an emerging fishery (Pablo Mora-Zamacona*, César Salinas-Zavala, Raúl Villanueva and Fernando González-Laxe)
- Collapse and recovery times in harvested populations subject to demographic stochasticity (Sara Cuenda*, Marta Llorente and José A. Capitán)

Seafood Markets and Trade (2)

Chair: Kilian Heutte (Room Terra / Land 2)

- A Panel Data Analysis of Anti-dumping Duties in Seafood Trade: A Gravity Model Approach (Akbar Marvasti*)
- Production, marketing and socio- economic features of the dry fish industry in the west coast of Sri Lanka (Chamari Dissanayake* and Upamali Neranjala)

- The effects of auction method on results of Icelandic fish auctions (Daði Kristofersson* and Birgir Runolfsson)
- Love of Variety and the Long-Term Welfare Effects of Trade in Open-access Renewable Resources (Martin Quaas* and Isha Dube)
- Mass media coverage of aquaculture: News characteristics and potential impact on demand (Angel Herrero*, María del Mar García de los Salmones, Jesús Collado, Andrea Pérez, Héctor San Martín and Jose Manuel Fernandez Polanco)
- To what extent do first sale prices reflect the sustainable management of artisanal fisheries? An econometric approach for the octopus in Asturias (northern Spain) (Claudia Arbesú, Laura García de la Fuente* and Gil Rodríguez)
- FAPs consumption trends and Covid-19 crisis in France: the conflicting sustainability issues excluded/ignored by consumers (Kilian Heutte*, Fabienne Daures, Sterenn Lucas, Sophie Girard, Frédérique Alban and Pascal Le Floc'h)

1230 - 1330 hrs.

Keynote Speaker Prof. Martin Smith (Auditorium)

1430 - 1540 hrs.

Open Session: Evaluating the inputs to governance for the purpose of improving performance outcomes

Chair: Kate Barclay (Auditorium)

- Aquaculture Performance Indicators (Frank Asche*, James Anderson, Taryn Garlock and Håkan Eggert)
- Using a wellbeing lens in governance analysis: tuna fisheries in Indonesia and Solomon Islands (Kate Barclay*, Nicholas McClean, Michael Fabinyi, Dedi Adhuri and Reuben Sulu)

Open Session: Using economics to allocate fishing rights between recreational and commercial fisheries in complex socioecological systems

Chair: Pablo Pita (Room Mar / Sea 4)

- Using economics to allocate fishing rights between recreational and commercial fisheries in complex socioecological systems: a global review (Pablo Pita*, Manel Antelo and Sebastian Villasante)
- An Input-Output approach to estimate the relevance of recreational marine fishing in European regional economies. Methodology and data requirements (Laura García de la Fuente*, Esteban Fernández-Vázquez, Carmen Ramos-Carvajal, Arturo Colina-Vuelta, Lucía García-Flórez, María del Pino Fernández-Rueda and Jorge Alcázar-Álvarez)

 Assessing the welfare impacts of changes in recreational angling management: An Integrated Modelling Approach for European sea bass (Fabio Cevenini*, Kieran Hyder and Angela Muench)

Closed Session: Illuminating Hidden Harvests. The Contributions of SSF to Sustainable Development

Chair: Giulia Gorelli (Room Mar / Sea 2)

- Illuminating Hidden Harvests: Case study on small-scale fisheries in Spain (Gonzalo Macho, Jose Luis Acuña, Luis Ambrosio, Esther Arcas Sen, Beatriz Ayala, Xavier Basurto, Oscar Esparza, Jose Luis García Varas, Raúl García, Giulia Gorelli, Nicolas Gutierrez, Maria Mancha Cisneros, Guillermo Martín, Isabel Navarro Sánchez, Beatriz Nieto, Jorge Saéz, José Luis Sánchez Lizaso, Jesica Sarmiento, Francisco Sobrado, Sebastian Villasante and Elena Ojea*)
- Gender in Small Scale Fisheries, a perspective to display women's work. Examples from Mexico (Carmen Pedroza-Gutiérrez*)
- Exploring Sub-national Patterns of Employment and Decent Work in Small-Scale Fishery (Gianluigi Nico*, Nicole Franz, John Virdin and Xavier Basurto)
- Illuminating Hidden Harvests: The Contributions of Small-Scale Fisheries to Sustainable Development (Giulia Gorelli*, Maria del Mar Mancha-Cisneros, Nicole Franz, Xavier Basurto, David Mills, Fiona Simmance, Simon Funge-Smith, Nicolas Gutierrez, John Virdin, Stefania Vannuccini, Shakuntala Thilsted, Lena Westlund and Benjamin Siegelman)

Contribution of fisheries and aquaculture to nutrition, food security and poverty in developing countries (2)

Chair: Mary Frances Davidson (Room Terra / Land 2)

- ¹Fish Farmers' Welfare and Climate Change Adaptation Strategies in Southwest, Nigeria: Application of Multinomial Endogenous Switching Regression Model (Lawrence Oparinde*)
- Co-drying of the hydrolyzed fish protein solution for use in animal feed: An economical approach for small-scale fishery industries (Amir Reza Shaviklo*, Yasaman Etemadian and Fereidoon Fafipour)
- Assessing labour migration patterns in marine fisheries sector across coastal India: Reflections for the future (Shyam Salim*, Sujitha Thomas, Raju S, Geetha R, Shinu M, Jamshi J, Athira N R, Bhargav Bhatt, Kiran C and Sunil V)
- Fishing Aid: Mapping and Synthesising Evidence in Support of SDG 14 Targets (Mary Frances Davidson*)

1430 - 1615 hrs.

Rights-based Fishery Management and Co-management

Chair: Jordan Moor (Room Terra /Land 4)

External monitoring and enforcement and the success of collective property rights regimes
 (Felipe Quezada* and Nathan Chan)

- Exploration of the behavioural drivers of catch-quota balancing in output-controlled fisheries (Sarah Landru*, Olivier Thébaud and Claire Macher)
- Sustainability and wealth creation, but no consensus: Recent decades in Iceland's ITQmanaged fisheries (Stefan Gunnlaugsson*)
- Renewable resource market responses to rights-based management: Market linkages in southern US fisheries (Jordan Moor*, Frank Asche and Andrew Ropicki)

1540 - 1615 hrs.

Dialogue Session: Designing Fresh Catch Auctions to Promote Sustainability, Local Sourcing, Economic Viability and Traceability

Chair: Stephen Stohs (Room Mar / Sea 4)

The goals of this session are to discuss recent work on fresh catch auctions and to consider possible approaches to developing a collection of peer-reviewed articles on this topic, potentially to include a synthesis of past work and case studies.

Open Session: Assessing the sustainability of aquaculture along the value chain: Interdisciplinary approaches

Chair: Elisa Ravagnan (Room Mar / Sea 2)

- SUREAQUA: Nordic Centre for Sustainable and Resilient Aquatic Production (Fiona Provan and Elisa Ravagnan*)
- Integrated Multi-Trophic Aquaculture All Atlantic Approach The ASTRAL Project (Pauline O'Donohoe*, Brett Macey, Tomás Chalde, Luis Poersch, Adrian Macleod, Elisa Ravagnan and Thierry Chopin)

Open Session: Supporting the transitions of fisheries communities

Chair: Richard Freeman (Room Terra / Land 2)

- Characterizing Trends in Participation and Diversification in Small-Scale Coastal Fisheries of Virginia, USA (Shelby White* and Andrew Scheld)
- Monitoring and measuring the effects of the Community-Led Local Development (CLLD) in fisheries communities. The case of Galicia (Jose Santiago*, Marta Ballesteros, Rosa Chapela, Melisa Santiago Nieto and Davinia Davo Lojo)

1645 - 1815 hrs.

Open Session: Case Studies in Fisheries Economics and Management

Chair: Hirotsugu Uchida (Room Mar / Sea 4)

- Profitability, Capacity and Productivity Trends in an Evolving Rights Based Fishery: The Norwegian Purse Seine Fishery (Nils-Arne Ekerhovd* and Daniel Gordon)
- Costs of mesopelagic fisheries: preliminary insights for the Danish pelagic fishery (Berthe Vastenhoud*)
- The merger effects of fishing firms: Implication for fishery-dependent communities (Keita Abe* and Gakushi Ishimura)
- Overcoming the Tragedy of the Commons: Economic Analysis of Fishing Coordination (Hirotsugu Uchida* and Kanae Tokunaga)

Economics of Aquaculture (1)

Chair: Dengjun Zhang (Room Terra /Land 4)

- Environmentally-determined production frontiers and lease utilization in Virginia's eastern oyster aquaculture industry (Jennifer Beckensteiner*, Andrew Scheld, and David Kaplan)
- Land transformation from rice to fish farming in Bangladesh: A comparative analysis of profitability and nutritional aspects (Rasmus Nielsen*, Md. Khan, Saidur Rahman, and Madan Dev)
- Consumer preference for farmed and wild fish products in the context of beef and chicken products A case study in Seattle (Minyan Shen*, Chris Anderson, and Jessica McCluney)
- Business failure analysis of fishing firms and aquafarming firms in Norway (Dengjun Zhang* and Ragnar Tveterås)

Managing Small-scale and Developing Country Fisheries (2)

Chair: Florian Diekert (Room Terra /Land 4)

- Banking on Sustainability: Informal interest rates, the Cost of Informal Debt, and opportunities for reform in small-scale fisheries in Myanmar (Michael De Alessi*)
- A Small-Scale Fisheries Academy Strengthening Capacities of women and men for collective action (Cornelia Nauen, Simona Boschetti*, Maria Fernanda Arraes Treffner, Aliou Sall and Stella Williams)
- Two ways of increasing boat efficiency: Higher catches or higher prices. What can be learned? (Antonio Alvarez* and Arias Carlos)
- Small-scale fisheries adaptations to extreme weather events: Lessons from hurricane Maria in the Commonwealth Puerto Rico (Juan Agar*)
- The Creation of Social Norms under Weak Institutions (Florian Diekert*, Joseph Luomba, Tillmann Eymess and Israel Waichman)

Ecosystem-based Management and Integrated Assessments (2)

Chair: Lucas Bair (Room Terra / Land 2)

- The past, present, and future of interdisciplinary marine science (Alan Haynie*)
- Greed is good: Heuristics to promote ecosystem-based resilience management (Yuanming Ni*, Leif Sandal and Sturla Kvamsdal)

- Are Stated Preference-based Ecosystem Service Values Ready for Primetime? An Evaluation
 of Best Practices Adherence by the U.S. Marine Ecosystem Service Valuation Literature (Dan
 Lew*, Leif Anderson, Douglas Lipton, Tammy Murphy and Kristy Wallmo)
- Recreational anglers' preferences for flow attributes: taking advantage of a designer flow experiment to validate novel flow scenarios (Lucas Bair* and Chris Neher)

1815 - 1900 hrs.

Poster Session

(Hall)

- Perceptions of Portuguese small-scale fishers towards the landing obligation (Cristina Pita*, Tereza Fonseca, Priscila Silva and Célia Teixeira)
- Climate Risk and Financial Disclosure in Salmon Aquaculture: Implementing CDP Results for Salmon Aquaculture Firms (Mikaella Zitti* and Atle Guttormsen)
- To fish or not to fish Economic perspectives of the Northeast Atlantic mackerel and herring fishery (Sandra Rybicki*, Katell Hamon, Sarah Simons and Axel Temming)
- IFISHIENCI: An innovative circularity approach for the evaluation of the sustainability of new fish feed (Inma Sanchez* and Marta Escamilla)
- Assessing the Viability of a Large-Scale Surf Clam Hatchery as a Mitigation Method to Offset Economic Losses of the Atlantic Surf Clam Industry Due to Offshore Wind Development (Caela Gilsinan*, Andrew Scheld, Sarah Borsetti and Daphne Munroe)
- The role of ASTRAL EU H2020 Project in mainstreaming women in aquaculture in Nigeria (Patricia Anyanwu*)
- Improving Value chain of small pelagic fishery in Malawi through Solar-tent drying Method (James Banda* and Maxon Ngochera)
- Monitoring artificial reefs' usefulness via vessel tracking technology and cloud computing: a
 case study in Southern Portugal (Paula Ito, Joana Costa and Jorge Ramos*)
- Toward a more integrated sustainability certification: The Prizefish approach (Loretta Malvarosa*, Rod Cappel, Maria Cozzolino, Giulia Sandalli, Evelina Sabatella and Giuseppe Scarcella)

THURSDAY, 21 JULY

0900 - 1000 hrs.

Keynote Speaker Prof. Juan Carlos Seijo (Auditorium)

1000 - 1200 hrs.

Open Session: Management in EU Fisheries

Chair: Loli Garza-Gil (Room Mar / Sea 4)

- The Spanish 300 fleet evolution on the Grand Sole fishing grounds: an empirical review (Raquel Fernández-González*, Loli Garza-Gil and Andrés Suárez-Garcia)
- Evolution and trends in Spanish fishery of anchovy (Marcos Pérez-Pérez*, Raquel Fernández-González and Loli Garza-Gil)
- Assessing the Technical Capacity and Efficiency of the European Fishing Fleet (Jose Luis Fernandez Sanchez*, Jose Manuel Fernandez Polanco, Ignacio Llorente Garcia, Manuel Luna, Elisa Baraibar Diez, Maria Dolores Odriozola Zamanillo and Ladislao Luna Sotorrio)
- Socio-economic quantification of the fishing in the Cíes Islands of the Atlantic Islands Natural Park (Loli Garza-Gil* and Ma Xosé Vázquez-Rodríguez)
- Mean-CVaR optimization approach towards an efficient ecosystem based fisheries governance in EU (Itsaso Lopeteguil* and Ikerne Del Valle)
- Price volatility transmission in the value chain of fresh anchovy in Spain (Ramón Jiménez-Toribio*, Juan José del Hoyo and David Castilla Espino)

Open Session: Adapting Fisheries to Climate Change

Chair: Smit Vasquez Caballero (Room Terra / Land 2)

- Combating climate change through interventions in value chains A Fish market and Price information System (FMPIS) developed for Kerala, India (Shyam Salim*, Naryanakumar Ramani and Athira N R)
- Factors affecting greenhouse gas emissions in fisheries: Evidence from Iceland's demersal fisheries (Daði Kristofersson*, Hreidar Valtysson and Stefan Gunnlaugsson)
- Making the most of the best (and the least of the worst) in adapting to climate change: A stylized fishery example (Jennifer Beckensteiner*, Fabio Boschetti and Olivier Thébaud)
- Pathways for establishing climate resilience in marine fisheries similarities and differences in contrasting fishery systems (Merrick Burden, Kristin Kleisner, Elena Ojea, Rod Fujita, Julia

- Mason, Willow Battista, Erica Cunningham, Kendra Karr, Samuel Amoros, Doug Rader, Nicolas Rovegno, Alice Thomas-Smyth and Christopher Cusack*)
- Understanding the effect of climate on U.S. west coast groundfish populations and fisher behavior (Yeuan Chen*)
- Portfolio Substitution between Coastal Pelagic Species under Shifting Target Species
 Distributions and Policy Constraints (Felipe Quezada*, Desiree Tommasi, Stephen Stohs, Isaac
 Kaplan, Tim Frawley, Jonathan Sweeney and Barbara Muhling)
- Distributional impacts of fishery disasters and implications for aid program design (Kailin Kroetz*, Matt Reimer, James Sanchirico, Dan Lew and Matthew Ashenfarb)

Fishery Governance, Policy and Management (4)

Chair: Birgir Runolfsson (Room Mar / Sea 2)

- The Performance of Shared Fish Stock Fisheries under Varying Institutional and Socioeconomic Conditions: Evidence from the South Eastern Pacific Anchoveta Fishery (Carlos Chávez*)
- Why a town as small as Bermeo is the tuna world capital? (Robert Ugalde Zabala*, Sofia Arana and Zaloa Sámano Cobián)
- Modern Compliance Policies in Fisheries (Florian Diekert*, Linda Nøstbakken and Andries Richter)
- Australian fish rights, ocean governance and development of the Blue economy (Alistair McIlgorm* and Daniel McIlgorm)
- Assessing the impact of fisheries co-management in northeast Bangladesh: building local institutions to enhance production, incomes and household fish consumption (A K M Khan*)
- The effect of vessel quota transfer and quota consolidation in Norwegian coastal fisheries (Keita Abe*, Linda Nøstbakken and Mads Wold)
- Discards and High-grading in the Icelandic ITQ system; A case control study of on-board vs on-land monitoring of catch (Birgir Runolfsson* and Daði Kristofersson)

1000 - 1110 hrs.

Open Session: The Economics of Marine Protected Species

Chair: Kathryn Bisack (Room Terra /Land 4)

- Behavioral responses to competing incentives and disincentives: Compliance with marine mammal protection (Kathryn Bisack* and Patricia Clay)
- Efficiency Measurement of Conservation Effort in Saving Sea Turtles (Minling Pan*)
- Spatial Management to Reduce Entanglement Risk to North Atlantic Right Whales in Fishing Gear: A Case Study of U.S. Northeast Lobster Fishery 2002–2009 (Gisele Magnusson* and Kathryn Bisack)
- Measuring the economic abatement cost of sea turtle by-catch in the Northwest Atlantic Commercial Pelagic Longline Fishery (Daniel Solis, Kathryn Bisack*, John Walden, Paul Richards and Juan Agar)

1230 - 1330 hrs.

Marine Spatial Planning and Multiple Use Management

Chair: Frederik (Geert) Hoekstra (Room Mar / Sea 4)

- Fishers Welfare and Sustainable Living: Assessment on Socio-Economic Benefits of Satellite Information Services to comprehend Changing Climate and Weather Events of Indian coast (Shyam Salim*, Monolisha S, Bala Krishnan Nair and Smitha Xavier)
- The economic impact of the Maritime Spatial Planning (MSP) in Europe (Juan Suris, Jose Santiago*, Xosé M. González-Martínez, Marta Ballesteros, Loli Garza-Gil and Rosa Chapela)
- Investigating the current and potential future market for lobster and crab from Dutch offshore windparks at the North Sea (Frederik (Geert) Hoekstra* and Emily Bouwman)

Governance and Management of High Seas and Straddling Stock Fisheries

Chair: Dale Squires (Room Terra / Land 2)

- Regional fisheries management for increased economic value of shared stocks (Barbara Hutniczak*)
- Transferable Credit Systems in International Fisheries: An Application to the Tropical Tuna Purse Seine Fishery of the Eastern Pacific Ocean (Dale Squires*)
- The Common Heritage of Mankind and Equitable Allocation of Rights in International Fisheries and Deep-Seabed Mining (Dale Squires*)

ICES-PICES Panel

Chairs: Martin Smith and Olivier Thébaud (Auditorium)

Panelists

- Alan Haynie (ICES)
- Yajie Liu (University of Tromsø)
- Cristina Pita (University of Aveiro)
- Pablo Pita (University of Santiago de Compostela)
- Martin Smith (Duke University)
- Olivier Thébaud (IFREMER)

Certification of Fisheries and Aquaculture and Consumer Behaviour (2)

Chair: Robert Botta (Room Terra /Land 4)

 Coastal fisheries and product labelling in France and Italy - consumer perspectives (Katrin Zander*, Fabienne Daures, Yvonne Feucht, Loretta Malvarosa, Claudio Pirrone and Bertrand Le Gallic)

- Changes in Marine Eco-Label Japan (MEL) through International Standardization and Comparison with MSC: Focusing on Vessel Size and Fishing Gears in Certified Fisheries (Taro Oishi* and Hiroki Iwata)
- Using restaurant menus to assess the value of product attributes: The U.S. oyster market (Robert Botta*, Taryn Garlock, James Anderson, Frank Asche and Andrew Ropicki)

Ecosystem-based Management and Integrated Assessments (3)

Frank Lupi (Room Mar / Sea 2)

- Willingness-to-pay to stop an invasive alien species: The case of Red King Crab in the Barents Sea (Erlend Dancke Sandorf*, Jannike Falk-Andersson, Ingvild Furuseth, Nick Hanley, Brooks Kaiser, Melina Kourantidou, Stale Navrud and Xuan Bui)
- Comparing Recreation Demand and General Population Valuation Across Probability and Non-Probability Samples (Frank Lupi*)

1430 - 1505 hrs.

Economic, Bioeconomic and Ecological-Economic Modeling (3)

Chair: Zihao Chen (Room Mar / Sea 2)

- The spatial dynamics of renewable resource use (Sunny Jardine*, Joshua Abbott and James Sanchirico)
- A dynamic model of a commercial fishery under alternative regulations (Zihao Chen* and Chris Anderson)

1430 - 1600 hrs.

Open Session: Refocusing fisheries governance: from the aggregated to the local level Chair: Ikerne Del Valle (Room Mar / Sea 4)

- The Socioeconomic Impact of the Seafood Sector in Ireland's Main Fishing Ports (Richard Curtin*)
- Clustering Spanish Fishing Communities (Ikerne Del Valle*)
- Fishers' Cofradías in the Cantabrian Sea: From private business organizations to comanagement (Kepa Astorkiza* and Ikerne Del Valle)
- Governance and participation in the Small-Scale Fisheries. The case of the cofradías of Galicia (NW Spain) (Iria García Lorenzo*)
- Intangible cultural heritage related to fisheries in the EU Atlantic Arc: A common methodology for its valuation (David Castilla Espino*, Juan José del Hoyo and Celeste Jiménez de Madariaga)

Open Session: Game theory and fisheries

Chair: Pedro Pintassilgo (Room Terra /Land 4)

- 1A Game Theoretic Model and Solution for the Malindi Ungwana Bay Penaeid Conflict (Moses Wambua*)
- Bioeconomic benefits of managing fishing effort in a coexisting small- and large-scale fishery game (Eric Zettermann Dias de Azevedo*)
- Stability of international fisheries agreements under stock growth uncertainty (Bruno Nkuiya*)
- The Aggregate Consequences of the Shared Compensation System in Fisheries (Philippe Marcoul*)
- The European Union as a Distant Water Fishing Player: A Game Theoretical Analysis (Pedro Pintassilgo*, Margrethe Aanesen, Rosa Chapela, Duarte Vidal, Benvindo Fonseca, Juliana Galvao, Karim Erzini, Jose Santiago and Kim Stobberup)

Economics of Aquaculture (2)

Chair: Matthew Reale-Hatem (Room Mar / Sea 2)

- Biological Control of a Parasite (Ruth Pincinato*, Atle Oglend, Martin Smith and Frank Asche)
- ¹Economic Efficiency Evaluation of Two-level Supply Chain of Rainbow Trout in Iran: A Focus on Use of Imported and Domestic Trout Eggs (Hiva Asadikia*, Seyed Habibollah Mosavi, Solmaz Rezaeiardebili, Trond Bjorndal, Michael R Reed, Sadegh Khalilian and Hamed Najafi Alamdarlo)
- Rent creation in the Norwegian farmed salmon fishing industry (Anders Skonhoft*)
- An empirical evaluation of coordinated disease management in Chile's salmon aquaculture industry (Thomas Anderson Jr.*, James Sanchirico and Matt Reimer)
- Bioeconomic modeling of disease management in aquaculture (Matthew Reale-Hatem* and Martin Smith)

1505 - 1600 hrs.

Open Session: Improving institutions to mitigate externalities across multiple sectors and jurisdictions

Chair: Manuel Bellanger (Room Terra / Land 2)

- Assessing economic impacts to the US commercial surfclam fishing industry from offshore wind energy development (Andrew Scheld*, Jennifer Beckensteiner, Daphne Munroe, Eric Powell, Eileen Hofmann, John Klinck, and Sarah Borsetti)
- Cross-sectoral externalities related to natural resources and ecosystem services (Manuel Bellanger*, Robby Fonner, Daniel Holland, Olivier Thébaud, Pierre Scemama, and Douglas Lipton)
- The IWC: ISO Collaboration (Rebecca Lent* and Dale Squires)

1600 - 1645 hrs.

Keynote Speaker Prof. R. Sumaila (Auditorium)

1645 - 1700 hrs.

Closing Session (Auditorium)

2100 - 2355 hrs.

Gala Dinner (Auditorium)

The registered attendees are invited to a Gala Dinner at the Pazo Los Escudos at 21:00h. A service of shuttle will be provided for those registered for the Dinner. The buses will depart at 2030 hrs. from the city centre (Areal street at intersection with Compostela Square - "Plaza de Compostela" - and Colón street) and they will stop at the venue to pick up people staying at the Eurostars Mar de Vigo Hotel (close the venue) 10 minutes later. We will return at midnight approx.