

Fisheries Panel formed under the Korea (MLTM/MIFAFF) - NOAA Joint Project Agreement

The Fisheries Panel is formed under a United States – Republic of Korea Joint Project Agreement (JPA). The principal agencies involved in this JPA are NOAA, MLTM, and MIFAFF. NOAA is the U.S. National Oceanic and Atmospheric Administration (NOAA). MLTM is the Korean Ministry of Land, Transportation, and Maritime Affairs. MIFAFF is the Korean Ministry of Food, Agriculture, Forestry, and Fisheries. The Panel is formed to foster cooperation and communication of ocean and fishery sciences between scientists of the two countries for conservation and management of fisheries resources.



JOINT PROJECT AGREEMENT Fisheries Panel

Project Leads

Dr. Sukyung Kang
National Fisheries Research
and Development Institute
Email: kangsk@nfrdi.go.kr

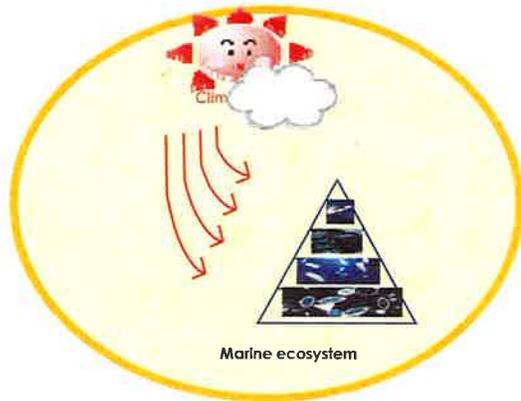
and
Dr. Loh-Lee Low
NOAA Fisheries
Email: Loh-Lee.Low@noaa.gov



MIFAFF/MLTM – NOAA Fisheries Panel

Fisheries Science and Research Cooperation

2011 Projects



Ten Years of Cooperation

The Fisheries Panel is entering into ten years of cooperation. For 2011, the Panel will engage in eight projects and one new one. Another fisheries project on Salmon Enhancement is administratively placed under the Aquaculture Panel. The projects are:

- (1) Impact of climate change on fisheries Resources;
- (2) Ecosystem based fisheries management with particular focus on integrated fisheries risk assessment methods for ecosystems (IFRAME);
- (3) Fisheries management training;
- (4) Tuna longline bycatch and discards research;
- (5) Trawl survey standardization and strategies;
- (6) Fisheries monitoring through science observers;
- (7) Fisheries restoration after oil spill events; and
- (8) A bilateral conference of the Panel.

A new project on Applications of JPA research for development of fisheries management strategies for Korean fisheries will also be initiated.

Impact of Climate Change on Fisheries Resources

The project will develop stock projection models to explore the effects of climatic changes on selected fisheries resources and their fisheries in Korea. These models will be used to forecast future fish distribution and production under different environmental conditions. We will focus on selected fisheries resources and waters off Korea, the Bering Sea and other areas of the North Pacific Ocean.

Ecosystem Based Fisheries Management

Improve IFRAME (integrated fisheries risk analysis method for ecosystems) forecast methodology that is based on biomass-based and age-structured-based risk metrics. We will develop forecasting risk indices and relevant reference points of indicators that can be used to manage the unit of species, fishery or ecosystem.

This project will also develop simulation models to examine the impact of implementing different TAC strategies beyond impact on biomass of fish. We propose to use simulation modeling to examine the impact of implementing TAC strategies to changing the size/age and length composition of catches.

Fisheries Management Training

A team of fisheries management experts will conduct a lecture/training course of the U.S. fisheries management process that involves the application of science and socio-economics. Topics will include NOAA fisheries management policies, resources rebuilding strategies, and enforcement systems. A Korean fisheries management official will also receive special training on the fisheries management process targeted for new Council members in the U.S. Management system.

Tuna Longline Bycatch and Discards

The project focuses on developing gear technologies and deployment in tuna longline fisheries in the western and central Pacific Ocean. The bycatch of particular concerns are fish, seabirds, sharks, and sea turtles.



Trawl Survey Standardization and Strategies

This project will work on standardizing the methodology used in Korean trawl surveys and to estimate the catchability coefficient of benthic fish and invertebrates by a bottom trawls used by the Korean trawl surveys. Standardization of the survey strategy and trawl equipment will allow better year-to-year comparison of results. The estimation of catchability coefficient will allow biomass of the fish populations sampled to be estimated.

Fisheries Monitoring through Science Observers

Scientists at the NFRDI will develop an observer training program for its fisheries management system. NOAA Fisheries in Seattle will collaborate with its counterpart program in Hawaii to provide the training program for the Korean scientists on longline and nearshore fisheries. The U.S. experts will also advise on data management and statistical issues surrounding the expected high volume of data that would be collected by the Korean fisheries observer program.

Fisheries Restoration after Oil Spill Events

This research will introduce methodologies for monitoring the physiological status of marine organisms (shellfish, fish, seaweed and other living marine resources) in the Taean oil-spilled area in Korea. The research will focus on learning from two major oil spill events in the US – the Exxon Valdez oil spill restoration project of more than 20 years in Prince William Sound, Alaska, and the new restoration plans that are being developed after the Deepsea Horizon oil rig blowout in the Gulf of Mexico in April 2010.

Management Strategies for Korean Fisheries

This project will apply experiences of ten years of joint research to develop fisheries management strategies and in marine spatial planning. We expect to improve the efficiency and effectiveness of the Korean fisheries management system.