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FOR CONSERVATION AND SUSTAINABLE USE OF TUNAS

Global Warming

Global warming and the marine ecosystem — Warning from marine life —

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As a promoter of responsible tuna fisheries, OPRT has been making efforts to reduce incidental catch of sea birds and sea turtles by longline fishing vessels. In order to really conserve marine living species such as sea birds and sharks, however, we believe that a holistic approach is necessary, taking into consideration the non-fishing factors affecting them, such as deterioration of nesting sites and marine debris derived from human activities on land. Global warming is one of them but not the least. This article supports our belief.

What would be the first thing that comes to your mind when you hear the words: “effects of global warming on the marine ecosystem”? The crisis of survival of large living species as polar bears and penguins that are deprived of their feeding grounds as sea ice decreases in the polar region, or whitening of corals as a result of rising water temperatures and the destruction of coral reef habitat that may occur along with it are generally widely known through reports of the mass media in recent years. Such damage is very serious from the perspective of the conservation of species diversity on the earth.

On the other hand, another threat quietly occurring in most of the vast oceans, although less visible, is

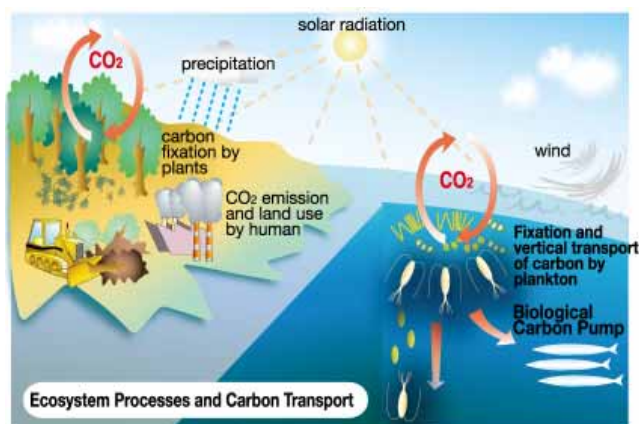
the fact that production and ecology of plankton that supports the marine ecosystem at its foundation are undergoing changes on a global scale in line with the progress of global warming during past decades.

In the ocean food web, phytoplankton produces organisms through photosynthesis, and supports zooplankton which feeds on the former. As zooplankton serves as important food for fish, the changes in plankton cause impact on fishery resources. Furthermore, plankton has a role of promoting absorption of carbon dioxide by the oceans. Carbon dioxide — phytoplankton fixed as organism — by itself is dissolved in the shallow areas of the sea and returns to the atmosphere. However, it is taken to the deep sea efficiently when it is consumed by zooplankton. This function of transporting carbon dioxide by plankton is called “biological pump” (Fig. 1).

As important changes resulting from global warming in the land ecosystem during recent several decades, the following two changes are mentioned in the fourth report of the Intergovernmental Panel on Climate Change (IPCC): (1) the northern limits of distribution area are moving toward higher latitudinal areas; and (2) the coming of spring has



Fig. 1 Biological Pump



been quickened.

Our research group has been engaged in comparative studies of long-term changes in the ecosystem in various ocean areas in the world through international joint research. As a result of these studies, it has been clarified that similar changes are occurring in the marine ecosystem as well. Once distribution and seasonal cycles of phytoplankton change, the timing with distribution and seasonal

cycles of zooplankton also changes, impacting the fishery resources and functions of biological pump. Further, it is predicted that the results of such changes will affect the earth's environment. In the study on projection of global warming, it is crucial to understand the mechanism of the changes in the marine environment in which various elements are intricately intertwined starting from microscopic plankton.

International Tuna Management

Red light? ICCAT bluefin tuna stock rebuilding plan for the Eastern Atlantic and the Mediterranean

—The key is how ICCAT can ensure the implementation
of the adopted regulatory measures—

The International Commission for the Conservation of Atlantic Tuna (ICCAT) discussed the focal issue of management of the bluefin tuna stock in the Eastern Atlantic and the Mediterranean Sea at its annual meeting held in Antalya, Turkey, November 12 through 18. ICCAT closed the meeting by adopting the following Resolution (summary).

a. All the parties should submit to the ICCAT secretariat regulations and other related documents adopted by them to implement ICCAT recommendation before the end of February 2008. In implementing this Recommendation, all the parties involved in the bluefin fisheries should submit a detailed report on their implementation of the Recommendation in 2008, no later than October 30, 2008.

b. The Commission requests that the parties involved in the bluefin fisheries jointly hold in March 2008 (in Tokyo) a Meeting of Managers and Stakeholders (fishing industry representing all gears, farming

establishments, buyers and traders) to work out joint voluntary actions to achieve an objective of reducing total fishing, caging and importing from the 2007 level.

Mr. Masanori Miyahara of the Fisheries Agency of Japan, who headed the Japanese delegation at the ICCAT meeting, stated as follows at a press conference in Tokyo on November 21.

“At this meeting, delegates took issue of the fact that the regulation on tuna resources in the Eastern Atlantic and the Mediterranean has not been complied with adequately. Based on the understanding that the non-compliance pertains to the credibility of ICCAT as a resource management organization, participants engaged in serious discussion of the issue.”

“In order to ensure transparency of bluefin tuna distribution in the market, Japan proposed **the Bluefin Tuna Catch Documentation Scheme**, which was adopted by ICCAT. The scheme will be enforced starting in next fishing season. Under the scheme, the actual state of all the distribution processes from the catch to the market will be recorded in one document with a view to ensure transparency of the distribution and reinforce compliance with the regulatory measures.”

“Japan pointed out that problems have been arising as a result of rapid progress in tuna farming. At the same time, Japan explained that supply of tuna should not be pursued to the extent of deteriorating the resources.”

“Further, ICCAT decided to hold a meeting in March next year, by inviting major stakeholders (tuna fishers, tuna farmers, traders, etc.), with Japan and the EC taking the leadership role. I hope that this will become a significant meeting.”



ICCAT annual meeting

OPRT News

Reduction of excessive tuna fishing capacity

International consensus is needed urgently

—OPRT representative makes an appeal at Pacific Tuna Forum—

Pacific Tuna Forum 2007, entitled “A Regional Tuna Industry and Trade Conference,” was hosted by Infofish in Port Moresby, Papua New Guinea, on September 12 and 13. On behalf of OPRT, Dr. Hiroshi Sakamoto called for the need to form expeditiously an international consensus on the reduction of excessive tuna fishing capacity in an address under the theme of “Japanese Regulatory Measures for Sustainable Tuna Fishing and Trade.”

What follows is a gist of Dr. Sakamoto’s address.

1) Global expansion of demand for tunas

International trade volume of tunas has been increasing in line with the global expansion of demand for tunas, including sashimi and canned products. Currently, there is an apparent trend in coastal states trying to actively develop tuna fisheries with a view to becoming exporting countries. Under these circumstances, excessive use of tuna resources has been advanced on a global scale, with the overall catch of tuna and tuna-like species in the world exceeding 4 million tons, which is about eight times larger than the level 50 years ago. In recent years, notably, catches by purse-seine fishery has seen a sharp increase while that by longline fishery has been declining. In order to ensure sustainable tuna fishery and trade, it has become an urgent task to implement the measures to restrain excessive catches of tunas.

2) Joint Tuna RFMOs meeting and its commitment

Based on the above recognition, the first joint meeting of regional tuna fisheries management organizations (RFMOs) was held in Kobe in January this year, in which the Course of Actions to be taken in the years ahead was adopted. I recognize the essence of the Course of Actions can be summarized into the following three points.

- (i) to take urgently the measures to prevent further deterioration of tuna resources, such as Eastern Atlantic bluefin tuna;
- (ii) to implement the measures to maintain the



stock level and ensure further recovery; and

- (iii) to implement countermeasures against excessive harvesting and illegal, unregulated and unreported (IUU) fishing activities which constitute one of the causes of excessive catches.

In the above three actions, measures relative to IUU fishing have seen a considerable progress. In other words, an international agreement toward elimination of IUU tuna fishing has been developed, and as a specific step, the Positive List system has been enforced and has proved effective to date. Further, efforts have been made to extend the vessel size subject to the Positive List to “15m or larger” as a new issue has arisen that vessels less than 24m (which are exempted from the application of the Positive List) have been evading the regulation of the system.

3) Steps taken by Japan

Japan, which has the largest sashimi tuna market in the world, has been taking positive steps to date regarding management of tuna resources with a view to ensure sustainable utilization of tuna resources. What supported these efforts is Japan’s “Tuna Law.” In 1996, Japan enforced the “Law on Special Measures regarding Reinforcement of Conservation and Management of Tuna Resources” (“Tuna Law” in short). Under this law, Japan stipulated the basic policy of fulfilling a positive role, including promotion of international cooperation as a State for conservation and management of tuna, which is a highly migratory



fish species, and acted accordingly. To cite some of specific examples of these efforts, Japan scrapped 132 of its large-scale tuna longline fishing vessels in an immediate response to the International Plan of Action for the Management of Fishing Capacity of the Food and Agriculture Organization of the United Nations (FAO). Japan also took an initiative in the global introduction of the aforementioned Positive List System. Further, Japan hosted the world's first Joint Meeting of Regional Tuna Fisheries Management Organizations in Kobe in January this year. The establishment of OPRT and the promotion of its activities also constitute part of the efforts to implement the "Tuna Law."

4) Promotion of responsible international trade in tunas

The basic principle of responsible international trade in tuna is stipulated as follows in FAO's Code of Conduct for Responsible Fisheries 11.2.2.

"International Trade in fish and fish products should not compromise the sustainable development of fisheries and responsible utilization of living aquatic resources."

Japan respects this principle and is striving for the establishment of a responsible tuna market. For instance, Japan is reinforcing surveillance of the actual state of production of tunas exported to Japan, conducting DNA tests for tuna products as a measure related to the prevention of tuna laundering, and rigorously implementing inspection at the landing sites to prevent importation of tunas caught by IUU fishing vessels.

5) The issue of excessive catch should be tackled with urgently

While tuna conservation and management measures have been reinforced, new issues have emerged in recent years. These issues include catches exceeding the quota of bluefin tuna for farming in the Eastern Atlantic, the increase in small-scale fishing vessels not subject to the regulations under the Positive List System, and expanded catches of small-size bigeye and yellowfin tunas by means of Fish Aggregating Devices (FADs). In order to overcome those issues and ensure sustainable tuna fishing and trade in the future, the efforts of the international community to solve the fundamental issue (i.e. excessive fishing capacity) is crucial. The FAO's Methodological Workshop on the Management of Fishing Capacity (May 2006) shows the guidelines for concrete steps to be taken. The effective and expeditious implementation of the recommendation of the Workshop is a task facing the international community. As a minimum requirement, I wish to call on the countries concerned for the need to develop an international consensus toward reduction of excessive tuna fishing effort on a global scale as expeditiously as possible.

Topics

Foreign Trainees Enjoy Sashimi Tuna Culture

Five foreign trainees, who are taking part in the Fishery Leaders Training Course (stock management) under the program of the Overseas Fisheries Cooperation Foundation (OFCF) since October, received on October 31 a special lecture session in which they experienced eating of tuna sushi and sashimi to learn about tuna diet culture in Japan.

The special session was organized with the cooperation of OPRT and Ginza Maguro-ya, a sushi restaurant in Tokyo.



Camara Youssof Hawa from Guinea, who said he ate sushi for the first time in his life, commented: "Frankly, I felt a kind of sensation that I am actually eating 'raw' tuna. I want to try again when I have a chance."

"Now I really understood that the Japanese people love fish so much," said Kodjo Ahuatchy Alain from the Ivory Coast. "I think it is wise to establish an organization such as OPRT and have it publicize about tuna." He said he was much interested in Japan's stock management approach in general, saying "I learned a lot from the efforts of fishermen in Akita Prefecture, northern Japan, to recover the stock of sandfish (hatahata) and also fish propagation programs practiced in Japan."

Eddrisea Fenni from Indonesia said she savored the taste of raw tuna and fully understood why Japanese people like tuna so much. Jaiyen Thumawadee from Thailand agreed she could also appreciate tuna eating habit in Japan in the course of the present training program.

Jamon bin Sallehudin from Malaysia hinted that he would like to eat sushi and sashimi at Japanese restaurants in his country.

All in all, it seems safe to say that all the participants became much fond of sashimi tuna through this session.