THE ORGANIZATION FOR THE PROMOTION OF RESPONSIBLE TUNA FISHERIES

OPRT

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FOR CONSERVATION AND SUSTAINABLE USE OF TUNAS

OPRT Interview

Purse-seiners on a sharp rise -will tunas in the Pacific be conserved?

Mr. Takashi Koya, officer of Fisheries Agency of Japan

Purse-seine fishing is intended to catch tunas, mainly skipjack, by surrounding fish schools with seine nets. Its characteristic is higher catch efficiency compared with longline fishing in which tunas are caught by baited hooks. Recently, large scale purse-seine fishing vessels, so called super purse-seiners, are emerging, with their tonnage ranging from 1,000 tons to 4,000 tons per vessel. It is said that one purse-seiner catches 10,000 tons of tunas in a year.

The number of super purse-seine fishing vessels is growing rapidly in the Pacific. The main target of the catch by those vessels is the skipjack tuna. But their negative impact on the Pacific bigeye tuna is a matter of serious concern, as they catch small-size bigeye incidentally.

What will become of tuna resources because of the sharp rise in purse-seine fishing? OPRT interviewed Mr. Takashi Koya, Deputy Director for International Negotiations at the Fisheries Agency, the Government of Japan.

Q: We heard that the rapid increase in the number of purse-seine fishing vessels has become a serious issue.

KOYA: In June this year, a joint meeting of regional tuna fisheries management organizations (RFMOs) was held in Spain, and the issue of drastic increase in the number of purse-seiners around the world was also discussed among various issues. At this meeting, Japan reported about the dramatic increase in large-scale purse-seiners exceeding 1,000 tons. Participants at the meeting from fishing nations and RFMOs seemed to have been shocked about this situation.

Q: Can you give us some specific figures?

KOYA: The quantities of tunas caught by purse-seiners in 2008 in the western and central Pacific – an area of the central Pacific coasts to the western area including Japan – nearly quadrupled during the past three decades to 1,783,000 tons. The increase rates in recent years have been conspicuous. In 2001, 202 vessels operated for a total of 44,866 vessel days, but the number increased to 218 with 58,762 vessel days in 2004, and to 226 with 62,314 vessel days in 2008.

Although I do not know in concrete terms, it is said that an increase of more than 30 super purse-seiners will occur in the three years to come. Japan has been restraining the number of its large scale purse-seine fishing vessels to 35 during past years in consideration of the tuna resources. But there are countries and territories that continue to increase their vessels and expand catches, without giving any thought to the state of the resources. If this situation continues, it is possible that the catch of tunas in the western and central Pacific will increase at a remarkable pace, quickly deteriorating the tuna population in the region.

Q: What is the trend of resource deterioration like?

KOYA: At the Western and Central Pacific Fisheries Commission (WCPFC) that manages the tuna resources in the region, scientists report the overfishing capacity, in other words, the fact that the capacity of fishing vessels and fishing devise have become excessive vis-a-vis exploitable stock size. Scientists are emphasizing the need for taking measures to control this excessive capacity.

At last year's WCPFC annual meeting, it was pointed out that the incidental catch of juvenile bigeye tunas by purse-seine fishing vessels is the main cause of the deterioration of bigeye resources. The Commission decided to reduce the incidental catch of bigeye tunas by 30% from the 2001-2004 level.

Q: That means measures are being taken with regard to the reduction of small-size bigeye by purse-seiners, doesn't it?

KOYA: As a step to reduce incidental catch of bigeye tunas, the WCPFC intends to realize a 30% cutback, by prohibiting for three months the use of fish aggregating devices (FADs) which can easily cause bigeye incidental catch, and also banning discarding of small-size fish and requiring boarding of observers on all fishing vessels.

Unfortunately, the reality is that the number of purse-seine fishing vessels has been increasing at a faster pace than those measures. The stock management measures will not be sufficiently effective unless the increase in fishing vessels is restrained.

Q: Is the stock of skipjack tunas still in good health?

KOYA: Regarding skipjack tuna resources in the Pacific, scientists say that they are still in a relatively robust status. Recently, however, the catch of skipjack has been on a decline in the waters near Japan. We are concerned over this trend that it may be sending a signal of skipjack stock deterioration.

In the case of skipjack tuna as well, it will be crucial to take steps before harvests become impossible. Japan expressed this concern at the Northern Committee of the WCPFC held in September this year, and obtained agreement from other member countries.

Q: What are future actions to be taken?

KOYA: There are many island countries in the area of tuna fishing grounds in the western and central Pacific. Those countries are considering utilizing tuna resources in their surrounding waters effectively with the aim to vitalize their economy. I admit that it is Japan's important role to cooperate with the development of island countries and we need to support the progress of their economy.

But it is equally important to manage the limited natural resources and take positive management measures to avoid the depletion of fish stocks. First it will be very important not to increase the number of fishing vessels from the current level and reduce fishing capacity while at the same time ensuring the progress of developing countries.

I believe this will be an important theme in the international consultations related to the management of tuna resources in the future.

Q: How will you cope with international consultations in the future?

KOYA: First and foremost, our task should be to reduce the number of fishing vessels to the extent of not deteriorating the resources. And then, we should take steps not to allow the fishing operation that disregard the actual state of the resources and aim to catch tunas by utilizing the loopholes in the international rules. At the same time, we should make effort to ensure stable operation by fishing vessels of the countries that give serious consideration to the stock status.

To attain that goal, it is crucial to wipe out the sense of distrust among developing countries. It is a fact that they tend to become allergic to the argument on the management of tunas, considering that advanced fishing countries talk only about the need to control the overall number of fishing vessels but hamper the development of fisheries in developing countries. I think that time has come for us to discuss ways to reduce fishing capacity while at the same time assisting developing countries in the development of their domestic tuna fisheries.

Q: Thank you very much.

Fishing capacity issue

Large-scale tuna purse-seiners' capacity sharply rising in WCPO

--Large-scale purse-seiners increased by 50 in C&W Pacific during past decade, with catch volume also expanding 500,000 tons--

At the second joint meeting of the world's regional tuna fisheries management organizations (RFMOs) held in Spain in June 29-July 3, Japan reported about the rapid increase of large-scale purse-seine tuna fishing vessels in the western and central Pacific. Japan's report sent shockwaves among participating countries.

According to the survey report by the Fisheries Agency, the number of large-scale tuna purse-seine fishing vessels in the western and central Pacific increased by 39 during the decade from 1999. All the vessels are of 1,200-2,200 tons, each capable of catching 7,000 to 10,000 tons of tuna a year. Of the 39 vessels, 13 were constructed during the past two years, clearly indicating the fact that the pace of increase has been accelerated. (This compares with the capacity of a large-scale tuna longline fishing vessel which stands at around 300-400 tons a year.)

Furthermore, China, which had not had any purse-seiner until 2000, launched into purse-seine fishing by importing, and giving Chinese registration to, aged Taiwanese vessels. When the number of these Chinese vessels is added, it can be said that a large fleet of 50 vessels was formed in the Pacific. On the basis of catch volume by a single vessel, the scale of 50 vessels would mean that a

fleet capable of catching 400,000 to 500,000 tons of tuna a year has emerged in the region.

The pace of increase has not lost its momentum. It is said that additional 35 purse-seine fishing vessels would make entry into fisheries during the coming three years. The expansion of the number of purse-seiners on the prospect of increasing demand for canned skipjack tuna is not likely to stop for some time to come.

Tuna science

Concern over ever-increasing fishing pressures on tunas

Dr. Ziro Suzuki
Tuna Scientist

In June this year, the second joint meeting of regional tuna fisheries management organizations (RFMOs) was held in San Sebastian, Spain. My initial hunch was that the meeting might not achieve fruitful results easily as it would discuss tactics to solve a mountain of difficult problems, such as the reduction of excessive fishing efforts. The meeting decided on holding some working group meetings for the solution of the issues, but discussion on most of the issues were postponed until the next meeting. Notably, even a clue to solution could not be found with respect to the issue of the reduction of excessive fishing efforts.

In what follows, I would like to consider the actual state of the tuna resources in the western and central Pacific, with a special focus on bigeye tuna resources and purse-seine fishing.

Spiraling tuna catches by purse-seiners

The Forum Fisheries Agency (FFA), representing the interests of island countries in the South Pacific, has been controlling the number of foreign purse-seine fishing vessels on which they could exercise influence. As of 2008, it seemed that the foreign vessels were being controlled within that framework, as long as we saw the number of fishing vessels. However, the number of purse-seiners from the United States, which had been a major purse-seining country in previous years, decreased, and, in a way to fill in the gap, foreign fishing vessels moved to acquire registration or form joint ventures with island countries. As a result, the number of purse-seine fishing vessels in the South Pacific saw a rapid increase. Among island countries, how to treat foreign fishing vessels differed from one country to another, making FFA countries far from being unified. In reality, the catch volume by purse-seiners has been spiraling. The steep increase may be ascribed to the fact that the efficiency of fish aggregating devices (FADs) improved and their use increased, contributing to enhancing the catch efficiency. Among other factors, we can point to the fact that purse-seine fishing vessels tended to become larger scale, and more tunas could be caught helped by at-sea transshipments of the catches to transport vessels. Furthermore, the rate of occurrence of the skipjack tuna, which is the mainstay catch, increased.

Serious concern over bigeye; Is skipjack safe?

The main target species for purse-seiners is the skipjack tuna, but they are also targeting the yellowfin tuna. Although they do not aim to catch the bigeye, juvenile bigeye are certainly caught incidentally when FADs are used. The stock size is large in the order of bigeye, yellowfin and skipjack, while the stock status become worse in the order of skipjack, yellowfin and bigeye. Red light appeared for the stock of bigeye, which was previously harvested by longlining, because of increasing incidental catches of juveniles in purse-seining due to the use of FADs. In 2009, catch regulation was at last launched to reduce the fishing pressures on bigeye by 30%. But, since the stock assessment, which became the basis of this regulation, was calculated based on the catch intensity of several years earlier, there is a concern that, when the increased fishing capacity in recent years is considered, there would be little or no effectiveness of this 30% reduction in fishing pressures. In other words, introduction of further regulations would be inevitable. In spite of that, fishing pressures continue to increase. If this situation persists, concern will arise over the future course of yellowfin and skipjack as well.

There are further serious factors of concern regarding bigeye. That is, the amount of bigeye caught incidentally in purse-seine fishing has been largely underestimated. The stock size of bigeye used in stock assessment is based on reports from fishing countries. But in the case of purse-seine fishing, bigeye juveniles are often reported erroneously as yellowfin juveniles. In other words, it is a known fact that 2-15% of bigeye are included in small-size fish reported as yellowfin. However, there are no countries other than Japan and the United States that implement, through scientific surveys, the measures to correct incidental catch volume of small-size bigeye taken by purse-seiners. Incidental catch rates by other countries, like Taiwan, Korea and China, which constitute the bulk of the overall catch, have not been corrected at all. Therefore, the incidental catch rates of these countries are less than half of those of Japan and the United States. It is incredible that there exists such a large gap when the operation using FADs has become so common. In other words, the catch of bigeye by countries other than Japan and the United States is estimated to be far larger in reality. This is a fact known not only to scientists but also to ordinary fishers. Given this situation, the stock assessment and future forecast for the state of the stock, which served as the basis of the current regulations, would have been largely optimistic. It should be considered that the state of the stock has deteriorated more seriously in actuality.

Urgent measures should be taken, starting with practicable ones

Regarding the issue of reduction of excessive fishing

pressures, particularly in purse-seine fishing, there is no clue for solution in sight at the moment both globally and locally because of the confrontation in interests between distant-water fishing nations and developing countries. Amid this impasse, it is crucial to implement measures that are practicable for the time being, without waiting for the progress in general discussion on the reduction of excessive fishing pressures. Such steps may include further reduction in FAD-based operations and expeditious development of selective skipjack catch methods by purse-seine fishing vessels.

Tuna Farming

A big step forward to commercializing full-cycle bluefin tuna farming

Kinki University obtained outlook to send 100,000 artificially hatched bluefin tuna juveniles to ocean cages

In full-cycle bluefin tuna farming, Kinki University's Fisheries Research Institute in Wakayama Prefecture, western Japan, estimates that at least 100,000 juvenile tunas need to be released into ocean cages if the project is to be implemented in an industry scale. As the institute has recently gained the prospect to send 100,000 juveniles out to the at-sea cages -- an important step in achieving extensive supply of juveniles to the market, it believes that its effort to commercialize the full-cycle bluefin tuna farming will take a big stride forward.

On July 28 this year the first transfer of the juveniles from the land-based ponds to the large ocean cages was carried out.

Since 2002 when it succeeded in production of bluefin tuna through full-cycle farming for the first time in the world, the institute has promoted research and experiments toward enhancing survival rates of juveniles after they are hatched. The highest survival rate in land-based facilities ranging from hatching of collected eggs to releasing juveniles into at-sea cage had been 4.42% in 2005. This year, however, thanks to the progress in raising techniques in the land-based pools, the rate improved to 4.67%. As a result, a prospect has emerged that approximately 100,000 fish will be transferred to ocean cages. This will be three times larger than about 32,000 fish released into at-sea facilities last year.

The juvenile tunas sent to the sea this time were the third-generation tunas hatched during the period between late in June and early July this year from about 5.89 million eggs collected from the second-generation parents hatched artificially. The juveniles, raised to the length of about six centimeters in the land-based ponds, were moved to the ocean cage of 30 meters in diameter.

The fish will be kept in the ocean cage for three years until they reach the size suitable for shipments to the market. (This article is based on the Suisan Keizai dated July 29, 2009.)

Tuna at CITES

The future of Atlantic Bluefin Tuna depends on ICCAT

EU Member States will not to give their support to a proposal to ban international trade of Atlantic bluefin tuna under the Convention on International Trade in Endangered Species (CITES). The decision was made at its meeting on September 21.

EU Fisheries Commissioner Joe Borg said that it was now up to the International Commission for the Conservation of Atlantic Tunas (ICCAT) to assume its full responsibility to ensure the recovery of bluefin tuna. Now more than ever, every effort had to be made to give the ICCAT multi-annual plan greater clout and to make it more effective, in line with scientific advice. ICCAT Members had to realise that the very future of this iconic stock depended on it.

The Government of Japan said that ICCAT should be primarily responsible for the management of Atlantic Bluefin Tuna and further improvement of ICCAT is possible through efforts among members. (ICCAT annual meeting this year is scheduled in November in Brazil.)

OPRT News

Shirasu named new OPRT President

OPRT elected Toshiro Shirasu as its President at an Extraordinary Board Meeting on September 25, following the resignation of his predecessor Isao Nakasu.

Shirasu, born in Tokyo in 1951, graduated from the Law Faculty of the University of Tokyo in 1974, and in the same year joined the Agriculture and Forestry Ministry (later to become the Agriculture, Forestry and Fisheries Ministry).

In August 2006, he was appointed as Director-General of the Fisheries Agency and in September 2007 became Administrative Vice-Minister for Agriculture, Forestry and Fisheries. He retired from the Ministry in September 2008. On September 1, 2009, he was elected as President of the Japan Fisheries Association, representing the entire fisheries industry in Japan. His favorite pastime is oil painting.

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