

## FUTURE PLANS FOR ICCAT PORT SAMPLING

P. M. Miyake  
ICCAT Secretariat

## I. Present status of ICCAT port sampling

1. Port sampling activities

Since 1975, ICCAT has been carrying out a port sampling program following SCRS recommendations. This program was originally designed to provide supplemental sampling from longliners operating from Atlantic ports. Those longliners, mostly operated by Asian countries, do not return to their home countries for several years, and the governments concerned had great difficulty in collecting logbooks and carrying out biological sampling. The Secretariat chose several ports in the Atlantic where the majority of the longliners unload and transship their catches and contracted a person at each port to abstract logbooks and measure fish.

Details of the program have been reported each year in the Secretariat Report on Coordination of Research and Statistics (included in the Biental Report). Since longline fishing patterns and landing conditions at each port change annually, the major unloading ports change over time. Therefore, the port sampling scheme has to be modified from time to time. The present scheme is:

Cape Town - One part-time sampler is contracted. This person works under the supervision of the Sea Fisheries Institute, Cape Town, South Africa. A set amount is paid per month.

Tenerife - One part-time sampler is contracted. This person is supervised directly by the Secretariat and is paid for each logbook abstract and sample.

Las Palmas - In the last few years, activity by tuna longliners has been low. Since 1983, the activities started increasing and, therefore, the sampling has been resumed. One person has been contracted under the same conditions as in Tenerife.

St. Maarten - One part-time sampler is contracted. This person is supervised directly by the Secretariat and is paid for each logbook abstract and sample.

Cumaná - One part-time sampler is contracted. This person is supervised directly by the Secretariat and is paid for each logbook abstract and sample. However, presently no foreign longliners are unloading in this port. The sampler is also instructed to sample from purse seiners, but there is some difficulty in logistics.

Montevideo - One part-time sampler is contracted. This person is supervised directly by the Secretariat and is paid for each logbook abstract and sample.

Except for Cumaná, the persons contracted have instructions that only catches unloaded by foreign flag vessels should be sampled. Sampling consists of: abstracting logbooks, recording unloading weight by major species and taking fork length measurements of 50 fish of each of the major species. If the trip covered more than one major fishing ground, a sample of 50 fish are taken from each ground.

2. Data

The data collected are verified and entered into three files: landing data by individual vessels and trip; catch and effort data by 5x5 area and month; and size frequencies.

Catch and effort data and size frequencies are summarized and published in the Statistical Series. The landing data are used to check various Task I catch data (for example Panamanian catches which are not reported by anyone else).

These port sampling files are also used for creating various working files for the working groups. The catch-by-size tables prepared for the Working Group on Juvenile Tropical Tunas depended heavily on the port sampling data.

## II. Feasibility of continuation of this program

1. Duplication of sampling effort

The data collected through port sampling are presently not as important as they used to be, as the Government of Korea and Taiwan University have improved their logbook and sampling systems in recent years. One of the biostatistical assignments given to the Secretariat has been to compare the data of these series to evaluate the need of the continuation of the port sampling. In the past, several reports have been presented. (e.g., SCRS/81/11, SCRS/82/14, 27, and COM/83/24).

The coverage of the logbook abstracts and sampling is now about the same between these official series and ICCAT series. Logbook abstracts in the official series would be more precise than the ICCAT series. However,

both series have various biases (e.g., geographical, temporal), and these biases are not the same for the two series. A good example is that ICCAT sampling coverage is better in the northern hemisphere for Taiwanese boats, while that by Taiwan University is better in the south. Therefore, the two series supplement each other.

When the Secretariat was creating longline catch-by-size tables for the Working Group on Juvenile Tropical Tunas, both series of the size data were used equally to compensate for the inadequacy of data of both series. Many time-area strata for which data of one series are missing were filled in by data from the other.

## 2. By-products of port sampling

As already mentioned above, the landing information which is taken during the port sampling provides a very valuable basis for verifying national Task I statistics. These data also form the basis for estimating catches of the fleet with flags of convenience.

Besides, the most important aspect of the port sampling scheme is that through this program the Secretariat maintains contact with various sectors of the tuna fishing industry. Even though the present port sampling program is only for the longline fleet, the Secretariat is monitoring the development of other fisheries through this program. If the Secretariat's duty is to receive and compile data from national sources, lack of communication with actual fishing fleets will lead to failure of the Secretariat's monitoring of fisheries in the Atlantic. The tuna fishery is developing very rapidly. Many joint ventures are starting all over the Atlantic, and the data reporting system for such fleets is not in all cases well established; it seems that monitoring such development is essential in the future.

## 3. Cost

The cost of port sampling activities in last few years has been about 12,000 \$US per year. Details are found in the Financial Report for each year.

## III. New requests for expansion of port sampling

### 1. Sampling from foreign flag fleet

As the tuna fishery has been developing quickly, as new fisheries of a joint-venture type are increasing, and as unloading and transshipment by boats at foreign ports are increasing, the collection of statistics and sampling data is becoming more difficult and more complicated each year. Particularly the increase of joint ventures and fleets with flags of convenience complicate the responsibility of reporting statistics and sampling.

The best location to carry out biological sampling and to collect logbook summaries from these fleets is at the unloading ports. In the

past, scientists working at these ports have voluntarily collected the data at their own expense for ICCAT, since the Secretariat was not authorized to do any sampling for fleets other than longliners. They include: Japanese, Korean and Panamanian baitboats unloading at Tema, Ghana, which were sampled by Ghanaian scientists; various flag purse seiners unloading at Abidjan were sampled by CRO scientists in Abidjan, Ivory Coast; and various transshipments received at Puerto Rico from other ports were sampled by U.S. scientists.

Since the sampling of foreign fleets involves a considerable amount of extra work which for the scientists at these ports, it has been asked in the past if part of the cost for such sampling could be borne by the ICCAT.

In principle, the flag countries are responsible for carrying out these samplings. Therefore, arrangements should be made between the countries assisting with the sampling and the country of the flag. An agreement was made between the IEO of Spain and the CRO of Abidjan that sampling costs by the latter of Spanish boats unloading at Abidjan would be at the cost of the former.

However, such arrangements are not always possible for various reasons, particularly if the fleets of joint ventures or flags of convenience are involved. In such cases, the question to be answered is who is responsible for: 1) sampling; and 2) financing.

### 2. Sampling from newly developing fishery

Many tuna fisheries have developed or are developing in early 1980's, namely the Brazilian skipjack fishery, the Ghanaian purse seine fishery, the Venezuelan super purse seiner fishery, the Mexican longline fishery, etc. Some of these fisheries are related to the problem of joint ventures discussed above. Some others are national fisheries; most of them are by developing coastal nations.

When a new fishery starts, the statistics and sampling system to cover that fishery are always somewhat behind. In the meantime valuable data on the initial fishery are lost. Since most of the fisheries are in the developing countries which usually have less experience in industrialized tuna fishing, the delay in establishing a data and sampling system is more noticeable.

Some of these countries have the actual man-power and technology to effect a sampling system but they lack financial support. Others have the financial support but lack the technology. The present policy practiced by the Secretariat (based on an SCRS decision), is that technical assistance should be given, whereas the establishment of a data collection and sampling system is the national responsibility.

Should the SCRS decide to provide some financial assistance for such cases, it would be very difficult to judge which countries aid should be given and to what extent. On the other hand, even if the Secretariat is authorized by the SCRS to expand the present port sampling program to such fleets, it would be very difficult to carry it out, unless full cooperation by the country is secured.

#### IV. A PROPOSAL FOR FUTURE PORT SAMPLING PROGRAM

##### 1. Present port sampling for longline

The present program should be continued. The cost is relatively low for what we are getting. The benefit of getting landing data for unreported catches and of monitoring the development of fisheries alone warrants the continuation of the program. Once the program is abandoned, we would have to pay a very high price to resume it in the future when the need arises again. Besides, the current system can be used as a basis for expansion in the future.

However, some change in emphasis may be made, i.e., less effort in abstracting logbooks, and a bit more effort in acquiring accurate and better coverage in landing data.

##### 2. Fleet of joint ventures and flag of convenience

The scientists at ports are responsible for data collection sampling but some financial support may be sought from ICCAT. If the SCRS adopts this recommendation, some mechanism is needed to advise the Secretariat as to how much support should be given and to whom it should be given. The present agreements made between the IEO (Spain) and the CRO (Ivory Coast) may be considered as a base for such discussion. The conditions for approving such financial assistance is that data should be sent to the Secretariat, which is responsible for compiling and disseminating.

A contingency plan for the case in which no one at the landing ports is willing to take this responsibility is that the Secretariat is authorized to expand the current port sampling plan to such ports, in consultation with SCRS officers.

##### 3. New developing fleets

The responsibility belongs to the nation which is developing the fishery. The Secretariat should assist only on technical aspects. However, as a contingency, if the lack of data from a fishery is vital, and only at the request of the nation involved, the Secretariat should be authorized to expand the current port sampling system to such ports and/or fleet. Again, advance consultation with SCRS officers is requested. Such action should be considered as temporary until the national system is established.

A copy of the data collected in such a system should be provided to the country which requested the assistance and the data processing is that country's responsibility.