

**KOREAN FISHERY STATISTICAL SYSTEM**  
by  
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**1. INTRODUCTION**

The Republic of Korea has a well-organized data collection system of fishery statistics for the purpose of providing information for the establishment of the national fishery policy. The Ministry of Marine Affairs and Fisheries (MOMAF) is responsible for the data collection of statistics from fishery authority and/or individuals including fishing companies. MOMAF sends the collected data to the Ministry of Agriculture and Forestry for compilation and publication. On the other hand, the National Fisheries Research and Development Institute (NFRDI) also collects data for various scientific purposes. The Fishery Census is being conducted whenever it is required, such as those in 1970, 1980, 1990 and 1995.

**2. NATIONAL FISHERY STATISTICAL SURVEY**

The survey on household in the fishing industry is conducted once a year during November 1 - November 30 to collect information on households engaged in the fishery industry. Statistical officials from the MOMAF are deployed in major landing areas to visit the households that are selected at random and collect statistical data. The procedure for collecting the data are summarized in Fig. 1.

The fishery production survey for coastal and offshore fisheries and shallow sea cultures, is conducted depending on the sale procedures of catch and harvest, which may be systematic or non-systematic sales. The systematic sales indicate that all fishery productions are trading through the Regional Federation of Fisheries Cooperatives (FFC). Production from commercial fisheries are not traded through FFC.

The total amount of production unloaded at fish markets for the systematic sale is recorded in the statistical record book. For non-systematic sales, recording is carried out by sampling survey. The procedure for collecting data on coastal and offshore fishery and shallow sea culture is shown in Fig. 2.

The survey on deep fisheries is being conducted by the Korean Deep-Sea Fisheries Association to make quick estimates of the total annual production in order to forecast the catch trends by species. All fishing vessels usually report only the catch record in weight by species to their mother companies once a week or at least by ten-day period by telegram at sea. Each company then sends monthly fishery statistics and total amount of export to the Association. The Association compiles the catch data reported by the companies and reports this data to the Ministry of Marine Affairs and Fisheries for final review and publication. The procedure of collecting data on deep sea fisheries is shown in Fig. 3.

According to Korea's fisheries law, fishermen who are engaged in the inland water fisheries with license or permission or notification have to report the amount of production to the mayor of the city or magistrate of the county where the fishermen belong. The mayor or the magistrate reports the data to the Director of Fisheries Technology Division or the Director-General of the District Maritime and Port Authority. The data are reviewed by the Director or the Director-General and reported to MOMAF. The procedure to collect data on inland water fisheries is shown in Fig. 4.

The fishery household financial status survey is similar to the survey of basic statistics on household in the fishing industry but the survey items and survey period are different. This survey is performed through out the year. The procedure of collecting data on this survey is shown in Fig. 5.

The survey on the production of processed fishery products is targeted to all processed products in volume and value. The survey is conducted semiannually. The producers of canned products, the Regional Federation of Fisheries Cooperatives and the village fisheries union must report the amount of products and trading volume to the mayor or magistrate of the country whom the producer belongs, respectively. The mayor or the magistrate reports the data to the provincial governor, who in turn report the data to MOMAF. The procedure of collecting data from this survey is shown in Fig. 6.

### **3. SCIENTIFIC FISHERY STATISTICAL SURVEY**

The National Fisheries Research and Development Institute (NFRDI) has maintained independently a data collection system for scientific purposes. Biological surveys are carried out for some commercially important fish species. The catch and effort data for the coastal and off shore fishery, are collected through the regional fishery institute of NFRDI and fishery technology service center, weekly and monthly.

In order to collect more detailed catch and effort data, NFRDI introduced the Log Book system for deep-sea fishery. The Log Book system for the collection of fishery data from fishing vessels was set by the NFRDI. Each fishing vessel records the following items: date, position of fishing activities, fishing effort, catch in weight and in number by species. These Log Book data are delivered to NFRDI through the fishing companies. NFRDI checks the data in detail to determine whether or not there are any errors or false reports.

Some important fishes are measured only for fish length at fish market by technicians working for NFRDI. In order to collect more detailed biological data, about 30-50 fishes are purchased every month and measured at the laboratory, for length, weight, sex ratio, collection of otoliths and scales for age determination, etc.

### **4. FISHERY CENSUS**

Fishery Censuses are carried out for the purposes of:

- a) grasping numerical information on the production system of fisheries, the employment and the living conditions of fishery workers, and providing information for fishery policies formulation;

- b) obtaining data which are used for comparison among countries; and
- c) updating the population from which samples are drawn for several kinds of fishery statistics.

The basic survey areas for the census include Gun and Gu, City and Province. The survey units are the fishery households and fishery companies, joint management, and cooperatives for their sale more than one month prior to the census. The survey items are selected on the basis of pretests such as the structural changes in Korean fisheries and the user's needs.

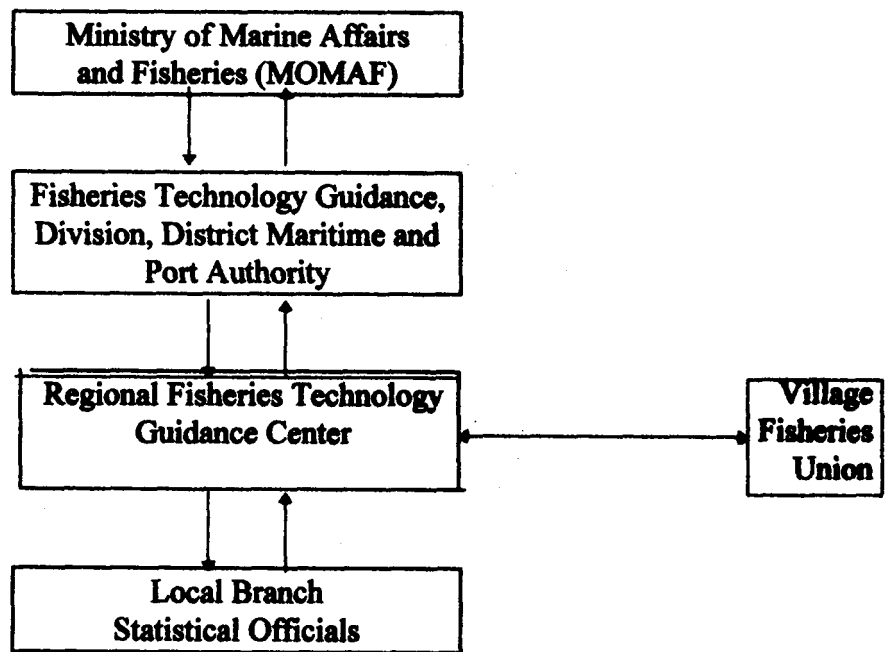
The Agriculture and Fisheries Statistics Information Bureau (AFSIB), Ministry of Agriculture and Forestry is responsible for the conduct of the Census. Some critical matters such as survey planning and method are examined by the central task force which consists of employees from the Bureau, Office of Fisheries (OF) and National Federation of Fisheries Cooperatives (NFFC). Supervisors and enumerators are trained by the local government (Fig. 7).

Local governments including provinces, Shi, Gun and Gu are employing some operating task force teams for the effective implementation of the census, and training the supervisors and enumerators in order to minimize statistical errors. The supervisors are selected and trained to supervise the enumerators. Those in charge of village fishery unions, and Ri's and Dong's, and fishery successors who are familiar with local affairs and fisheries, are usually asked to serve as enumerators.

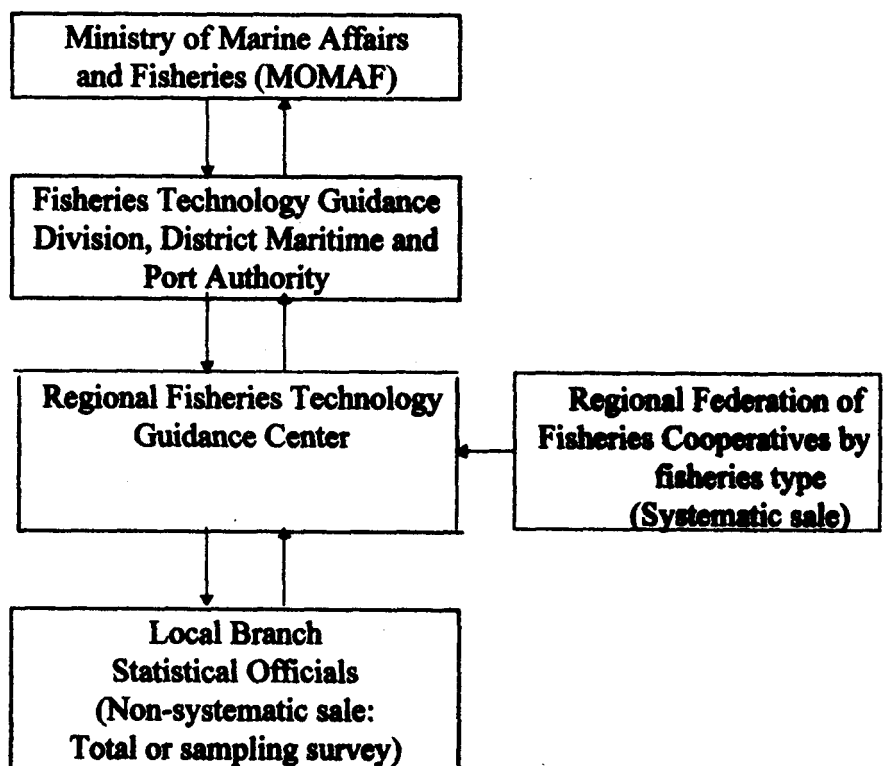
The pilot survey is carried out to detect potential problems concerning census items, selection of Enumeration District (E.D.) and computation. The main survey starts after a pilot survey and the tasks for the main survey are:

- a) design of E.D.'s;
- b) preparation for list of survey units and map;
- c) training of supervisors and enumerators; and
- d) enumeration.

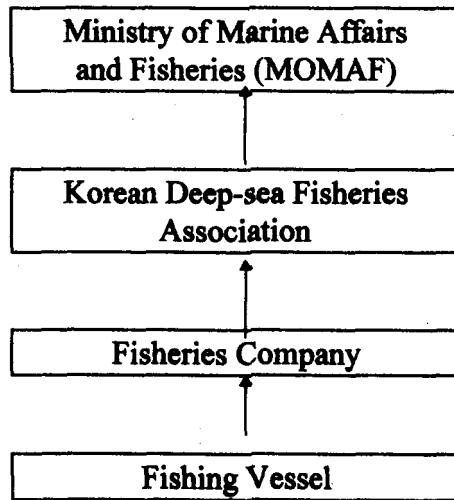
The enumeration sheets are collected and counted by the director of 'Eup' or 'Myun' office. If there are serious mistakes the enumeration is carried out again. The results are checked by local government survey workers and transmitted from the branch statistics office to the central government through the computer terminals. A preliminary report is published to meet the prompt needs before the final report is made. The final report is published after the complete compilation of the survey results is completed using the computer system in the central government.



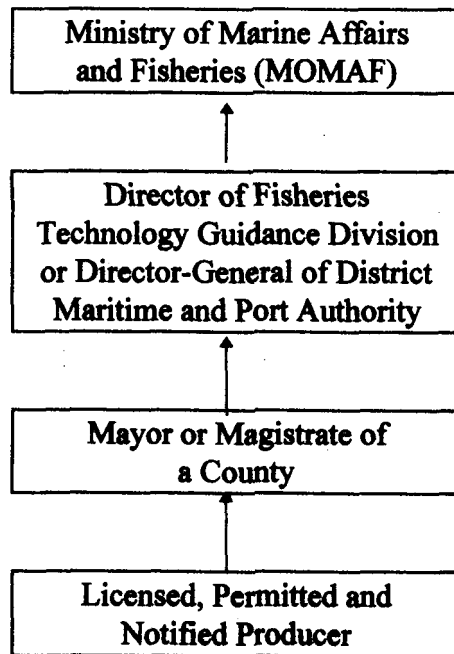
**Fig. 1. The procedures to collect the data on basic statistics on household in the fishing industry**



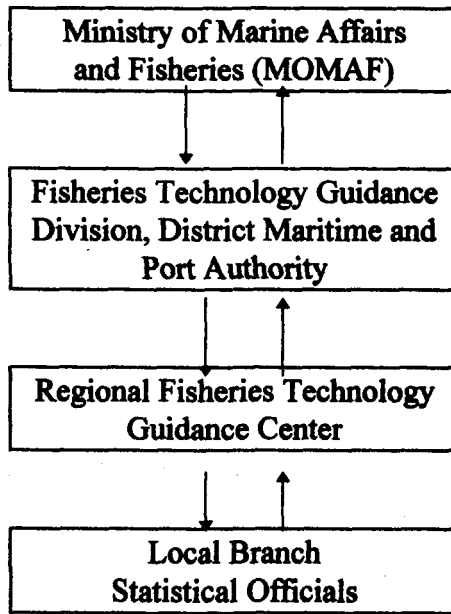
**Fig. 2. The procedures to collect the data on the coastal and offshore fishery and shallow-sea cultures**



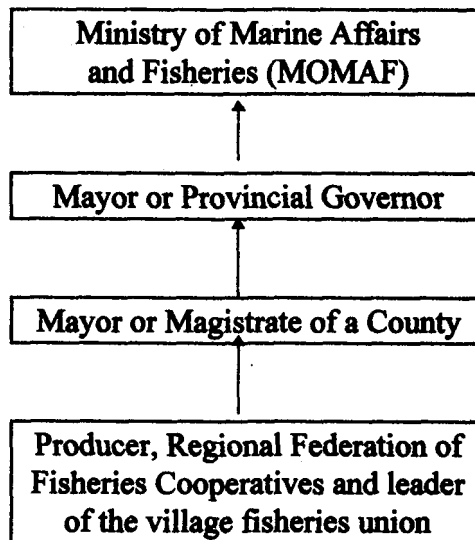
**Fig. 3. The procedures to collect the data on the deep-sea fishery.**



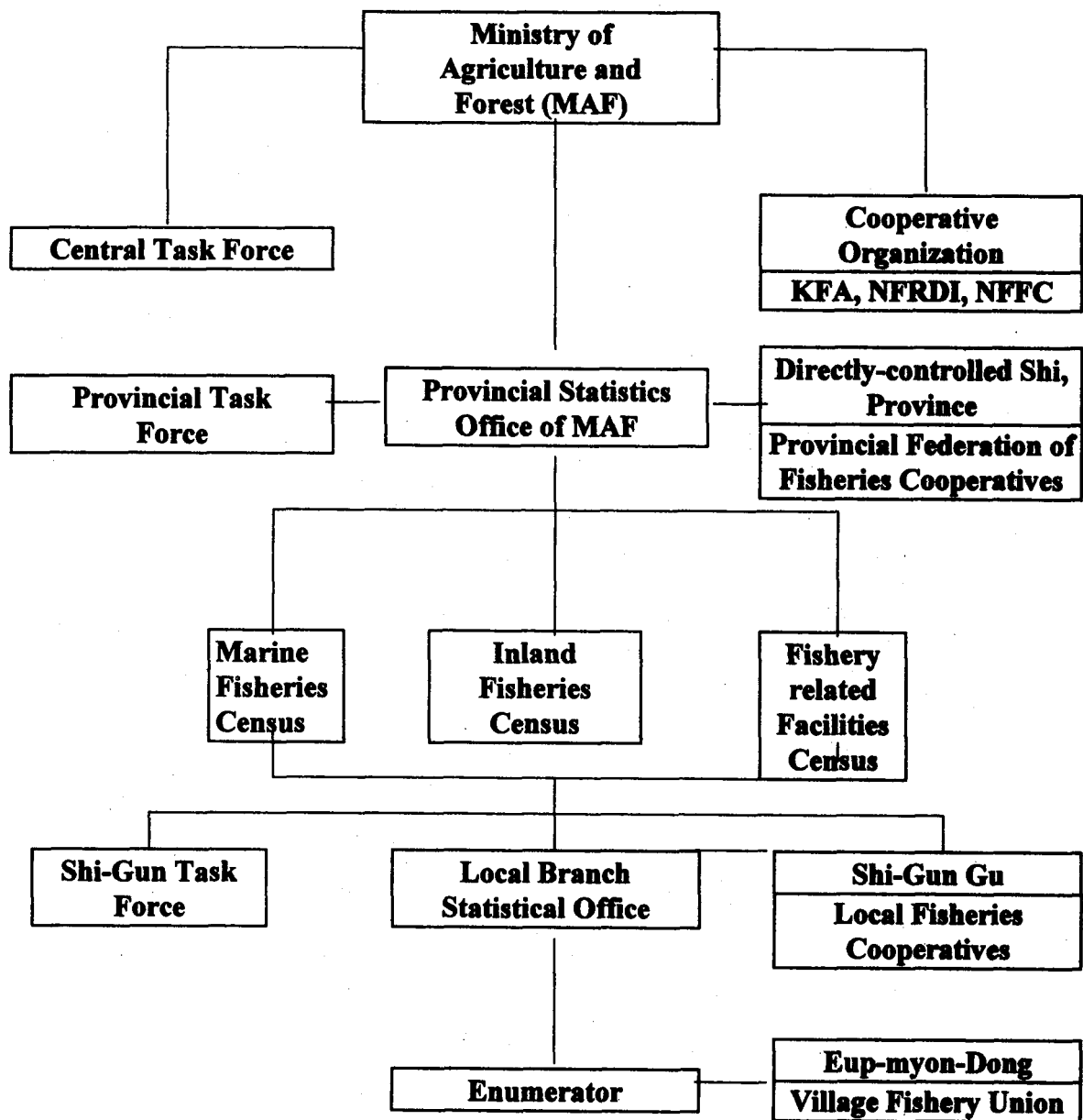
**Fig. 4. The procedures to collect the data on inland water fisheries.**



**Fig. 5. The procedures to collect the data on the fishery household financial status survey**



**Fig. 6. The procedures to collect the data on the survey on the production of processed fishery products.**



**Fig. 7. The fisheries organization for fisheries census**