

# OUTLINE OF FISHERY STATISTICS: JAPAN by Norimichi Suzuki JICA Expert on Fishery Statistics Center for Agricultural Data Ministry of Agriculture Jakarta 12550

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### 1. SURVEY SYSTEM OF FISHERY STATISTICS

Surveys on fisheries conducted by the Statistics Department, Ministry of Agriculture, Forestry and Fisheries of Japan, are classified into four groups: production structure, fishery production, fishery economy, and marketing of fishery products. Each survey system, described below, is also summarized in Table 1.

#### Survey on Production Structure

The first survey on production structure was the "Special Survey on Fisheries" which was started in 1892. It covered a wide range of areas: marine traders, fishing boats, fishing gears, fishing grounds, fish catches, manufacture, marketing, fishery economy, etc. Throughout its implementation, the survey has undergone various changes, with temporal interruption during the war. After the World War II, two kinds of surveys on production structure was conducted. The fishery census, which is conducted every five years, and the fishery movement survey, which is done every year except the year when the census is conducted.

The objectives of the fishery census are: to clarify various conditions supporting basic production structure, working structure, and production industry of fisheries; and to complete basic materials for fishery politics such as improvement of the fishery structure. It also serves as a basic material for designing various surveys for fishery statistics. In this sense it is the most essential survey of all the fishery statistics surveys.

The fishery census, conducted every five years, is based on a fishery census regulation (an ordinance of the Ministry of Agriculture, Forestry and Fisheries). Since its inception, seven censuses have already been conducted, the seventh census was done in 1983. Through each census, the actual condition of fisheries, fishery production structure and so on are clarified, as these relate to the changes of various kinds of systems, national economy and world-wide fishery circumstances.

On the other hand, the fishery movement survey is done every year except the year when the fishery census is conducted. Its objectives are:

a) to complete the basic list of fishery statistics surveys and to unify various kinds of surveys;

<sup>\*</sup> An excerpt from Fishery Statistics. TA-JR-90-68, Japan international Cooperation Agency

- b) to make a basic statistics on fishery management units, fishing boats and fishery households, and;
- c) to grasp movements during a year and factors of movements of these important indices.

This survey is classified into three parts: survey on fishery management unit, survey on fishery household and survey on fishery production structure. On the other hand, the survey on management unit collects data on:

- a) the names of management units, their addresses and management of organizations;
- b) types of fisheries, fishing vessels and number of fishing days; and
- c) subsidiary businesses of fishery management unit.

The survey on fishery household collects data on:

- a) household members (sex, age);
- b) condition of work by household members of 15 years old and over; and
- c) condition of fishing employment, etc.

The fishery production structure survey is intended to look into the changing production structure of fisheries and the factors contributing to such chance.

### Survey on Fishery Production

The survey on fishery production is one of the most basic surveys in fisheries. The first fishery production survey was conducted in 1970, but the number of fishery products surveyed was small, thus the result was not considered very reliable. The statistics of fishery products as conducted today was first sent out in 1984. The statistics on fishery products had been what is known as tabular investigation, i.e. the survey is done by gathering reports from local offices once a year. This was also alleged as less reliable until 1950, when the modern system of statistics, which is highly accurate, was established by setting up the Fisheries Statistics Division in the Statistics and Information Department and posting specialists in fishery statistics in all government organizations up to the small units. The survey on fishery production consists of the "Statistical Survey on Marine Fishery Production", and the "Statistical Survey on Inland Water Fishery Production".

The statistical survey on marine fishery production aims to statistically grasp the actual conditions of production from marine fisheries and marine culture, and to complete the basic material for fishery politics, studies on fishery resources, and so on. The target of this survey are fishery management units and associations working on marine fisheries or cultures. The items of the survey are:

a) number of fishing units, number of establishments of culture;

- b) culture equipment and so on;
- c) amount of fishing effort; and
- d) catches, production, and so on.

The survey is conducted every month or every three months. On the other hand, the statistical survey on inland water fishery production aims to statistically grasp the actual conditions of production from inland water fisheries and inland water culture, and to complete the basic material for fishery politics and studies on fishery resources. Catches by species of fish, catches by rivers and lakes, and so on, are also surveyed.

#### Survey on Fishery Economy

The survey on fishery economy have been conducted less often than those on fishery production. Before the war, the income of fishery households and contents of fishery household economy were surveyed twice through the "Survey on Fishing Village Economy" and the "Survey on Economy of Main Fishery Management Units" which were conducted in 1933 and 1938. However, these surveys were not very satisfactory. After the war the Fisheries Agency started to survey the fishery household economy in 1949 for fishery politics. Meanwhile, the Statistics and Information Department took over the "Survey on Fishery Household Economy" in 1951 and the "Survey on Fishery Enterprise Economy" in 1956.

In addition to these two surveys, which had been called the survey on fishery economy, the "Survey on Fishery Companies" was started in 1967. Its target are the companies with more than one hundred million yen capital and not involved in the earlier surveys. The "Survey on Fixed Assets for Fishing" was started in 1956 to complete the basic material for the standards in assessing fixed assets which are used for the survey on fishery economy.

The surveys on fishery household and fishery enterprise economy aim to grasp reproduction structures of fishery households and fishery enterprises, and to clarify contents of the economy. In the survey on fishery household economy (establishments under individual management using powered boats with total tonnage under 10 t) and the survey on fishery enterprises economy (management units using powered boats with total tonnage over 10 t), the condition of household members, operating condition of fisheries, condition of income and expenditures, condition of property, household expenditures and so on, are surveyed.

The survey on fishery companies aims to grasp the managing condition of fishery companies. The targets are the fishery companies with more than one hundred million yen capital. The survey on fixed assets for fishing has the same objective as the survey on fishery companies. The targets are manufacturers and stores where bodies, engines, electric appliances, freezing equipment, fishing equipment, and fishing net (nets and ropes) of fishing boats are built and sold. The main survey items are the values of the buildings and prices of equipment.

## Survey on Marketing of Fishery Products

Among the surveys on marketing of fishery products, the oldest is the "Statistical Survey on Fishery Process", which began during the Meiji era This includes the survey on the amount of processed products and the survey on processing establishments. The "Survey on Marketing of Fishery Products in Landing Areas" was also conducted since 1956. Its objective is to grasp the actual condition of the fluctuation in quantity and price of fishery products to strive for the stability of fishing management.

Since the fluctuation in price of fishery products is highly influenced by the destination of fishery products unloaded, the "Survey on Distribution of Landings by Type of Utilization" and the "Survey on Quantity of Shipment" have been conducted since 1960. These surveys are parts of the survey on marketing of fishery products in landing areas. The "Survey on Chilled Fishery Products" has been conducted since 1964, in order to assess the role of chilled fishery products on control of supply and demand.

In order to promote the plan for stability of price and improvement of marketing of fresh food, the "Survey on Marketing of Fishery Products in Consuming Areas" has been conducted since 1965. The survey items include prices by steps of arrival, wholesale, brokerage, retail, and so on, in principal cities.

The survey on marketing of fishery products in landing areas aims to grasp the market price, disposition division, quantity by destination, and so on, and to complete the basic material for supply and demand plan of fishery products, plan for price stability, improvement of marketing facilities, and so on. In the survey on price of fishery products, quantity, amount of money, price of fishery products landed by fish species are surveyed with consignees in the main landing areas.

In the survey on distribution of landings by type of utilization, the quantity of fishery products landed by utilization (for fresh, for frozen, for process, directly to cold storage, and so on) are surveyed with consignees, brokers' associations, processors' associations, traders (brokers, process manufacturers, etc.) in the survey areas. In the survey on quantity of shipment, the shipment of products for other districts are surveyed with brokers, process manufacturers, and transportation facilities.

The survey on marketing of fishery products in consuming areas is a survey on wholesale marketing (survey on arrival quantity, amount of money, and so on of fresh, frozen, processed, and other products, and on arrival quantity by main producing district) with central wholesale markets in survey cities and wholesale traders.

The survey on chilled fishery products aims to grasp the actual condition, inputs, stock and outputs of refrigerators dealing with fishery products, and to complete the essential material for improvement of marketing systems, including control plan of supply and demand of fishery products, stability of prices, building plan of cooling facilities and so on.

The statistical survey on fishery process aims to complete the basic material for improvement of utility of fishery products and to plan for the stability of fishery product prices. Its targets are cooperative associations and other kinds of organizations, manufacturers, and enterprises. The number of management units by type of process, and the quantity of products in a year by kind of products and so on, are included in the survey items.

