

Collective Fishery Management Developed in Japan - Why Community-Based Fishery Management Has Been Well Developed in Japan -

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Abstract. It is often said that the reason why Community-Based Fishery Management System (CBFM) in Japan has been well practiced is due to a historical development of a fishing right system, which emerged during her feudal era. This is not always correct. Until August 1945, when Japan was defeated in the World War II, Japanese people served to the emperor under the military government. In those days there was no democracy at all. Thereafter, Japan was occupied by the Allied Forces for seven years until April 1952. During this period, the policy of the Occupied Forces was to make Japan a real democratic country. Within such a fundamental policy, the contents of Japan's fishery law was thoroughly redrafted in order that fishermen are entitled to participate in the planning with regard to the use of fishing area and fishery resources through a fishery coordination committee at the utmost democratic manner. This gave an ideal circumstance to Japanese fishermen to create a collective fishery management, which is often called a community-based fishery management system.

Key words: Fishery law, Fishery coordination committee and community-based fishery management

1. INTRODUCTION

Fishery management in Japan has been developed in two ways. One is "community-based fishery management system", which has been developed with the initiative of fishermen and is mainly applied to coastal small scale fishery. The other is "total allowable catch system", which has been developed based on UN Law of Sea and is mainly applied to migratory species such as Saury pike, Alaska Pollack, horse mackerel, pilchard, mackerels and Tanner crab. The present paper describes how the community-based fishery management system has been developed to the coastal small scale fishery, which is the mainstay of Japanese fisheries.

2. RADICAL CHANGE IN POLITICAL STATUS OF JAPAN AFTER 1945

With the end of the World War II in August 1945, Japan was under the control of the Occupied Forces for seven years. During this period the basic policy of the occupied forces was to make Japan a democratic country. Thus, Japan changed its administrative status completely from a country under military government to a democratic country. Under such a radical change in her administrative status a land reform was carried out with the order of the occupied forces. However, in its implementation, there was no political and methodological difficulty at all, as an idea of the land reform was already in existence even in the prewar days. The success of the land reform resulted in no more landless farmer.

Similar to agriculture, in November 1946 the Allied Forces requested the Japanese government to renovate her fishery institution in a democratic manner. However, neither the Occupied Forces nor the Japanese Government had any exact idea as to what to do for this crucial subject. Under such a circumstance, Mr. Takashi Hisamune devoted his every effort with his colleagues to find a way to make the democratic use of fishing area and fishery resources. Until the final bill of a new fishery law was approved by the national assembly in October 1949, there were many twists and turns due to different views from the occupied forces, political parties and fishermen's organizations. Under such confused situations, Mr. Hisamune always kept in mind that the fishery law for the future must be for the benefit of fishermen, who actually engage in coastal small scale fishery.

3. BACKGROUNDS NECESSITATED FOR THE DEMOCRATIZATION OF JAPANESE FISHERY

For the democratization of Japanese fishery, the following points were fully taken into account:

(1) Specific Feature of Japanese Coastal Fishery

Japan is an island country and is located in a temperate zone with Kuroshio, which is a warm current running up from the area of equator and Oyashio, which is a cold current running down from the North Pacific Ocean. For these reasons, fishery resources in coastal waters of Japan are rich particularly in terms of variety of species. Due to a traditional preference of Japanese people to any sea

product, fishermen fish any aquatic animal and plant as far as it is edible.

Thus, even in a same coastal fishing area, it was possible to develop a variety of different fisheries using different gears aiming at different species. However, in the past there was no plan to make synthetic use of these different fisheries resources. As a result, a number of severe conflicts happened among different groups of fishermen, which resulted in over fishing. In the worst case, fishermen fought each other on the sea.

(2) Fishery Coordination Proposed by Mr. Kanich Nomura

To reduce conflicts among fishermen, to make harmonious use of fisheries resources among fishermen and to improve the productivity of fishermen as referred to (1) above, since 1935 Mr. Kanichi Nomura, who was a chief for coastal fishery at the Ministry of Agriculture and Forestry, proposed and tried to establish a *fishery coordination committee* with the participation of fishermen, but there was little achievement due to the intensification of the World War II.

(3) 1901 Fishery Law and Fishery Society

With the enactment of the 1901 Fishery Law, which was the first fishery law in Japan, fishing rights in four different types with a validity of 10 or 20 years were granted to fishery societies (80% of total) or to individual fishermen (20 % of total) with reference to traditional practice of fishing operation in the past. In addition, with the development of new type of coastal fisheries, which occurred after 1901, new fishing rights were also granted to the fishery society in response to their request.

In 1910, with the introduction of trawl fishery, which was an offshore fishery, a fishing license system was added to the 1901 fishery law. The fishing license was issued to individual fisherman or company, limiting the number of fishing licenses, the size of fishing boat and gear in use, fishing area, fishing season, etc.

An advantage of the 1901 Fishery Law was that the Law gave a motive to all fishermen to organize themselves into fishery societies (FSs), which later on developed into fishery cooperative associations (FCAs).

(4) Contradiction, which occurred in the Contents of Fishing Rights

Out of the four types of fishing rights in the 1901 fishery law, an exclusive fishing right was the mainstay, which was granted to the entire sea area of a FS and entitled to fish both migratory and sedentary resources. With the

progress of time, migratory fishery resources, which were included in the exclusive fishing right disappeared due to oceanographic change or some other reasons, which made it meaningless to keep them in the fishing right. In contrast, sedentary resources had remained unchanged, but gathering such non mobile resources such as abalone, lobster, etc. were apt to be monopolized by some prerogative persons. Thus, the democratic redistribution of such sedentary resources to actual fishermen became necessary.

(5) Motorization of Coastal Fishing Boats

Motorization of coastal small boats began in the latter half of the 1920s. By 1930 the majority of small fishing boats had already been mechanized, resulting in the over use of coastal resources and severe conflict among different groups of fishermen. Toward the end of the World War II, the number of trawlers operating in sea area around Japan's Islands increased so as to secure foodstuff for Japanese consumers. This also resulted in over fishing to resources and severe conflicts with coastal fishermen.

Thus, after the World War II, one of the problems of Japan's marine fishery was to recover the abundance of decreased resources and to increase the productivity of coastal fishermen.

4. 1949 FISHERY LAW AND FISHERY COORDINATION COMMITTEE

4.1 1949 Fishery Law

Referring to various situations as referred in 3 above, the 1901 Fishery Law was thoroughly redrafted with the enormous effort of Mr. Takashi Hisamune, who was a lawyer and the Chief of the Planning Division of the Bureau of Fishery, Ministry of Agriculture and Forestry from 1947 to 1950. In redrafting the fishery law, he tried to make it as democratic as possible and crystallize his idea of the establishment of a *Fishery Coordination Committee*, which was actually the one proposed by Mr. Kanich Nomura.

Thus, the first article of the 1949 fishery is described as follows:

The Fishery Law defines the basic system with regard to the fishery production such as fishing right and fishing license.

The law aims at :

- ① increasing the fishery productivity by synthetic use of all fishery resources available in a sea area on the basis of a plan, which is drawn *through the performance of a fishery coordination committee*, which is represented mainly by fishermen and employed fishermen, and
- ② democratization of a fishery.

The 1949 Fishery Law is composed of nine chapters with 138 Articles. However, the core of the law was the establishment of a fishery coordination committee to make democratic and optimum use of fishery resources.

For the precise implementation of the fishery law as he had in mind, Mr. Hisamune prepared a manual, with a title of “Fishery Reform”, which gives article by article explanation of the new Fishery Law” and distributed it to all persons concerned at national, prefecture, municipal and even fishery cooperative level. The manual was composed of 780 pages. By looking at such a heavy publication, the reader may well imagine how eager Mr. Hisamune was in the optimum and democratic use of fishing area and fishery resources among fishermen. (See Photo. 1 and 2)

Photo 1. Mr. Takashi Hisamune who Revised Japanese Fishery Law in Democratic Manner



Photo 2. Books dealing with Fishery Reform (Right) and Compendium of Fishery Laws (Left)

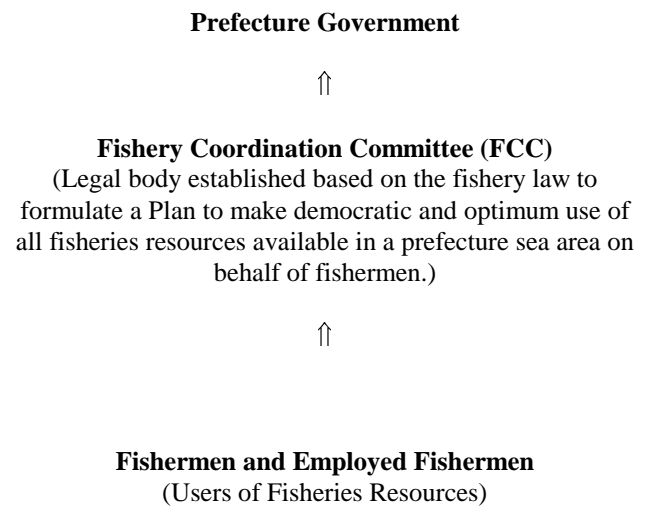


(Note) Looking at “Compendium of Fishery Laws” (Left), which contains not only fishery law but also fishery cooperative law, fishing harbor law, fishing boat law, fishery resources conservation law, fishery insurance law, etc., the readers may well understand how laws in Japan has been developed in the various field of her fishery to stabilize her fishery.

Role of A Fishery Coordination Committee

Administratively, Japan is divided into 47 prefectures. A fishery coordination committee (FCC) is established for each prefecture. As seen in Figure1, the FCC is a legal organization established based on the 1949 Fishery Law and it is located in between a prefecture government and fishermen with the following functions:

Figure 1: The location of a Fisheries Coordination Committee



- An important thing to note from the above Figure 1 is that the FCC is independent of the prefecture government. It is not a part of the prefecture government. It works on behalf of fishermen.

- The role of FCC is to formulate “*a plan to make synthetic use of all fishery resources available in a sea area right off a prefecture on behalf of fishermen, taking into account the conservation of fishery resources*”. For the establishment of the plan, a fishing right and a fishing license are used as its tool.
- Another role of the FCC is that according to the fishery law it is allowed to issue an order to fishermen concerned when required for fishery management. This may happen after the government issued fishing right and license.
- In a principle a FCC is established for each prefecture sea area with fifteen (15) members, of which nine are elected among fishermen. Of the remaining six, four are men of learning and experience, who are acquainted with fishery and fishery resources in the sea area and two represents public interest. These two groups of the FCC members are nominated by the prefecture governor.
- For the formulation of the plan, the FCC organizes a public hearing as much as possible to listen the voice of fishermen.
- Based on the plan determined by the FCC, the prefecture governor issues fishing right and license.
- The FCC is authorized to issue an order to regulate fishing operation, whenever necessary.
- The FCC is a permanent organization, and it will amend or adjust the plan in accordance with natural change in the type and size of fishery resources in its sea area. This is done particularly at the time of the renewal of fishing right and fishing license, which is done at an interval of 5 or 10 years

(Note 1) In addition to a FCC at prefecture level, another FCC with more or less similar functions is established at a regional level, when same fisheries resources are fished by fishermen from two neighboring prefectures or more. Apart from these FCCs, there is a national council, which examine the size and operational conditions of industrial fisheries, which have been specified by Minister, who is responsible for fishery. These are distant water fisheries operating in high seas and those, which operate in sea areas off several neighboring prefectures. The members of the council are appointed by the Minister concerned.

(Note 2) All fishing rights granted based on the 1901 Fishery Law became invalid when the new Fishery Law came into operation on March 1, 1950. Then, the first election of the members of the FCC took place on August 15, 1950, which means that the actual activity of the FCC

started in the fall of 1950. To compensate the abolishment of old fishing rights, the government paid a sum of 18 billion Yen to all the owners of fishing rights granted based on the 1901 fishery law by means of “bond” payable in twenty five years. Later on the bonds were cashed and well utilized for the economic rehabilitation of FCAs.

4. 2 Tools used for the Establishments of the Plan

For the establishment of the plan at prefecture level, fishing right and fishing license are used as tools.

(1) Fishing rights system

With a few exceptions, a fishing right is granted by a prefecture governor to fishery cooperative association (FCA). There are three types of fishing right as follows :

- Common fishing right : Out of the three types of fishing rights, this is the fishing right, which is commonly granted to every FCA. The right covers the coastal sea area right off the entire coast of a FCA. The distance from the coast covered by the common fishing right varies according to the availability of resources and gears as specified below. The right is valid to sedentary resources such as abalone, turban shell, lobster, scallop, sea weeds and non-mobile gears such set gill net, boat and beach seines, portable trap and small set net. The right is valid for 10 years.

(Note) Unlike the exclusive fishing right in the 1901 fishery law, migratory resources were excluded from the contents of the common fishing right.

- Aquaculture right : This right is established for a sea area, which is suitable for aquaculture. Such sea areas are mostly found within the sea area of the common fishing right. The validity is 5 years.
- Right for Large Set Net : This is a right to set a large set net with a depth of 27 meter and above, which aims at catching migratory fishes. A sea area allowing to set the large set net is specified on a map. The validity is 5 years.

(2) Fishing License system

Fishing license system is established to fisheries, which are in need of restricting the number of fishing units/boats, the size of fishing boat, fishing area,

fishing season, etc. The license is issued to an individual, either fisherman or fishing company. There are two types of fishing licenses as follows :

- Fishing license issued by Prefecture governor: The license is issued to the owner of fishing boat, who operates his fishery within the prefecture sea area. The validity is 5 years.
- Fishing license issued by the Minister responsible for fishery : The license is issued to the owner of fishing boat, who operates his fishery in sea area off two neighboring prefectures or more, high seas or the EEZ of foreign countries provided that a fishing agreement has been established between Japan and a country concerned.

(Note) For further detail of fishing right and license, the readers may wish to refer to the author's paper entitled "Development of a Community-Based Fishery Management System in Japan", *Marine Resources Economic*, Volume 10, 21-34

5. EFFECTS OF THE PLAN FORMED BY FISHERIES COORDINATION COMMITTEE

(1) The Plan Gave an Ideal Circumstance to Fishermen to Create CBFM

Fishing rights granted and fishing licenses issued based on the Plan drawn by the fisheries coordination committee (FCC) brought about an ideal circumstance for fishermen to create their own "Community-based Fishery Management system 'CBFM)". Such a situation was further accelerated by the following two facts :

- ① Fishing rights granted based on the 1901 fishery with reference to traditional custom had already nullified.
- ② Fishermen's organization such as FCA, which could be responsible for CBFM was already available.

(2) Organization Responsible for CBFM

Hereunder, a term, FMO is used for a fishermen's organization responsible for CBFM. According to the Fishery Censuses, the total number of FMOs throughout the country in 1952 was only 359, which increased with the progress of the time, being 1,339 for 1988, 1524 for 1993 and 1,734 for 1998. Since the total number of FCAs in 1998 was 1890, in average a FMO has been developed in almost every FCA.

A variety of different types of FMO have been developed in terms of way of organizing such FMO.

Out of 1,734 FMOs developed in 1998, 460 FMOs (27 % of the total) were a single FCA itself, 106 FMOs (6 %) were those, which were established by two neighboring FCAs or more, 742 FMOs (43 %) were fishermen's groups, which have been formed within a FCA, and 90 FMOs (5 %) were those other than the former three respectively. A FCA has normally established several fishermen's groups according to type fishing gear employed or species being fished. Thus, nearly a half of FMOs are fishermen's groups, which have been established within a FCA

It is important to note that these FMOs appeared only after 1950, when the present fishery law was enacted. There was no FMO at all before 1945, when Japan was non democratic country

(3) Way of Fishery Management adopted in the CBFM

There is no standard CBFM in terms of the way of fisheries management. The way of CBFM varies to a great extent from very simple ones to sophisticated ones, as the ideas and way of conserving fishery resources are in many instances created by fishermen.

According to the 1949 Fishery Law, a prefecture governor establishes a fisheries regulation, e.g., by specifying the minimum size of fish to be caught for a certain species, say., 15 cm in length. However, it often happens that fishermen make it larger, say 20 cm for their area. When Lobster set gill net is one of the species component of a common fishing right to a FCA, the FCA may restrict the number of fishing units by issuing a fishing license to specific fishermen to avoid an over fishing. A fishing area of scallop is split into two or three sub-areas, and fishing are allowed by annual rotation, resulting in better harvest. in terms of both size and quantity. The enlargement of the mesh size of a set gill net will lower catch in quantity. However, as the unit price will increase with an enlargement in the size of fish caught, the income of fisherman will increase.

Fishing operation without any rule established among fishermen may result in excess of unnecessary fishing effort, wasting operational cost and over supply of fish, which will in turn make the price of fish lower. To overcome such situations, a pool system has been developed for some fisheries under the leadership of an experienced fisherman, who decides days for fishing. Only on the day for which he decided, all fishermen go out for fishing. The size of catch may varies among fishing boats. However, sale of every boat is pooled, and fuel expense of every boat ia also pooled. Then, the difference between the total sale and the total expenses of fuel throughout all fishing boats, i.e., crude profit of all boats, is equally distributed to all fishermen. This will

greatly reduce the size of fishing effort. Catch limit system has also been developed, when a prefecture fishery experimental station is capable of providing the size of MSY to fishermen. There is a case that a moratorium is executed at a prefecture level for a particular species until the resources give a sign of recovery.

(4) Resources Enhancement

In recent years, with the enhancement of marine ranching a FMO, which cover the entire coast of a prefecture, is being developed in several prefectures. A FMO, which has been developed for the entire coast of Fukushima Prefecture for an increased production of Bastard halibut (Hirame) is a typical example. A FMO, which was developed in Akita Prefecture for the recovery of sand fish (Hatahata) resources is another case, where the prefecture federation took an initiative with the corporation of its member FCAs.

(5) No Compliance Problem

Community-based fisheries management in Japan has been developed with an idea and initiative of fishermen. Therefore, there is no compliance problem in Japan. In either central government or prefecture government, there has been no case that the government is involved in community-based fishery management.

(6) Campaign on Resources Management Fishery

It may be worthwhile to mention herein that in connection with the advent of the regime of the 200 miles economic zone, Professors Yutaka Hirasawa and Akira Hasegawa of the Tokyo University of Fishery, did a nation-wide campaign to encourage fishermen to develop their own self management with the use of a word of “Resources Management Fishery”, which is a synonym of “community-based fishery management”. Thus, a term “Resources Management Fishery” has become a word, which is commonly used whenever a matter of fishery management is discussed among Japanese people concerned.

6. CONCLUSION

In 1950 when the present fishery law was enforced, no one had thought that the law would be so effective in the development of the community-based fishery management system (CBFM). Even Mr. Hisamune, who drafted the 1949 Fishery Law, had no intention that his law could be a base to create the CBFM with the idea of fishermen.

At this moment, it may be appropriate to mention herein that in around 1938 the author was incidentally under Mr.

Kanichi Nomura for two years, and has often heard Mr. Nomura’s idea with regard to “fishery coordination” directly from him.

According to one of Mr. Nomura’s lecture materials prepared in 1935, he already had a firm idea to establish a fishery coordination committee for a sea area, such as XXX Bay, YYY Coast, etc. with the participation of representatives of FCAs as its committee members to establish a plan with respect to the synthetic use of fishing area and resources in the defined sea area. Now, his idea has been fully accommodated into the present fishery law.

So far, how fishery coordination committee (FCC) acted to form a plan and how it was the effective to create CBFM by fishermen were detailed under 4 and 5 above respectively. In short, these may be summarized as follows:

“Community-based fishery management system” developed in Japan follows two steps. A Plan formed by FCC is actually a fishery management plan in a broad sense. Using such a broad management plan as a framework, actual fisheries management plan, which corresponds to CBFM, has been developed as the second step. Particular feature of these two steps are the fact that both two plans are formulated with the ideas of fishermen but not from the manager of fisheries resources. Therefore, no compliance problem has occurred.

The reason for the success in the development of CBFM in Japan is thought to be an existence of legal framework in the fishery law, viz., the establishment of a fishery coordination committee, by which fishermen were fully allowed to participate in the formation of a fishery management plan.

In many countries, the government tries to enforce fishery management plan established by themselves. Conversely, fishermen try to escape from the government enforcement. To ease such a tension of fishermen towards the resources manager, it may be worthwhile to think of establishing an organization like a fishery coordination committee between the resources manager and fishermen as has been developed in Japan.

7. ACKNOWLEDGMENT

In the preparation of the present paper, the author was greatly indebted to Professor Yutaka Hirasawa for his valuable information, advice and comment, as he has served to Mr. Takashi Hisamune when he was a junior fishery officer for the drafting the present fishery law.

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