

# Trends and Problems in the Reorganization of the Production Structure of the Japanese Fishery Industry

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**Abstract** : Over the past several years, the production structure of Japanese fisheries has continued to decline. Specifically, there has been a decrease in the number of fishery management entities, fishery workers, and fishing vessels. As a result of these dilemmas, there is apprehension over the future survival of the Japanese fishery industry. This is a very important issue that needs to be resolved. As a measure toward solving this problem, there is a movement to re-examine methods to reorganize the production structure of the fishery industry by delving into the current fishery policies of present day Japan.

This study examines the contents of the reorganization policy, its effect on the fishery establishments, and the difficulties that may arise should this policy be implemented.

**Key words** : Production structure, Reorganization, Fishery management entities, Fishery workers, Fishing vessels

## Introduction

Over the past several years, the production structure of Japanese fisheries has continued to decline. Specifically, there is a decrease in the number of fishery management entities, fishery workers, and fishing vessels. In recent years there has not only been a decline in number of these three, but also deterioration in their quality. For example, most of the fishery establishments have not been able to easily gain a profit from their fishing enterprises. As for the fishery workers themselves, because there are so few new workers entering the field, the number of elderly laborers has risen. It is worth noting that there is also an increase in the number of old fishing vessels.

As a result of these dilemmas, there is apprehension over the future survival of the Japanese fishery industry. This is a very important issue that needs to be resolved. As a measure toward solving this problem, there is a movement to re-examine methods to reorganize the production structure of the fishery industry by delving into the current fishery policies of present day Japan.

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policy, its effect on fishery establishments, and the difficulties that may arise should this policy be implemented.

### 1. The Decline of Japanese Fisheries Production

In post-war Japan, high growth of the economy began due to the progress of industrialization which centered heavy on chemical industries in the mid-1950s. Because of the good economic climate, in domestic fishery, the advancement of related technology led to the improvement of production in domestic fisheries. As a result, pay for domestic workers increased, which helped productivity, and the market of marine products expanded. However, the high growth of the economy ended because of the first oil crisis in 1973 and the economy moved to a period of low growth. In 1977, the establishment of restrictions limited fishing areas to 200 nautical miles. On top of that, a second oil crisis came in 1979. The two oil crises caused the expenses of fisheries to increase and caused fishing area to be taken away due to the establishment of the restriction of 200 nautical miles. Furthermore, the value of fish decreased due to the bad climate of the domestic economy.

As a result, the trend of expansion of fishery production was interrupted. However, Japan's economy later entered into a period of recovery, and from 1986 the "Bubble Economy" began. Because of that, the value of fish went up and fisheries businesses recovered. As a result, the volume of fishery production was at a post-war peak of 12.8 million tons in 1984. Likewise, in 1982, the fishery production value was recorded at a post-war peak of 2.98 trillion yen (Table 1). However, entering into the 1990s, fishery production volume began to decline. The first reason for this decline was that the volume of sardines drastically decreased. Secondly, the volume of other fish also declined. Consequently, production volume and the value of Japan's fishery industry were reduced to half of their respective post-war peak numbers. In 2005, the volume was 5.76 million tons and the value was 1.6 trillion yen.

## 2. Reduction of the Fishery Production Structure

For this paper, in order to study fishery production structure, the changes in fishery management entities,

persons engaged in fishery and the number of fishing vessels were observed. As a result of the decline of fishery production, the fishery production structure was reduced. For example, from 2001 to 2005 the number of fishery management entities decreased from 142,000 to 125,000; the number of persons engaged in fishery decreased from 252,000 to 222,000; and the number of fishing vessels decreased from 251,000 to 237,000. The percentages of decline were: -11.9%, -11.9%, and -5.6% respectively (Table 2). The high percentage of reduction of the production structure is not the only problem for Japanese fisheries. First of all, with the economic condition of fisheries remaining poor, management entities are having difficulty making a profit (Fig 1). As a result, the number of managers who feel apprehensive about continuing with their work has increased. Secondly, not only did the number of persons engaged in fishery decline, but the percentage of older workers increased. The percentage of male workers aged sixty and over increased from 38.4% in 1995 to 46.9% in 2005 (Table 3). The shortage of successors and the disproportionately large number of older workers

**Table 1.** Decrease of fishery production

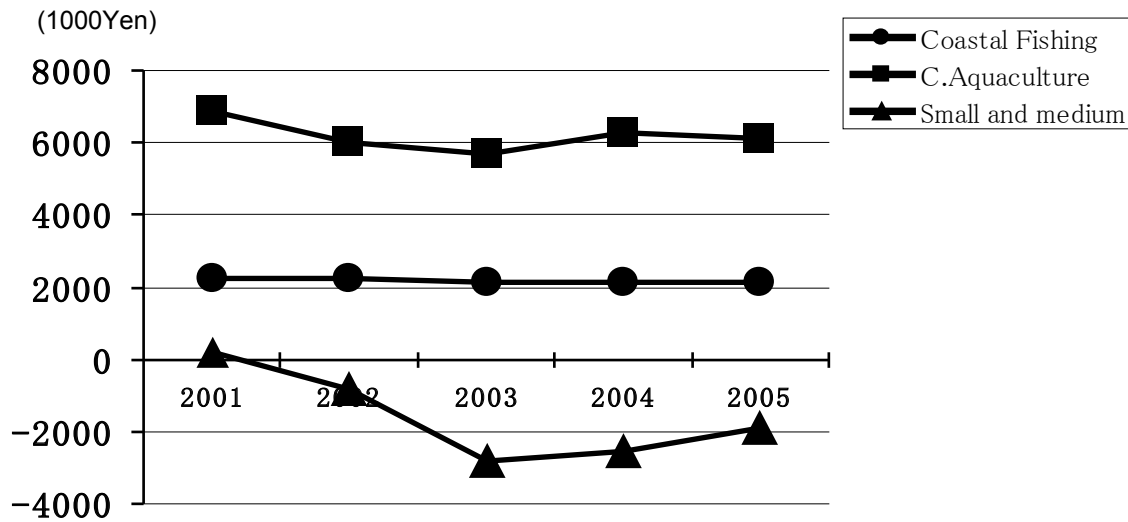
Item	2005	Peak	Year of Peak	Peak =100
<b>F.Volume</b> (10000t)	<b>576</b>	<b>1282</b>	<b>1984</b>	<b>44.9</b>
<b>F.Value</b> (trillion yen)	<b>16007</b>	<b>29772</b>	<b>1982</b>	<b>53.8</b>

Data source: Ministry of Agriculture, Forestry and Fishery  
"Annual Statistics on Fishery and Aquaculture Production"

**Table 2.** Decrease of the Fisheries Production Structure

Item	2001	2005	Decrease	Percentage of D.(%)
<b>Number of Fishery Product Entities</b> (1000 entities)	<b>141.5</b>	<b>124.7</b>	<b>-16.8</b>	<b>-11.9</b>
Coastal	134.5	117.9	-16.6	-12.3
Small and medium	6.9	6.7	-0.2	-2.5
Large scale	0.1	0.1	0.0	-9.7
<b>Number of Fishery workers</b> (1000 persons)	<b>252.3</b>	<b>222.2</b>	<b>-30.2</b>	<b>-11.9</b>
<b>Number of Fishing boats</b> (1000 vessels)	<b>251.3</b>	<b>232.5</b>	<b>-18.8</b>	<b>-7.5</b>

Data sources: Ministry of Agriculture, Forestry and Fishery  
Entity: "Annual Statistics on Fishery Industry" (2001)  
"Annual Statistics on Fishery and Aquaculture Production" (2005)  
Worker: "Annual Statistics on Fishery Industry" (2001)  
"Survey Report on Fishery Workers" (2005)  
Boat :MAFF date



Data Sources: Ministry of Agriculture, Forestry and Fishery "Fishery Business Management Survey Report"

Fig. 1. Movement in Fishing Profits

Table 3. Percentage of Fishery Workers Aged 60 and over

Age class	1995 (%)	2005 (%)
Over 65 years old	22.7	35.7
60 – 64	15.7	11.2
<b>Total</b>	<b>38.4</b>	<b>46.9</b>

Data sources: MAFF "ASFI" (1995), "SRFW" (2005)

became a serious problem for fishery production. Thirdly, the number of old fishing vessels has been a continual problem. Specifically, the case of vessels being used in off-shore trawl fishery, which is currently the primary mode of fishery, was studied. In 1992, the percentage of those fishing vessels that had been in use for less than fifteen years was 78.7%. In 2002, that percentage had declined to 43%. On the other hand, the percentage of vessels that had been in use for more than twenty years drastically increased from 4.5% in 1992, to 32.8% in 2002 (Table 4).

As a result of the abovementioned observations, it can be confirmed that many fishery management entities are having difficulty making a profit; experiencing a serious problem of a shortage of new workers and a disproportionately large number of older workers; and the number of old

fishing vessels has increased. These are the things which are understood as the reduction of the fishery production structure. Not only is quantitative reduction occurring, but qualitative deterioration of the current structure is also occurring.

### 3. Measures to Maintain the Continual Development of Japanese Fisheries

Japan is facing a serious crisis concerning the future survival of the fishery industry due to the reduction of the fishery structure and its deterioration in quality. These problems need to be dealt with immediately by Japanese fisheries organizations and solutions need to be found. For this reason, various measures have been taken by administrations and related organizations. For this paper, the policies implemented were particularly studied.

The core fisheries policies are the fundamental law of fishery enacted in 2001, and the action plan enacted in 2002. The important points of these policies are ①Promoting recovery of depleted fishery resources and responsible fishery management, ②Fostering and securing internationally competitive fishery entities and developing a vigorous working environment for fishery workers, ③Implementing processing, distribution and consumption measures to secure the stable supply of fishery products, ④Developing

**Table 4.** Percentage of Off-shore Trawl Vessels according to the Number of Years from Construction, Domestic

Number of years from construction	Number		Percentage	
	1992	2002	1992	2002
	(vessels)	(vessels)	(%)	(%)
<b>0 – 9</b>	<b>231</b>	<b>67</b>	<b>37.4</b>	<b>15.4</b>
<b>10 – 14</b>	<b>255</b>	<b>120</b>	<b>41.3</b>	<b>27.6</b>
<b>15 – 19</b>	<b>104</b>	<b>105</b>	<b>16.8</b>	<b>24.1</b>
<b>20 – 24</b>	<b>28</b>	<b>112</b>	<b>4.5</b>	<b>25.7</b>
<b>Over 25</b>	◇	<b>31</b>	◇	<b>7.1</b>
<b>Total</b>	<b>618</b>	<b>435</b>	<b>100.0</b>	<b>100.0</b>

Data Source: MAFF data

Note: ◇ is no data.

and diffusing new technologies to improve the future of the fisheries industry, ⑤Comprehensive development of fishing ports, grounds and villages, and the demonstration of the multiple functions of the fisheries industry and fishing villages, ⑥Reorganizing related fisheries industry groups (The Administration of Agriculture, “The Action Plan of Fishery Related Documents”, March 2007, p2) . The recovery of fisheries production structure is connected to the above-mentioned second point. One of the concrete measures is the project of leasing fishing vessels (hereafter referred to as PLFV) , which supports the construction of fishing vessels (Fig 2) . The contents of this project are as follows. Firstly, on behalf of those who cannot afford to pay for vessel construction, the fisheries co-operative associations (FCA) or related organizations (RO) will bear the costs. Secondly, a fisheries manager can use a new vessel for a relatively cheap leasing fee. Thirdly, the policy supports the reducing of the amount of the lease a person bears.

The following are the merits of PLFV. Fisheries managers can use a new fishing vessel without raising funds for its construction, and they can make lease payments every month using the profits from daily business. Also, FCA or RO, assuming they are sure to get their money back from the lease payments, can help fisheries avoid going out of business. If fisheries going out of business can be avoided, this would contribute to the maintaining of employment opportunities for fishermen. Also, this can help avoid the decline of other industries related to fisheries. Judging from these points, PLFV is a

very effective policy for fishermen who are in danger of going out of business.

#### 4. Problems Occurring In Implementing PLFV

FCA and RO, though they have only been in existence for about ten years, owe a large debt for constructing vessels. For FCA, it will bring a huge burden as fishery production is declining in recent years. Therefore, they must select fisheries managers who will definitely be able to pay their debt. As a result, only a small number of fisheries managers can obtain support from PLFV.

If fisheries managers cannot obtain support to construct new vessels, they will have to close their business when their fishing vessels reach their maximum life. If fishery is the main industry in a local area, then fishery is a very important industry that can provide job opportunities. The disappearance of fisheries creates unemployment and the decline of related industries. As a result, the economy of such a local area would decline. Therefore, PLFV would decide the future of certain business entities and consequently it would bring a crisis to the future of those local economies.

#### 5. Future Issues

It is not easy to secure fishery profits and improve financial conditions as fishery production declines, fishery workers age and vessels get older. However, it is easily surmised that the decrease of management entities will surely continue, and the regional economies will be led into a depression if conditions remain as they are now. It is an

important task to maintain the existing fishery management entities to avoid such a situation. To solve these issues, it is urgent that each management entity tries to improve its own operation first. Specifically it seems that reform of the system of ownership of production means and management organization must be put into action immediately. For example, ①Attempt to cut costs by improving the system of buying and sharing facilities and equipment, ②Attempt the joint operation of business organizations, or ③Attempt the integration of management which would cancel the business organization.

To continue with the current management style under conditions in which fishery production is low, puts the potential for continuous growth of fishery management

entities at risk. The current Japanese fishery industry is called to fundamentally reform the past management style.

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