

SUSTAINABLE DEVELOPMENT AND SUBSIDIES IN THE FISHERIES SECTOR
- A CASE IN JAPAN -

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Introduction

Japan is islands with approximately 70% of land covered by mountain forests and where arable space is limited. Fishing communities are located in all coastal areas nationwide. About 6,200 fishing villages exist along Japan's coastlines, extending 35,000 km. They are mostly distributed in geographically disadvantaged areas such as peninsulas and remote islands, where fishery is one of the most important sources of revenue in these communities. The government has constructed more than 2,900 fishing ports to date, and this is the largest use of "fisheries subsidies" in Japan.

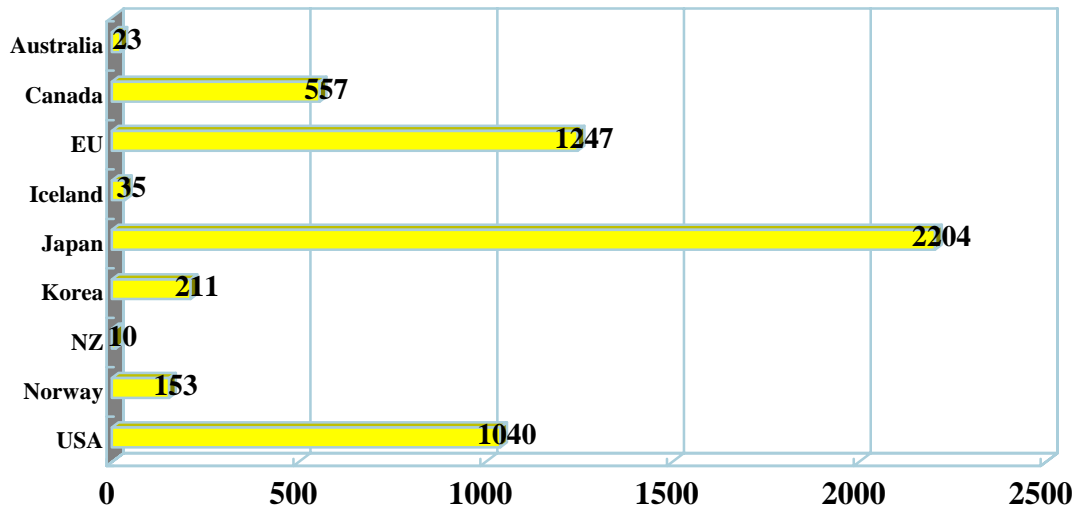
The issue of fisheries subsidies has been debated internationally. It is frequently argued that "fisheries subsidies could cause unwelcomed externalities such as over-harvesting and trade distortion." This argument may be true under the situation where no management on fisheries activities in place. However, in the case of Japan, multiple layers of fishery management measures are imposed, and the unfavorable externalities by the fisheries subsidies are not clearly observed.

The Scale of Japan's Financial Transfer Related to Fisheries

The data released by OECD indicates that the amount of Japan's financial transfer to marine capture fisheries exceeds the amount of other major countries (see Figure 1 below).

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Figure 1. OECD Estimates of Government Financial Transfers in Marine Fishery Sector in 1998 (source: OECD 2001²)(Unit: million US dollar)



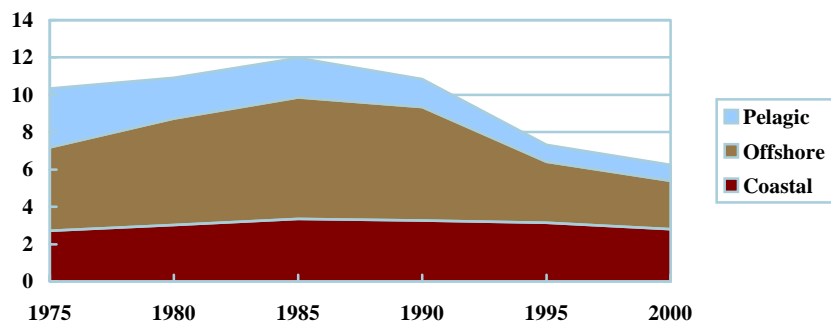
Do Japan's fisheries subsidies cause over-harvest or over-capacity?

The issue is whether or not this large amount of “fisheries subsidies” is causing unwelcomed externalities. For this purpose, recent trend of Japan's fishery capacities and productions are reviewed.

As noted in the Figure 2 below, Japanese fishery production has steadily declined in the past two decades. Current production is about half its peak in the 1980s. However, it is considered that harvest decline is not the adverse effect of subsidies. Tighter international regulations after the creation of the 200-mile zones in the mid-1970s accounts for some of the causes. In fact, during the last quarter century, Japan's distant water fishery catch has declined to one-fourth, from 3168 thousand metric tons in 1975 to 855 thousand metric tons in 2000. Offshore catches have also dropped, probably reflecting a cyclical fluctuation of sardine stocks. Coastal fisheries, in contrast, have been keeping the same level of production for many decades.

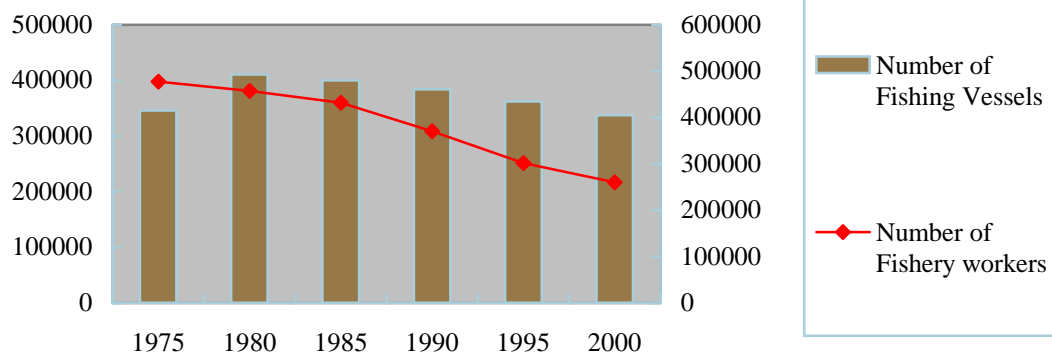
² Review of Fisheries in OECD Countries. OECD 2001.

Figure 2: Changes in the catch of coastal, offshore, and distant-water fisheries in Japan (unit: million metric tons).



The number of fishing vessels, as well as fishery workers, has also been declining these past two decades (Figure 3).

Figure 3: Changes in the number of fishing vessels and fishery workers.



Although not as rapid as the decline of large-scale industrial fisheries, the number of coastal small fisher-folks is also decreasing. The number of people engaged in coastal fisheries is 220,000, or 85% of all Japanese fishermen³, and the role of coastal fisheries in the remote local economy is rather significant.

The number of new entrants into the fishery sector job market in such communities has continued to decrease, and the percentage of fishery workers of over 60 years old increased from 28% in 1990 to 45% in 2000, indicating the ageing of the fishery

³ Calculated using data from the *Annual Fishery Dynamics Statistics*, Ministry of Agriculture, Forestry, and Fisheries, Japan

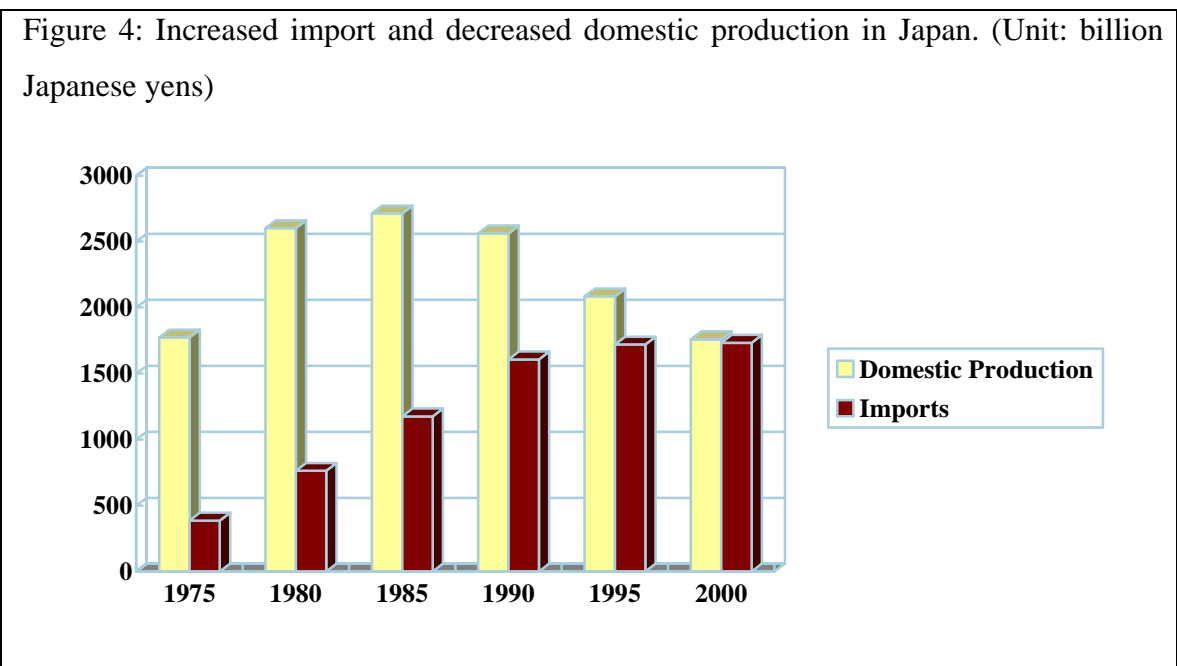
workforce population. Much of the fishery budget is expended to support such fisher-folks and their communities. In this sense, Japan's fishery budget can be characterized as rural development or social adjustment transfers.

In sum, judging from declining fishery harvest and capacity, Japan's fisheries subsidies do not result in the increase of its domestic fishery production or capacity.

Do Japan's fisheries subsidies cause trade distortions?

Japan does not have export subsidies in fishery products. Also, judging from the continued increase of Japan's import in fishery products during the past decades, Japan's fisheries subsidies do not result in reducing import.

From the 1970s, the import of fishery products has drastically increased, and the value of import and domestic production have become even in recent years (see Figure 1).



In fact, Japan has become the world's largest importer of fish products. According to the FAO, 37% of the world's fishery production is exported, and Japan's imports account for one quarter of it. As Japan's export of fishery products is relatively very small (less than 10% of the import), the net import value (difference between exports and imports) in Japan has become quite significant. Japan is the world's leading importer of fishery

products from developing countries. In 2002, 62%⁴ (JPY 669 billion) and 9% (JPY 30 billion) of its imported fishery products came from developing countries and least-developed countries (LDCs) respectively. The current average tariff on fishery products in Japan is approximately 4.1% (weighted average).

Japan's subsidies also do not result in maintaining market price. The average price of fishery products at ten (10) central wholesale markets in large cities fell continuously over the decade from JPY904/kg in 1991 to JPY798/kg in 2001.

Why adverse externalities are not observed even though the amount of Japan's fisheries subsidies is huge compared with other countries?

Three explanations can be made to answer the question why Japan's large amount of fisheries subsidies are more or less neutral to resource harvesting or trade distortions.

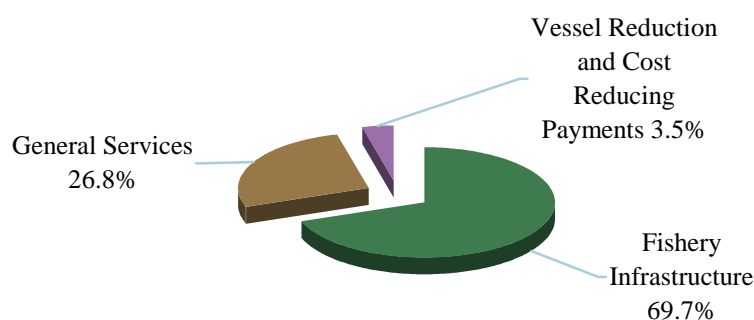
First, Japan sets mandatory upper limits on fishing capacities and efforts through (i) regulations on the construction, registration and inspection of fishing boats, (ii) a fisheries licensing system, and (iii) a right-based management system⁵. Also some of major fishery outputs are regulated through the total allowable catch (TAC) system. Because of these multiple layers of regulations, Japan's fishing capacities and efforts are hard to raise regardless of the existence of subsidies. Fishery production would have been more directly affected by resource management and market conditions, rather than the amount of subsidies.

Second, most of Japan's fisheries budget does not constitute financial transfers from the government to the fishery sector. Approximately 70% of the budget is for infrastructure construction companies under a government plan on development and maintenance of fishery infrastructure such as fishing ports and public utilities of fishing villages (Figure 5). As of April 2003, there are 2,928 fishing ports, and they are located in geographically disadvantaged areas.

⁴ 62% is a value-based figure. An amount-base figure is 60%. These calculations were made using import statistics in 2002.

⁵ Detailed explanations of the right-based management are given in the section on coastal fishery.

Figure 5. Use of Government Financial Transfers (calculated from data submitted by Japan to OECD for its 2002 reporting)



The port construction/maintenance budget is not designed for boosting industrial outputs of the fishery sector, but rather characterized as rural development transfers.

Also, approximately 27% of the budget is expended as a cost for general services of the government (such as salaries for government officials in the Fisheries Agency, scientific research, surveillance and control, official foreign development aids, etc.) (see Figure 5 above).

The use of the subsidies, rather than their total amount, would be a key factor for further assessments on the effects caused by subsidies.

Third, it should be noted that, while certain gray areas exist on the coverage of fisheries subsidies (such as infrastructure or payments for access to other countries' fishing grounds), Japan's reports to the OECD covers all areas of government financial transfers, including gray area items and other general services. The amount of such areas of government transfers is not always well reported by other countries and, therefore, simple comparison between Japan's figures and those of other countries does not necessarily bring an accurate picture.

Conclusions

As noted above, no positive relationship was observed between the existence of subsidy and fishing capacity and production in the case of Japan. To make a fair assessments on various potential impacts caused by fisheries subsidies, proper policy filters (such as

consideration on information on capacity control and resource management) are necessary. Matrix approach would be useful for this process.

Standardized rules for the coverage of subsidies (in particular infrastructure subsidies) would be critical for international comparisons. Japan has made its best efforts to keep a high level of transparency of its fisheries subsidies through OECD reporting, as well as the WTO notification based on the provisions of the SCM Agreement, and related question/answer sessions at the WTO Committee on Subsidies and Countervailing Measures.

Nonetheless, the world fishery resources are continued to decrease, and a fair improvement of disciplines on fishery subsidy for the purpose of solving the problem on over-capacity and IUU fishing is important. Japan is also committed to contribute to the process of WTO and other organizations so that a fair conclusion could be achieved.