

Joint Ventures in Fisheries between Distant-water and Developed Coastal Nations: An Economic View

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ABSTRACT

With extension of national jurisdiction over coastal living resources, new dimensions and objectives should be added to international cooperation in fisheries concepts. For distant-water fishing nations, joint exploitation of these resources is today considered not only as a way of producing additional income opportunities, but first of all as at least a partial solution to neutralization of harvesting limitations imposed on them in traditionally exploited fishing grounds.

Japan is leading in number of joint ventures run by this country abroad. They are supplying fish products to the Japanese consumption market. Many other distant-water fishing nations, including Eastern Europe, began to build their cooperational links with coastal states in recent years when it became clear that this can alleviate harvesting restrictions and increase employment opportunities for their fishing fleets. For the developed coastal states, joint ventures with foreign partners could be seen as a way to develop these coastal resources, which temporarily can not be utilized by local fishermen, mainly for economic reasons.

Joint ventures developing such resources will be attractive for both sides if they could produce additional volumes of fish for the foreign markets and offer an economically more effective way of resource utilization than would be possible in non-cooperative activities.

Cooperation in fisheries between foreign distant-water and developed nations can find a good future in the development of lower market values species in coastal nations which, in the case of the United States, Canada or Australia, represent a very large fishing potential. The benefits and constraints for each joint venture operation should be considered on a case-by-case basis.

Extension of national jurisdiction and a radical change in pattern of access to the coastal fishery resources put the question of international cooperation

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in marine fisheries in a quite different perspective.

During the freedom of fisheries era and particularly in times when coastal living resources were abundant, their joint utilization by local and foreign partners was based on the mutual interest in getting the highest direct economic benefits for the participating companies. Although joint ventures were sometimes restricted in the species to be harvested and areas of operation in the coastal waters of the host country, limitations as to the volume of catch were generally based rather on the biological factors and on the total production capacity of such a company.

Foreign partners, mainly from developed fishing nations, looked principally for highest returns on their invested capital. Thus the majority of the fishery joint ventures early in the 1960's, for example, were specialized in high valuable species, principally shellfish and some high-priced fin fishes like tuna, some bottom fishes, and other species. After being processed by joint venture, they were exported to foreign markets, principally to the developed countries of Europe, North America and Japan.

Numerous joint ventures in Africa and Latin America with foreign partners from Europe, Japan or the United States could serve as an example of this tendency.

With the development of distant-water fisheries, joint ventures began to serve not only as a source of additional financial benefits for both sides, but also as the basis for handling the ready-made fish products brought by the factory trawlers of the foreign partner. They could be unloaded and stored until the support vessels would take them to the foreign partner's home country or to international markets. We can mention here the joint ownership of the Mombasa (Kenya) Cold Storage Warehouse by local and Japanese partners. With the increasing range of operations of distant-water fishing fleets, land-based facilities for fish cargoes, vessels and their crews have become even more important for foreign partners than the immediate results of these ventures.

The distant-water fleets, if their capacity is to be efficiently utilized, should operate with constant support of auxiliary vessels (motherships, transport vessels, tankers, etc.) or with the land-based installations as near to their fishing areas as possible. The second alternative usually requires cooperation links with the neighboring coastal states. For example, large fishing bases established by Japan and the Soviet Union in the Canary Islands are providing a full line of support services, from fish cargo handling and storing up to ship repair and crew recreational facilities. This land base, run by local and foreign interests is, thanks to its excellent geographic location, providing lower costs for vessel operation and is increasing the economic efficiency for both distant-water fleets on the Atlantic fishing grounds. There are many other fishing bases established and run by local and distant-water countries.

Japan and the Soviet Union, with the largest distant-water activities, consider the network of such base-ports as Singapore, Havana, Dakar, and Aden as an important component of their harvesting potential on the world oceans.

With implementation of extended jurisdiction, new expectations were added to the international cooperation by distant-water fishing nations. As a principal goal, cooperative agreements are expected to provide an open access to the fishery resources within the 200-mile economic zone with the simultaneous opportunity for further utilization of their large and actually overcapitalized distant-water fishery potential.

Can joint companies or other cooperational ventures be a feasible and effective way for distant-water nations to alleviate access restrictions to the living resources now under extended jurisdiction of the coastal state?

According to the recent statistics ^{*1}, Japan was participating during 1976 in 173 overseas joint ventures with 51 countries. These were formed between various Japanese companies and foreign partners and controlled 203 fisheries companies in all aspects of the fishing industry. The total value of Japanese investments was about \$ 80 million or 52% of the total capital engaged in these companies. Table I indicates the number of companies by area and by type of operation.

The highest number of Japanese joint ventures operate in host countries with large coastal fishery resources like the United States (28 companies), Indonesia (11), Australia (8), Canada (8) or in countries providing the best investment opportunities in fisheries like the Republic of South Korea (19) or the Philippines (10). It is very significant that nearly half of these ventures are specializing in processing activities. In the United States and Canada, Japanese interests are located just in the fish-processing industry, which specializes in exportation of fish products to Japan ^{*2}. Joint harvesting activities are developed principally on highly valuable species like tuna or shellfish, which could provide the highest economic returns for these companies.

A principal benefit which such a joint venture network is bringing to the Japanese fishery economy is the production and supply of fish food for the Japanese consumption market. These products are taken by Japan as a compensation for costs incurred during joint operations as well as a share in the net income produced by such companies.

The joint ventures with Japanese participation are specialized in harvesting and processing only those species or products which are of special interest to

^{*1} Survey of Foreign Fisheries, Oceanographic, and Atmospheric Literature, Department of Commerce, Washington, D.C., No. C-20, 1977, pp. 5 and 6.

^{*2} Japanese investment in shore-based U.S. seafood processing plants totalled \$ 129 million by the end of 1974 (Heggelund, 1977).

TABLE I

Number of companies per area and type of operation

Type of fishery	Latin America	Oceania	Africa	North America	Europe and Middle East	Total
<i>Fishing</i>						
Trawl fishery	4	3	7	—	1	15
Shrimp trawl fishery	4	20	7	—	—	31
Skipjack angling	—	7	2	—	—	9
Tuna longlining	1	2	1	—	1	5
Other	6	3	2	5	—	16
<i>Mariculture</i>						
Eel	1	16	—	—	—	17
Pearl	—	4	—	—	—	4
Other	—	8	—	2	—	10
<i>Processing</i>						
Frozen seafood	5	10	5	4	1	35
Canned seafood	2	2	1	13	—	18
Other	4	20	2	16	1	43

Source: Suisan Shuho, No. 799, Apr. 1977, p. 4.

Japan and which could not be obtained through non-cooperative activities.

Joint ventures with the developing countries still could assure relatively cheaper manpower and lower costs of vessel operation due to the shorter distance between fishing grounds and base ports. Such countries as Indonesia, the Philippines, South Korea and Taiwan are still attractive in this field. Consequently, it can be expected that cooperative companies are also able to produce profits and hard currency for their partners.

The increasing number of joint ventures run by the Japanese fisheries could not, however, prevent the negative impact of the 200-mile economic zone on their distant-water activities. According to the latest statistical data from Japanese sources ^{*1}, the total Japanese catch within the foreign 200-mile economic zone has been declining, as follows:

1974 — 4.477 million metric tons (total 10.808 million metric tons).

1975 — 3.744 million metric tons (total 10.810 million metric tons).

1976 — 2.995 million metric tons (total 10.550 million metric tons).

1980 ^{*2} — about 2.000 million metric tons (total 10.695.000 m. tons).

Also due to the reduced catch quotas, Japan estimates that during 1977 over 1,000 fishing vessels of various sizes have been idled. ^{*3} This was due to

^{*1} Suisan Tsushin, 1/29/77 and Suisan Keizai Shimbun, 1/31/77.

^{*2} World Fishing, No. 2, February 1977, p. 30.

^{*3} Japan Fisheries Agency, Japan Trawlers Association, Various fisheries newspapers.

the extension of national jurisdiction in the North Pacific during 1977 only.

It seems clear that joint ventures could not save Japanese distant-water fisheries from the threat of limitations on catch and fishing effort in the foreign fishing grounds. Overseas joint ventures, however, can attenuate the fish food supply shortages in this country, acting as main exporters of fish products to Japan.

These expectations of the Japanese government are confirmed by the promotion policy encouraging Japanese fishing owners, processors and other food companies to invest in processing plants and other fishing ventures in the United States, Canada and other countries. The main purpose of this policy is to circumvent the 200-mile economic zone quotas by importing fish from Japanese companies established with coastal nations. It is on such operations that the future high level of fish consumption in this country could depend.

Other distant-water fishing nations are also intensifying their efforts to establish fishery joint ventures in countries with rich coastal resources. According to Congressional Records, in the four months since the 200-mile limit was set over 30 delegations from Japan, Spain, Poland, West Germany and Italy have shown up seeking American partners which will be able to cooperate in joint exploitation of the coastal fish stocks, which they used to catch themselves off U.S. coasts. A year earlier, by contrast, there were only two such visits. *1

Which are the principal elements of the offer presented by distant-water fishing nations for developed coastal states? They are offering large fishing potential, know-how and experience in commercial exploitation of the fishery resources now under extended jurisdiction of coastal nations. As the species of higher market value, such as shellfish, salmon and halibut, are fully reserved for the local coastal fishermen, distant-water fleets are focusing on underutilized species of lower market value. In this group we can mention Pacific hake, Alaska pollock, Atka mackerel, dogfish, silver hake, capelin and others. In Japan, U.S.S.R., South Korea and Eastern European fishing countries, the demand for fish products based on the above-mentioned species is high and tends to increase with time.

In Japan, for example, ex-vessel prices for round Alaska pollock caught by Hokkutensen trawlers recently reached 19.5¢/lb. *2 This price is twice as high as paid in the United States and equals the level of ex-vessel price for cod. In eastern countries we can observe the same tendency: underdeveloped, low-market-value species in the United States and Canada are nearly of the

*1 Congressional Record, Extensions of Remarks, August 5, 1977, p. E5274.

*2 Survey of Foreign Fisheries, Oceanographic and Atmospheric Literature, Department of Commerce, NOAA, NMFC, Washington, D.C., No. C-18, 1977, p. 8.

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same value as cod, haddock and other demersal species of high demand in North America (Kaczynski, 1977).

It can be expected that joint ventures in fisheries of underdeveloped or unutilized species will have open markets for fish products based on them even in the long-term perspective.

There are no uniform opportunities offered by joint ventures to be established between coastal states and distant-water partners. Generally it is expected that such companies will operate in the coastal state's waters rich in fishery resources. The majority of distant-water partners will be interested in establishing cooperational links which would allow them to employ their own fishing vessels with crews and processing plants onboard. The reason for this is the necessity of keeping employed a large number of highly skilled fishermen and vessels built during or for non-restricted fishing activities.

Processing of fish onboard such vessels will also be most convenient for distant-water partners. Reasons: lower manpower costs, existing experience and know-how, larger employment opportunities for their fishermen and possibility of utilizing existing factory-trawlers without the necessity of substantial reconditioning for joint operations.

As a first alternative, large factory trawlers, which actually meet with serious difficulties in finding adequate fishing grounds for their operations, will probably be offered for joint ventures with developed coastal nations. There are at least three important problems related to their utilization in joint-venture operations.

1. Impact of harvesting patterns on target species

In some coastal nations introduction of large factory trawlers is frequently criticized for their massive fishing technologies which can endanger the local ecosystem equilibrium, particularly if the designated area of operation is small. Factory trawlers, in order to work efficiently, should obtain, for example, a high catch rate of 50 up to 100 or even more metric tons of round fish per day. Consequently they have to operate on the richest stocks and the largest commercial concentrations of target species, which can also be of highest interest for local fleets. This obviously will require a careful management policy to be applied by the coastal states when establishing joint operations based on such vessels.

2. Socio-economical effects of joint venture operations

It is known that almost all distant-water fishing fleets are heavily subsidized by their home governments. They may be inclined to continue the same policy to support their companies engaged in joint operations. This assumption is particularly valid when foreign vessels, crews, equipment and other materials are delivered as a contribution to such joint ventures. If a

joint venture is also contributing to softening the host country's unemployment difficulties or to the economic development of the neighboring coastal zone where it is located, it can expect additional support also from local government. Consequently, the successful joint company is expected to be extremely competitive with the existing coastal fishing communities, which are not able to quickly develop an efficient and massive exploitation of some coastal resources. It causes many controversies.

As an example, we can mention the nation-wide discussion held until recently in the United States, where Regional Fishery Management Councils are under constant pressure from both followers of and opposers to the joint-ventures concept in that country.

3. Political constraints

This particularly is valid when possibilities of cooperation between partners of various political and economic systems are involved. If we try to establish the list of the most important countries potentially interested in establishing a joint exploitation of the fishing resources close to the coastal states, the resulting picture will be quite significant (see Table II).

The table is of course not complete, especially when applied to the distant-water fishing nations which are looking for cooperational exploitation of overseas coastal fishing grounds. It is also true that distant-water fishing countries can establish joint companies between themselves: Japan with the

TABLE II

List of important countries interested in joint exploitation of fishing resources

Developed host country rich in coastal fishery resources	Distant-water fishing nations seeking cooperation in fishery resources exploitation
1. North America: United States Canada	1. Asia: Japan USSR South Korea Taiwan
2. Europe European Common Market Countries (neighboring the NE Atlantic fishing areas)	2. Europe: Federal Republic of Germany Norway Spain Italy Poland
3. Australia New Zealand	German Democratic Republic Rumania Bulgaria
4. Republic of South Africa (with Namibia)	

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Soviet Union, South Korea with Japan, etc. However, it is hard to expect that joint ventures organized by these nations which have insufficient or no fishery resources off their own coasts will be feasible. There are some examples in world fisheries of joint companies devoid of access to fishery resources having to be closed or having to be discarded by feasibility reports.

East-European countries which belong to the geographically disadvantaged group of states, accompanied by the Soviet Union, are developing an active policy oriented to reduce the impact of extended national jurisdiction over coastal resources by means of cooperative companies.

According to the Lloyd's Register of Shipping data, during 1975 the total tonnage of commercial fishing fleets of the socialist countries including support vessels was 7.017 million GRT ^{*1}. Its participation in world total tonnage of fishing fleets, composed of vessels over 100 GRT, is about 60%. All of these countries are heavily dependent (from 30% up to 70% of their total catch) on overseas fishing grounds now being incorporated into the 200-mile economic zones of the coastal nations. Together with Japan, all socialist countries are thus the principal potential partners for joint ventures with developed coastal nations.

One of the most significant features — the importance of which became clear only recently — was the fact that the foundations for a modern industrial distant-water fishery were laid on a highly restricted raw material base. After all, many other modern, industrially developed fishing nations throughout the world had limited marine living resources at their disposal. However, the peculiar systematic and political context in which expansion of Eastern countries into massive exploitation of these resources took place, made this peculiar aspect one of crucial importance for the future of their fisheries. It means that all these states are heavily dependent on the marine living resources actually controlled by foreign coastal nations.

Another important feature of the Eastern distant-water fisheries, which also has far-reaching repercussions, was the growth of autarkic tendencies. All fishing activities were developed until recently on a generally non-cooperational basis. Coastal resources were harvested by distant-water fishing vessels with heavy support of auxiliary fleets without establishing joint ventures or other commercial cooperational links with coastal nations. It is not surprising then, that in the absence of outside pressures (for example, developments originated by the extension of national jurisdiction), there was little spontaneous movement toward cooperation in joint utilization of these resources. ^{*2}

^{*1} Lloyd's Register of Shipping Statistical Tables, 1976.

^{*2} These expansion features of the Eastern sea fisheries were typical for the early development of the whole industrialization process of Eastern Europe. For perceptive discussion related to this problem, see Korbonski (1976).

If we now compare the existing assets of Japan in cooperational fishery ventures with coastal nations with its 203 overseas companies, and cooperational links of other western distant-water countries with the achievements of the Eastern countries in this field, the conclusion is clear: Eastern countries still have a long way to go toward the joint utilization of fishery resources with developed coastal nations.

In order to serve as an effective and reliable source of fish food supplies to the local and distant-water markets, a joint venture requires a few years of operation to develop its full harvesting and processing capacity. With factory trawlers employed in such companies, this time can be shortened. However, it is perhaps quite realistic to expect that from the initial cooperational agreement to the projected production level, at least 2 or 3 years are needed if not more.

When the richest fishing areas adjacent to the developed coastal nations were included within the 200-mile economic zones, the Eastern countries as well as many other states found themselves in an initial stage of negotiations for general fishery agreements, stipulating licensed fishing rather than joint-venture arrangements.

On the other hand, these fleets represent not only high harvesting and processing potential but also advanced technology and vast experience in large-scale commercial fisheries. Coastal-shelf resources are the principal targets for these fleets. If properly arranged, joint ventures can be successful in fishery activities, which at the present time could hardly be developed by coastal fishermen. Factory or freezer trawlers of foreign distant-water nations could certainly not be the long-run solution for developed coastal states' resource utilization policy, but they can offer an interesting alternative in rapid development of underutilized species by the coastal state. This is particularly valid when such resources are located in areas of difficult hydro-meteorological conditions, far from the nearest base ports, or subject to rapid deterioration after being caught. The northern Pacific (Bering Sea) and Atlantic waters (Patagonian Shelf) can be mentioned here as a classic example of this. In the case of the Eastern Bering Sea, the best solution for the development of some fishery resources seems to be a factory or freezer trawler of good seaworthiness, larger dimensions and high engine power.

Both the United States and Canada are temporarily unable to utilize an important part of their fishery resources due to the economic inefficiency of harvesting and processing activities related to the species of lower market value.

Optimal management of the resource, regardless of which economic system is employed, implies an objective to take any given amount of catch at the lowest possible cost for the society. This indicates the need for various

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forms of cooperative arrangements with distant-water fishing nations, if they could offer the cheaper and more efficient resource utilization for both coastal and overseas partners. Thus the cooperation in fisheries between developed coastal and foreign fishing countries should, as suggested by many other authors as well (e.g. Crutchfield, 1977; Munrou, 1977; Copes, 1977), be seen as the economic and managerial problem in choosing the best alternatives of the optimal resource management.

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Joint Venture in fisheries (1949)

→ Japan leader in this domain

→ Joint Venture, pas uniquement au niveau des navires mais aussi au niveau de l'industrie de transformation

en 1976 le Japon participait dans 143 Joint Venture dans 51 pays dont 96 dans la transformation

↳ bénéf des Joint Venture pour le Japon
→ assure l'approvisionnement du ①

→ Les espèces ciblées ou transformées par les Joint Venture japonaises sont celles demandées par le ① Jap.

→ Les Joint Venture ont été créées pour contrecarrer l'institut des ZEE
↳ l'institut des ZEE a fait ↓ les captures en 1977 les bateaux Jap ont dû stopper soit aux ZEE de la zone du Pacifique (p42)

↳ Les Joint Venture ne vont pas sauver les DWF mais sauveront l'approvisionnement du ①

→ Le gov encourage les compagnies Jap. à investir dans les usines de transformation

→ Avec cela le Japon peut importer le poisson
à partir de ses entreprises implantées
localement.