

# Oyster Resort, Ishinomaki—A Proposal for Water Front Development in Enclosed Coastal Seas

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This paper will discuss and arrange the present situation and problems in marine resort development particularly in local areas and, for this purpose, take up Miyagi Prefecture as an actual case study. At the same time, this paper will present a new concept for the resort development of the regional development type (regional economy-promoting type) viewed from a completely new angle, in which aquaculture production is organically combined with resort development though they could not coexist previously. The paper also pursues the feasibility of this new concept. As an example, "the Mangoku-ura Inlet" in Ishinomaki City, Miyagi Prefecture being famous for oyster farming in the enclosed coastal sea will be taken up, and "Oyster Resort, Ishinomaki" as a resort development project using the "oyster" as its main theme will be proposed here. In this case, the enhancement of added value was proposed by means of shifting from the conventional concept of "aquaculture production" equals "food production" or "oyster" equals "foods" to also by looking at and utilizing the oyster from many different viewpoints. Then, this proposal was combined with resort development thereby utilizing the local enclosed coastal sea for regional development.

Aquaculture production in enclosed coastal seas in Japan has been decreasing gradually in recent years because of the reduction of culture area caused by the landfilling of the foreshore, water pollution, slow growth due to overcrowded culture and the like. Still more, inflow of muddy river water originating from large-scale deforestation and pollution by organotin compounds released from antifouling paints have recently caused new problems. Consequently, aquaculture production is now in a critical state. In spite of these conditions, there is a resort boom in Japan in a record-breaking manner. That is, several hundred resort development schemes have been proposed under the Fourth Comprehensive National Development Program (by the Government) and the Resort Law (Comprehensive Resorts Development Law), which has appeared on the stage as a means of solving various problems, such as city-dwelling people strongly desiring to pursue more leisure, too much money in many corporations, and the necessity of developing depopulated areas. Waterfront resort development projects have even been planned for coasts and sea areas including the Tokyo Bay Development Plan. Construction of hotels, marinas and the like which are inseparable from such marine resorts will reduce culture areas still greater, and the increase in the number of leisure boats will make water pollution by antifouling paints more serious. It is evident that aquaculture production in enclosed coastal seas will be driven away in the near future under such conditions. These development projects are mostly carried out by large-scale developers, and it is questionable whether the resort development is able to contribute to the development of local areas.

This paper will discuss and arrange the present situation and problems in marine resort development particularly in local areas and, for this purpose, takes up Miyagi Prefecture as an actual case study. At the same time, this paper will present a new concept for resort development of the regional development type (regional economy-promoting type) viewed from a completely new angle, in which aquaculture production is organically combined together with resort development though they could not coexist previously. The paper also pursues the feasibility of this new concept. As an example, "the Mangoku-ura Inlet" in Ishinomaki City, Miyagi Prefecture being famous for oyster farming in the enclosed coastal sea will be taken up, and "Oyster Resort, Ishinomaki" as a resort development project using the "oyster" as its main theme will be proposed here. In this case, the enhancement of added value was proposed by means of shifting from the conventional concept of "aquaculture production" equals "food production" or "oyster" equals "foods" to also by looking at and utilizing the oyster from many different viewpoints. Then, this proposal was combined with resort development thereby utilizing the local enclosed coastal sea for regional development.

Present Situation and Problems in Local Marine Resort Development

Ishinomaki City, Miyagi Prefecture is a town with the population of about 120,000 and with fisheries as its main industry (Fig.1). After the establishment of 200-mile Economic Sea Areas, the catch of unloaded fish in the local fish wholesale market in Ishinomaki was 200,000 to 400,000 tonnes annually, one of the greatest in Japan. However, the price per 1 kg began to gradually decrease after the maximum of 114 yen in 1977 and dropped to 51 yen in 1988, which was less than one-half (Fig.2). The residents are gradually losing their vitality because of the depression in commercial fishing in recent years. They are trying to find a solution to the problem or some other new ways for living. On the other hand, the Mangoku-ura Inlet in Ishinomaki (Fig.3), being famous from old times for oyster farming in the enclosed coastal sea, is now experiencing a decrease in output because of the delayed growth of oysters due to excessively dense farming and water pollution, the increased period of oyster farming and also decrease in yield percentage. Moreover, the scale of oyster farming enterprises is small, the output per enterprise is small, and thus the business operation itself is weakening. This trend is opposite to that of the neighboring oyster farms in the open sea area where the business scale is large, and the output has been increasing recently (Table 1).

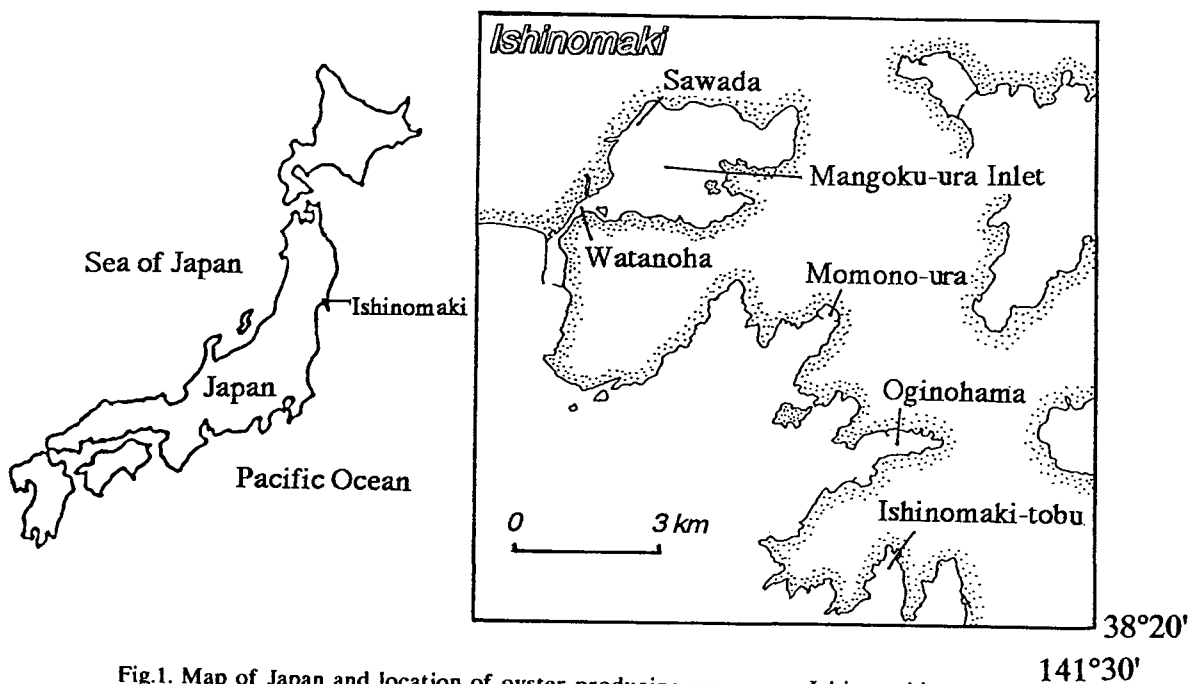


Fig.1. Map of Japan and location of oyster producing areas near Ishinomaki.

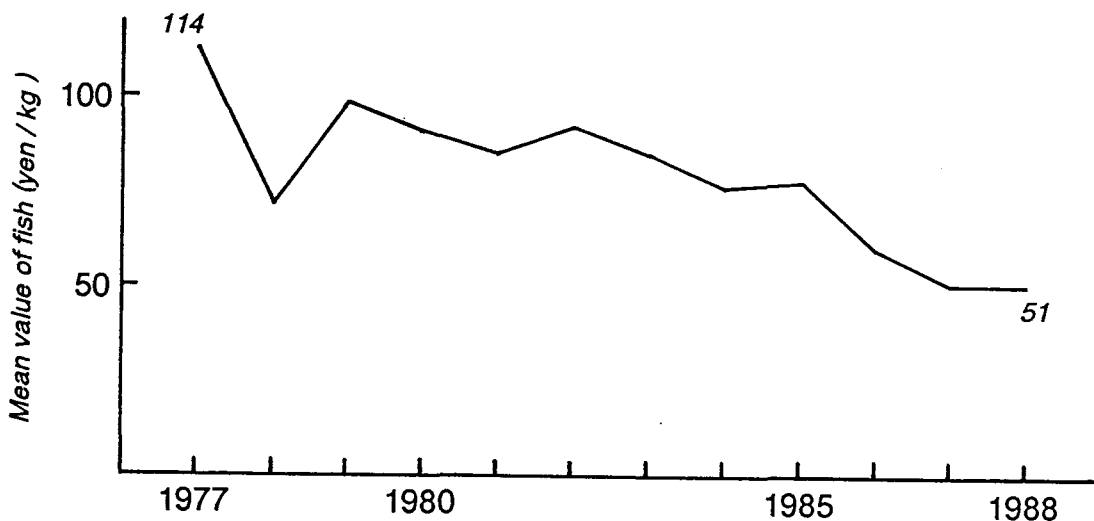


Fig.2. Mean value of fish handled in Ishinomaki fish market.



Fig.3. Commercial rack culture of Japanese oysters in Mangoku-ura Inlet near Ishinomaki, July, 1990.

Table 1. Production of marketable oysters in five oyster production areas near Ishinomaki, 1988(see Fig.1)

	Production (with shell) ( t )	No. of Enterprise	Production / Enterprise ( t )
Sawada	542	30	18.1
Watanoha	2592	149	17.4
Momono-ura	5192	62	83.7
Oginohama	2361	27	87.4
Ishinomaki-tobu	7816	103	75.9

The Miyagi Prefectural Government formulated the Miyagi Prefectural Sight-seeing Master Plan (March, 1986) and the Third Miyagi Prefectural Long-term Comprehensive Project (August, 1986) almost at the same time as the Fourth Comprehensive Development Program and the Resort Law of the Central Government. As one of the items of the Third Miyagi Prefectural Long-term Comprehensive Project, "the formation of highlands and marine resorts" was taken up, and two districts were designated for this project; "Matsushima District" and "Kesenuma, Kinkasan and Ishinomaki District" (hereinafter referred to as "the district"). The Project intends to form marine resort zones of the experience type, staying type and whole-year type sight-seeing activities utilizing rich, beautiful, natural environments. Ishinomaki City previously had no significant sight-seeing facilities and was merely passed by enroute to the sight-seeing areas, such as the Oshika Peninsula and Kinkasan Island. Ishinomaki also had other disadvantageous conditions for sight-seeing, such as sight-seeing visitors going to the Ishinomaki zone including the Oshika Peninsula tended to decline in the last ten years; sight-seeing was mainly for swimming in summer season, and the number of visitors for this one-season type sight-seeing was governed by the weather conditions in the summer, and other seasons had no attracting power. Conforming to the national and prefectural projects and plans, stated before, thereby activating the Ishinomaki District mainly based on a marine resort, big enterprises are interested in building resort hotels and marinas.

However, thereafter, the analysis of the Kesenuma, Minami Sanriku Kinkasan Sight-seeing Development Plan was disclosed by the prefectural government, and it concluded that sight-seeing and resort development for this district was very difficult, because: (1) development type projects are likely to create friction with fishing firms with respect to the fishing rights widely distributed in most water areas within the district, and (2) establishment of marine resort in a high latitude region where there are no cultural or historical monuments is almost impossible. Also, the survey on trends and intentions by private enterprises indicated the following results: (1) they are considering southern districts for a marine type resort, (2) the area is not suited to yacht bases, (3) there are no images of

the district and it is too far away, (4) targets (visitors, development areas) must be screened, and (5) higher speed of transport means is needed. There are very severe requirements. Being different from the scheme, the marine resort development in this district possesses many realistic problems. More than two and half years has passed after formulation of this plan, but little actual work has so far been done.

This kind of situation is not limited to this area. It can be seen in many fishing production districts throughout the country. They want to move with the resort boom and escape from depression in the fishing industry business and from depopulation. However, there are no seas with coral reefs as in Okinawa, and they have no bright sunlight. Visitors come to the Shonan area near Tokyo without advertising, but this will never occur in the district being considered. These areas have no image at all. Moreover, when the resort development is started, fishermen must abandon their fishing rights. Aquaculture production itself may be damaged by the landfilling of public water areas. In addition, complicated problems may be created with the local residents and others. Thus, the developers will not be interested in this district at present. When considering marine type resorts by taking account of these problems, a very unique development plan becomes necessary, which can obtain consensus and cooperation from local residents and fully consider the visitors-attracting ability and the economy. Basing upon the various problems stated above, the possibility of resort development of the regional development type in this district was reviewed.

Next, we will explain a resort development scheme of the regional development type as a proposal for the future use of a local enclosed coastal sea. This scheme is called "Oyster Resort, Ishinomaki" which organically combines oyster farming with resort development.

#### "Oyster Resort, Ishinomaki" Scheme

##### *1. Basic Concept and Regional Image*

Marine resort schemes are now often proposed in many areas throughout the country, but most of them mainly have the construction of resort hotels and marinas accompanied by golf courses, tennis courts, aquariums, sea food restaurants or the like regardless of urban or local type. These schemes consider mainly the hardware. All the schemes are similar to each other. Unique schemes are very hard to find. In this kind of planning, the most important item seems to be the establishment of a basic concept, but this not clear, and only the facilities are arranged in many schemes; and their reality is questionable. Therefore in the Ishinomaki scheme, the basic concept was first established. The basic concept was "to put the regional image at the center, and to have the resort development of the whole year type capable of providing organic harmony between fishing and aquaculture business."

Interestingly, "oyster" means Matsushima resort in Miyagi prefecture. "Matsushima oysters" are well known across the country. However, its output is at present much smaller than the output from this district including Ishinomaki and Oshika Peninsula. Nevertheless, the image of "Matsushima oysters" is still alive, and the orders from the every corner of Japan flood in during shipping season. This kind of image is so important, but a new influential image cannot be created in a short time. Ishinomaki means "a port town." This image continuously existed from old times to the present. Therefore, the image can be more easily created by using it as the basic image and overlapping a new image on it. Thus, in this scheme, the basic image was determined as "a port town" and then "oyster" was overlapped on it because the oyster is the particular local product. Moreover, the oysters are shipped from autumn to winter during which the sightseeing is off-season. Therefore, the important factor of "the whole year" was fulfilled. The last difficult problem was how to the organically harmonize coexistence between fishing and aquaculture. This was the most important but the most difficult problem. In order to meet this requirement, it was decided to abandon the previous thought of "oyster farming" equals "food production" in this scheme. Then, as a new idea, it was decided to consider the whole process of oyster farming and production as the commodities and extract as many commodities as possible from the process. That is, the oyster farming itself was considered as a commodity. This was the core of the scheme. Because of this thought, the member of the Fishermen's Cooperative Association will be shifted from the previous "producer" to "producer and service renderer"; that is, the member will be engaged in both the primary industry and tertiary industry. The thinking habits of the members of the Association became a very important factor in this scheme. The basic concept was completed and established based on the above ideas. Now "the newly extracted commodities" will be explained below in both the hardware and

software phases.

**2. Actual Hardware Phase and Software Phase of the Scheme**

This scheme will be explained below for both the hardware and software phases separately.

**(1) Hardware phase**

In the hardware phase, two facilities will be constructed along the coast of the Mangoku-ura Inlet; (a) an oyster harbor and (b) an oyster production area (Fig.4). Both of them will be 1 km apart, and connected with a sea way and a harbor street having gas lights. The former will be constructed after buying a lot, and the latter will be remodeled by building a visitors' road from the present "oyster shell removing yard" owned by the Sawada Fishermen's Cooperative Association. Next to this yard, several facilities will be provided, such as an information counter, study room, a Japanese food restaurant "Kaki-Tei (Oyster Foods)" (2nd floor) and a gift shop (1st floor). The target (kinds of visitors expected) of the latter will be ordinary sightseers (including groups), visitors with family members and primary/junior high/senior high school students. This image will be "daytime." Annually, about 6.5 million sightseers visit the Matsushima resort (1986), and about 2 million sightseers visited Oshika Peninsula and Kinkasan Island (1986) passing through

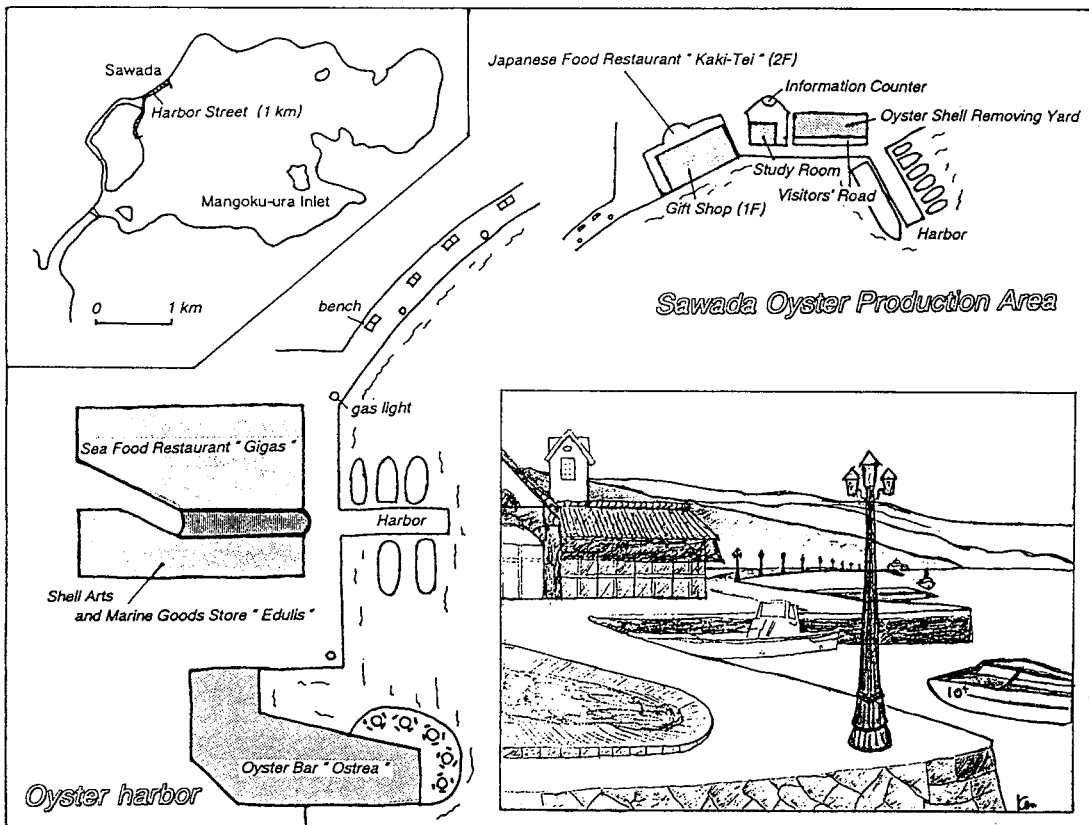


Fig.4. Schematic illustration of the Oyster Harbor and Oyster Production Area.

Ishinomaki. These sightseers can be the main target. On the other hand, the oyster harbor of the former will have young people from Sendai District and neighboring prefecture as the target. The time image will be "from evening to night." Japan's first Oyster Bar "Ostrea", European sea food restaurant "Gigas", shell arts and marine goods store "Edulis" and a mini-harbor will be provided. A very fashionable, trendy space will be created there as a place for the young with cars. No groups nor children will be accepted here. This kind of space may be not now exist on the coastline of the Tohoku District. These two facilities will be connected by a sea way and passengers' ships and a harbor street 1 km long with gas lights. This is the hardware phase. Basic facilities such as streets and harbors will be constructed by public works to maintain uniformity. The Sawada Oyster Production Area will be managed mainly by the Sawada Fishermen's Cooperative Association and partially by the tertiary sector method, and the Oyster Harbor will be managed under the leadership of the private sector.

**(2) Software phase****(A) Production of shelled oysters and home delivery system:**

The number of suspended ropes (farming ropes with cultured oysters attached) will be reduced by several dozen percent in order to eliminate the existing overdensity of farming, and oyster production will be changed from the previous oysters with shells removed to the shelled oysters because the selling price is higher for the shelled oysters. A purifying plant will be constructed. A sightseers' street for looking at the oyster shell-removing work and oyster shipping preparation will be constructed outside the oyster shell removing yard. Produced oysters will be utilized at each facility in the harbor and production area, and they will also be sent to orderers through the existing home delivery service.

**(B) Introduction of an oyster owner system:**

Each suspended rope (one rope with one hundred and several dozen oysters attached) will be sold to any one who wants to become an owner when the oysters are young (seed oysters or spats). The each rope sold to the owner will be cultured for 1 to 2 years by the Association and harvested together with the owner during the shipping season, or will be delivered to owner's home. The owner may visit the site at any time to see how the oysters are growing. This system is good for forming repeaters and also having visitors from distant areas as targets.

**(C) Experiencing and learning aquaculture:**

A variety of aquaculture learning and experiencing programs will be provided for primary/junior high/senior high school students, and the students will experience each process of production. This system may be built into part of school events and into the activities of children's associations, and also parent visitors with children can be considered as targets. These appointments or reservation will be received by the information counter, and the members of the Association will give lessons in study rooms or in an actual production field. This may create good relationship between the Association and visitors.

**(D) Various event planning:**

Catching fish by dragnets, picking up shellfish, fishing, swimming on the beach, diving, yachts and boats will be provided for ordinary visitors. At the harbor, disco parties, seaside band festivals and so forth will be held for young visitors. Also, events for residents will be provided, such as oyster and seafood cooking contests for housewives' associations, and oyster shell removing contests may be held for workers in aquaculture enterprises; and good cooking will be added to the menu at the restaurants. Information on various events will be supplied to not only the information booths at both the facilities but also to railway stations, hotels, inns, private house lodgings, stores, etc.

**(E) Supporting technology:**

(a) Research and development of new processed goods (local oyster processing enterprises, research organization), (b) research and development of the utilization of oyster shells (Fig.5) (disposal enterprises, research institutes), (c) research on the new utilization of oysters (Fig.6) (medicines, arts, oyster pearls, etc.), (d) purification of the Mangoku-ura Inlet and improvement of the sewage system (administration).

As stated above, local industry, government and schools as well as local citizens will aggressively participate in this project. The above is an outline of this scheme. Also, the creation of a network with other schemes in adjoining and existing facilities such as



Fig.5. A "hill" of oyster shells.



Fig.6. "Oyster pearl" (arrow) produced on the inner surface of an oyster shell (Okoshi, unpublished).

**Kesennuma's "Tuna City Scheme", Ayukawa's "Whale Land" and a new harbor being built in Omotehama will become an important factor.**

From the above, the important points in resort developments in local districts can be summarized as follows: (1) Unique ideas connected to regional images are required, (2) year-round type resorts are more desirable. Especially in northern areas, conquering winter in the scheme is an important problem, (3) targets (types of visitors and areas) must be clearly screened and determined, and it is not necessary to attract the city-dwelling people, (4) aggressive participation of local enterprises and citizens are more desirable, and (5) a network should be formed with other neighboring districts.

Japan is now in the middle of a "resort boom". However, most schemes for many local areas are based on very simple ideas including the construction of theme park or inviting resort hotels. This poor situation should be improved. Can the construction of theme parks or hotels really aid in regional development? This point should be fully re-examined.

"The purpose is to make the local residents happier". Never forget that this purpose is the basis of any resort development of the regional development type.