STUDY OF KOBE REGIONAL MARITIME CLUSTER

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I. INTRODUCTION

This paper focuses on Japan's "Kobe Maritime Cluster."

Discussions about forming maritime clusters in Japan are prevalent. The maritime industries of Japan are challenged by many rivals in international competition. Since many maritime professionals are concerned by this, we will discuss about the "maritime cluster" as in Japan.

The "maritime cluster" is expected to find the role of towing the maritime industry.

The cargo volume of the ocean-going vessels which depart and arrive in Japan is becoming less; Japanese seafarers are insufficient, as also are engineers, and shipbuilders. In 2000, the government made the slogan "Maritime Japan" as a motto towards creating a new maritime perspective, and to energize the Japanese maritime industry. Progress has been made and the industry has started to grasp the momentum. However, doubts remain of what a maritime cluster really is. Hence, at the present time, the problem is of definition, in order to proceed with the vision that the government initiated, for back in 2000.

Recently, the industrial policy, which used the cluster as the base, became a powerful tool for strengthening the competitive edge of a local area, a country, an industry, and or company. The maritime cluster has used Michel Porter's "industrial cluster theory." The company and the organization of the maritime field is approached geographically, and these cooperations complement and heighten the international competitive edge in the maritime field.

In the maritime cluster argument, making a maritime cluster of the whole of Japan was thought important that is until now. Kobe was chosen in order to utilize the local

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level, which has special character of a cluster. Kobe, which is a port city in Japan, is globally famous in the maritime industry, and a long tradition of shipbuilding and as a port. But on the domestic and the international level, Kobe has been losing competitive edge gradually, this because of acute competition. Therefore the policy of developing Kobe as once again a famous service provider, is very important!!

The arrival and departure of a foreign cruise ship is a business which has not been developed in the maritime field of Japan, and Kobe. The new and heterogeneous industry of tourism is fast growing. This facet cooperates with the existing port and maritime industry, and naturally contributes to the physical distribution and a logistics of people.

People in the West say that they are "yearning for a mystery and a challenge" and they find it in the word "maritime." European countries have for long explored the oceans. Much scientific development and technology were acquired, also wealth and glory. On the other hand Japan, protected from invasion by the sea (until, the 19th Century) has a different image. The sea wraps itself around us like air, and it was often who dared to challenge. However, future Japan has to make the sea its domain. Japan should lead the world by demonstrating its power in the maritime field. It is surrounded by this "yearning, the mystery, and the challenge."

2. HISTORY OF KOBE MARITIME CLUSTER

Kobe has a great maritime tradition and today the maritime sector plays an important role in the economy, creating value and employment. Kobe was the first East Asian maritime city to form a maritime cluster since its port opened to international trade in 1868. Kobe is the birthplace of world class maritime enterprises, such as Kawasaki Shipping and the ship-builders Mitsubishi and Kawasaki. From 1915 to 1917, 78 shipping companies were established in Kobe.

Kobe maritime cluster was located near Kobe port, which was lead by shipping companies and two large shipbuilding companies (including repair,) port logistics (or port transportation) and auxiliary ship industries Kobe has reaped huge benefit. Effects such as a strong image as an international maritime city, a high business efficiency level, a large accumulation of maritime related information, and transactional business etc. With the growth of global maritime enterprises and related support industries, active business operations with spin-offs, Kobe maritime industry was secure as an industrial dynamo.

Today, however, the physical distribution of overseas-shipping-business in Kobe is tending to word decline (Fig. 1). The following can be considered as reason; the role of the harbor in Japan's freight dealings is quoted like an export, which is required near the factory (Example: Nagoya's car industry.) As an import it is required near the large

consumer cities such as Yokohama and Osaka. Kobe lost its position because of the Great Hanshin-Awaji Earthquake (1995). Other cities in Japan grew as regardless:-

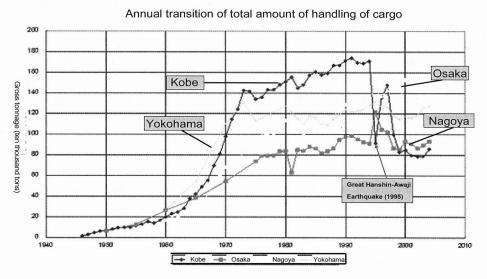


Fig. 1 Annual transition of total amount of handling of cargo 1)2)

3. Maritime Cluster

Michael Porter, who advocated the cluster theory, was the first to define the cluster and as follows:-

In the specific field, by common technology and know-how, are connected by:-

- Research institutions, such as universities
- Related companies
- Suppliers with high specialty
- Service donors, such as financial institution
- Related organizations (administration, economic, etc.)

Cluster is a state that gathers in one, local area. Cooperation is also given simultaneously, competing.

The view of a cluster is not an old view. In the middle of the 19th Century, Kobe was one of the very first ports in Japan to be opened to the West. The maritime companies were accumulated, centering on the harbor and Kobe University of Mercantile Marine [Present Faculty of Maritime Science of Kobe University.] The latter produced excellent navigators and engineers to the sector, and to industry, and to administration and academia. The cooperation was the building of the port town, Kobe. This can be called a cluster centering on shipbuilding and the marine business.

The rapid development of IT and transportation networks in recent years has changed Kobe. Technology flows out rapidly. Countries which have low production costs, create intense international competition. Moreover, the jump of wages and the shortage of youth are the problem of developed countries. This enlarges the crisis of the reduction of the maritime industry, and marine businesses in Japan.

Efficient and low cost competition is a reality in the world. Since imports use the harbor near large consumer areas, exports use the harbor near big production areas, the ratio of export and import use in Kobe harbor is declining, since the earthquake 1995⁴). The Cluster infrastructure of Kobe was taken by shifting headquarters of the maritime industry to Tokyo. Result, loss of logistics of goods, people, and money. Therefore, accumulations of the cluster effect needs to be artificially created. The notion which hits "cluster" is "Maritime Japan." However, the present condition is difficult. "Maritime Japan" is not getting the result because it is hard to take out a concrete maritime policy. This is because did not think from the range of the local area, but thought as the whole of Japan.

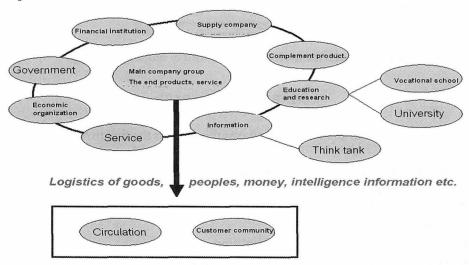


Fig.2 The concept of a cluster

4. MARITIME SPECIALIST OPINION OF KOBE MARITIME CLUSTER

Since the decline in the cluster effect is obvious, we conducted research into the opinion of maritime specialist opinion on strengthening the Kobe's maritime cluster, as well as the port itself. The research was carried out in July and August of 2005, and targeted shipping, port and shipbuilding industries, as well as maritime administration and the academic community. We sent out 114 questionnaires and collected back 44 sheets in return.

The followings are the results of the SWOT analysis, from their replies. The concern was of the lowering competitiveness of the Kobe maritime cluster. Reasons include

- 1. Transferring headquarters of local enterprises to Tokyo
- 2. Lack of talent among the younger generation
- 3. Lack of inter-industry cooperation between shipping and shipbuilding
- 4. Lowering of understanding of the maritime industry by the local society
- 5. Lack of competitiveness based on production costs
- 6. Lack of a leading company to lead the Kobe maritime sector [Such as Toyota of Nagoya]
- 7. Lack of a platform for the exchange of inter-industry information
- 8. Severe competition from neighboring ports, example Busan and Shanghai
- 9. Improper measures for developing, the maritime sectors
- 10. Lack of a world class, leading maritime company
- 11. Lack of world class leading education and research system

From the result of the questionnaires, the Ocean Policy Research Foundation coordinated the research committee of "Renascence of Kobe as international maritime centre" with 23 institutions in 2006 and the committee proposed to set up a working group consisting of the Municipal Office, the Chamber of Commerce and Industry, Kobe branch of the Ministry of Land, Infrastructure and Transportation and Kobe University, The working group will propose the road maps for realizing the maritime city of KOBE-2009.

5. Proposing "Kobe Maritime & Sightseeing Cluster"

We examined what kind of maritime cluster can be constructed in the Kobe maritime field.

The physical distribution of marine business of the oceangoing vessel in Kobe has been declining for ten years. It is because Kobe is losing large consumer areas, large-scale factories, etc. In order to activate the maritime sector in Kobe, logistics of goods, people and money required. Then, we must pay attention to cruise ships are of the purpose taking a "ship" and enjoying oneself aboard. Moreover, it is accompanied by the stay onboard. The function of the harbor for a cruise ships is mainly divided into two kinds, "destination type" and a "homeport type." In Japan, the homeport of Asuka II (one of Japan's cruise ships) is Yokohama. All ports in Japan are "destination types" for the foreign cruise ships. Cruise ship can give high economic impact to her homeport. A "destination type" has a restrictive economic effect. ⁵⁾

Therefore, we propose to invite foreign cruise ships to Kobe as a "homeport type."

Thus we can focus cooperation and also synergistic effect of the existing maritime industry. Tourism, which is cross-industrial, is proposed. This diversifies the maritime industry and develops the cluster of Kobe.

.The following is from the SWOT analysis of the Kobe, and about inviting cruise ships.

Strength	Opportunity
 Big consumer place and sightseeing location (Himeji, Kyoto, and Nara) which included the waterfront Great accumulation of shipping and the shipbuilding industries with 50,000 employments Convenient East-West public transport Good image of city of port, Kobe Support of residents and administration Traditional maritime knowledge An accumulation of universities including a maritime 	 More cruise-ships attractive activities Development of Kobe airport for sea and air Economic growth in East Asia area Ships are prosperous in the National Project of "Yokoso! Japan"
Weakness	Threat
 Few berths for cruise ships The cruise terminal and shopping quarter are placed quit for apart. Insufficient of CIQ equipment 	 The high cost risk for carrying out a new enterprise Competition from Busan and Shanghai Most tourists to Kobe are Japanese

6. Conclusion

Since the 2000, Ministry of Transport's "Maritime Japan", so far the maritime cluster theory is not progressing. This is because it was a cluster based on shipping which lacked the concept of "geographical proximity." Moreover, there is also another view, one which considers "marine business" in maritime industry.

The global image of the Sea of Japan is as a place connected to a maritime cluster it is formed for every local area, to widely catch the "sea". The mission is to make an answer which can overcome the uneasy element of a maritime correlative industry. It is required for a cluster to develop by cross-industrial cooperation, taking advantage of the maritime industry, the culture, the geographical features, and the features of a local area for that purpose.

When considering the maritime cluster of a local area, such as Kobe, which used to be the center of marine business of Japan. The industry, administration and academia exists from a century ago. The "Kobe Maritime & Sightseeing Cluster" centering on cruise ships, are a new possibility as a model of the maritime cluster, in the feature.

Japan has been developing many integrated factory areas but it is not building a cluster. The talented people supporting the whole maritime industry are decreasing in number, and competitors overseas are increasing.

It is important to build a new maritime correlative industry for Japan.

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