A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

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Introduction

Japan has currently been the top donor of Official Development Assistance (ODA) to the Philippines, in particular financing many of the country's infrastructure building projects. Japan's ODA has had considerable influence on the Philippine polity, economy, environment and society, but there has been little detailed researches on that impact. This study mainly examines the fishing port development project as a typical case of Japan's ODA loan financed projects. The impact of the project can be observed in various ways, but here, it is assessed by the public acceptance in the local communities, for the degree of public acceptance is the clear reflection and indication of the immediate impact on society. This public acceptance was researched among various concerned parties, including both governmental and non-governmental sectors which were involved and/or affected by the project. Based on the findings, the performance of Japan's ODA projects is evaluated in respect to their local acceptability. Some ideas for the improvement of ODA projects will also be proposed.

I. Public Acceptance of ODA in the Japanese Society

The government of Japan has provided to the Philippines a
large amount of ODA since the 1960s. The majority is in the form of Yen Loans (Yen Credit) which is channeled through the Overseas Economic Cooperation Fund (OECF). Yen Loans started in 1969 with the construction of the "Japan-Philippine Friendship Highway" as the first project financed. It has been made into an almost annual event since 1971. Every year a package of various projects is prepared and agreed by both governments and an agreement called "E/N" (Exchange of Notes) is signed. Up to now the total amount of yen loans is over ¥1 trillion or US $10 billion if converted at the present rate of exchange.

Previously, until the early 1980s, ODA was generally well accepted by the Japanese public as a symbol of good will diplomacy in Asia, except in a few suspected cases of corruption such as the supply of subway cars for the city of Seoul, South Korea. When some concerns were raised about ODA, those were usually on the amount being seen as too small or the conditions too restrictive, in other words, not generous enough.

After the killing of Ninoy Aquino in 1983, some political activists in the Philippines started criticizing Japan for giving ODA to the dictatorial regime of Ferdinando Marcos and asked it to be stopped. Such voices reached Japan and doubts about ODA spread when opposition Diet members started asking questions to the government controlled by the then ruling Liberal-Democratic Party.

Eventually in 1986 after the fall of the Marcos regime, the Honolulu papers were made public as the evidence of the hidden wealth of Mr. Marcos and his cronies. A good part of his ill-gotten wealth was found to be channeled from Japan's ODA loans.
Japanese tax-payers were annoyed by this scandal, and the credibility of ODA, especially to the Philippines, suffered a big loss. There was no yen loan package for 1986. However, Mrs. Aquino's clean image and some efforts by her government to reorganize the receiving mechanism made it possible to resume aid and even to increase the amount granted to the country from 1987.  

Since then, some news about misuses and trouble regarding ODA projects in the Philippines have been reported in the Japanese press from time to time. In general, however, the provision of ODA to the Philippines is not questioned so much, and is therefore more or less accepted, except in one controversial case, a project to expand the commercial port of Batangas City (See Chart 1).  

In May 1994, a group of Japanese, including some Diet members, visited the project site in Batangas City. They met with the local residents who were told to relocate to make way for the expansion. The visitors understood clearly that the condition proposed to the residents for eviction was far from being satisfactory. Japanese TV programs and newspapers started to cover the situation, and there was also an extensive lobbying effort by concerned citizens' movements in Japan in response to a request came from the people of Batangas.  

Despite the growing concerns, on the 27th of June, the Philippine Port Authority of the government mobilized the military and police to demolish the houses. Some local residents were injured by gun shots. At this sudden development, the Japanese government had to suspend the release of the OECF fund. But about six months later, in December, the OECF resumed the
Chart 1. Map of Fishing Port Projects and Calabarzon
funding, and the project is back in process as if nothing had happened. However in Japan, there remains strong criticism on this case.

Therefore, it can be said that the smooth operation of Japan's ODA to the Philippines depends chiefly on two factors: 1) the accountability of the administration, and 2) public acceptance in the project areas. Controversies can be provoked anytime unless the image of the regime stays comparatively clean from the point of view of the Japanese masses that are generally not well informed about the Philippines, and no strong voices of opposition are raised by the local people and heard in Japan.

I will not go any further into the issue of public acceptance of ODA in Japan, as the main concern here is how it is in the Philippines, especially in the localities where Japan's ODA financed projects are carried out.

II. The Growing Importance of Public Acceptance

Public acceptance is the term often used in Japan in relation to the construction and operation of nuclear power stations. The people are well aware that nuclear power stations can be fatally dangerous. The fuel is radioactive material and the reactors produce nuclear waste of even more deadly high-level radioactivity. Even a small leakage over time or one serious accident in a moment could cause death and suffering among a large number of people, especially those who live in close proximity to a nuclear power plant.

In order to achieve the acceptance of the neighborhood, many benefits, including a large cash contribution, new school
buildings, public athletic centers and other items are provided by the national government and the power companies. For example, ¥500 million (US$5 million) in budget support is to be distributed to each immediate neighboring municipality for the construction of every new or additional reactor on a plant site. This is the cost of buying public acceptance.

In Japan, many plans for constructing nuclear power stations were cancelled in the past due to strong opposition of local communities. Various other types of industrial and tourism related development plans have also met resistance from the residents who are to be affected. Many such plans have consequently been cancelled or become long delayed. Therefore, the issues of achieving public acceptance in all kinds of development projects have come to be considered very important among the national and local administrations as well as the general contractors, trading houses, banks and other business firms which have vital interests in those projects.

Similar cases have been experienced in the Japan's ODA financed projects in the Philippines. Some of the better known examples are the coal-fired power station in Calaca, Batangas, the geothermal power station at Mt. Apo in Mindanao, the Pampanga Delta Development Project as well as the already explained Batangas Port expansion.

Therefore, as can be seen from such examples, there is a growing awareness today among the concerned people and organizations regarding the importance of public acceptance in ODA project sites.
III. Fishing Port Development in Luzon: A Case Study

It is easy to criticize the misuse of ODA funds, but much more difficult to address the problem of mismatches between certain projects and local needs.

I have conducted some case studies regarding this issue, including the fishing port project at Camaligan, Lucena and Sual on the island of Luzon." Let me first examine the outline of the project (see Chart 1 and Table 1).

For the Philippine Fishing Port Development Project, ¥8.34 billion was financed from the 7th Yen Loan package (E/N on 07 Nov 1978) for engineering service (E/S) and construction." The additional ¥3.63 billion loan was committed in the 10th Yen Loan package (E/N on 26 May 1982) for facilitating cold storage and freezers." Therefore, the total amount was ¥11.97 billion, which was one of the major projects in this period. The executing agency in the Philippines was the Department of Public Works and Highways (DPWH, but during the late years of the Marcos administration it was reorganized into the Ministry of Public Works, or MPW). After completion, the facilities were turned over to the Philippine Fishing Development Authority (PFDA) for operation.

The aims of the project, according to the Japanese Ministry of Foreign Affairs, were stabilization of fish prices, development of marine industry and related local industry, and improvement of the food supply situation in the country through modernization of fishing ports."

Five ports were built in Iloilo, Lucena in Quezon Province, Zamboanga, Sual in Pangasinan and Camaligan near Naga in
### Table 1. The Fishing Ports Project

<table>
<thead>
<tr>
<th>LOCATION OF FISHING PORT</th>
<th>TYPE OF FACILITIES</th>
<th>CAPACITY</th>
<th>SUPPLIER</th>
<th>DATE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iloilo</td>
<td>Block Ice Making Plant</td>
<td>50 tons/day</td>
<td>HASEGAWA</td>
<td>November 1985</td>
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<tr>
<td>Fishing Port</td>
<td>Daily Ice Storage (-5 C)</td>
<td>50 tons</td>
<td>Refrigerating</td>
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<tr>
<td>(Tanza, Iloilo City)</td>
<td>Ice Storage (-5 C)</td>
<td>200 tons</td>
<td>Industries Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-5 C)</td>
<td>100 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-35 C)</td>
<td>500 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact Freezer (8 sets)</td>
<td>960 kg/set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air Blast Freezer (-45 C)</td>
<td>4.5 tons/12 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zamboanga</td>
<td>Block Ice Making Plant</td>
<td>70 tons/day</td>
<td>HASEGAWA</td>
<td>July 1988</td>
</tr>
<tr>
<td>Fishing Port</td>
<td>Daily Ice Storage (-5 C)</td>
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<td>Refrigerating</td>
<td></td>
</tr>
<tr>
<td>(Sangali, Zamboanga City)</td>
<td>Ice Storage (-5 C)</td>
<td>150 tons</td>
<td>Industries Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-5 C)</td>
<td>70 tons</td>
<td></td>
<td></td>
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<td></td>
<td>Cold Storage (-35 C)</td>
<td>500 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact Freezer (4 sets)</td>
<td>960 kg/set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air Blast Freezer (-45 C)</td>
<td>5 tons/12 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brine Freezer</td>
<td>10 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucena</td>
<td>Block Ice Making Plant</td>
<td>25 tons/day</td>
<td>MAYEKAWA</td>
<td>October 1991</td>
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<td>Fishing Port</td>
<td>Flake Ice Making Plant</td>
<td>5 tons/day</td>
<td>Manufacturing</td>
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<td>(Dalahican, Lucena City)</td>
<td>Daily Ice Storage (-5 C)</td>
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<td>Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ice Storage (-5 C)</td>
<td>75 tons</td>
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<td></td>
<td>Cold Storage (-35 C)</td>
<td>50 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact Freezer (2 sets)</td>
<td>400 kg/set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pangasinan</td>
<td>Block Ice Making Plant</td>
<td>15 tons/day</td>
<td>MAYEKAWA</td>
<td>November 1991</td>
</tr>
<tr>
<td>Fishing Port</td>
<td>Daily Ice Storage (-5 C)</td>
<td>25 tons</td>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>(Sual, Pangasinan)</td>
<td>Ice Storage (-5 C)</td>
<td>60 tons</td>
<td>Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-5 C)</td>
<td>25 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-35 C)</td>
<td>100 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact Freezer (2 sets)</td>
<td>960 kg/set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicol</td>
<td>Block Ice Making Plant</td>
<td>15 tons/day</td>
<td>MAYEKAWA</td>
<td>September 1991</td>
</tr>
<tr>
<td>Fishing Port</td>
<td>Daily Ice Storage (-5 C)</td>
<td>30 tons</td>
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<td></td>
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<tr>
<td>(Camaligian, Camarines, Su)</td>
<td>Cold Storage (-5 C)</td>
<td>20 tons</td>
<td>Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cold Storage (-35 C)</td>
<td>30 tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact Freezer (2 sets)</td>
<td>400 kg/set</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Philippine Fishery Development Authority and Project Management Office. (as of Feb., 1992)
Camarines Sur, the Bicol region. Except Zamboanga, I have visited all of them, some twice.

The Japanese Embassy in Manila has conducted an evaluation on Iloilo and Zamboanga in December 1991 and the report was published by the Economic Cooperation Bureau of the Gaimusho, or Ministry of Foreign Affairs, in June 1993.18

According to the report, Iloilo fishing port had been completed five years before the evaluation was conducted (1986), while Zamboanga was finished and put into operation in 1988. The Embassy's evaluation is rather positive and optimistic, stating that operations were generally proceeding smoothly without problems. However, it points out the under-utilization of some of the facilities such as the repair shop for fishing boats and also the fish market hall in the case of Zamboanga in particular. I have not had a chance to cross-examine in detail the results of their evaluation, but if it is as described, those two examples must be better cases than the rest. What I found was much more problematic.

(1) **Extreme delay in completion of the construction.**

The first portion of the yen loans were decided in 1977 but it took 9 to 15 years until they became operational. According to the OECF office in Manila, there was no significant difficulty, but constant delays took place, such as construction materials found missing and so on. However, the Project Management Office (PMO) in Manila disclosed to me a problem at Sual of machinery purchased from Japan and brought into the construction site in 1983 having to be stored for six years because the building for it was not constructed. When they finally tried to install it in 1989, it
caught fire, causing further delay. This illustrates poor management on the part of both the Philippine and Japanese sides.

(2) Wrong choices for project location.

The Camaligan Fishing Port is a river port. It takes two to three hours for engine powered fishing boats to go upstream for the distance of 30 kilometers to reach it from the mouth of the river. Moreover, at low tide the river becomes too shallow making it impossible for boats to travel at all. The result is that fish loses freshness by the time they reach the port. More unfortunate are the small fishers. They are automatically excluded because of the distance and the traveling speed of their small and simple boats.

When I first visited Camaligan in August 1990, the cold storage facility was under construction. I met some Japanese engineers and they told me about their worries and frustration. They believed that the port should have been built at a spot on the sea coast where the local fishing port was functioning. The original plan was on the coast, but it was changed several times. Politically powerful figures, such as the then head of the Philippine National Railways and his younger brother, the mayor of Camaligan, exercised their influence to finalize the site for their convenience, according to the Japanese engineers.

In Dec. 1991, I revisited the site. The port had been in operation for three and a half months. PFDA officials proudly explained to me that in November they had made a small profit of about 30,000 pesos (US$1000). Yet I wondered, how could they repay the loan of about ¥2 billion (US$20 million) plus interest spent for this port alone on such meager returns?
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

The cold storage was apparently under-utilized. I found a large amount of chicken meat stored there. PFDA explained that they were maximizing the use of the available capacity by renting out the space to a Manila based major meat business. That may be better than being left empty, but would it meet the original aims of the loan package?

(3) Marginalization of the small scale fishers.
There are conflicts of interest between the small scale/subsistence fisherfolk and the larger commercialized fishing industry. According to Mr. Delfin C. Carlos, spokesperson of NACFAR, a national NGO of small fisherfolk, the construction of fishing ports did not benefit the coastal fishers but rather caused them many problems.

First of all, the dislocation of small fisherfolk to make way for building fishing ports arose. Seashores are legally government property, and many of the coastal fishers are considered to be squatters with no recognized right to live in and use the shores. They are just simply evicted.

Second, the price of fish goes up. Fishing ports promote the shipment of fish to bigger markets such as Manila and even overseas. This is good for the commercial fishing industry, but small fishers suffer because it causes inflation of fuel, fishnets, bangka boats and foodstuffs.

Thirdly, ODA financed large fishing ports are used mostly by the commercial fishing industry, not only because of the often inconvenient location but also to tax collection. In order to avoid being taxed, small fishers usually bring their catches to the local
market, not to the fishing ports. The commercial fishers often have ways to minimize or evade tax collection through personal connections.

Mr. Carlos proposed a concept of fishing ports managed by fisherfolk themselves. Small scale fishers could possibly benefit from building fishing ports if they were more organized in cooperatives. In reality, the location of fishing ports are decided by powerful politicians and their business associates, and the land owners at the port site and surrounding areas derive large gains from the increase in land value as roads and other infrastructure are built.

I learned from the Regional Office in Naga for Region V of the Department of Agriculture that trawlers had depleted the fish stock and caused severe damage to the marine environment and to the local coastal fishers in Bicol. Consequently, the government banned trawlers from the most (7 kilometers from the shore) of San Miguel Bay in 1985. It was not well enforced however, due to poor capability in monitoring as the Navy had only one boat to conduct that duty. There have been serious conflicts of interest between the small and the larger commercial fishers over the marine resources.

In the process of planning and implementing the fishing port project financed by the yen loan, neither the OECF nor DPWH seemed to have taken this problem into account. This should be considered as the most important shortcoming of the project.

Conclusion

If the government of Japan truly wishes to improve the level
of public acceptance of its ODA, it has to design projects that work to reduce problems in the local community. As seen in the case of the three locations in Luzon, there is a sharp contradiction between large commercial fishers and small subsistent fisherfolk. This difference requires a good deal of consideration on the part of the OECF. It should at least not disturb the efforts of the fisherfolk, together with NGOs, to correct the situation. They have been trying hard to organize themselves and to enforce the stronger ban on trawling on and near the coast.

On the contrary, by building a fishing port at Camaligan which is far from the sea, trawlers are in fact encouraged to fish in the San Miguel Bay rather than outside it because it is much faster and easier to bring the catch to port. As law enforcement remains loose, such a project would certainly have a negative effect, further marginalizing the small fisherfolk along the coast. Instead, as people are developing the concept of fishing ports managed by cooperatives of small fisherfolk, as Mr. Delfin Castro said, it is worth examining assisting this concept, even with just a fragment of Japan’s ODA funds.

The fundamental problem in Third World societies, such as in the Philippines, is the gap between the rich and poor, which is, in many cases, still increasing. ODA has a tendency to worsen the gap. Unless the drastic efforts are made to reverse this trend, ODA should be stopped.

NOTES
1. This article is based on the paper presented at the Fifth International Philippine Studies Conference held in Honolulu, April 14-16, 1996.
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon


3. Ibid.
4. Ibid.
5. Ibid.
6. Ibid.
8. Ibid., p.155.
13. A subsidy in accordance with the three laws for promotion of electric power generation since 1974.
14. This research has been conducted with repeated field work trips since August 1990.
16. Ibid.
17. Ibid.

This article is one of the products of a series of my researches, entitled "a Research on Evaluating Public Acceptance of Japan's ODA Assisted
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

Appendix 1.

THE BICOL FISHING PORT NETWORK

BASIC OBJECTIVES

The Bicol Fishing Port Network consists of a main facility adjacent to a main regional population concentration and the country's transport trunklines (PJHL and PNR); and, the development of a number of smaller ports located in the region's fishing grounds linked to regional and other markets through the main facility.

The main facility is located in Camaligan, Camarines Sur with the smaller ports distributed in several locations in the said province alone (Cabusao, Calabanga, San Vicente, Caramoan, Ragay, Presentacion and Sagnay).

The smaller ports will be served by refrigerated vans from the main facility to maintain freshness of fish and other marine products until these arrive at the markets or at the storage and processing facilities at Camaligan. Under this scheme, the prices of such products are maintained or improved and spoilage kept to a minimum. In this manner, productivity of the extensive fishing grounds surrounding the region is enhanced. The region is also assured of supply of fish and marine products that meet the highest standards of the domestic and international markets. The storage facilities of the Network also assure a stable supply of these products, reducing the seasonal fluctuations of prices for such commodity. The development of the Bicol Fishing Port Network more importantly will provide small-scale fishermen access to better market opportunities and higher prices to increase incomes in the region’s fishing communities.

PRINCIPAL FACILITIES OF THE
CAMALIGAN FISHING PORT NETWORK

Built on 16,000 square meters, the port complex is provided with a multi-purpose pier; refrigeration building; market hall; navigation aids; utilities including water supply, drainage, sewerage, pavement and parking areas, dormitory, administration building; power supply; water pump house; and, guard house. The refrigeration system is designed for freezing, ice-making, processing, packing and storing of fish products to meet international standards. It includes a 15-ton per day ice-making plant; a -35 degree centigrade cold storage room; two contact freezers for prawns, shrimps, milkfish, and the like; and, a -5 degree centigrade chiller room having a 20-ton capacity for fresh fish products.

Aside from the market hall, the Complex also can provide relevant market information and prices (foreign and local) through its daily bulletins so that fishermen can be guided properly in disposing of their products, thereby also maximizing incomes.

CONSTRUCTION AND OPERATION

The Project was constructed under the supervision of the Department of Public Works and Highways (DPWH) through its Project Management Office (PMO) for Ports, with assistance from the Japanese Government through the Overseas Economic Cooperation Fund (OECF). The Philippine Fisheries Development Authority (PFDA) of the Department of Agriculture will operate the port network in coordination with the local government units concerned.

Completed ahead of schedule, the project cost only about P116 Million with realized savings of more than P60 Million.
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

Appendix 2.

THE PANGASINAN FISHING PORT NETWORK

BASIC OBJECTIVES

The Pangasinan Fishing Port Network is basically intended for the optimum utilization of the rich marine resources of Lingayen Gulf and the waters off the western coastline of Pangasinan; and, maximize production in the extensive inland fisheries resources for which Pangasinan is noted throughout the country.

The high quality fish processed in this port network can then be exported to other countries and the other fish species can be consumed locally with the surplus sent to other nearby fish deficit areas. The port network is equipped with the necessary equipment that meet international export requirements and to maintain freshness of products intended for the domestic market.

As a result of the availability of facilities, the local fishermen particularly the small-scale ones will have access to better markets and their incomes could also be increased through selective product handling. This should encourage them to increase production while conserving their source of livelihood.

It is estimated that the port will handle some 10,000 metric tons annually of fish and other marine products and open about 3,000 new jobs related to trading activities and the processing of fish. In addition, some 2,000 fishermen are expected to use the port. It has also been calculated that exports of prawns, tuna and octopus could reach $15 Million yearly.

CONSTRUCTION AND OPERATION

The Project is being constructed under the supervision of the Department of Public Works and Highways (DPWH) through its Project Management Office (PMO) for Fishing Ports and PCI/Basic Team Consultants. The Philippine Fisheries Development Authority (PFDA), of the Department of Agriculture, will operate the port network after completion.

Construction funds are provided for by the Philippine government and a loan from the Japanese government through the Overseas Economic Cooperation Fund (OECF PH-P25). The project cost is about ₱62 Million for Civil Works and ₱25 Million for Government Furnished Materials (GFM).

The Pangasinan Fishing Port Network consists of developing a Main Fishing Port Complex in Sual and two (2) satellite/feeder ports (Bolinao and Damortis). Construction works are being undertaken by Kawasaki Steel Corporation and involves the following major items of work:

A. Sual Fishing Port Complex
   1. Reclamation of 3.0 ha. port area
   2. Revetment appurtenant to the reclaimed area
   3. Multi-Purpose pier and banca landing
   4. Slipway and workshops
   5. Navigation Aids
   6. Utilities such as water supply, drainage, sewer, pavement and parking area
   7. Installation of the electro-mechanical works for refrigeration system
   8. Major Building Facilities:
      a) Refrigeration Building (37.5 m x 64.80 m)
         - 35 deg. C Storage Room : 350 T capacity
         - 5 deg. C Storage Room : 350 T capacity
         - 45 deg. C Air Blast Freezer : 5 T capacity
         - Contact Freezer : 3.84 T capacity
         - Ice Machinery Plant : 25 T
         - Daily Ice Storage - 5 deg.C : 25 T
         - Ice Storage -5 deg.C : 60 T
      b) Fabrication Shop Building, 20.0 m x 50.0 m
      c) Carpentry Shop, 10.0 m x 15.0 m
      d) Foundry Shop, 10.0 m x 10.0 m
      e) Market Hall, 12.0 m x 30.0 m
      f) Winch House, Fresh and Sea Water Pumphouses, Guard House and Comfort Rooms
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

B. Satellite/Feeder Ports

1. Bolinao Fishing Port
   a. Reclamation of 3,800 sq.m. port area
   b. Revetment appurtenant to the reclaimed area
   c. Rockmole and Concrete Quay Wall, 4.00 m x 2.00 x 60.00 m
   d. Market Hall, 12.00 m x 20.00 m

2. Damortis Fishing Port
   a. Rock Causeway Ext., 5.50 m x 16.50 m
   b. R.C. Wharf, 9 m x 14 m
   c. Improvement of Access Road, 217 m

PRINCIPAL FACILITIES

Refrigeration Facilities

The 3.0-hectare reclamation port area in Sual has a refrigeration system for ice-making, processing, packing and storing of fish products so that they can meet stringent international standards. For this purpose its various facilities are a 15 T/day ice making plant, -35 deg. C cold storage rooms; two contact freezers for prawns, shrimps, milkfish, etc; and a 25 ton chiller at -5 deg. C for fresh fish products.

Boat Repair, Drydocking and Other Facilities

The Complex has boat repair facilities with a slipway capable of dry-docking vessels of up to 100 G.T. complimented with fabrication, engine, electrical, machine, foundry and carpentry shops complete with equipment and tools including a 3-T and a 5-T overhead crane for handling heavy loads, and two sets of lathe machines.

Marketing Facilities

Aside from the market hall, the Complex also can provide relevant market information and prices (foreign and local) through its daily bulletins so that fishermen can be guided properly in disposing of their products, thereby maximizing incomes.
A Study on Public Acceptance of Japanese ODA Projects and Their Impact on Philippine Society: The Case of Fishing Port Development in Luzon

LEGEND:
1. SLIPWAY
2. WINCH HOUSE
3. FABRICATION BLDG.
4. FOUNDRY SHOP
5. WATER TANK
6. REFRIGERATION BLDG.
7. MARKET HALL
8. BANCA LANDING
9. COMFORT ROOM
10. SEA WATER PUMP HOUSE
11. MULTI-PURPOSE PIER

PANGASINAN FISHING PORT NETWORK
SUAL MAIN FISHING PORT COMPLEX