

The fishery damage by National Isahaya Bay Reclamation Work

【 At the Isahaya Bay in Nagasaki Prefecture from April 14 in 1997 ~ 】

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In spite of the opposition from many people involved in the fishing industry and local people, the water gate of the Isahaya Bay salt pan embankment was closed on April 14 in 1997. The subject areas of this plan are Isahaya City, Moriyama Town, Takaki Town, Agatsuma Town, and Aino Town in Nagasaki Prefecture (Fig.3 reference). Following this National Isahaya Bay Reclamation Work was started whose content of the construction is creating the reclamation farmland of about 700 hectares inside (Fig.1~3 reference). The total cost is about 250 billion yen. Completion is due in fiscal 2006, and over 90% of the construction already ended by 2004. According to "the national Isahaya Bay land improvement work changing plan" announced in the year-end of 1999, the purpose of this project is “ Making come true the agriculture with the high productivity by developing the large-scale flat superior farmland which has the regulating reservoir and the water whose source is the regulating reservoir.

strengthening the disaster prevention function against the storm tide, the flood, and the poor-drainage in the back swamp. ". But National Isahaya Bay Reclamation Work is told that it has affected something unusual in the Ariake Sea, and it has also caused the large disturbance of the fisheries promotion that has resulted in the decrease in the laver harvest and so on (Fig. 4,5 reference). Comparing the increase in the agricultural yield by making the new farmland with the transition of decreased harvest, there are some comments that it is a failure in terms of being the national work contributing to upgrading the degree of self-sufficient food. In addition, though they have declared the prevention of disasters as one of the work's purpose, floods have not decreased or rather there are even some reports that the new types of inundation disasters have happened. Nation and Nagasaki Prefecture should carry out the proper reevaluation for this project, and distribute the information. And the examination of stopping the project has also been required.

The judgment was transferred to the field of the judiciary. The national Isahaya Bay reclamation work which typifies the public works about which it is said “ Once public work starts, it never stops ” was carried out under the provisional disposition application of the suspension of the construction. This was applied for by 106 fishermen of coastal 4 prefectures because the fishery damage by the unusualness of

Ariake Sea was caused by the effect of the national Isahaya Bay reclamation work. On August 26th, 2004, Yoshiyasu Enomoto (the presiding judge of Saga District Court) initially decided that the construction would be forbidden. At last the provisional disposition of the suspension of the construction was decided. However, the State objected as it is natural to rule according to past precedents as in the past justice of public work. The sterile combat has continued. Will it be possible to stop the national Isahaya Bay reclamation work, which typifies the public works about which it is said “Once public work starts, it never stops”? Or will it be reversed in the future justice and will it be ended with the temporary joy of local area inhabitants? The outcome of the trial and government measures attracted great public attention. The result... In May, 2005, Fukuoka High Court removed the statement of the fishermen because the general proof was needed to judge the suspension of the construction. In addition, on September 30th, 2005, the Supreme Court rejected the complaint of the fishermen. By the judgment, the decision of Fukuoka High Court which canceled the decision of Saga District Court which prohibited the remaining construction was determined.



Fig.1 (Source: Home Page by Ministry of Agriculture, Forest and Fishery)

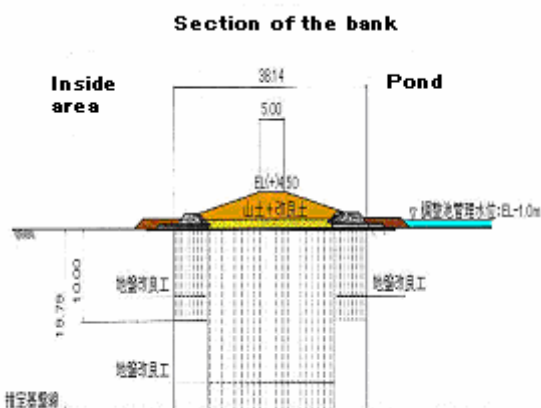


Fig.2 (Source: Home Page by Ministry of Agriculture, Forest and Fishery)

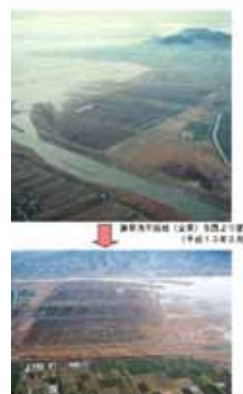
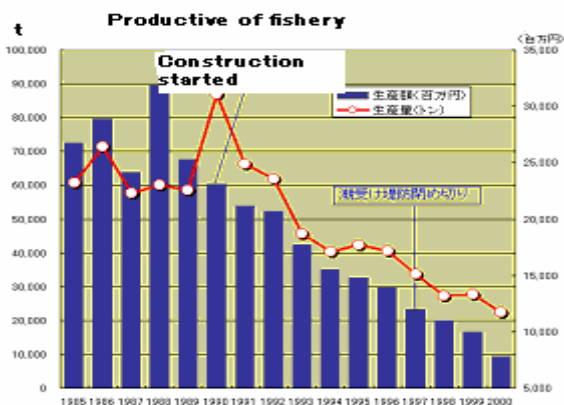
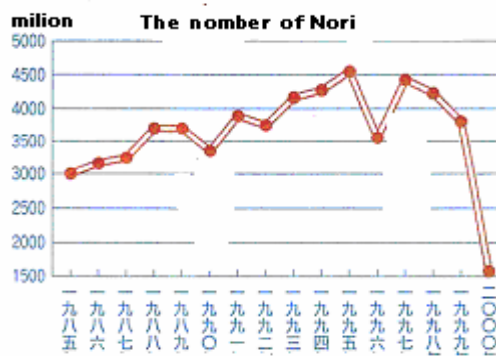


Fig.3 (Source: Home Page by Ministry of Agriculture, Forest and Fishery)



(Source: Home Page by "Come Back, the Ariake Sea!")
Fig.4



(Source: Home Page by "Come Back, the Ariake Sea!")
Fig.5

1. Event

The content of the construction is isolating the end of the Isahaya Bay by the salt pan embankment and creating the reclamation farmland of about 700hectares inside. About the cause-and-effect relationships between National Isahaya Bay Reclamation Work and something unusual in the Ariake Sea, the investigation work has still been continued. (The loss of the water purification function and the increase in the bad influence The change of the flow (tidal level, velocity of flow, and flow direction) The increase in the red tide The generation of the anoxic water mass The decrease in atrina pectinatas, ruditapes philippinarum, and so on, The poor growth of them, The death of young shellfish The change in the nature of the bottom in the Isahaya Bay (accretion of floating mud and becoming fine-grained) and the decrease in benthos.)

2. Course

The national Isahaya Bay reclamation work is based on “national Isahaya Bay reclamation work plan” announced in 1985. After some delays such as the scale reduction etc in 1992, it started. On April 14th, 1997, the water gate of the embankment was closed. However, the tideland in the Isahaya Bay was dried up by the national Isahaya Bay reclamation work. The organisms which lived in the bay received the destructive damage. The environment problem called “the unusual event in Ariake Sea” became serious. The discussion on the appropriateness of Isahaya Bay reclamation work increased. The laver culture industry of the whole Ariake Sea received enormous damage by the generation of the red tide from December, 2000, which was of the biggest scale. The crop of the laver was record-breaking bad. The sharp decrease of seafood in Isahaya Bay and Ariake Sea started from the commencement of the work. Many people in Japan became to know the unusualness of Ariake Sea because of the bad crop of the laver. To stop the fishery damage, each fishermen cooperatives in the coast of Ariake Sea (Saga, Fukuoka, Kumamoto) insisted that the unusualness of Ariake Sea was mainly caused by the construction of the reclamation work, in November, 2002, demanded the suspension of the construction of the reclamation and took first filing suit to Saga District Court. The judgment was transferred to the field of the judiciary. The national Isahaya Bay reclamation work was subjected to the provisional disposition application of the suspension of the construction which 106 fishermen of coastal 4 prefectures had applied for. On August 26th, 2004, Yoshiyasu Enomoto (the presiding judge of Saga District Court) initially decided that the construction would be forbidden. At last the provisional disposition of the suspension of the construction was decided. However, the State objected as it is natural to rule according to past precedents as in the past justice of public work. As the result, in May, 2005, Fukuoka High Court removed the statement of the fishermen. In addition, on September 30th, 2005, the third petty bench of the Supreme Court rejected the complaint of the fishermen. By the judgment, the decision of Fukuoka High Court which canceled the decision of Saga District Court which prohibited the remaining construction was determined.

3. Cause

- The holes ,which were dug in order to pick sea sand, have been a hotbed of the anoxic water mass.
- The salt pan embankment has caused a weakening the tidal current and a raising of the tidal level.
- "Foul water" discharged from regulating reservoir has contaminated the whole Ariake Sea.

- The Isahaya Tideland Mud Flat , which had retained the high clarification function, decreased because of the closing the salt pan embankment. Because of the drainage from the regulating reservoir, the discharge volume of organic matters, phosphorus, nitrogen, and so on have increased.
- The holes, the embankment, and the foul water, have caused generation of the red tide.
- Since there had not been countermeasures against the high water at all at the Oura Harbor, the dangers in typhoon (, storm tide, or flood tide) increased after the completion of the salt pan embankment.

4. Immediate Action

When the crop of the laver was bad, some fishermen have carried out the acid treatment which began at the middle of the 1970's. But it is said that the acid treatment may cause the further vicious circle.

Against the background of the national criticism which was "Once public work starts, it never stops", in December of 1997 Prime Minister Ryutaro Hashimoto directed the 6 public work relations of 6 ministries and agencies concerning public works to introduce the reevaluation system of public works. That was why, the Ministry of Agriculture, Forest and Fishery introduced its own reevaluation system, starting from fiscal 1998. However, the following are being mentioned as a problem of the reevaluation system: That they do not guarantee fact, information disclosure and citizen participation of the evaluation content has narrowly been limited, and most of the reevaluation in a past becomes the business ratification, etc... It is strongly desired that it looks at social conditions and environmental problems of the actuality directly, and that the specialist carries out the fair evaluation, and that it demonstrates the function as a rational evaluation system which also contains the judgment of the business review in visual field without ending as a result justifying the business continuation, of which this reevaluation system is merely a formality.

5 Countermeasure

In February of 1998, Nagasaki Prefecture set the numerical target of the water quality protection about the environmental impact assessment, the review and the prediction of the water quality in the regulating reservoir. Nagasaki Prefecture settled on the Initial Stage Water Quality Protection Plan, and promoted the systematic and synthetic water quality protection countermeasure in order to achieve this numerical target. It is necessary that the administration steadily carry out the plan on the basis of

the specialist's view and opinion, and properly maintains the water quality in the regulating reservoir throughout the future. In addition, the water quality protection plan must be revised at every regular period, and reviewed by having its basis in the progress of the various countermeasures and the change of the new situation. But the result of review in 2001 was very different from the prediction of the environmental impact assessment of National Isahaya Bay Reclamation Work in 1986, and it has been said that it is doubtful whether the water quality protection plan will be achieved.

6. Generalization

National criticism and anger for public works which are said "Once public work starts, it never stops" were begun by the case of Nagaragawa river mouth barrier and accelerated by the image of the guillotine of the Isahaya Bay. The decision by the judiciary about the national Isahaya Bay reclamation work was hard to accept for the plain tiffs. They were very sad. However, in the Kawabekawa River dam plan (same Kyusyu), on May 16th, 2003, the party which opposed the construction won in water use hearing of the intermediate appeal, even though the State applied the expropriation vote of fishing right. In Kawabekawa River dam, the construction of the dam had not started at the time of writing (2005) though the Ministry of Construction (the Ministry of Land, Infrastructure and Transport) announced the plan in 1966 (40 years ago).

However, the State does not change completely. Kitagawa (the Ministry of Land, Infrastructure and Transport) says "it is necessary to complete as soon as possible." The anger and the opposition movement of the local areas' citizens for many useless public works such as the Isahaya Bay reclamation work, the Nagaragawa River mouth dam, the Yoshinogawa River movable weir and the Kawabekawa River dam attract the attention of Japanese people and change the rigidity of public works.

7. Background

We can cite Nagasaki Prefecture, the Ministry of Agriculture, Forest and Fishery, Nagasaki Great Reclamation Resolution Alliance Association, and the area's farmers as the promoters of the reclamation work. Each has promoted the reclamation work for the following reason.

• Nagasaki Prefecture :

In order to get out of the inefficiency of the small-scale reclamation system, which had been carried out in the past, at the Ariake Sea Coast.

In order to drastically prevent the typhoon disaster occurred in the coastal area frequently.

In order to upgrade the self-sufficiency degree of the prefectural people's food

- The Ministry of Agriculture, Forest and Fishery :

In order to attempt to increase the food production nationally

- Nagasaki Great Reclamation Resolution Alliance Association :

Because the area's people recognized that it was very important from the point of the modernization of agriculture, the regional development, the prevention of disasters, food self-sufficiency.

- The area's farmers :

Because it can solve the bad drainage

Because they expected the effect of the increase in the agricultural income and so on

Nagasaki Prefecture has disasters frequently, and has experienced the damages of storm tide and the flood. Especially, the Isahaya Huge Flood in 1957(Figure-6) brought about great damage. The heavy rain which attacked the Isahaya district from July 25th to 26th in this year was over 588 millimeter. Therefore, all rivers such as Honmyogawa River which flowed into Ariake Sea overflowed. The earth-flow was generated here and there in the upstream. In addition, the debris flow smothered many farms with rocks and it swallowed a large number of houses and people. In the Honmyogawa River watershed, flood damage in detail is described as follows.

Fatalities: 494 persons

Missing person: 45 persons

Complete collapse and washed away: 727 houses

Half collapse: 575 houses

Complete collapse (non-dwelling): 176 houses

Half collapse (non-dwelling): 320 houses

Damage the total amount: 87 hundred million yen

People expected the Isahaya Bay reclamation work to protect the high water disaster, to dispel the worry of ill-drainage in the hinterland and to develop large farmland which has desired in the district. People also expected the Isahaya Bay reclamation work to contribute as a flood countermeasure since the sad experience like the Isahaya Huge Flood should not be repeated.

The Isahaya Bay Reclamation has the long history. The durable reclamation had been carried out by the technology which skillfully utilized the natural environment called "the sight frontage reclamation" since about 600 years ago. Today's plan of the large-scale and compound reclamation was started by "the Nagasaki Large Reclamation Plan" in 1952. The project done at present was named after "the Isahaya Bay Disaster Prevention Total Reclamation Project" planned in 1983. The plan was changed in 1999. The drastic extension in the construction period (the completion schedule: fiscal 2006) and the increase in the cost (249 billion yen) have been expected.



Figure-6 (Source: The Ministry of Land, Infrastructure and Transport Kyushu district improvement station Nagasaki river national road office)

(Photograph: Isahaya history story association)

8 Knowledge

- When the Government plans and undertakes projects, it should consider the latest socioeconomic situations, environmental problems, and so on. And the Government should carry out the strict evaluation, which is based on fair and proper information, in the transparent process.
- According as the change of the socioeconomic situation, the administration should carry out the reevaluation anytime.
- If they take makeshift action on situations without examining the basic measure, it may cause the vicious circle.

9 On the Side

Closing the salt pan embankment in Isahaya Bay in April of 1997 has been called the "guillotine". The guillotine was the beheading stand for the executions, used mainly during the French Revolution. We were overwhelmed by the image of what is called the "guillotine"; 293 steel plates were dropped like dominoes. It is not difficult to imagine that a lot of people opposing it have never been able to forget the image as a detestable memory.

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