MINAMATA BAY DISASTER

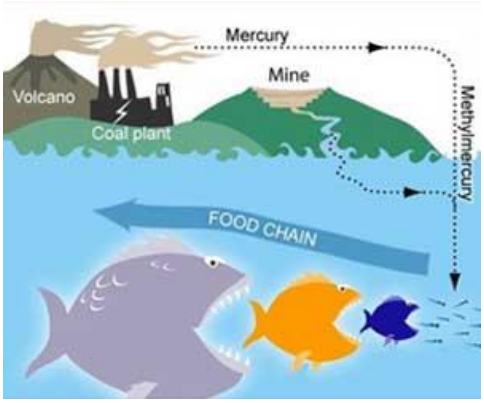
ABSTRACT:

Minamata illness was named after the city of Minamata in Kumamoto Prefecture, Japan, where it was originally found in 1956. It was caused by the leakage of methylmercury in industrial wastewater from a Chisso Corporation chemical production, which occurred between 1932 and 1968.

In 1997, the government deemed the region fishable. However, some fish have been found to contain high levels of methylmercury, and exceptionally high levels of contamination have been identified in sediment in Minamata Bay, despite officials' assurances that the levels are safe.

INTRODUCTION:

Nothing about this serene picture suggests that it was the scene of Japan's worst environmental calamity.



Beginning 50 years ago, mercury-contaminated fish from these waters poisoned entire neighbourhoods. Thousands of people were paralysed, and hundreds more perished in agony. Awful abnormalities were present in newborns.

To the rest of the world, the catastrophe known as Minamata Disease is a distant memory, and few outside Japan would recognise Chisso Corp. as the firm that poisoned Minamata Bay and the Shiranui Sea with lethal methylmercury. The calamity, however, never ended for Akinori, 62, and Itsuko, 58, and many of the residents who live along these rocky beaches.

The Moris' parents his father and both of her parents suffered from the disease's effects, which included blinding headaches, crippling loss of sensation in their limbs, insomnia, and dizziness. Both Akinori and Itsuko are experiencing symptoms of the disease as they get older, including excruciating hand and limb aches, as well as loss of feeling and coordination as a result of eating poisoned fish as children.

Itsuko stated as she pulled strips of seaweed from her fishing nets in the early sun, "Now it's starting in my hands and fingers." "They're all crooked and getting white."

Japan, like the Moris, never entirely recovered. Indeed, the sickness played a significant part in the formation of modern-day Japan. It sparked the Japanese environmental movement, and it became an international cause celebre, much like the Chernobyl nuclear accident and the Union Carbide chemical tragedy in Bhopal, India.

LITERATURE REVIEW:

It compelled Japan to accept the cost of the industrial miracle it constructed from the ruins of World War II, spurred other victims of such incompetence to seek reparations, and forced authorities to be much more vigilant in safeguarding the public from Japan Inc.'s mistakes.

However, the battle for Minamata is far from done. At least 2,000 people have perished as a result of the attack. Even now, the government is being forced to recognise more casualties, which some believe to be as high as 30,000. Many are confined to wheelchairs or beds, complaining of haphazard and insufficient diagnosis and treatment. Suits for additional remuneration are still pending. The administration continues to refuse to perform an epidemiological investigation into the true extent of the contamination.

Takeko Kato, managing director of Hotto Hausu, a vocational aid centre for Minamata disease victims, said, "Minamata Disease has been going on for 50 years and it still hasn't been fixed." "The country isn't doing enough to assist these people."

Minamata Bay's calamity began in silence.

Growing numbers of fish were discovered floating dead in the bay that flows into the Shiranui Sea in the early 1950s. Then crows dropped to their deaths from the sky or collided with rocks. Before dying, cats began gyrating in a strange "dance."

Then came the people. Villagers began to experience dizzy spells, as well as difficulty walking and speaking, by the mid-1950s. A growing number of people went into spasms, wilted, and died. In 1956, the name Minamata Disease was coined.

Victims huddled behind closed doors, ostracised by neighbours who worried the sickness was spreading. Fishermen suffered in silence because they were afraid that word of the ailment would jeopardise their livelihood. The persons who were most in danger were frequently the ones who battled doctors who tried to help them.

"They always stated there was no Minamata Disease around here," Shigeo Ekino, a researcher at Kumamoto University who has been studying victims since 1971, said. "Because if journalists reported that the sickness had arrived, the price of fish would fall."

The culprit was also shielded from accountability for the methylmercury it released during the creation of acetaldehyde, a chemical used to make a variety of items, including medications.

Chisso was a bright accomplishment in Japan's frenetic rush for postwar economic expansion in the 1950s, and it awed both bureaucrats and Minamata villagers an untouchability that allowed it to refuse to accept responsibility for more than a decade.

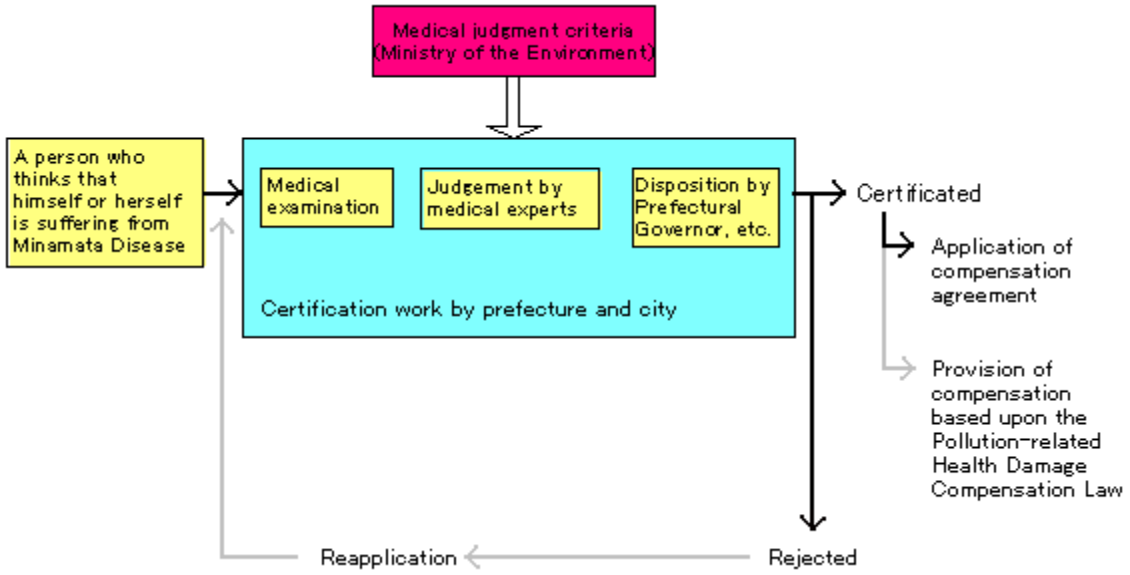
THE OUTCOME OF THE SURVEY:

In Minamata Bay and the Shiranui Sea, this very deadly compound bioaccumulated and biomagnified in shellfish and fish, causing mercury poisoning in the local people.

Causes: Mercury poisoning is a serious condition.

The restriction of fish and shellfish taken from Minamata Bay, as well as self-restraint of work by the fishing cooperative, began in 1956 in the area around Minamata Bay, when it became obvious that intake of fish and shellfish might be the source of the disease. Kumamoto Prefecture et al. The dividing nets in Minamata Bay were removed completely in early October 1997, after this direction had persisted with various interruptions. During this time, Chisso Co. Ltd. paid 140 million yen in compensation to the fishing industry in 1959, 3,930 million yen in 1973-74 FYs, and 950 million yen in 1992-98 FYs.

After June 1965, when Minamata Disease was first diagnosed in the Agano River watershed, Niigata Prefecture took steps to provide counselling to the concerned fishing cooperative in terms of self-restraint in catching fish and shellfish, as well as to the individuals who are affected.



Until now, many forms of environmental pollution assessments have been carried out in the area around Minamata Bay and the Agano River basin, including water quality, bottom sediment, fish and shellfish, hair samples, and so on. As a result, it's thought that continuous methylmercury exposure at levels that could cause Minamata Disease existed in the area around Minamata Bay until no later than 1968, and until no later than 1965 in the Agano River basin, and that since then, there hasn't been any such exposure that could cause Minamata Disease.

In the area around Minamata Bay and the Agano River basin, methylmercury concentrations in fish and shellfish are still being monitored.

The first full-scale survey to assess the magnitude of the health impact was conducted on roughly 110,000 inhabitants of the area around Minamata Bay in 1971, after the cause of the Minamata Disease was determined. The prefectural administration conducted a series of health surveys on the residents of the Agano River basin shortly after the patients were discovered, and the scale of the survey was around 80,000 for the total number of items.

CONCLUSION:

Toxic substances pollute the environment, causing major consequences such as health problems and the degradation of the living environment.

In the instance of Minamata Disease, an agreement was reached between patient organisations and companies, and lawsuits were settled through a compromise between plaintiffs and companies, as well as the withdrawal of plaintiffs between the nation and plaintiffs, resulting in less social problems. However, in the places where the sickness occurred, certified patients are still experiencing symptoms, and the scenario is that residents' health fears have not yet been alleviated.

From the Minamata Disease, Japan has learned that activities that prioritise economic interests while ignoring environmental concerns cause a variety of serious consequences, including health problems, and that it is difficult to recover from these consequences later. From an economic sense, it is evident that these actions are not an economical decision because the steps to mitigate these damages require a significant amount of money and time in compared to the cost of taking measures to prevent pollution from occurring.

With the devastating effects of pollution, especially the Minamata Disease concerns, as a turning point, environmental protection measures in Japan have made significant progress, but the sacrifices made along the way have been enormous. We hope that it will be recognised once more how essential environmental consideration is, and that efforts will be taken to prevent environmental pollution without a devastating pollution experience, using Japan's experience as a lesson in other nations.

REFERENCES:

https://www.env.go.jp/en/chemi/hs/minamata2002/ch6.html

https://www.verywellhealth.com/minamata-disease-2860856

https://www.env.go.jp/chemi/tmms/pr-m/mat01/en_full.pdf

https://en.wikipedia.org/wiki/Minamata_disease