Poisoned by Pollution

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Pollution is an international problem; it physically crosses boundaries between states. The creators of pollution are often corporations which operate in several countries or are parts of multinational conglomerates. If those who fight against pollution are successful in one country, the producers of pollution may shift their operations to a country where opposition is weaker. The struggle against pollution is therefore an international struggle.

Opposition to pollution is not a hobby for those who enjoy the countryside but a life and death war between the interests of a few and the well-being of all. Just how unpleasant the death has been for some and can be for us, is amply illustrated by recent Japanese cases.

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Japan is a string of four main islands and 3,000 islets 2,400 kilometres long off the North Pacific coast of the Asian continent. The total land area is less than 370,000 square kilometres, less than a twentieth the size of Australia. It is mountainous and forested. Its fast streams are the source of hydro-electric power. It has lakes and rivers, hot springs and volcanoes, and is subject to typhoons and earthquakes. The total population is now just over 100 million and population density is very high - 271 per square kilometre.

Japan has no great natural resources of petroleum or coal but has abundant water power for the generation of electricity - only the USA, Canada, and the USSR producing more electric power or hydro-electric power. Thermal power is increasing and provides more than half the supply of electricity. Coal gas and liquid propane are widely used by domestic users and natural gas is growing in importance. The Japan Nuclear Energy Development Program was started in 1955, and the Japan Nuclear Electric Company has been supplying electricity since 1967. About a
tenth of the national consumption is supplied by nuclear power stations. Japan imports most of its crude petroleum but exports an increasing volume of petroleum products.

The Meiji government, from 1868, promoted what were called "Measures to make Rich and Strong" to bring Japan up to the level of the great powers. This involved the creation and rapid development of heavy industry, particularly mining and smelting. As early as the 1870s the effects on the environment were catastrophic. The Hitachi mine caused destructive pollution, the Besshi and Ashio mines mineral pollution poisoning. The Ashio mine produced a great quantity of copper and discharged so much sulphur dioxide that 400 sq. km. of surrounding fields and forests were destroyed. This meant that rainwater was not contained and in 1885 the Watarase River broke its banks, flooding tens of thousands of hectares. The government took the part of the mineowners, doing nothing to prevent further pollution or compensate its victims. It went further - when the peasants organised themselves to prosecute their claims, the government crushed their organisations and in 1900 charged thousands who tried to get to Tokyo to present a petition. The government helped the Furukawa Company, owners of the Ashio mine, to impose on the victims a paltry settlement, forcing them to sign a contract that in no circumstances would the Furukawa Company have to pay more than small compensation. This was to be a precedent for the settlements forced on the victims of Kumamoto-Minamata disease in later years.

From about 1890 the fields and forests around the mine in the Toyama prefecture were laid waste by the discharge from the mines. The fish in the river were killed. Itai-itai disease first was noticed in the second decade of this century but it was only in 1971 that a victim of the disease was first successful in an action against the mining company. Since then anti-pollution precautions have been demanded of the company.

Since the late 1950s, the Japanese government has had a policy of rapid economic growth, part of which was the Region Comprehensive Development Plan. Under this, monopoly capital was reorganised and strengthened, emphasis was placed on heavy industry and the chemical industry and many new industrial sites developed all over the country. After the US-Japan Security Treaty was revised in 1960, Japan's main source of energy changed from coal to petroleum.

New industrial cities were created where large petrochemical factories were built, resulting in the distribution of poisonous pollution over all the country - air pollution causing widespread sickness, sea and river pollution destroying the livelihood of fishermen.

Government policy created programs of industrial renewal and growth and decentralisation. A new network of ports, airports, roads and railways linked the new "development points". Land was bought for these purposes and noise and vibration nuisance became widespread. New thermal and nuclear plants were built with their own forms of pollution. Waste from discarded mines continued to discharge poisons. Growing road traffic increased exhaust fumes. Lax enforcement of food and drugs control allowed many forms of injury. In 1968 there were many people poisoned by the presence of PCB in Kanemi rice oil, causing serious internal and skin complaints. The Morinaga Milk Industry Co. poisoned new-born babies in the early 1960s by selling dehydrated milk with an admixture of arsenic. Many babies were born with deformities because their mothers had taken thalidomide. Chinoform drugs caused those who took them to suffer from sub-acute myelo-optico neuropathy. The government listed more than a thousand patients suffering from peripheral and optical nerve troubles in the 1960s but wrongly attributed their symptoms to a viral disease. Coralgil was sold as a medicine. It left residues of lipid phosphorus in the blood, liver and other internal organs.

Hundreds have been killed, thousands deformed or maimed, tens of thousands made seriously ill, and millions have had the quality of their life reduced in some way. Not surprisingly, the pollution issue, called in Japan Kogai, has caused widespread reaction and resulted in organised campaigns to protect the environment and win compensation for the victims of pollution.

That widespread increase of pollution was created by industrial enterprises required by the capitalist system to maximise their profits without concern for human values and by a conniving government which was more concerned with economic growth than...
protection of its citizens is clear. When a Basic Law for Environmental Pollution Control was passed in 1967, it provided in its first article that: "The preservation of the environment must be harmonised with sound development of the economy." In other words: profit first, health if it can be fitted in.

LEGAL ACTIONS

Minamata disease broke out in 1956 in the suburbs of Minamata City, a small industrial city on the south-west of Kyushu Island. The Chisso Corporation was responsible, but with government help, was able to conceal the connection between the disease and its industrial activities. Central and local government allied themselves with the corporation to suppress the truth.

In 1965, a new outbreak of the disease occurred in Niigata, a large city on the Sea of Japan. Again government and company conspired to conceal the facts which showed the origin and cause of the poisoning, and the company's responsibilities.

Victims and their supporters in Niigata responded by organising themselves with three objects:
* to make clear the cause of, and responsibility for, the disease
* to help the victims
* to prevent a recurrence of the disease and get rid of all kinds of pollution

In June 1967, legal action was started against the Showa Denko Corporation which set off other campaigns, and actions were started all over the country. Legal actions were just a part of the broad campaigns involving victims of pollution, workers, reformist political parties, democratic and progressive political groupings, scientists, intellectuals, lawyers and civil rights workers.

In June 1971, the plaintiffs in the Itai-itai disease were completely successful and this was followed by victories in the Niigata and other cases. On the basis of these decisions, other victims were able to persuade the polluters to compensate them.

The environmental protection movement has grown in strength and in the last few years has been powerful enough to force changes in government policy.

The article of the 1967 law which stated that "The preservation of the environment must be harmonised with the sound development of the economy" has been repealed and the new version clearly gives preference to safeguarding health; new crimes of creating pollution have been established; various environmental standards have been made more rigorous; a Pollution Health Damage Compensation Law has been enacted. Local government bodies have enacted Pollution Prevention Ordinances in response to popular demand.

POLLUTION DISEASES

Minamata disease is a disorder of the central nervous system caused by ingestion of large quantities of fish or shellfish which have been polluted by chemical waste containing methyl mercury compounds. It has a high mortality rate, and even if the patient does not die, suffering is long, as no way has been found to treat the dysfunctions resulting from impairment of the nervous system.

Most of the victims are found in either Kumamoto or Niigata. By the end of 1974 in Kumamoto there were 793 patients designated as suffering from this disease of whom 106 had died; those not yet designated 2,894 and it is estimated that the disease is latent in more than 10,000 people.

Since 1963-64, among fishermen of the river basin near Niigata, 526 patients have been designated as suffering the disease, 566 not yet designated, and 24 have died.

Both factories responsible blew acetylene gas into mercury sulphate solution to get acetaldehyde. Mercury, used as a catalyst, became methylated in the process and, in this form, was discharged into the drainage system. Both factories have discharged large quantities of methyl mercury into the environment.

Despite the discovery in 1959 that the disease was caused by an organic mercury compound, Chisso, the factory concerned, flatly denied any causative link between their discharge and the disease and still more strongly denied responsibility for compensation of the victims. They continued to discharge the poison and at the end of 1959 the organisations of victims and fishermen, impoverished and impatient, were forced to accept compensation of about $1000 for each victim.

In 1965 it was officially announced that Minamata disease had broken out again in
Niigata and democratic forces organised the Niigata Council of Democratic Forces against Minamata Disease to fight for compensation and an end to pollution. The victims formed their own organisation and joined forces with the Council.

In June 1967, 13 people who had suffered bereavements resulting from the disease, started an action in Niigata against the factory there, which denied liability. Subsequent to the Welfare Ministry proclaiming the official view that the cause of Minamata disease in Kumamoto was the effluent from the Chisso factory, plans were made to start an action there as well. But the Compensation Management Commission of the Welfare Ministry used its powers to compel most of the victims to accept small awards of compensation. The government and the corporation were able to split the movement and play one part off against the other. But about one-third of the families (112 people in all) stood their ground and started an action against Chisso in April 1969.

Even allowing for great differences in procedure, there is much of interest to us in the progress of the Niigata-Minamata action. From the start of the action in June 1967 to judgment in September 1971 there were 60 sessions or appearances. There were 82 witnesses, including 37 plaintiffs, 21 witnesses for the plaintiffs, and 24 for the defendants.

The major issues were causality and responsibility. The plaintiffs had to show first that the defendants' acts had caused the disease, and secondly that the defendants were responsible to the plaintiffs for the damage they had caused.

The defendants, Showa Denko, fabricated a story about mercury insecticides stored in a warehouse having been washed away and causing the pollution. They then set about destroying all evidence of their guilt - they would not allow scientists into their factory to investigate, they took out and burned anything which would incriminate them, they hired scientists to create masses of experimental data to protract the legal proceedings and confuse the issues. Obviously, they felt cornered.

Environment groups were growing in strength all over the country and directing the attention of the people to the legal battle. In January 1970, the Niigata-Minamata Disease Joint Commission was organised as a united front of the Japan Communist Party, the Japan Socialist Party, the Council of Niigata District Labor Unions, and the Japanese Farmers' Union.

On September 27, 1971, the company announced they would accept the decision of the District Court and would not appeal, and on September 29 the court found them liable.

Itai-itai disease is renal osteomalacia caused by ingestion of cadmium. Victims are mostly multiparous women over 40. The first symptom is a stabbing pain in the thighs, waist, shoulders, back, knees and other joints. Then rheumatic-like pains spread to the whole of the body; the patient starts to walk carefully, favoring her pelvic, lumbar and femoral regions; she adopts a characteristic waddling gait. This stage lasts a few years, sometimes more than ten, with gradual deterioration. The pain gets worse and is caused by slight movement, even breathing. Normal sleep is impossible, the appetite falls off. This may last for up to ten years before the patient becomes so weak that she dies.

The source of the poison is the Kamioka Mine, owned by the Mitsui Mining and Smelting Corporation, and producing zinc, lead and cadmium, among other things. Waste materials and water containing heavy metals, including cadmium, have been discharged into the Jinzu River in massive quantities. The heavy metals have been ingested by villagers lower down the river in drinking water taken from the river, or from poisoned wells, and in rice and vegetables grown in fields irrigated with contaminated water.

Hundreds have died of the disease since 1910 and it is estimated there are thousands of latent patients. The number of patients shot up after wars during which production had been increased. The sufferers, nearly all peasants, were forced or tricked out of their attempts to bring legal actions against the company. After World War II, concerned lawyers, doctors and others managed to get together the scientific evidence to show that the Kamioka Mine was the poisoner. On May 8, 1968, the Welfare Ministry declared the mine's discharge of poison was the source of Itai-itai disease. It was the first case of "Pollution-related disease". But there was a long way to go before the victims got any compensation. Local, and national, government again conspired with the mine owners to avoid responsibility.
To the peasants, political activity seemed useless or improper and they decided to bring a legal action which involved 300 young lawyers from all over the country who formed an organisation to help them. A massive claim was made by 522 plaintiffs, including the families of some killed by the poison. The amount claimed was 5 million yen for each victim who had died, and 4 million yen for each survivor.

On June 30, 1971, the district court found for the plaintiffs and at once Mitsui appealed, trying to bog the court down in a fabricated mass of scientific evidence designed to cast doubt upon the way the disease starts.

Counsel for the plaintiffs were vigorous in arguments based on the epidemiology of the disease and asked for a review of the amount of damages, demanding twice what had been awarded. After a very short hearing, on August 9 the plaintiffs were completely successful and Mitsui were ordered to pay 22 million yen to the family of a victim who died in 1949 and about 12 million yen to the estate of one who died just before the court decision. About 10 million yen was awarded to plaintiffs still alive.

As a result, Mitsui makes payments to more than 200 sufferers who still survive, plus all medical expenses. After further negotiations, the company promised to restore to its original state 4,000 hectares of fields polluted by cadmium, to compensate the peasants for all rice crops lost, and to allow victims of the pollution free admission to the factory and mine with their scientific investigators for the purposes of surveillance and investigation, at the company's expense.

Those who live in the polluted area are studying ways of preventing further pollution with the help of concerned scientists. Already the company has started to carry out its undertaking to restore the fields.

In Yokkaichi, huge petrochemical plants stand next to dwelling houses and pour poisonous fumes directly into the playgrounds of primary schools alongside them. Stinking fish were washed ashore, poisoned in the myriads. Since 1971 there has been a marked increase in occlusive pneumonic disease and a great increase in patients presenting with asthma symptoms. In all the industrial development no regard was paid to the wellbeing of those who live in the areas being "developed". All emphasis was on maximum profit at minimum cost. No investigations were made into the effect of the expansion or change of fuel on the environment, though effects of the emission of sulphur oxides were in general well known. Industrialists were encouraged to join together in building joint industrial estates by the national government, local government and financial institutions. As a result, local residents had their land and business taken from them and were subject to poison by aerial pollution.

The Yokkaichi Suit against pollution was started on September 1, 1967 and continued for nearly five years until July 24, 1972 when, after 54 hearings and three inspections had been held, judgment was given. The defendants chosen all lived in the suburb most affected and represented over a hundred victims in that area and hundreds more in the rest of the city. Two of them died during the course of the action from paroxysms associated with their ailment.

The defendants were six typical representatives of Japanese monopoly capitalism.

This case was of historic importance for two reasons - it was the first judgment to find that there was an action arising from a "just proceeding" and to hold the component companies in an industrial estate jointly liable for their pollution. It laid down what the policies of government and local authority should be on the location of huge combinations of factories, and pointed out inadequacies in official policies which preferred industrial development to the health of residents. This judgment was a great victory; political support grew and the movement was strong enough to wrest from the defendant companies important promises legally binding their future conduct.

On December 1, 1972, 124 further victims of pollution living in the same area summoned representatives of the polluting companies to discuss and negotiate problems of compensation. The representatives of the polluters agreed to the demands and to comply with their promises. A hundred days of negotiations following the court judgment achieved for all the victims what it had taken the pioneer plaintiffs five years to win in court.

Following a further demand for compensation by 800 victims of pollution, twenty or more of the polluting companies formed the Yokkaichi Pollution Victims Relief
Foundation and agreed that they would pay a lump sum and an annuity to each victim, based on the scheme provided in the Pollution Health Damage Compensation Bill then before the Japanese Diet.

Despite these successes there has been little progress in stopping aerial pollution and the “clear sky” demands of environmentalists have had limited success. While the emission of sulphur oxides was completely banned in Yokkaichi and the reduction of sulphur oxides has proceeded as planned, there is no effective control of nitrogen oxides. But the struggle goes on and has been fundamentally affected by the legal victories which have been won.

However, as some older pollution problems are solved, new ones arise usually because of the development of new private or public enterprises without concern for the people affected by their pollution.

A major case concerned the Osaka International Airport which is in the heart of a densely populated area, its runways running straight up to streets of old wooden houses. About 440 planes take off and land every day - one every two minutes at rush hours. Those living near the airport are subject to intense noise and an enormous amount of exhaust gases; they live in fear of a crash; their houses shake all the time. Because of the noise and interference they cannot carry on a normal conversation or hear callers on the telephone; they cannot watch television or listen to the radio. Normal family life is impossible - they are irritated and suffer from stress, and from a number of acute physical symptoms.

The culprits are not only the airline companies but also the Japanese government which directly controls the airport and which expropriated more and more land near the Osaka airport as it expanded and as the aircraft got bigger the damage increased. The Basic Environmental Pollution Control Law requires the government to prevent pollution of this kind, but the government has excused its illegal acts by claiming the operation of the airport is necessary in the public interest.

It told the residents that they would have to put up with the damage, ignoring the fact that when 1,700,000 people’s lives are made miserable, a considerable public interest is affected. No effective measures were taken by the government, even when those affected organised and petitioned the government. So, at the end of 1969, they began an action to prohibit the departure and arrival of planes between 9 p.m. and 7 a.m. and for compensation for past and future damage. By the time judgment was given there were 264 plaintiffs who asserted their rights to protection as individuals and to protect the environment generally. The action took four years and the judgment given in February 1974 was that there should be no flights between 10 p.m. and 7 a.m. and that compensation should be granted for past damage. No damages were awarded for future loss or injury.

This was the first case in which it was recognised that a private individual could get a judgment protecting private rights by an injunction against flying at certain times of the day. In this respect it has great importance, particularly as it is believed that this is the first such case anywhere in the world.

After the first decision the government devised a plan for the airport environs, providing for the expenditure of 500 billion yen in the acquisition of neighbouring houses and soundproofing of others. These measures left undecided the question of who has power to control the source of pollution and tried to avoid the issue by evicting the innocent. Dissatisfaction with this decision has caused the growth of the biggest anti-pollution movement in Japan which has begun a new action with 3690 plaintiffs, appealing to public opinion, attacking the government and publicising the injustice of the previous decision. In the two actions there will have been over 4000 plaintiffs, a record for Japan and the world. The campaign is directed at making the government change its policies on development, transportation, pollution and the restoration and preservation of the environment.

The Tokaido Shinkansen is the Japanese National Railway Corporation's much vaunted high-speed railway between Tokyo and Osaka, recently extended to Fukuoka. The 16-coach train, weighing over 900 tons, seats 1500 passengers and reaches speeds over 200 k.p.h. Trains pass through Nagoya, about midway between Tokyo and Fukuoka more than 200 times a day. They are a clever use of technology and make transit by rail between major cities of the island of Honshu much more rapid - the time is reduced from six hours by ordinary express from Tokyo to Osaka to just over half this time. Shinkansen trains are clean and comfortable, but a ticket costs 50
This railway was built not for people but as part of the policy of rapid economic growth which required an industrial belt stretching along Japan's eastern shore from Tokyo to Osaka with major industries arranged so they could be managed from Tokyo. Passengers were shifted on to the new fast and expensive Shinkansen line leaving the old Tokaido line for freight movement. The National Railways now have a plan to link all major industrial areas with 9,000 kilometres of Shinkansen railway covering the Japanese archipelago.

The trains run through Nagoya on a ferro-concrete track 15 metres high at the level of the roofs of houses which line the railway. Every five minutes from 6.20 a.m. to 11.30 p.m. a 900-ton train passes at a speed up to 200 k.p.h. Severe vibrations are felt in adjacent homes, bad enough for those experiencing them for the first time to think there is a minor earthquake. Normal living is impossible. Shinkansen pollution is extensive and continuous. Actions have been started by residents of a number of districts where 5,000 families (about 20,000 people) live and are affected by a diversity of damage including headaches, stomach trouble, nervous breakdowns, and physical and mental damage arising from disturbance of sleep, conversation and relaxation, loss of television and radio reception, interruption of study, damage to houses, blocking out of light and so on. Since this railway was opened the damage has increased every year but no serious attempt has been made by the National Railways to try to avoid it.

Since 1972, affected residents have had an organisation - the "Federation of Leagues against Shinkansen Kogai in Nagoya" which has waged a joint campaign against the National Railways, petitioning for effective measures to stop noise and vibration. The response has been silence or, at best, makeshift and ineffective measures.

In March 1974, 575 members of the Federation brought an action demanding that the railways reduce Shinkansen noise and claiming compensation of a million yen each. The noise and vibration levels requested had been agreed by many scholars as the maximum permissible if ordinary life were to be possible. They are not asking that the Shinkansen railway be shut down but that it should run more slowly through areas where the plaintiffs live.

The defence put forward by the National Railways is that the claim is against the public interest. They see the running of Shinkansen trains at 200 k.p.h. all over Japan as their social mission and that the Kogai associated with it is what local residents can properly be expected to contribute and they should not expect compensation.

The case, not yet heard, calls for a fundamental change in government policy: to give priority to people, the protection of their environment and the quality of their lives, at the expense of the dehumanising process of economic growth which has marked Japan's post-war years.

DEVELOPMENT OF PUBLIC OPPOSITION

In Tokyo, one of the most polluted cities in the world, a progressive local government was elected and in 1969 established the following three principles in anti-pollution regulations:

* All residents have the right to lead a wholesome, secure and comfortable life and no environmental pollution shall be allowed to violate this right

* Every resident is obliged to respect the right of others to lead a wholesome, secure and comfortable life and must not engage in any act of destruction that may cause this right to be violated in the natural environment or in living conditions

* The Tokyo Metropolitan Government, the local self-governing body of the population of the capital of Japan, has the highest obligation to guarantee the people's right to lead a wholesome, secure and comfortable life and must do everything in its power to prevent and eliminate the causes of environmental pollution.

Many other local governments, some of them certainly not progressive, have signed agreements with business and industry, binding them to take precautions against pollution. It is quite clear now that the environmental movement has general political significance.

The central government's reaction to pollution has been first to foster industries
which cause it and then to make only such moves to prevent it as have been forced upon it by environmental groups and the victims who have started legal actions. Recently, however, the political strength of the national movement to protect the environment has grown to the level where the policies of the national government are changing.

It was pointed out above that the amendment to the Basic Environmental Protection Law led to important changes in the regulations, though there is still much room for improvement. Other changes in government policy are reflected in the establishment of the Environment Agency whose object is to counteract pollution. Legislation has been passed attempting to control pollution by a formula already tried by some local authorities. Other legislation has been passed making polluters responsible without proof of fault for damage to health caused by their pollution of the air or water. The Compensation Law 1974 requires polluters to pay part of the medical expenses of those they have poisoned. None of this means, however, that the government has changed its basic attitude. It is apparent, for instance, that the government is in illicit alliance with the automobile industry regarding pollution from car exhausts.

THE ROLE OF LAWYERS

Lawyers have played a very important part in the environmental movement. Their involvement began by making sure they had a clear understanding of the damage that pollution poisoning had caused. They understood that if actions were to be brought and won, they must be able to prove conclusively what had really happened. They went to the polluted areas, listened to the stories of the victims and tried to learn from their experiences. Many realised that success in legal actions and successful political organisation were inextricably related. Many spent weeks living with victims, co-operating with scientific investigations and building up their case. They joined residents in pressing local authorities for data on pollution, and industrial enterprises for opportunities to inspect processes. They helped foster residents' movements by informing them of their legal rights, some of which were by no means clear. Lawyers had little experience of actions based on pollution poisoning, but worked hard at developing new legal principles, using their skills to create new categories of responsibility. They also were able to offer their experience in, and influence on, the mass media.

The lawyers were not working as individuals in separate activities but as parts of a nationwide alliance. The Young Lawyers' Association, Japan's largest law society, now holds each year a session "to discuss the problems of environmental pollution of Japan".

All lawyers concerned with the fight against pollution are organised in the National Liaison Council of Lawyers against Environmental Pollution, made up of groups of lawyers from all over the country.

This professional co-operation has made possible the development of legal theory on the new problems of responsibility for pollution. One problem is the difficulty of showing the causal connection between the emission of the poison and the injury to the plaintiff. The problem is even worse when there is more than one polluter. Lawyers have succeeded to some extent in overcoming this obstacle by insisting on the validity of epidemiological evidence, where clinical and pathological evidence is insufficient.

Another new development is the acceptance of the illegality of combined polluting activities, even where the discharge of any one of the polluters in the combination is quite small.

A third new theory of liability is an extension of the concept of negligence in Japanese law. The decision in the Kumamoto Minamata disease case took the development of the law in the Niigata Minamata disease an important step further by stating (in part):

"... no chemical plant should be allowed to let waste out until all available knowledge and technology have been exhausted to make research studies and make sure that the industrial waste contains no dangerous substance and has no adverse effect on animals, plants and humans."

With regard to preventing the creation of sources of pollution, no new theories have been fully worked out yet. Lawyers are now working on elaborating the principles whereby suspension can be demanded of building projects which lead to pollution. Others are developing new concepts of a "right to the
environm ent", which would expand and generalise the principles which have already been established.

Another new direction of legal development has been towards comprehensive compensation orders by the courts. The traditional approach of Japanese courts to the assessment of damages has been very superficial, determining the measure of damages according to the loss which is readily and immediately apparent, restricting compensation for personal injury, for example, to loss of working capacity. To show that immediate quantifiable financial loss is by no means all that polluters should pay for and that their responsibilities cannot be discharged by a lump sum payment of the amount that can be established at the time of the action, lawyers have been working hard to persuade the courts of the relevance of, and necessity for, a new set of theories.

There are other new legal attacks on polluters, more concerned to protect the interests of the public as a whole, such as attempts to fix polluters with the responsibility for reinstating damage caused to the environment and for paying the price of pollution. Lawyers seek also to establish the principle that the public is entitled to have all data on pollution available to the polluters or the government. It is sought to establish that the government should provide legal aid or otherwise bear the cost of bringing actions for pollution poisoning and for the rights of residents to participate in the planning of regional development projects.

THE FUTURE

Lawyers are now well organised and integrated in the environmental movement in Japan. There are 31 different lawyers' groups, making up the All-Japan Committee of Members of the Legal Profession against Pollution. Many other lawyers support it, and new members and new groups are joining all the time.

There are interesting things going on at present. The outcome of the Osaka International Airport case will be important, because the court may accept the principle that the preservation of the people's health and the quality of their living environment take precedence over what have previously been accepted as the public utility and social usefulness of the polluting industries.

Pollution of the land and sea is providing new issues. The mercury poison in Minamata Bay and elsewhere, the sludge which is siltng up the Seto Inland Sea and the bays of Tokyo and Suruga, and other forms of poisoning, such as the massive oil spill from the Mitsubishi tank at Mizushima last year which fouled much of the Seto Inland Sea. All are polluting activities which could yet foment political activity and legal actions which change the law.

Poison in food and drugs is another attack on health which is the subject of current litigation. A decision is awaited and expected any time now in the Kanemi Rice-oil case, and there are others, which will develop the law relating to the responsibility of manufacturers and distributors of food and drugs and the liability of local authorities for maladministration.

A CALL FOR INTERNATIONAL CO-OPERATION

The All-Japan Committee of Members of the Legal Profession against Pollution has proved its worth to the cause of environmental protection in Japan and its members have played an important part not only in bringing legal actions, but in general political work. They actively participate in international discussions and are concerned that the campaign to protect the quality of human life and health should be an international one. They seek allies throughout the world and offer co-operation and solidarity to those who fight the same war against pollution in other countries.

The international nature of the problem of pollution needs no stressing. Poison spreads across national boundaries. Polluters are often international corporations. There is a need for international initiatives and solidarity not only in the development of legal principles but also in the awakening of public opinion and the organising of political activity.

For the lawyers of Australia the challenge is clear. Individual, spontaneous, uncoordinated efforts are not now enough. So far we have not had the stimulus of Minamata and Itai-itai to give us the will to organise and fight. Do we have to wait for such a terrible lesson to teach us from our own experience. Surely we can learn from what has happened in Japan and what is already happening on a different scale in Australia.