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Environmental Education for Urban Air Quality

The Pollution Experience Can Be the Engine of Community Renewal

—The Aozora Foundation's Environmental Education Initiative—

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#### O. Introduction

Thank you for giving me this opportunity of presentation here. I'm a staff working for the Environmental nonprofit organization called "Aozora Foundation". Aozora means a blue sky. The formal name is "the center for the redevelopment of pollution-damaged areas". Aozora Foundation was established in 1996 using a part of the settlement in Nishiyodogawa air pollution lawsuit. I have been working there since the same year and now, I am in charge of the library and accounts.

In my presentation, at first I will explain about air pollution problems in Nishiyodogawa area. The second, I will introduce our environmental education initiatives.

# 1. Nishiyodogawa: From Air Pollution to Community Renewal

#### (1) Characterization of the Locality

The area where we are most active is Nishiyodogawa Ward in Osaka City. The ward is on the city's west end, in the Hanshin Industrial Zone, which is one of Japan's four major industrial zones. This region is characterized by large factories mostly in the heavy industries along the Osaka Bay coast, while inland there are small and medium-sized companies in the machine industry and other industries. One more feature is that the region is crisscrossed with major highways. Traffic includes many large trucks, and the intersection of route 43 has daily average traffic volumes as high as about 85,000 vehicles.

# (2) Pollution during the Rapid Economic Growth Period

Japan's rapid economic growth period, which began in the second half of the 1950s, brought severe pollution and environmental damage throughout the nation as the down side of sudden economic development. The Nishiyodogawa area was no exception. Air pollution arising from the combination of factory smoke and motor vehicle exhaust had a devastating impact on human health and the community. There were many cases of asthma, emphysema, chronic bronchitis, and other ailments, and many people died from asthma attacks. People who contracted illnesses at that time must even now continue to receive treatment.

As these pollution problems arose, victims around the nation conducted anti-pollution citizens' movements to eliminate pollution and to protect their rights. In 1973 their efforts led to a law meant to provide relief for pollution victims. This law, the first of its kind in the world, is called the Pollution-Related Health Damage Compensation Law. It alleviated the financial burden on pollution patients for their medical treatment and livelihood. About 7,000 pollution patients were

certified under the law in Nishiyodogawa Ward. But from the victims' point of view, this was still not enough because they wanted to determine who was causing this pollution and have them take responsibility for the damage.

# (3) Nishiyodogawa Pollution Lawsuit

So it was that in 1978 pollution victims in Nishiyodogawa Ward filed a lawsuit against 10 large corporations including a power producer and a steel mill, and against the national government and the Hanshin Expressway Public Corporation. It is called "Nisiyodogawa air pollution lawsuit".

It was a large lawsuit with 726 plaintiffs. Pollution victims felt strongly that they did not want their children and grandchildren to suffer as they had. The lawsuit asked that the defendants compensate victims for damage and to keep their air pollutant emissions under environmental standards. Victims started using the slogan "we want to leave a blue sky to our children" to show what they wanted to accomplish. Many citizens sympathized with this, and the movement expanded quickly.

This lawsuit was completely resolved in 1998. It took 21 years owing to the great difficulty of proving that factory smoke and motor vehicle emissions damage human health, and also to prove the shared responsibility of the defendant companies. But this persevering struggle won the recognition that the corporations and government are responsible for air pollution.

Here, I would like to show the video about anti-pollution movement in Nishiyodogawa area.

### (4) From Legal Settlement to Community Renewal

When the plaintiffs and nine defendant corporations reached the reconciliation in 1995, the plaintiffs donated 1.5 billion yen to renewal community. It came from the settlement which amounts 3.9 billion yen. They wished for a future with a blue sky. To pass that wish on to the next generation, they set up Aozora Foundation using a part of their donation.

Now, there are 5 types of our activities. "Developing pollution-free communities", "Relating the experience of severe pollution", "Learning about nature and the environment", "Making life worthwhile for pollution victims" and "Collaborating with others". In mainly these five areas we conduct studies, make recommendations, hold public lectures, symposiums, and other events with citizen participation, gather documents and source materials, provide information, host observation tours and trainees, lend support for school classes, conduct international exchanges, and more.

Underlying all our activities are the two ideas that "Pollution must never occur again" and "Let's use the bitter experience of pollution as the engine of community renewal."

Our air is much cleaner now thanks not only to the citizens' movement, but also to efforts by business and government. They have especially lowered the concentration of sulfur dioxide (SO<sub>2</sub>), whose main emission source is factory smoke. But in Nishiyodogawa Ward, which has heavy

vehicular traffic, air pollution by nitrogen dioxide (NO<sub>2</sub>) and particulates is considered a problem. There is a tendency for the number of children with asthma to rise, which is happening in all major Japanese cities, not just Osaka. We have not yet won the battle against pollution.

#### 2. The Aozora Foundation's Environmental Education Initiative

 $\sim$ The Importance of Learning from the Past $\sim$ 

From now on, I introduce Aozora Foundation's Environmental Education Initiative.

Learning from the past is important to us. And our aim — in order to make use of what is learned from the past — is to increase the number of people who consider "What can I do?" and "What must I do?" in their own everyday lives, and then take action. Further, pollution and environmental issues are also human rights issues because when people live in a damaged environment, they are deprived of their right to a healthful and cultural life. Air pollution in the Nishiyodogawa area teaches us about the importance of the environment and human rights.

Here, I choose several projects, "Nishiyodogawa Library on Pollution and the Environment", "Developing Educational Materials and Programs", "a Program for Children" and "Education for Sustainable Development".

# (1) Nishiyodogawa Library on Pollution and the Environment (Eco-Muse)

For the first decade of the Aozora Foundation's existence we collected and organized records of pollution in Nishiyodogawa. Our thinking was that unless we have properly preserved records of the past, it would be impossible to know the truth even if one wanted to learn from the past. The items we have gathered and organized include the newsletters and leaflets of groups which have been active in eliminating pollution, activity reports, conference materials, certified documents submitted to courts, materials collected by lawyers, and records kept by pollution victims of their daily lives. All are one-of-a-kind documents. These are all testimony to people's activities. In order to make these documents available to the general public so that they are more useful for studies and research, we opened an ancillary facility called the Nishiyodogawa Library on Pollution and the Environment in March 2006. It is ordinarily known as "Eco-Muse."

Eco-Muse services include not only viewing and lending materials, but also educational visits and training sessions, plus programs for field work. We also have a "history reciter" program that lets people hear pollution victims recount their own experiences. Since the opening of Eco-Muse it has had about 630 visitors. It is a small library that shares space with a conference room, but we endeavor to make it a "repository of information for giving future generations a blue sky," where people can interact, and where information is provided and exchanged.

# (2) Developing Educational Materials and Programs, Primarily on Motor Vehicle Use and Air Pollution

We also develop a variety of educational materials and programs with the cooperation of instructors from universities, high schools, and elementary schools. Specific examples of these are

photo panels and videos for learning about Nishiyodogawa pollution. Another is "air pollution building blocks," a three-dimensional learning aid for learning about air pollution. And there are texts for exploring and mapping one's community.

In the spotlight now is our recently developed educational tool called the "Food Mileage Shopping Game for Learning about Food, Transportation, and the Environment." This allows players to learn, in the form of a game, about the burden imposed on the environment when transporting the foods on one's dinner table by truck, ship, and other means. The unique feature of this game is that it approaches transportation issues through "shopping." Players make a dinner menu using food photo-cards, which has information on the amount of CO<sub>2</sub> emitted in transporting the food. And then, they learn how much the food mileage their dinners have. Players can also learn about the differences between the various means of transportation which are used to go shopping, and each one's environmental impact, and about the differences between the 1970s and now in terms of diet and the state of roads.

Saying "learn about pollution" gives people the impression of stiffly formal and difficult instruction, but these educational materials have people spontaneously turn their attention to the underlying problems of transportation and air pollutants, by approaching the subject through the everyday activity of shopping. We think this is the reason that these educational materials are so widely accepted.

# (3) "Let's Become Community Doctors," a Program for Children

We also have several programs meant for children, the next generation to carry society on their shoulders. Since last year we have been running a series of events called "Let's Become Community Doctors." Behind this program is our desire that children maintain an interest in the history and environment of the areas where they live. The events are "dandelion survey" in the spring, "cicada shell survey" in the summer, "goby fishing and water quality testing" in the autumn, and "measuring air pollution" in the winter.

#### (4) Education for Sustainable Development (ESD) Initiative

Starting this year, the Aozora Foundation has been chosen by the Environment Ministry as a model of the local practical implementation of "education for sustainable development," which was proposed by Japan's government at the Johannesburg Summit in 2002. ESD is defined as "education in which each individual gains an awareness of all the world's people and future generations, and of the fact that our lives are connected to the environment." The Aozora Foundation proposes the theme "citizens' conference for community development with sustainable transportation — so that everyone can think, connect with each other, and act together." We are working on a system which enables cooperation among parties in various circumstances, such as local residents, educators in the schools, government employees, and people working with NGOs.

By having these parties share their aspirations, their worries, and their challenges, we want to implement education which fosters the people who will involve themselves in building a better

society.

#### 3. In Conclusion

The Aozora Foundation works for community renewal through a variety of activities which are based on the experience of air pollution. We think that community renewal means building a community where people can live free of concerns. But who builds these communities? The people who live there play the leading role, and it is education which fosters the people who will involve themselves in community development.

Knowing what impacts air pollution has on the environment and health leads to having concern for the current state of our air and of our health. And that concern leads people to having a correct awareness of the present situation, and to taking action to identify problem areas and devise solutions.

If our activities to make the Japanese experience of air pollution useful in community renewal and environmental education could proceed while sharing information with and acting in concert with people in China and Korea, we think that our activities would broaden and realize advances in all our countries.

This concludes my presentation. Thank you.