

Manila Sky

By Ms. Terumi Ishii*

My first impression of Metro Manila was that it was unpleasant to walk along the street. I did not feel like going out and having a walk on a sunny day and taking a deep breath. It was mainly because of the exhaust gas from vehicles. Vehicles emitting gross black smoke often passed by pedestrians there, and this discouraged me from walking outside. Air pollution due to vehicle emissions is uncomfortable, not only for people from other places like me, but also for the people living there. I have seen many local people hold handkerchiefs over their mouths in jeepnies, a popular form of public transportation. Guards at office buildings controlling the vehicles wear masks to protect themselves against exhaust gas. Once I noticed that the sky in Manila is not even clear on a sunny day. The sky is “blue” but misty and it is never as blue as it can be. “How nice it would be if only Manila had a beautiful sky!” This was what I thought all through my stay in Manila and it has become my concern. Manila was a lovely place with warm people, good food, and exciting entertainment, and the one and only other thing I wished they had was beautiful air.

Air pollution is one of the biggest issues in many urban cities all over the world and Asian urban cities are not exceptions. There are mainly two types of air pollution. One comes from stationary sources like factories and plants. The other is from vehicle emissions. Actually, the fixed sources contribute to the “misty sky” that I mentioned before. However, what I would like to discuss here is air pollution due to vehicle emissions, which directly affects our daily lives.

In many Asian countries, along with the rapid economic growth of the 1980s, there was rapid urbanization. Since it was so rapid, the development of infrastructure could not catch up with the urbanization. Here, infrastructure refers to public transportation or roads. As a result, people started to buy their own vehicles instead of relying on inconvenient public transportation. Owning a private vehicle also became a social status symbol for people. Thus, the numbers of vehicles kept increasing. However, as the roads were not planned to carry that many vehicles, traffic jams became a chronic problem in many cities. Then, since traffic jams worsen air quality and no one wanted to expose themselves to polluted air, they chose to ride in air-conditioned private vehicles, which made the traffic jams even worse. The whole situation fell into a vicious circle.

Traffic jams cause two aspects of economic damage. One is the economic loss of lost time. The other comes through contaminating the environment. Studies have shown that vehicles pollute air the most when they are running at a low speed. This is the reason traffic jams contribute to air pollution. Here again, there are mainly two types of air pollution due to vehicle emissions. One comes from gasoline vehicles that emit carbon dioxide (CO₂). CO₂ is one of the so-called “greenhouse gases” that contribute to global warming. The other comes from diesel vehicles, which emit “Suspended Particulate Matter” (SPM) or “Total Suspended Particulates” (TSP), which directly affect people’s health. They are small solid or liquid particulates that are suspended in the air. The major sources of SPM and TSP are diesel vehicles and coal-burning power plants. The particulates are the gross black smoke that can be seen coming out of many of the heavy-duty vehicles, such as the trucks and buses running on the street because those vehicles are mostly diesel. “Particulate matter, 10 microns in diameter or smaller,” which is called PM₁₀, is said to be harmful to people’s health.¹ Diseases such as acute bronchitis, asthma, pulmonary diseases and lung cancer are attributed to PM₁₀. According to a recent study by the World Bank, the health impacts

* Ms. Terumi Ishii is a citizen of Japan. She is a student at The University of Tokyo in Tokyo, Japan.

¹ Great Basin Unified Air Pollution Control District. *Particulate Matter Air Pollution: A Threat to Our Health*. Available: <http://www.gbuapcd.org/pm10.htm>

and costs attributed to air pollution in the Philippines, particularly PM10, were estimated at US\$392 million for 2001,² based on monetary costs for excess deaths, treatment of chronic bronchitis, and respiratory symptom incidences. According to another study by the World Health Organization, in developing countries as many as 300 million people are dying due to vehicle emissions.³ These estimates show how much damage vehicular emissions can do to economic development. It is easy to realize that motorization in some ways can be an obstacle to sustainable development.

However, this does not mean that it is appropriate to stop motorization. Economic growth is always supported by the development of transport. This is part of the well known quandary: do we want “economic growth” or “environmental conservation?” Now that transport is the fastest growing energy consumer, we have to strive to achieve both. Here I would like to discuss the situation regarding air pollution due to vehicle emissions in Manila.

In the Philippines, the Clean Air Act (CAA) became law in June 1999. Its key features are (i) the identification and characterization of all airsheds in the country and the establishment of multi-sectoral Air Quality Management (AQM) Boards for each airshed; (ii) the development of a national air quality management framework and a fund to be earmarked for air quality management activities; and (iii) the imposition of air quality management charges, improvement in quality of gasoline and diesel, and promotion of alternative, cleaner fuels.⁴ As of 2003, major accomplishments had been made in such areas as air quality monitoring, emissions testing of motor vehicles prior to registration, and setting emission standards. Though many of the emission concentrations are still under desirable standards, it is true that the air quality has improved gradually in recent years because of these provisions. However, it has only moved from “very bad” to “bad” and there is much left to be done.

In many countries, vehicle emissions are controlled by laws set by the national or local government. It would be easy if the laws were enacted and people simply followed the regulations. However, of course, things do not work like that. The problem in many developing countries is how to implement all the regulations. No matter how many regulations or emission standards there are, if people do not follow them, they are meaningless, and the fact is that people are not willing to follow the regulations.

Why are people unwilling to follow the rules? One reason is that it is simply too expensive and troublesome to follow them. However, the fundamental underlying problem is people’s awareness. Many people spend their days thinking about what to eat for tonight’s dinner or how to support their family. It is difficult for them to stop and think that all the pollution from vehicles may shorten their lives little by little. Everyone understands that air pollution is harmful for bodies, because at the least it is uncomfortable to breathe polluted air, but not everyone is aware that it can affect their future. The important thing for many people is to survive until tomorrow. Thus, it is difficult to have a long-term perspective while living their daily life. All people will die somehow at a certain moment, so you never know if someone actually died from air pollution or how long their lifetime was shortened by it. This is a common problem for all kinds of environmental issues. However, at least if people feel uncomfortable about the situation, they can try to do something about it. It is not only the government that can take action but also the local people and the nongovernmental organizations (NGOs). In India, it was the inhabitants that affected the Government. When the air pollution situation was still bad in spite of the laws, the local people sued the

² The World Bank. 2002. *Philippines Environment Monitor 2002*. Washington, DC: The World Bank. Available: <http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/Philippines2002.pdf>

³ Minato, Kiyoyuki. 2002. Improving Urban Air Quality in Asia. Available: <http://www.jari.jp/pdf/jido/JARI90.pdf>

⁴ Clean Air Initiative for Asian Cities. *The Clean Air Act in the Philippines*. Available: <http://www.cleanairnet.org/caiasia/1412/article-34762.html>

Government for not implementing the law. Then the Government took concrete measures against it. In Manila, people should not only be aware of the situation but also take action to try to improve it. Air quality improvement will never be accomplished without the willingness of all the stakeholders.

Next, I would like to mention where those vehicles come from. The Philippines imports many secondhand heavy-duty vehicles from Japan. The statistics show that approximately 1,000 heavy-duty vehicles⁵ are imported every month and more than half of the heavy-duty vehicles in the Philippines are secondhand vehicles from Japan.⁶ Many of them are exported from Japan because they no longer meet Japanese emissions standards. These are the heavy-duty vehicles that pollute the air by emitting SPMs. This means that Japan should admit the fact that they are exporting something harmful to humans. However, needless to say, heavy-duty vehicles like trucks and buses are necessary for physical distribution and contribute greatly to economic growth, which is why the Philippines imports them. You cannot stop importing those vehicles simply because they pollute the air. However, Japan should be aware that it is their secondhand vehicles that are polluting the air in some countries, not only the Philippines.

When a country develops, it inevitably encounters environmental problems. Environmental problems have accompanied economic development in every country in the world. Then people realize the importance of conserving the environment and take elaborate measures to minimize the problem and finally it works out somehow. It is not necessary to choose either “economic growth” or “environmental conservation,” since they can be compatible to a certain extent. Human are wise enough to achieve both, as history has proved. In other words, the technology and wisdom exist to promote sustainable development.

I am hoping to have a walk along the road under a clear sky the next time I go to the lovely city of Manila.

⁵ Department of Transportation and Communications. Land Transportation Office. 2005. Number of Motor Vehicles Registered, New-Renewal, By Region, By Classification & Type of MV. Annual 2005. Available: <http://www.lto.gov.ph/stats2005annual/MVDenAll.htm>

⁶ Ministry of Finance. Japan Customs. Trade Statistics of Japan. Available: <http://www.customs.go.jp/toukei/srch/indexe.htm>