

## Waste Treatment System by International Cooperation

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About forty years ago, the Japanese economy grew rapidly. As it did, unfamiliar issues arose around the country. The Japanese faced many problems caused by enterprises' exhaust, noxious industrial wastes, and so on, which led to environmental destruction and serious sickness. The problems led to a raised social awareness about the difficulty of making economic growth and environmental conservation work together. Too rapid growth had prevented people and enterprises from paying attention to waste treatment. The development Japan experienced was unsustainable because it wasted too many of the next generation's resources. Sustainable development became a responsibility left to future generations. Now we need to create a "recycling-based society"<sup>1</sup> to ensure that sustainable development does not use too many of the future generations' resources. According to the Environment Agency of Japan, it is described as "a society which spends resources usefully with minimum consumption and exhausts minimum wastes" (footnote 1). However, some developing countries that are now growing rapidly are facing problems with wastes that are not treated adequately. For these countries, environmental conservation is often a trade-off for economic growth. This situation was addressed in the Kyoto Protocol.<sup>2</sup> The Kyoto Protocol is an agreement made under the United Nations Framework Convention on Climate Change (UNFCCC). Countries that ratify this protocol commit to reduce their emissions of carbon dioxide and five other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases (footnote 2). In this protocol, the parties agree to a set of "common but differentiated responsibilities" (footnote 2). Even though it exempts "China, India, and other developing countries which will soon be the top contributors to greenhouse gases,"<sup>3</sup> it does not mean that they have no responsibility for their future generations. All people in all countries have the same responsibility for them. However, what can be done is different for each people and country. In addition, no one has any right to reduce the economic growth of the developing countries.

We need to cooperate with each other across borders for sustainable development. Countries that have experienced environmental problems already, including Japan, have to cooperate with developing countries in order to keep them from following the same path of exchanging the valuable environment for economic growth. To promote sustainable development, I suggest that international cooperation is needed to build waste treatment systems in developing countries. Such systems should include classification rules, garbage collection, and facilities to treat the wastes from households and enterprises. There are three reasons to support this idea. I will use the situation in Viet Nam as an example.

The first reason why I think that international cooperation should support the building of waste treatment systems in developing countries is the lack of both the money and the skill to treat the wastes adequately in such countries. It is hard for developing countries to fund themselves and develop their own skills while keeping up with the speed of economic growth. The important point is that a waste treatment system is one of the essential public goods needed to realize sustainable development. Though it should be completed by governments, this has not happened. It is necessary for developing countries to receive support from outside their country.

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<sup>1</sup> The Environment Agency. 2000. *The challenge to establish the Recycling-based Society*. October. Tokyo: National Printing Bureau. Available: <http://www.env.go.jp/recycle/panf/fig/e-guide.pdf>

<sup>2</sup> United Nations. 1988. *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. Available: <http://unfccc.int/resource/docs/convkp/kpeng.pdf>

<sup>3</sup> Wikipedia. *Kyoto Protocol: Common but Differentiated Responsibility*. Available: [http://en.wikipedia.org/wiki/Kyoto\\_Protocol](http://en.wikipedia.org/wiki/Kyoto_Protocol)

There are two ways to reduce the waste of resources, from the processes of production and consumption. Making a circle around these two processes is a significant part of creating a "Recycling-based Society" (footnote 1). Though there is no doubt that reducing the use of resources in the production process is important, it requires the action of industries. The big companies who emit the exhaust are exposed to international competition. Without any intervention, they will not act on environmental issues. Even if the companies of developing countries are not able to use the best technology for the environment, they still have a right to grow. As they grow, they will be able to take better care of the environment. On the other hand, it is not directly up to industry to minimize the effects of the wastes and exhausts. It is usually divided into two sections. One is to increase social awareness about environment. This takes a long time and requires the help of industries as well as government policy. This is not the part for which immediate international cooperation is needed. The other is treating wastes after consumption. This is usually the difficult part for industry. It costs a lot to set up a system of waste treatment around your house. If no one but your family joins the system, the energy and capacity of the system will be wasted. Moreover, you cannot receive the expected benefits, such as no more waste in the forest, if others do not join the system. For these reasons, governments have to supply adequate facilities for their nations. However, the costs of building new facilities and developing new systems of gathering garbage and wastes are so high that it is difficult for the governments of developing countries to raise enough money. In addition, some countries, Viet Nam for one, are now growing too rapidly to treat all the wastes with a stroke of the pen. The quantity and quality of their wastes have changed. As production and consumption increase, obviously the quantity of waste explodes. In addition, according to a 2002 World Bank report on the environment of Viet Nam, in recent years the proportion of plastic bags in whole wastes has become bigger.<sup>4</sup>

To sum up, while waste treatment systems should be supplied by the government, developing countries cannot finance the cost to build the system and facility and face a lack of skills to cope with the variety of wastes. Developing without taking care of the wastes is not sustainable. The experiences of developed and developing countries show that the costs of recovering the environment after complete destruction are high. All countries should consider the developing countries' incomplete waste treatment systems as their own issue.

The second reason for international cooperation is that untreated wastes can pass across borders through the ground and the river. The reason why we cooperate with each other internationally is not only for the country that throws its wastes to the environment but also for the countries around it. According to the World Bank's report on Viet Nam's environment, the main causes of organic pollution of rivers are "untreated sewage from households, effluents from industrial enterprises, and seepage from garbage dumps or landfills" (footnote 4). The report also shows that while the upstream water quality of most rivers remains good, downstream areas are badly polluted (footnote 4). Though this research is based on Viet Nam only, it shows that pollution can gather downstream. If the country downstream is different from the country of the source of the pollution, it is an international issue. A similar effect can occur through the ground when untreated wastes are discarded. Viet Nam can affect the adjacent countries of Cambodia, the Lao People's Democratic Republic, and the People's Republic of China. The problem becomes an international one.

The third point is that the relationships created through international cooperation will be valuable in the near future of the Asia-Pacific region. While cooperating with all countries is certainly the best way to conserve the environment and ensure that economic growth and environmental conservation go together, it is also necessary to cooperate within economic

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<sup>4</sup> The World Bank. 2002, September. *Vietnam Environment Monitor*. Available: <http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/VN-Monitor-02.pdf>

zones. Environmental issues can not be discussed without also discussing economic problems because the environment did not become “an issue” without them. Here, economic zone suggests the Asia-Pacific countries. Compared to the European Union (EU) and the parties to the North American Free Trade Agreement (NAFTA), the Asia-Pacific countries have much more potential for future development. There has been already much international cooperation on the environmental issues. Along with past efforts, cooperating to create a “Recycling-based society” (footnote 1), will help to accomplish regional sustainable development when all the countries become more well-developed. It will be too difficult to think of environmental issues as international ones after the economies have become full-grown. To provide for the Asia-Pacific countries’ next stages of sustainable development, it is necessary to keep cooperating internationally to build waste treatment systems.

In conclusion, with the above three points: (i) the developing countries’ lack of skills and money to establish waste treatment systems, (ii) the high possibility that the pollution of one country can become an international issue, and (iii) the importance of cooperating to achieve a “recycling-based society” (footnote 1), I suggest that to build and support waste treatment systems through international cooperation is the key to realizing sustainable development in Asia-Pacific countries.

I lived in Viet Nam for a year and a half. In Viet Nam, I wondered where the garbage went, because people did not classify it. People threw their rubbish on a road. The answer is that the garbage went to mountains and rivers. The country is growing rapidly and no one can stop it; however, if the country does not pay attention to the environmental issues, its growth will stop in the near future. Forty years ago, the Japanese could not discharge their responsibilities for future generations. This is not just Japanese history, but also the history of the relationship between human economic lives and the environment. We need to learn from the past for now and the future. Promoting international cooperation in establishing waste treatment systems will discharge our responsibility for the future generation. Though the cooperation will be provided by developed countries, there may be many things that they can learn from the developing countries too. For example, a Japanese electricity company sells only a “light” without the case.<sup>5</sup> The company exchanges and repairs the case by providing the content or “light.” This is an example of “reuse.”<sup>6</sup> While it seems like a new idea for me, others must have thought of it in the past. Once people are used to mass production and consumption, they need to make a lot of effort to remember how to save resources. Perhaps people in some developing countries still know how to live comfortably while saving resources. Through exchanging ideas and cooperating with each other, I want to work with people from other countries to realize the way to sustainable development.

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<sup>5</sup> Matsushita Electric Works, Ltd. *Akarianshin Service*. Available: <http://biz.national.jp/Ebox/akarianshin/index.html>

<sup>6</sup> Ministry of Economy, Trade and Industry of Japan. *3R Policies*. Available: <http://www.meti.go.jp/policy/recycle/main/words/ra.html#04>