

Global Environmental Issues and International Contributions

By Yanagawa Yoshiro

When the Earth Summit (the United Nations Conference on Environment and Development) was held in Rio de Janeiro, Brazil two years ago, a global call was issued for environmental protection. In Japan, as well, for several consecutive days the mass media reported on the dangers which the global environment faces, appealing for environmental protection and a move from the age of theory to an age of action.

The feverish interest that was exhibited in environment protection then has cooled, as if the affliction were a temporary one. As political uncertainty prevails among authorities, backed by the protracted economic recession with no forecasts for recovery likely in the near future, some say this might not be the time to think of the environment. However, the global environment is steadily being destroyed; destruction by invisible agents persists, though perhaps at a slower rate. This remains unchanged from two years ago.

It goes without saying that we have to halt environmental destruction while there is still time. Over the past several years, there have been numerous calls made, both at home and abroad, for Japan to play a large international role, through participation in U.N. activities, including peacekeeping operations and increased aid to developing countries. Among the various methods of contributing globally, a contribution to the protection of the global environment may be the best choice for Japan, and perhaps the one most needed.

Safe, wise investment

First of all, the protection of the global environment as Japan's international contribution would be an extremely peace-oriented move, untainted by political or military considerations. Although Japan would play a large international role should it be admitted as a permanent member to the United Nations Security Council, appeals for

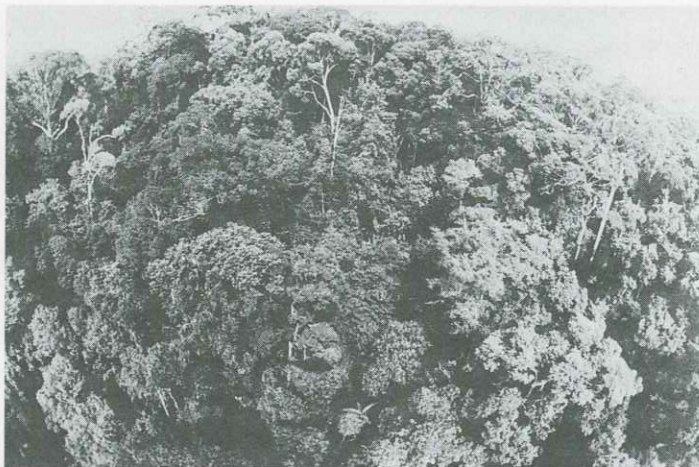


Photo: Kyodo News Service

A lush rain forest in Sarawak, Malaysia: The destruction of tropical rain forests is a factor in increasing carbon dioxide levels that contribute to global warming and is also strongly related to disruptions in polar weather patterns. Moreover, there are fears that the razing of the rain forests, where half of land-based life forms subsist, will lead to the extinction of some species.

caution are being voiced domestically. Furthermore, a consensus has not been achieved within the international community.

As for Japan's contribution to U.N. peacekeeping operations, national debate remains divided, with Japan's participation in large-scale peacekeeping activities likely to invite skepticism from various Asian countries. Compared with such alternatives, international contributions made by Japan towards global environmental protection would neither trigger friction nor invite resistance. Such contributions would be well-received by everyone.

Secondly, Japan has the capacity to make a contribution to the global environment. Said differently, it's Japan's turn to contribute. Worldwide, many countries, primarily developing countries, don't have the financial resources and technology to protect their environment. In addition, Japan has had considerable experience responding to serious pollution problems with sophisticated technologies. Furthermore, Japan is the world leader in air pollution technologies.

As an economic superpower, Japan also ranks top in the world in terms of

capital funding. If Japan were to use its abilities to the fullest, it could indeed make a large contribution to the international community.

Thirdly, Japan is an Asian country. Although the Cold War between East and West has been resolved, and opposing ideologies have dissolved, opposition between North and South, if anything, promises to escalate in the future.

The North-South divide is one of the largest problems facing solutions to environmental problems. Advanced nations, which are relatively sensitive to environmental concerns, request that developing countries show the same environmental consideration. The rebellious developing countries, however, responding to such requests, assert that the advanced industrialized countries are the ones primarily responsible for the environmental destruction to date, and claim that the advanced nations are selfishly making the lesser-developed countries scapegoats. Furthermore, these countries claim that environmental protection is an obstacle to economic development.

Developing nations have neither the funds nor the technology to comply with the expectations of the developed world.

If advanced nations are serious about making such a request, they can provide the necessary funds and technology, the countries of the South maintain. In this way, the logic of the North collides head-on with the logic of the South.

Asian countries are in the majority, and many of these developing countries will be forced to make a difficult choice between whether to give priority to environmental protection or economic development. Among these, Japan is the sole advanced industrialized nation. Therefore, environmental protection is largely Japan's responsibility.

Fourthly, Japan has a large impact on the global environment, being one of the worst offenders. Therefore, it is Japan's responsibility to redress the balance and make its contribution a favorable one.

Regarding the amount of carbon dioxide (CO₂) emissions—which has brought on the problem of global warming—Japan is the fourth largest consumer of petroleum and coal, behind the U.S., the former Soviet Union and China, accounting for 4.3% of total emissions worldwide. Therefore, it is Japan's responsibility to work actively to protect the global environment.

Fifth, Japan is a country with few natural resources, it lives by importing raw materials from overseas and processing these materials into commercial goods for domestic consumption. Japan is a great benefactor of the world's natural resources, yet it leads in the destruction of the global environment.

For example, Japan is the world's largest importer of tropical lumber (in the form of logs), importing more than half of all the lumber forested. As a result, Japan is lending a hand in the deforestation of tropical forests.

To take another example, a recent surge in labor costs, backed by the yen's appreciation against other currencies, has prompted many of Japan's manufacturers to expand production overseas. This is yet another way in which Japanese firms use resources procured overseas to fuel their own production activities. In particular, it is a source of air pollution, and invites criticism. If Japan is insensitive to environmental

protection, Japan will inevitably trigger Japan bashing around the world.

For these direct and indirect reasons, Japan must, and should, make active efforts to contribute internationally to the protection of the global environment.

Lack of knowledge hampers advancement

Regarding problems related to the global environment, the areas where Japan can contribute are numerous—the foremost being in the field of scientific research.

There is much that cannot yet be explained scientifically. In order to determine the current state of the environment and accurately devise appropriate protective measures, a deeper understanding of scientific knowledge in the natural sciences and social sciences is required.

Take for example, global warming, a problem pertaining to the atmosphere surrounding the earth. Mass consumption of fossil fuels has raised the concentration of CO₂ emissions in the earth's atmosphere, bringing on climatic changes and a rise in the sea level, known as the greenhouse effect. As the problem is directly related to energy issues, it is a very difficult one to solve, and can be said to be the greatest environmental concern.

However, regarding global warming, various scientific

uncertainties still abound. A panel called the Intergovernmental Panel on Climate Change has forecast that unless countermeasures are introduced, the earth's average temperature will rise by about 3°C, and that the sea level will rise by 65 centimeters by the end of the 21st century. Some scientists, however, due to a lack of research and forecasts pertaining to the oceans and clouds—which have a strong impact on atmospheric temperature—suggest that this forecast is unreliable and nothing more than a rough estimate.

Chart 1: The Volume of CO₂ Emissions Worldwide

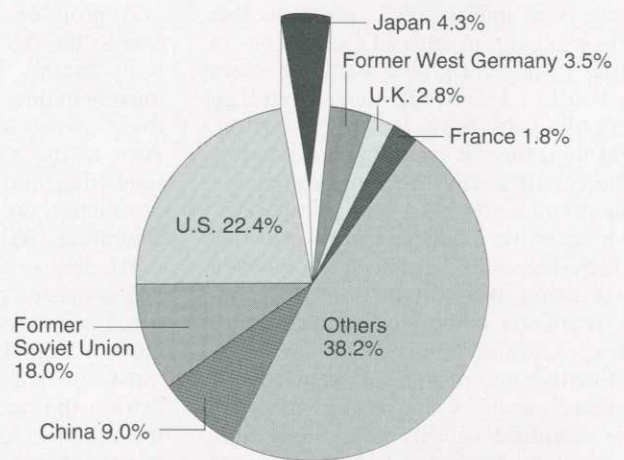
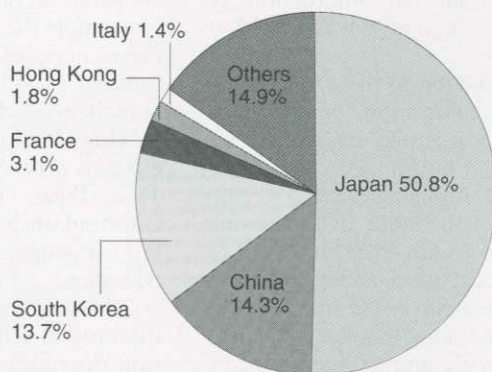


Chart 2: Leading Importers of Tropical Lumber (logs)



In addition, there are many aspects of the mechanism of global warming that have yet to be explained. Research on CO₂ and other gases that cause the greenhouse effect has been minimal. Some scholars, although the minority, maintain that the greenhouse effect is more than the result of climatic changes brought on by natural causes. They claim that the earth is not headed for a global warming, but rather, a global freezing.

Regarding the effects of global warming, other scientists, in response to destructive scenarios such as the destruction of the ecosystem and flooding of lowlands, claim that an increase in CO₂ would raise plant productivity, which would benefit humans. Although there is an international consensus that it is necessary to curb CO₂ emissions in order to prevent global warming, there is limited scientific understanding regarding the basis for this assertion, and therefore, it lacks persuasiveness. The result is that no comprehensive countermeasures have been introduced.

If scientific evidence can be provided which decisively verifies environmental destruction, there would surely be concrete efforts made worldwide to curb energy consumption.

Funding and manpower are needed if research is to be undertaken to prove the scientific validity of the assertion. Japan lags far behind the U.S. in its research on global warming, especially in basic research. In terms of both research funding and manpower, Japan has latent capabilities. In the future, Japan should contribute internationally by playing an active role in this field of research.

As for destruction to the ozone layer, Japan has measurement capabilities comparable to those of the U.S., Germany and France. As a matter of fact, it was a Japanese scientist who first observed the hole in the ozone layer over the South Pole. In order to develop a model to research and forecast the mechanism of ozone destruction, it is necessary to take measurements worldwide and exchange information. In this area, as well, Japan is expected to play a pioneering role.

Given that acid rain also falls on Japan, the likelihood of damage is increasing. Acid rain also crosses international borders, causing environmental destruction. Compared with the U.S. and Europe, Asia lags behind in its research, however, the threat of the negative impact of acid rain is gradually worsening.

Regarding the state of research in Asia and preventative measures, Japan is the only country capable of taking aggressive action, both in terms of the level of scientific technology and funding. Japan must play a large role, exchanging information and research results with other Asian countries.

What can be done

To promote an international contribution in the field of redressing the problems facing the environment, Japan must help developing countries promote their own technology. Especially in Asia, as these countries face the age of industrialization, signs of environmental destruction are increasingly being seen. Therefore, Asian developing countries must devise environmental strategies and a master plan. Japan, in turn, will need to set up an international environmental monitoring system and must also aid these countries by transferring the necessary technology, contributing machinery and providing funding to address the sources of environmental destruction.

Japan should also provide training for researchers and environment-related authorities in developing countries, cooperate in on-site training and actively promote the dispatch of instructors to these countries. In developing countries, interest in environment-related problems is generally low and know-how is lacking. It is necessary to inform and educate people about the environment. Thus, Japan could make an important contribution by helping to educate and inform people about environment-related issues.

Other concrete measures include contributing to actual tropical forest protection operations and preventing deforestation. This form of aid would also be a meaningful international contribution.

In order for Japan to gain recognition as an international contributor, it must contribute to international efforts being made to redress environmental-related problems. Especially important is cooperation with developing countries, because unless progress relating to environmental protection is made in these countries, it will be impossible to ensure global environmental security.

ODA is a useful channel through which to extend cooperation to developing countries. However, developing countries, out of necessity, give priority to economic development, with environmental protection being a secondary concern. As a result, requests for aid seldom include environment-related projects. Meanwhile, the Japan ODA system tends to dispense aid in response to specific requests made by developing countries. The current system through which ODA is extended makes it more difficult for Japan to give aid specifically for environment-related projects. If Japan could incorporate some flexibility in its approach to responding to specific requests, then it would have more success in convincing developing countries of the necessity of protecting the natural environment and playing an active role in helping these countries devise environmental protection-related projects.

Japan's leadership capabilities are frequently questioned when the issue of making an international contribution arises. This applies to the field of environmental protection, as well.

The formulation of a long-term strategy for environmental protection on a global scale and the creation of an international framework is the contribution most needed from Japan—especially now that interest in environmental protection has cooled.

Japan should be on the front lines in stimulating environmental protection activities on a global scale. This is the most appropriate international contribution for Japan to make in the 21st century. ■

Yanagawa Yoshiro, a news commentator at NHK (Japan Broadcasting Corporation), specializes in natural disasters and their measures.