



Employing Japanese Environmental Technology in ODA

The international community is currently confronting climate change and a host of other environmental issues. Many of those issues know no borders and affect nations across the globe, and the entire world is faced with the challenge of addressing to them, but most developing countries are unable to rise to the challenge effectively. Developing countries seeking to grow economically tend to push forward with that growth without regard to the environment for lack of knowledge and technology. The emerging countries like China and India have also grown rapidly, and air pollution and other issues have already become quite serious. Japan learned many lessons from the pollution it faced during its period of rapid economic growth from the 1960s on and is at the forefront of environmental technology. Japan continues to use its advanced environmental technologies to help developing countries achieve sustainable development through ODA, and that will promote Japanese science and technology diplomacy and will lead to intensified efforts in response to global issues.

Japan committed to provide its support on climate change for developing countries at the 15th Session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP15) in 2009 and implemented \$13.2 billion in support from the public and private sectors to developing countries working on climate change measures as well as those vulnerable to the effects of climate change from 2009 through February 2012. Part of this support involves ODA projects that make use of technologies and products from Japanese corporations as in the establishment of geothermal power generation facilities in Kenya and solar power generation facilities in Moldova. In addition to its support for adopting such renewable energy, Japan also supports the improvement of coal-fired power generation and other energy conservation measures. Coal is currently used to generate 40% of the world's power, and promoting low-carbon technology for more effective use of coal is extremely beneficial for measures against climate change. Japan has developed clean coal technology (technology for controlling the effects of burning coal on the environment by using it more efficiently) and uses it as it provides support to Indonesia and other countries. Japanese environmental technology is being used in many other fields as well; for example, it is being used to reduce effects on the environment by increasing natural rubber production and establishing basic technologies in Viet Nam as part of the Establishment of Carbon-Cycle-System with Natural Rubber Project.

In addition, Japan presented the "Green Future" Initiatives at the UN Conference on Sustainable Development (Rio+20) in June 2012. These initiatives include the Green Future Action Corps involving experts,

a pledge for \$3 billion of support for both the disaster reduction field and for the renewable energy and other climate change fields, and other policies that make use of advanced Japanese environmental technology, and Japan will steadily implement these Initiatives. The Initiatives also include the Joint Crediting Mechanism / Bilateral Offset Credit Mechanism (JCM/BOCM) to be established to help partner countries make use of Japanese low-carbon technology, etc. to reduce their greenhouse gas (GHG) emissions and allow Japan to use its contributions to GHG emission reduction so as to achieve Japan's emission reduction target. This mechanism is meant to supplement the current Clean Development Mechanism (CDM) defined in the Kyoto Protocol, which has some problems to work on such as the difficulty and time required for the approval process and other issues. Japan is currently implementing feasibility studies of projects mainly in Asian nations and is promoting governmental consultation with relevant countries so that it can be put into practice as soon as possible.

In addition, Japan has engaged in international joint research with researchers from developing countries through Science and Technology Research Partnership for Sustainable Development (SATREPS) since 2008. Its goals are to gain new knowledge and experience for resolving global issues, improving scientific and technical standards, and to build a system of continuous action to help developing countries improve their independent research and development capabilities and resolve problems. Among the SATREPS projects are Development of Low Carbon Society Scenarios for Asian Regions in Malaysia and Wild Fire and Carbon Management in Peat-forest in Indonesia.



The making of refined natural rubber latex. Through this cooperation, Japan supports the development of technology that endows natural rubber with higher functionality and basic carbon cycle technology (Photo: JICA)