

East Asia

Strengthening Strategic Partnerships Aiming for Mutually Beneficial Relationships

East Asia contains China, a country dealing with numerous issues that include environmental problems resulting from its dramatic economic growth, and Mongolia, which is pursuing rapid development underpinned by its abundant mineral resources. The sound and sustained development of these countries has become increasingly important for Japan as well as the rest of the world.

JICA's cooperation in this region is contributing to building stronger economic relationships with China and Mongolia that are both reciprocal and mutually beneficial.

Key Aid Strategies Support Regional Stability and Growth that is Sound and Sustained

Country Overviews and Priority Issues

● **China**

Not only has China achieved economic development, its technological level has also increased. To some extent ODA has already played a role in development aid for China; consequently, JICA's additional contribution through providing Loan and Grant Aid was ended.

In this situation, and in line with policies of the Japanese government, JICA's cooperation is currently extended to the common challenges faced by both countries. Examples include measures against cross-border pollution, infectious diseases, and food security-related issues.

Major projects in this region for priority issues include the Project for Total Emission Control of Nitrogen Oxide in Atmosphere.

Based on Japan's experience with pollution, this project aims to find ways to reduce the emissions of nitrogen oxide, a causative agent for 2.5-micron particulate matter (PM2.5), which, among airborne particles, is particularly damaging to health. To that end, the project is investigating technological measures and public policies and systems and spreading the use of practical control technologies and methods.

● **Mongolia**

JICA is focusing on cooperation in accordance with the three priority areas stated in the Mongolia Aid Policy, announced in April 2012.

(1) Sustainable development of the mining sector and enhancement of governance: establishing systems and training personnel to achieve sustainable development of mineral

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resources, the key element in Mongolia's economic advancement, as well as establishing systems including those for the proper management of revenues from natural resources.

(2) Assistance for inclusive growth: creating employment primarily at SMEs and smaller companies to diversify industrial activities, and improving basic social services.

(3) Enhancement of the capacity and function of Ulaanbaatar as an urban center: improving the city's infrastructure facilities, and upgrading urban planning and management capabilities [→ see the Case Study on page 72].

Major projects in this region for priority issues are as follows.

The New Ulaanbaatar International Airport Construction Project: Construction of a new airport in Ulaanbaatar will improve the safety and reliability of air access for the capital city and

provide greater convenience for travelers, contributing to further economic development in Mongolia. JICA is also extending technical cooperation for establishing smooth management and maintenance systems to be applied when the airport starts operations.

The Project for Capacity Development of Business Persons through the Mongolia-Japan Center for Human Resources Development: In this project, JICA provides professional development training through the Mongolia-Japan Center for Human Resources Development, constructed through Grant Aid, to nurture individuals who can play key roles in the creation of a market economy. The center offers business courses and provides assistance to SMEs and microenterprises. The center also provides Japanese companies with business information.

Case Study

Mongolia: Capacity Development Project for Air Pollution Control in Ulaanbaatar City

Aid for Restoring Clean Air in Ulaanbaatar

The city of Ulaanbaatar has the world's second-worst air pollution, according to a World Health Organization (WHO) survey. With residents suffering harm from air pollution, urgent actions are needed to deal with the problem. With the goal of developing Ulaanbaatar's capacity to deal with its air pollution, JICA is providing a technical cooperation project to enhance the public sector's capabilities, including the city and national-level agencies in the technical and managerial aspects of air pollution control, which demand a high level of expertise.

The air pollution in Mongolia's capital city, Ulaanbaatar, where temperatures can drop as low as -30°C to -40°C during winter, comes from many sources, including a large amount of coal combusted in boilers and household stoves for heating, which is indispensable to people's daily lives, and emissions from aged coal-fired combined heat and power plants and automobiles, among others.

When this project started, there was very limited understanding of the states of these pollution sources and emissions, just how much these sources were affecting air pollution in the city overall, and what measures were needed to deal with the problem.

Assessing and Controlling Ongoing Air Pollution

In such circumstances, JICA began full-scale work on the project in March 2010 to address

the issue at the request of the Mongolian government. In order to promote effective air pollution control measures, JICA's first priority in this project was to improve the technical and regulatory capabilities of Mongolian agencies to measure emissions from major pollution sources, to evaluate their impacts on air quality, and to reduce emissions in the city.

Specifically, JICA provided assistance for on-site stack gas measurements of coal-fired boilers to acquire reliable data on emissions—a basis for rational decision-making, for developing an emissions inventory, and for executing an atmospheric dispersion simulation model, which requires advanced technical expertise. As a result, based on the data that the Mongolian agencies collected themselves, the government steadily began to get a clearer picture of how much each source was contributing to air pollution, and to evaluate



Performing on-site stack gas measurement

emission control measures in a practical manner. This process has yielded concrete results, as the Ulaanbaatar City Council has approved for implementation several of the measures evaluated on the basis of technical diagnoses of emission sources with assistance from JICA.

JICA also placed emphasis on institutional development aspects as well as human resources development, creating a boiler registration system to enable the government and the private sector to coordinate together for emissions reduction and building a framework within which government agencies, the private sector, universities, and professional groups cooperate in preparing air pollution measures.

Further, in addition to the government's effective regulatory control of emission sources, clear-cut air quality improvement would require a wide range of efforts, including capital investments and technological improvements at private-sector entities that are causing pollution, fuel improvements, and fuel switching from raw coal to cleaner fuels. Also, measures in land-use planning, urban development, infrastructure development, and investments will play very important roles, along with the necessary strategy and policy elaboration. Restoring clean air to Ulaanbaatar will require such efforts to be carried out steadily by people in Mongolia, based on scientific and technological facts. For that purpose, JICA will continue to provide cooperation aimed at further developing Mongolia's capacity to deal with air pollution.



One of the major sources of air pollution: emission from a combined heat and power plant