

# JBIC's Overseas Development Assistance Initiatives

ODA loan operations of JBIC (Japan Bank for International Cooperation) are based on a Medium-Term Strategy for Overseas Economic Cooperation Operations which is set every three years (the current target covers period between April 1, 2005 and March 31, 2008). The Strategy highlights three sets of approaches for ODA loan operations; focuses on developmental results, emphasizes medium- to long-term perspectives, and increases efforts for the transparency of Japanese ODA loans.

JBIC focuses on four priority areas; (1) Poverty Reduction, (2) A Foundation for Sustained Growth, (3) Global Issues and Peace Building, and (4) Human Resource Development. Here are the examples of the projects that were evaluated in FY2005. It highlights the results of the ex-post evaluation studies in Peru, Pakistan, Bulgaria, and Indonesia. (For further details, please check [www.jbic.go.jp/english/oc/post/index.php](http://www.jbic.go.jp/english/oc/post/index.php))

## Aid for Poverty Reduction

### Peru: Social Sector Development Project in Amazon Area/Sierra Area

#### Project Outline

The objectives of the project is to contribute to poverty reduction and employment generation in poor areas (Phase1: Amazon Area, Phase2: Sierra Area) by the implementation of small-scale infrastructure subprojects (water supply, roads and bridges, village electrification) and thereby contribute to improve social and economic infrastructure and social services.

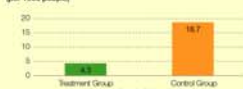
#### Evaluation Results

This project comprises a variety of subprojects in Peru's impoverished region, including the provision of potable water facilities, latrines and other sanitary infrastructure, rural roads, bridges, and small-scale electrification. According to a study of 300 beneficiary households in some 16 villages, over the past 10 years household medical expenditure has dropped by over 50%, and roughly 30% of beneficiaries have replied that there were dramatic improvements in water quality, women's household chores, labor for drawing water, and household sanitation. One can thus say that the living environment in the project target region has been improving.

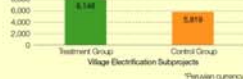
In addition, JBIC has conducted detailed Poverty Impact Assessment. In the study, household income and infant mortality rates have been verified and compared in areas where subprojects were conducted (treatment group) (625 households in 69 villages) and where the project was not conducted (control group) (834 households in 82 villages). A comparison between areas with and without water supply facility projects indicated that the infant mortality rate was considerably lower in project areas. Moreover, in regions where village electrification was conducted, incomes were found to be higher than in the control group. (see figure at right).



Mortality Rate for Infants (0 - 5 Years Old) Over the Past Five Years (per 1000 people)



Household Income (Rupee Sq / Household)



## A Foundation for Sustained Growth

### Pakistan: Kohat Tunnel Construction Project I — III

#### Project Outline

This project's objective was to improve traffic conditions and increase the role of National Highway 55 (the Indus Highway) by constructing a new tunnel and new approach road as an alternative route to the Kohat pass, situated between Peshawar and Kohat of the Indus Highway, and thereby contribute to stimulate social and economic development in the North-West Frontier Province where poverty levels are high, and to promote a balanced economic development of Pakistan.

#### Evaluation Results

The Kohat tunnel built as part of this project was the first large-scale tunnel in Pakistan. The project made use of tunnel construction technologies from Taisei Corporation, a Japanese enterprise. During the project execution period (2006), traffic volume exhibited a favorable increase of 49% from 2003 to 2004, and 13% from 2004 to 2005. These figures greatly exceeded the initial target of 5% annual growth. Moreover, according to a survey of beneficiaries, the majority of drivers have experienced reduced transit times, and they also notice that travel costs (fuel costs) have been reduced. In addition, by using the tunnel and approach roads, commuting to work and school has become easier, and as a result, class attendance rates have risen. Some people surveyed added that after graduating high schools, many schoolgirls continue with their schooling in Peshawar. Many responded that the amount of time needed for getting to hospital facilities and the like has been reduced.



Stamps commemorating the opening of the Kohat tunnel

## Support for Global Issues and Peace-Building

### Industrial Pollution Improvement Project in Plovdiv

#### Project Overview

The project objective was to reduce the harmful substances emitted into the air and discharged into water from KCM plant, the zinc and lead smelter located in Plovdiv, the Republic of Bulgaria, through appropriate countermeasures to produce cleaner exhaust gas and wastewater, and thereby contribute to environmental improvement and economic growth in Bulgaria.

#### Evaluation Results

KCM has been operating as a leading lead and zinc smelter. At the time of appraisal, the company had no choice but to curtail production volume so as to meet the EU's environmental standards. Bulgaria joined EU in January, 2007. Thanks to the introduction and improvement of countermeasure facilities for exhaust gas and wastewater through Marubeni, a Japanese enterprise, KCM has now succeeded in largely meeting the EU's new environmental standards.

Moreover, JBIC, in cooperation with Sofia University, Bulgaria, has conducted an analysis of the project's effect on cultural heritage as well as the surrounding environment (soil and crops) and residents' health. The results of this study confirm a reduction in air pollutants such as soot, lead, and cadmium, and sulfur dioxide (SO<sub>2</sub>). A particularly notable drop in emission levels was noted following 2003, the year when the project's introduction of environmental equipment was completed. Moreover, a drop in lead, zinc, and cadmium in the soil has also been confirmed. In addition, because the range over which sulfur dioxide, soot particles, and other substances in the air settle to the ground has become smaller through this project, it is estimated that their adverse effect on buildings and historical landmarks has also been reduced.



Changes in Yearly Average SO<sub>2</sub> Concentrations in the Outskirts (Aasenograd, Kuklen, Dolni Voder) of KCM Company



## Assistance for the Human Resource Development

### Indonesia: Siah Kuala University Development Project

#### Project Overview

This Project aimed to improve education quantitatively and qualitatively and strengthen research activities in the agriculture and engineering departments of Siah Kuala University of Aceh Province by constructing school buildings for these departments, providing educational and research equipment, and supporting a foreign study program for professors; It thus, the project aimed to contribute to the development of the Aceh region and Indonesia as a whole through the nurture of engineers and technicians in science and technology fields, particularly the agriculture and industries, etc. that use natural resources, and also through effective use in society of the knowledge and technology of these fields.

#### Evaluation Results

Through this project, educational infrastructure has been provided in the Aceh province, and the number of students, number of new entrants, and number of teaching staff have all increased in a manner exceeding initial targets (For instance, the number of students in the agriculture and engineering departments has reached a total of 5,070 people in 2004, in contrast to an initial target of 2,994. The number of entrants in the two schools reduced 897 in 2004, in contrast to the initial target of 406).

Based on a foreign study program conducted through this project, Siah Kuala University researchers obtained doctorate degrees in Japan. They have been particularly active in reconstruction activities for the tsunami damage generated by the earthquake that occurred off the coast of Sumatra at the end of 2004. It can thus be said that the role played by this project is extremely large.



Some 50 teachers have obtained doctoral degrees at 18 universities in Japan including Nagoya University.



A professor who obtained his doctorate at Hokkaido University has developed cement materials that are lightweight and water resistant. It has proven useful in the reconstruction of houses damaged by earthquakes and tsunami.



A professor who obtained his doctorate at Kyushu University has developed crops with resistance to the dry season.