

South America — Promoting Effective Aid While Advancing Inter-Regional Partnerships

South America, gifted with fertile soil and abundant natural and mineral resources, is achieving strong economic growth spurred by the recent increases in worldwide demand and prices of resources and foods. At the same time, however, South American countries are still characterized by large disparities in both income and access to social services, where large numbers of people are forced to live in poverty in the shadows of economic growth. Taking into account the specific circumstances under which each country lives, JICA addresses the issues that are considered to be priorities in each country, and also focuses on environmental conservation of the region's resources, such as the Amazon Basin, which have a significant impact on the global environment.

Going forward, JICA will focus on extending cooperation on economic infrastructure development, global issues, and mitigating disparities, while assisting the development of countries inside and outside of the region through private sector partnerships and partnerships with countries in the region that have achieved relatively high income levels and possess advanced technology, such as Brazil.

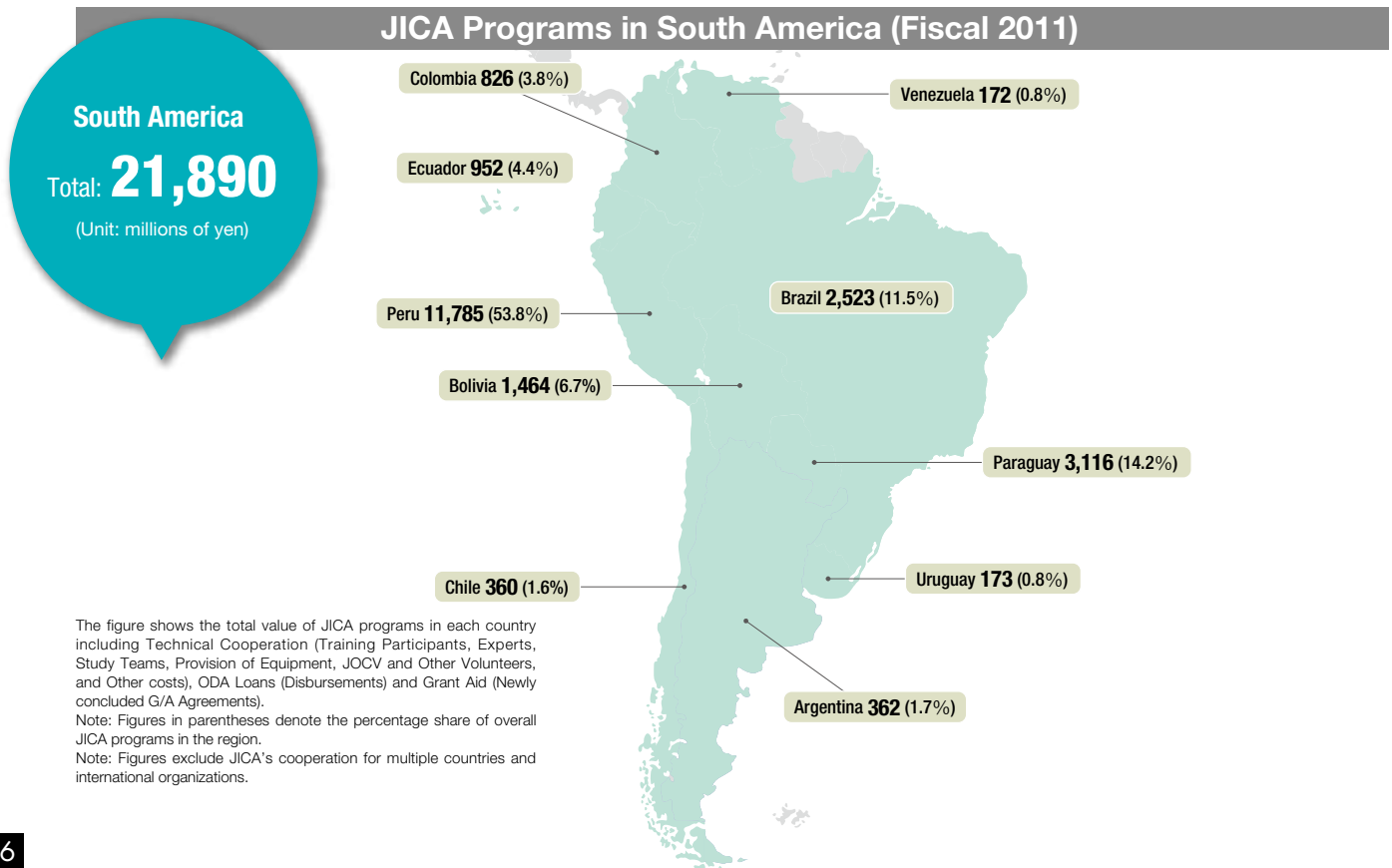
Key Aid Strategies ▶ **Contributing to Regional Stability by Developing Economic Infrastructure, Addressing Global Issues and Mitigating Disparities**

South American economies depend heavily on the production and export of primary products, which makes them extremely vulnerable to global economic and market trends. In the future, these countries will need ongoing industrial development, trade promotion, and an improved investment environment, as well as economic development that facilitates sustainable growth. It is also essential to strengthen the administrative capacities of the governments and maintain stable security as a foundation for encouraging private sector economic activity. Moreover, there are many areas in which urban environmental problems are growing more serious due to economic growth, and these problems require an urgent response as well.

In the shadows of the strong economic growth of recent years, there persists considerable social anxiety created by the presence of economic disparities at the national and regional levels. Under these circumstances, in addition to undertakings to foster economic growth, efforts are being made to mitigate disparities and stabilize the economy and society in the region.

It is important to address global issues in South America because the Amazon, the world's largest rainforest, greatly impacts global climate change, and because this area still offers significant potential for developing both agricultural land and natural resources, which are related to food and energy security.

JICA Programs in South America (Fiscal 2011)





South America has witnessed frequent major natural disasters in recent years, including an earthquake in Chile and flooding in Brazil, Colombia, and Venezuela, making disaster prevention countermeasures an important issue.

While placing a priority on utilizing this key aid strategy, JICA implements assistance by keeping the next three points in mind:

- 1) Mitigating disparities both within regions and within countries
- 2) Contributing to development while maintaining respect for the ownership of the recipient countries
- 3) Ensuring that the benefits of growth are extended to the poorest segment of the population

In addition, JICA is strengthening its relationships with Brazil, Argentina and Chile, where income levels have grown higher and technological capabilities have also improved compared to other countries in the region, by reinforcing partnerships to address development in neighboring countries and in Africa.

In recent years, Japan has been importing more and more of its resources and food from this region. Based on the large Japanese immigrant community numbering more than 1.6 million people, the relationship between Japan and South America is likely to deepen further in future.

Case Study

Ecuador Vocational Training for Socially Vulnerable People

Vocational Skills for Ending Poverty and Aiming for a Better Future

In Ecuador, JICA has been continuously providing aid for training industrial workers through the Vocational Training Improvement Plan (Grant Aid) and the Vocational Training Improvement Project (Technical Cooperation). During the three-year period from 2008 to 2011, JICA conducted the Project on Strengthening of the Occupational Training for the Vulnerable Sector (Technical Cooperation). Under the leadership of President Rafael Correa of Ecuador, who has committed to helping socially vulnerable people, this project has helped to reduce poverty among these people. More than 70% of people who completed the training reported that they received additional benefits such as by raising their incomes, starting small businesses or receiving a higher-paying job.

Daily Income Below \$2 for About 40% of Residents

The Andes mountain range covers about one-third of Ecuador. There are many more impoverished small farmers in mountainous areas of the country than along the coast, resulting in a high poverty rate. Although Ecuador has a gross national income of more than \$3,000 per capita, about 40% of the country's population of approximately 14 million is impoverished with a daily income below \$2. Many of these impoverished people are women, people with disabilities, refugees from Colombia* and other socially vulnerable individuals. They are unable to break away from poverty mainly due to the lack of skills required to find a job.

Basic Skills Training Follows Industrial Human Resources Development

The new administration of Ecuador is taking actions to support socially vulnerable people and help impoverished people. Under this policy, Ecuador has been offering Basic Skills Training Courses for socially vulnerable people at vocational training centers nationwide since 2007. However, there is insufficient know-how to operate these courses as well as a need to strengthen the capabilities of instructors.

JICA has been providing support in the vocational training sector of Ecuador in order

to foster the development of industrial human resources. In addition, JICA received another request from the Government of Ecuador for aid for basic skills training that is specially targeted to socially vulnerable people. In response, JICA started the Project on Strengthening of the Occupational Training for the Vulnerable Sector. Assistance was provided for the development of model courses for basic skills training for vulnerable individuals and for the creation of a framework for widely utilizing these models. A needs survey was performed so that the project could contribute to reducing poverty among socially vulnerable people. Based on the survey, model courses were developed for six sectors: food preparation, sewing, electricity, building construction, machinery and metals, and automobile maintenance. The developed models were then implemented at eight vocational training centers that are representative regional centers and where there are large numbers of refugees from Colombia.

Training Improved the Lives of 70% of Participants

This project developed a curriculum and teaching materials for 20 basic skills training courses in seven fields. In all, 425 courses were conducted and approximately 7,500 people attended the courses. About 70% of people who completed these courses had improved

their lives due to an increase in income, new job, start of a new business, better quality job, new job with a higher income or other improvements. To increase employment opportunities and improve the livelihoods of socially vulnerable people, the Government of Ecuador has decided to expand the model of basic skills training to all 18 training centers in the country.

From the Grassroots

Shiro Kikuchi, Project Leader (descendant of emigrant to Paraguay; recipient of a 2011 JICA Recognition Award)

Before the start of this training, socially vulnerable people had no opportunity to gain new skills that could be used as a source of income. This is why they studied so hard and expressed their sincere appreciation after finishing the course. I hope that the useful knowledge and technologies they acquired will enable them to find jobs and start businesses that can increase their incomes.

*Colombia suffered from a prolonged internal conflict between the government and left-wing guerrillas and a right-wing militia. Many people were forced from their homes and became refugees who now live in Ecuador, Panama, Venezuela and other nearby countries.



Students in the bread baking and confectionery course

Priority Issues and Efforts

■ Building a Foundation for Sustainable Economic Growth

Blessed with abundant natural resources, South America has achieved steady economic growth in recent years, primarily driven by private-sector investment. Although the region was impacted by the global economic crisis in 2008 and by volatile prices for natural resources, the economy recovered in 2010. JICA is providing support to reinvigorate the economies of rural areas in consideration of mitigating domestic income disparities, which is an important development issue faced by various countries in the region.

In Paraguay, 87% of the roads are unpaved and are frequently unusable in the rainy season. This threatens the country's social foundation, as it hinders sales channels for the livestock industry, Paraguay's major industry, as well as slowing down economic activity and restricting access to schools and hospitals. JICA is implementing the Rural Roads Improvement Project with emphasis on regions with particularly low pavement ratios.

The Altiplano region of Bolivia, which is a plateau high in the Andes, has lead, zinc and other mineral resources as well as tourism resources like Salar de Uyuni salt flats and the Potosi silver mine, which is a UNESCO World Heritage site. Nevertheless, this area has the country's highest poverty ratio. Average monthly income is less than half the national average and the income disparity between urban and rural areas is more than four times. Agriculture and livestock are the primary industries in this region. However, the infrastructure is inadequate and the climate is challenging because of the altitude of more than 4,000 meters. In addition, the effects of climate change have been lowering agricultural and livestock productivity in recent years. As a result, livelihoods in the future is a main problem that residents concern.

Japan is strengthening its economic ties with this region by constructing geothermal power plants and developing mineral resources. Along with these activities, JICA is supporting the creation of plans for industrial promotion in the tourism sector and agriculture and livestock sector with the aim of improving the livelihoods of residents by increasing the scale of these two sectors.

In Peru, there are expectations for even stronger economic ties with Japan since an Economic Partnership Agreement between the two countries became effective in March 2012. JICA plans to provide financial support for economic growth in the entire country while contributing to help Peru to eliminate disparities within the country, such as through tourism development projects in the country's poorest areas.

■ Addressing Global Issues

South America tends to be affected by global issues such as climate change, but at the same time the region can have a significant impact on the resolution of such problems. Accordingly, JICA is cooperating in this field with many South American countries. Since this is a region where some

countries have relatively advanced levels of technology, JICA pursues research cooperation together with Japanese universities and other research institutes by utilizing Japanese science and technology in order to contribute to resolving global issues.

Chile is a country with many earthquakes and tsunamis, just as in Japan. In 2010, the sixth most powerful earthquake ever recorded devastated a large area of the country. Damage caused by the tsunami was particularly severe. This disaster raised many questions in Chile. JICA has been sharing with other countries information and lessons learned regarding the Great East Japan Earthquake of March 11, 2011 and working on measures to strengthen tsunami preparedness in order to prevent this type of tragedy. Starting in 2011, JICA has been implementing the Research Project on Enhancement of Technology to Develop Tsunami-related Communities under the Science and Technology Research Partnership for Sustainable Development (SATREPS) with a research team consisting of universities and organizations in Japan (Lead research institute: Port and Airport Research Institute). Objectives of this joint research project include developing tsunami damage prediction technologies and a highly accurate tsunami warning method in Chile.

Ninety-nine per cent of the world's tropical glaciers are concentrated in the Andes Mountains of South America, and these glaciers are disappearing rapidly due to climate change. Through the Study on Impact of Glacier Retreat on Water Resource Availability for cities of La Paz and El Alto Project (SATREPS) in Bolivia, conducted jointly with Tohoku University and other partners, JICA is supporting the research and development of a water resource management model that reflects climate change and changes in the social environment in order to reduce the impacts of disappearing glaciers.

In Argentina and Chile, JICA cooperated with the Project to Strengthen the Capacity to Measure the Ozone Layer and UV Radiation in Southern Patagonia and the Projection towards the Community (Technical Cooperation) with the National Institute for Environmental Studies and Solar-Terrestrial Environment Laboratory of Nagoya University and other organizations. This project supports activities related to observing the ozone layer, and warning and educating residents about limiting the health impacts that result from ozone layer depletion.

■ Poverty Reduction and the Correction of Disparities

Measures to address poverty and the correction of disparities are an issue common to all South American countries as well as a cornerstone of each nation's governmental policy.

In Colombia, more than 40 years of internal armed conflict has caused many serious and complex problems. For peacebuilding in this country, it is vital to eliminate the poverty problem through improvements in the lives of internally displaced persons (IDP) and other socially vulnerable people by enabling them to earn incomes. JICA supports the "One Village, One Product" project, which aims to enable impoverished and socially vulnerable people to earn incomes and improve their lives. Under the strong leadership of the Government of

Colombia, as part of the national strategy of strengthening the capabilities of local governments, the “One Village, One Product” project is being implemented on a nationwide scale.

Peru has enacted macroeconomic policies that achieved rapid growth but is still working on correcting disparities. JICA is providing support for fighting poverty and improving the livelihoods of rural residents of the Amazon regions of Peru. JICA supports Peru with two ODA Loans; 1) the Rural Amazonia Water Supply and Sanitation Project, which aims to build water supply and sanitation facilities in rural villages of Amazonia; and 2) the Sierra Small and Medium Scale Irrigation Project, which aims to improve agricultural productivity in mountainous regions, and a Technical Cooperation, the Project for Improving the Livelihood of Small-scale Farmers in Cajamarca. In addition, JICA provided Technical Cooperation for the care of victims of domestic and social violence through the Project of Strengthening the Integrated Health Service for People Affected by Violence. As a result, there have been rapid increases from 2009 to 2011 in the number of small medical care districts that can provide comprehensive health care services and in the number of under-controlled victims served, the number of people who receive medical care, and the number of referrals to associated institutions.

Strengthening Relationships with the Japanese Government and People

Aid from national governments themselves or from foreign countries has a relatively smaller impact on the overall

economy in comparatively higher income countries, where private sector economic activity drives development.

In South America, Japanese private companies have entered the mining industry to start with in particular because of the region's rich mineral, energy and other resources. The progress of these private sector economic activities will serve to promote further economic development, while also contributing to strengthening the relationships between these countries and Japan.

With demand for electricity expected to continue to climb in Brazil, the country needs to secure sources of electricity needed to support sustainable growth. In response, the country is moving forward with smart grid and smart community* initiative. By collaborating with the New Energy and Industrial Technology Development Organization (NEDO), JICA invited key members of the electricity sector in Brazil to Japan to explain initiative of the Japanese government and advanced case studies at Japanese companies. Smart grid technology is one of the central elements of the Japanese government's New Growth Strategy. These activities are helping to build a network of relationships among key stakeholders in Japan and Brazil. It is expected to increase understanding and interest involving extremely advanced technologies, thereby contributing to the use of these technologies in Brazil.

*The smart grid and smart community use electricity supply systems that incorporate IT in order to make all functions of a city more efficient, resulting in substantial energy conservation.

Case Study

Carbon Dynamics of Amazonian Forests

Working with Global Partner Brazil to Deal with Global Issues

A joint research project is under way in the Amazonian forests with the aim of contributing to the establishment of a new framework for fighting climate change.

Discussions are ongoing worldwide about the establishment of the REDD-plus mechanism (reducing greenhouse gas emissions from deforestation and forest degradation and other causes). One of the major issues involving the design of this mechanism is the creation



In the central Amazonian forest, where very few surveys have been performed, data on plants and other subjects have been collected at about 1,000 locations by measuring tree diameters, collecting flowers and conducting other activities.

of a method for the accurate and efficient calculation of carbon sequestration in forests that are changing due to deforestation and forest degradation. To devise a method, the Carbon Dynamics of Amazonian Forests Project is being implemented as part of the Science and Technology Research Partnership for Sustainable Development (SATREPS), a joint undertaking of JICA and the Japan Science and Technology Agency (JST).

The project is performing research by



In the upper Amazon basin, members of the on-site team weigh a tree to estimate the amount of carbon inside.

operating in two teams: the on-site team and remote-sensing team. The on-site team consists primarily of the Forest Products Research Institute of Japan and National Institute for Amazonian Research of Brazil. Team members have been repeatedly performing on-site surveys to calculate as accurately as possible the amount of carbon stored in the Amazon rainforest.

Members of the remote-sensing team come mainly from the University of Tokyo and the Brazil National Institute for Space Research. The team uses information from on-site surveys to obtain highly accurate carbon storage volume data for each type of forest. The team also performs research concerning methods to calculate the volume of carbon sequestration in the Amazon region by using satellite images and other remote sensing information.

This cooperation that combines the scientific technologies of Japan and Brazil is expected to make a valuable contribution to international discussions that may lead to establishment of the REDD-plus mechanism.