

# Industrial Development

## Supporting Developing Countries in Promoting Industry and Creating an Economically Independent Society



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

In the field of industrial development, JICA supports the development of the private sector, which serves as an engine for economic growth. While focusing on promoting trade and investment, tourism development, small and medium-sized enterprises development, and the vitalization of local industry and economy, JICA provides broad-ranging support for developing industrial infrastructure in developing

countries, including support for the stable supply of electric power, mining, renewable energy, and energy conservation. The objective is to empower developing countries to build industrial bases, advance industry, increase job opportunities and create a society in which local residents can receive the benefits from economic development.

In a globalizing economy, supporting developing countries through Public-Private Partnerships is also an important theme, and JICA is laying emphasis on cooperation in environment-related and other sectors where it can utilize Japan's advanced technologies.

## Private Sector Development

### Overview of Issue

Efforts to develop the private sector aim to promote economic growth in developing countries by enhancing the capacity of private sector corporations and local industries. The growth and expansion of private sector corporations and local industries are essential to diversifying and strengthening the competitiveness of industries in developing countries. Improving the investment climate for private sector companies will contribute to developing local communities through a form of industrial promotion that exploits local resources and the self-fulfillment of the people. The governments of developing countries are being asked to tap the vibrancy of their private sectors from a dynamic and inclusive perspective in order to expand job opportunities and thus reduce poverty.

### JICA Activities

JICA's private-sector development initiatives have so far centered on Southeast Asia and East Asia. Today, both of these regions are experiencing tremendous economic growth. In light of this fact, there is an increase in requests from Africa to learn from the experiences of Asian countries.

The volume of trade and investment in the global economy has risen substantially due to globalization. Asian countries that have grown into emerging economies on the world stage, as well as many developing countries in Africa and other regions, are actively taking part in international frameworks such as the World Trade Organization (WTO) and Economic Partnership Agreements (EPA).

Economic globalization has increased the likelihood that one country's economic crisis will spread quickly and widely and significantly damage the economy of vulnerable countries and regions, as witnessed in the global financial and economic crises that struck in autumn 2008 and the unstable situations emerging

in a number of Middle Eastern countries since early 2011. JICA supports developing countries in building their industrial bases, increasing job opportunities and creating societies that can reap the rewards of economic development through their own efforts.

### 1. Promoting Trade and Investment

By promoting trade and investment, developing countries can create new markets, introduce expert knowledge such as finance and management know-how and technology, create jobs and strengthen international competitiveness. JICA provides assistance in three core areas: development of industrial bases, organizational/institutional reinforcement and capacity development.

The development of industrial bases includes creating legislation and institutions to promote trade and investment and building other infrastructure for industrial advancement. On top of this, JICA supports the organizational/institutional reinforcement of institutions which play key roles in trade and investment promotion, and individual companies in each country, as well as capacity development for policymakers and private sector human resources of private enterprises. By doing so, JICA can provide comprehensive support from industrial policy to the promotion of export and investment.

Recent successful projects include the Study on the Institutional Strengthening of Investment Promotion in Cambodia, the Egyptian Export Promotion Center, Reinforcing the Capabilities of the Zambia Development Agency and Project for Reinforcement of the Human Resource Development Center on Export and Investment in the Dominican Republic.

In Cambodia, JICA has supported the establishment of a special economic zone (SEZ) on around 70ha of land near Sihanoukville Port, the country's only international port. The SEZ is expected to attract foreign direct investment for the development of Cambodia's export-related industries, which can generate employment opportunities particularly for youths. JICA conducted

## Strengthening Customer Service Functions in Order to Attract Active Investment

Cambodia is continuing to gather attention as a potential investment market after China and Viet Nam. JICA is providing Cambodia support in strengthening the functions of the customer service institutions that work to attract investment from Japan and other foreign countries. Thanks to these wide-ranging efforts, investment from Japanese corporations in Cambodia increased sharply in 2010.



The Cambodia Investment Seminar held in Tokyo with the participation of numerous private company employees.

### Lack of Effective Information and Consultation

For Cambodia, a country that is working hard to promote economic development, attracting direct investment from foreign countries that will facilitate production and management-related technology transfers and generate funds is a major task. Investments from China, Thailand, and other countries have increased as the result of an active national effort to attract foreign investment, including by revising the investment law and strengthening the structures of the institutions that accept investments. Nevertheless, investment from Japanese corporations remains modest for reasons that include high production costs owing to an underdeveloped infrastructure and a lack of information on the investment environment and opportunities.

The investment promotion institutions of neighboring countries such as Thailand and

Viet Nam, in particular, provide investors with comprehensive investment-related information and consultation services, actively working to attract investment. In Cambodia, however, the functions of the institutions that are supposed to oversee such services are extremely limited, thereby hampering the attraction of investment.

For this reason, since 2007 JICA has extended cooperation to promote investment for the Council for the Development of Cambodia (CDC), an institution that endeavors to attract investment from overseas. Investment promotion advisors have been dispatched as experts, and since 2009 a development survey has been carried out in order to strengthen the functions of customer services that will attract investment to Cambodia. In March 2011, a Technical Cooperation project was launched to provide CDC officials with the knowledge and expertise needed to attract investment, and support has been provided for information consolidation functions as well as activities that promote investment.

### Investment Surges with Guidebooks and Seminars

In April 2010, the Cambodia Investment Guidebook (Japanese) was completed as a part of a development survey. Moreover, in May of the same year, a series of Cambodia Investment

Seminars was held in Tokyo and Osaka by the ASEAN-Japan Centre (international organization), the Ministry of Economy, Trade and Industry, and the Japan External Trade Organization (JETRO). These seminars served as an opportunity to attract the interest of many Japanese corporations in investment in Cambodia. In fact the level of investment is beginning to rise. While the total investment amount over the four-year period between 2005 and 2009 was US\$180 million and the figure for 2010 alone was US\$35 million, for 2011, if projects for which approval procedures are ongoing are included, investment by Japanese corporations in Cambodia has already risen to US\$130 million as of the end of May.

Since 2011, JICA has been extending various forms of Technical Cooperation to CDC with the aim of improving the organization's investment-related services required by investors. Specifically, JICA is endeavoring to launch an investor information website and develop library and reception desk services in order to strengthen the capacity of CDC to provide investment-related information. JICA is also planning to enhance the functions of the Japan desk, which is the precursor to the country desk, and to hold more Cambodia investment seminars in Japan.

### Simultaneously Promoting Infrastructure Development

JICA has used ODA Loans to support the repair and expansion of Sihanoukville Port, which is expected to develop into Cambodia's main center for trade and industry, as well as for the development of the neighboring Sihanoukville Special Economic Zone (SEZ). Japan is contributing to the economic development of Cambodia by promoting this type of infrastructure development while also supporting the penetration of Japanese corporations.

#### From Our Partner

#### Vice Chairman of CDC

#### Senior Minister Sun Chanthol

There is much that Cambodia must do, such as promoting the provision of various forms of beneficial information, but I feel that the investment seminars in Japan have created a good response as many Japanese corporations participated. I intend to take advantage of this valuable opportunity to promote investment. We will be putting the action plan proposed by JICA into action in the near future. (in a greeting delivered at the Cambodia Investment Seminar)



Development advances in the Sihanoukville Special Economic Zone (SEZ).



a development study from February 2009 aimed at strengthening functions for attracting investment and transferred the required knowledge and know-how to the Council for the Development of Cambodia (CDC). Throughout this cooperation, CDC's capacity, such as information gathering and investment promotion, can be strengthened [ → See the Case Study on page 117].

## 2. Promoting Small and Medium-Sized Enterprises

In developing countries, growth for small and medium-sized enterprises (SMEs) has been stifled by the delayed development of policies and institutions that support SMEs, coupled with the lack of corporate networks, insufficient technical and managerial know-how, and poor access to finance. Efforts to train industry human resources that can work in these enterprises are also inadequate.

In response to these issues, JICA provides cooperation for strengthening implementation capacity of the government institutions in charge of SME promotion as well as educational institutions, human resource development and improving the quality and productivity of enterprises. Moreover, since it is difficult for SMEs to receive financing, JICA aims to provide effective support with financial aid offered in the form of ODA Loans [ → See the Case Studies on page 43].

Recently, emphasis has been placed on extending cooperation for developing countries where large numbers of Japanese firms have established a presence, such as Thailand, Viet Nam and Mexico. This cooperation is aimed at creating a mutually beneficial relationship between the recipient country and the Japanese firms operating there. In Viet Nam, for example, JICA helped the country promote small and medium-sized enterprises. In addition, JICA also assisted supporting industries in providing comprehensive cooperation for government agencies that are in charge of promoting SMEs, educational institutions, financial institutions, etc., with the aim of empowering local companies to oversee the supporting industries that provide parts and materials to local Japanese companies and to cultivate industry human resources that can work at Japanese companies.

JICA also works to support the strengthening of public institutions that provide companies with services for Japanese business improvement techniques such as "5S" activities and the quality/productivity improvement "KAIZEN" methodologies [ → See the Case Study on page 119]. In Cambodia, for instance, policy



Learning about corporate consulting through OJT from an expert (Productivity and Quality Improvement Center Project in Egypt)

dialogue regarding the roles of corporate support services was carried out in consideration of the results of a model corporation where the 5S and KAIZEN methodologies were applied, and these methods were even reflected in governmental policy.

Furthermore, while JICA is endeavoring to provide cooperation for SMEs, it is also supporting careers at corporations and entrepreneurship for individuals placed in vulnerable positions, such as the families of surrendered soldiers in Colombia.

## 3. Promoting Local Industry and Vitalizing Local Economies

Regional disparities, as an impact of economic growth, have become an important issue in many developing countries. Developing countries face an increasing need to create local employment opportunities and to promote local industries by vitalizing their local economies. In response to this demand, JICA supports the development of local industry under a program called "One Village, One Product" and encourages the use of local resources in attempt to create employment and promote regional economies.

In Africa, in particular, the "One Village, One Product" project is scheduled for implementation in 12 countries, as stated in the Yokohama Action Plan released at the 4th Tokyo International Conference on African Development (TICAD IV). Surveys and projects are being implemented in countries such as Malawi, Kenya, Uganda, and Nigeria, where efforts are now being carried out to develop governments' structures for assisting small local producer groups, provide support for accounting and other basic business skills as well as production technologies, and strengthening the collaborative structure that ties together markets and producer groups. Similar programs are also being carried out in Asia, Central America, and South America.

## 4. Tourism Development

Previously the tourism industry in developing countries was led by foreign-capital entities such as tourism developers, travel companies and hotel chains. This is regarded as heteronomous tourism. Although not necessarily adverse, it does not allow local people to fully reap the benefits of this sector.

JICA initiatives aim to promote autonomous tourism development, in which the local people develop the industry under their own steam and sustainably by utilizing their own resources.

JICA provides support in the following areas: (1) promotion of Public-Private Partnerships in which public institutions such as the Ministry of Tourism and local tourist bureaus, private enterprises such as travel companies and guide associations, and local people can work together; (2) nurturing of human resources to convey the necessary know-how to advance tourism; (3) development of tourism products using tourism resources such as places of historical importance or extraordinary scenic beauty in addition to locally produced items such as handicrafts and folk art unique to a region; and (4) strengthening tourism promotion and marketing capacity and the implementation system. Through such support, JICA aims to ensure sustainable tourism that helps realize regional advancement contributing to poverty reduction. This is attainable by increasing the income of local citizens, creating jobs and strengthening the impetus of social harmony.

For instance, in Palestine and El Salvador JICA is providing

support for developing tourism products using local resources and carrying out promotions for those products. In the Dominican Republic, a project called Sustainable Tourism based on Public-Private Participation is being implemented, which aims to create foundations for tourism development that provide benefits to the local community in a sustainable manner. The Laos Pilot Program for Narrowing the Development Gap towards ASEAN Integration (LPP) (tourism promotion component) aims to rectify disparities between member states of the Association of Southeast Asian Nations (ASEAN). Under this project, JICA is providing support to promote tourism development for Laos, one of the least developed Southeast Asian countries, by utilizing natural, cultural, and historical tourism resources in an appropriate and sustained manner [ → See the Case Study on page 38].

In this way, JICA assesses the needs of each country and the condition of local communities and supports tourism development that is necessary and suitable for each country or region.

## Natural Resources and Energy

### Overview of Issue

The energy sector has been host to significant developments in recent years.

According to the World Energy Outlook 2010, released by the International Energy Agency (IEA), energy demand is expected

to increase rapidly in the future mainly in countries that are not members of the Organisation for Economic Co-operation and Development (OECD), and consequently energy security issues including the diversification of primary energy are expected to become more relevant challenges. At the same time, summit-level meetings such as the G8 and G20 continue to discuss reducing greenhouse gas (GHG) emission levels and to further strengthen its efforts noting the results of the 15th session of the Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Copenhagen in 2009 that identified the energy sector as a main source of GHG emissions. Energy technologies have also progressed significantly. In addition to improvements being made to the conventional power generation technologies such as the thermal efficiency of boilers and turbines, efforts have been progressing to develop new energy technologies such as solar thermal power generation and to commercialize advanced power supply systems utilizing IT technologies such as smart grids.

Taking account of these trends, moving forward the international community must pursue an optimum form of energy development, based on both short-term and medium- to long-term perspectives.

In June 2010, the Japanese government issued The New Growth Strategy: Blueprint for Revitalizing Japan, in which it stated that Japan would strive to become an “environment and energy power” and would actively promote Japan’s top-level

### Case Study

## Industrial Policy Dialogue in Ethiopia

### Utilizing the Economic Development Experience of Asia in Africa

**Ethiopia is working aggressively to develop its private sector while referring to the experience of economic development in Asia. In support of this endeavor, JICA is hosting a policy dialogue to shed light on Asia’s experience and is supporting the drafting of industrial policy.**



After the industrial policy dialogue, a manual created during the Study on Quality and Productivity Improvement (KAIZEN) in Ethiopia, which started at the same time as the dialogues, was presented to Prime Minister Meles by Ms. Kuwashima, the manager of JICA’s Industrial Development and Public Policy Department.

### Prime Minister Meles Zenawi Displays Keen Interest

On the occasion of the 4th Tokyo International Conference on African Development (TICAD IV) in Yokohama in May 2008, JICA hosted an international symposium, East Asian Lessons for African Growth, which was favored by the participation of Ethiopian Prime Minister Meles Zenawi. Also, at the African Task Force Meeting of the Initiative for Policy Dialogue (IPD) held in July of the same year in Ethiopia, JICA gave a presentation about Asia’s economic development experience together with professors from the National Graduate Institute for Policy Studies (GRIPS). Prime Minister Meles displayed strong interest in this presentation, and thereafter requested

JICA’s support in the form of advice about creating an industrial development strategy for Ethiopia and for improving the competitiveness of the country’s private corporations. He indicated that he hoped to seek advice by freely exchanging views about ideas based on the economic development experience of Asia in particular.

In October 2009, JICA joined hands with GRIPS in launching a two-year industrial policy dialogue project in the form of a project research initiative. Moreover, JICA provides Technical Cooperation for KAIZEN (improving quality and productivity) as a form of support for boosting corporate competitiveness.

The dialogues, which are attended by the Prime Minister, his advisors, related ministers, and related organizations, are serving as a forum for energetic exchanges of views based on the economic development experience of various Asian countries. In this way, the dialogues contribute to assisting the Ethiopian government in the formation of its policies.

environmental energy technologies overseas. JICA is actively providing support in the energy sector for developing countries in the light of this government policy.

## **JICA Activities**

### **1. Electric Power and Energy**

The key aspects of JICA's support in the energy and power sector are, 1) support for sustainable economic growth through the stable supply of electric power, 2) promoting the reduction of GHG emissions by implementing optimal technologies, and 3) promoting rural electrification in view of reducing poverty.

In order to ensure the stable supply of electric power, it is important to develop the systems of power generation, transmission, and distribution facilities in a timely and coordinated manner, as well as to cultivate administrative and technical capacity of human resources. Taking this into account, it is possible to develop electric power facilities in a swift and integrated manner by providing Technical Cooperation for the development and planning of facilities in accordance with each country's unique circumstances and implementing financial cooperation via ODA Loans at the construction stage. Furthermore, implementing managerial and maintenance training allows countries to operate their new facilities in a sustainable manner, and realize further effects from cooperation.

The global community intensifies its efforts to reduce GHG emissions, and so do the developing countries: they are beginning to promote the use of renewable energy sources such as solar, wind, and geothermal power generation, as well as high-efficiency thermal generation technologies. Japan must utilize its abundant knowledge about the development of renewable energy and the implementation and maintenance of high-efficiency thermal power generation to cut GHG emission levels in the energy sectors of developing countries [ → See the Case Study on page 46].

When promoting rural electrification, which targets on upgrading the living standard of communities, it is important to act from the standpoint of human security. This means that electrification plans must be formulated and implemented based on the actual needs of the local citizens as well as local industry development and other development plans. Also, in view of the lack of technicians working in power generation and distribution in developing countries, it is important to enhance maintenance and management capacity, including the development of management structures for facilities at the same time. Furthermore, in countries with low electrification rates such as those in Africa, efforts are underway to improve rural electrification rates by using off-grid that utilizes solar and other power generation technologies.

JICA also implements cooperation in countries that are undergoing reconstruction, such as Rwanda and Sierra Leone, including human resource development that contributes to the management of electric power facilities.

### **2. Mining (Natural Resources)**

Demand for metallic resources is currently increasing



A diesel generator provided to Sierra Leone, where civil war came to an end in 2002, via Grant Aid as a means of supporting the country's economic reconstruction. JICA has provided cooperation since 2010, when the generator began operating, in order to improve Sierra Leone's capacity to operate and manage electric power facilities.

in accordance with the economic development of newly industrializing economies. Moreover, the rare earths crisis of 2010 has reconfirmed that demand for rare earths is rising not only in the industrialized nations, but in newly industrializing economies as well. Using these limited mineral resources in an effective manner is important for both producers and importers. In developing countries, JICA works to support systems for the promotion of sustainable mining development and investment for mining, as well as for human resource development, the creation of master plans, and the collection of information on mineral resources. JICA also advises on environmental countermeasures for mining, development plans for infrastructure taking into account the environment and related industries, and support plans for communities.

### **3. Energy Efficiency**

JICA provides assistance for the training of energy management technicians in order to support energy conservation efforts using sophisticated Japanese technologies. This program has produced many positive outcomes. For instance, JICA has provided support for the construction of energy manager systems and the education of technicians that can manage thermal and electric power in Thailand, Turkey and Poland. Following a series of programs in Turkey, technicians were soon able to operate systems independently. These sites are now used as third country training grounds.

In ODA Loans, JICA is providing Two-Step Loans\* in India and Viet Nam focused on energy efficiency and renewable energies. Two-Step Loans strengthen financing and the ability to establish energy conservation projects, and increase the effectiveness of support by complementing Technical Cooperation. Through this scheme, it is easier to provide financial support for private-sector activities.

\* Scheme where ODA Loan funds provided to development finance organizations of the borrowing nation are used to provide loans to small and medium-sized enterprises in the borrowing nation.



## Aid for Trade

### What is Aid for Trade (AfT)?

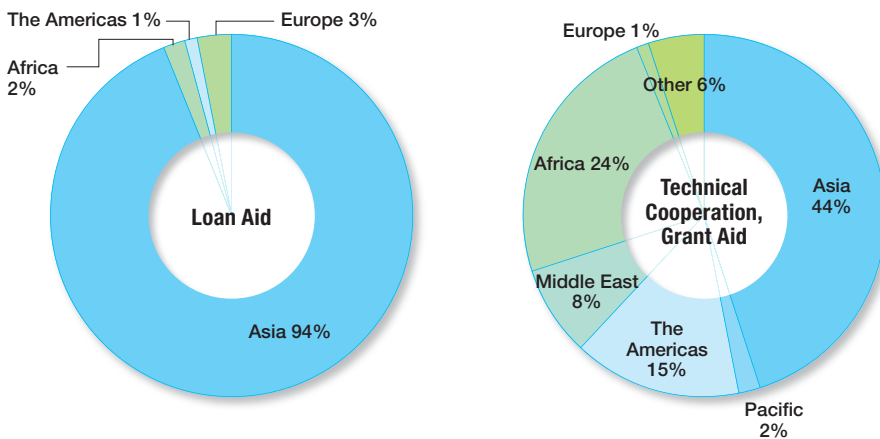
AfT refers to assistance provided to developing countries that helps to build supply-side capacity and trade-related infrastructure, so that these countries can benefit from trade expansion and reduce poverty. It will enable these countries to realize trade profits, and consequently, realize economic growth

through these trade profits.

### JICA Activities

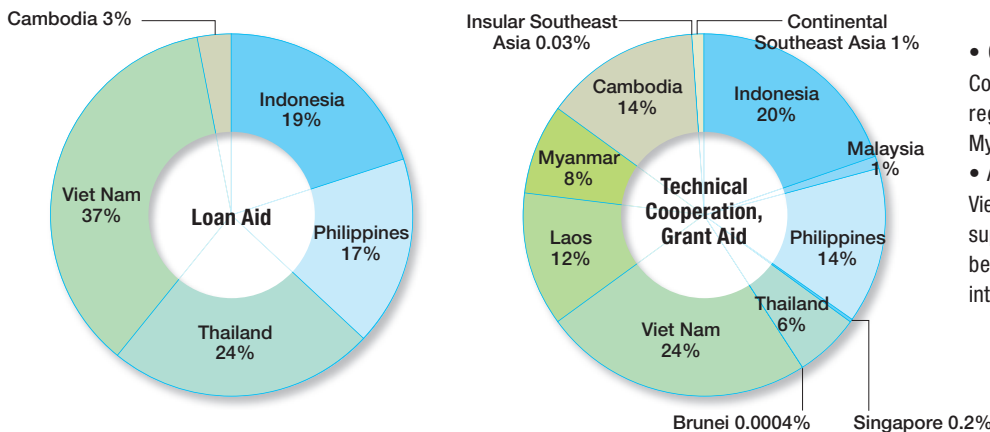
JICA is actively engaged in AfT. Approximately 54% of all ODA Loan projects were devoted to AfT in 2009.

Figure 1 Breakdown of AfT by Region (2009)



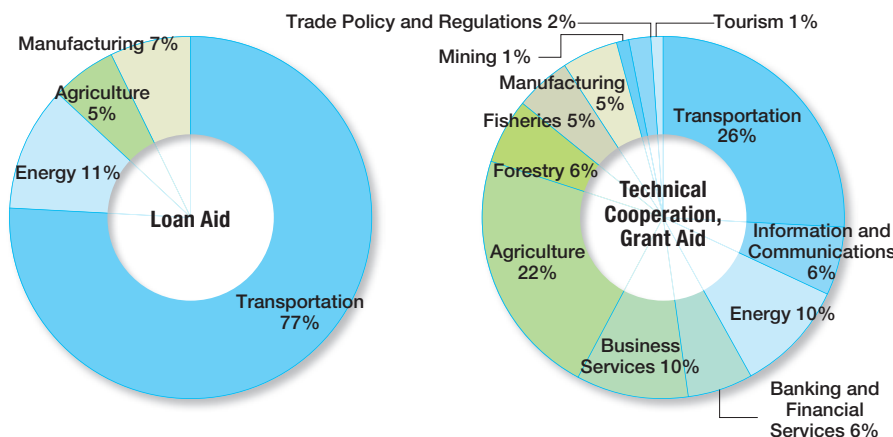
- AfT-related Loan Aid, Technical Cooperation and Grant Aid are concentrated in Asia. In 2009, Asia accounted for 94% of AfT-related Loan Aid and 44% of AfT-related Technical Cooperation and Grant Aid.
- Africa accounted for 24% of AfT-related Technical Cooperation and Grant Aid, second behind Asia.

Figure 2 Breakdown of AfT by ASEAN Country (2009)



- Over half of all AfT-related Technical Cooperation and Grant Aid in the ASEAN region takes place in Cambodia, Laos, Myanmar and Viet Nam.
- AfT-related Loan Aid is concentrated in Viet Nam, expressing the direction of JICA's support in terms of correcting disparities between ASEAN nations and improving integration by expanding trade.

Figure 3 Breakdown of AfT by Industry in ASEAN Countries (2009)



- JICA focuses on development of economic infrastructure in the ASEAN region with the aim of promoting economic growth that will benefit the lives of every individual.

Note: Figures in the charts are rounded to the nearest whole number. Totals may not add to 100.