

Industrial Development and Public Policy

Creating a Fair, Sustainable, and Growing Society through Partnerships



*Of the 17 Sustainable Development Goals (SDGs), strongly associated goals are shown in color.

Private Sector Development

Sustainable and quality growth in developing countries requires industrial promotion that encourages sustainable expansion and advancement of private sector activity and promotion of a wide range of job creation as a driving force for economic growth. The manufacturing industry, in particular, embraces a comprehensive range of strengths and potential such as: (1) high capacity to absorb labor; (2) potential to create added value and abundant value chains (including those of relevant service sectors); and (3) high potential for foreign trade (export potential) and technological innovation. Thus the promotion of the manufacturing industry is believed to be the cornerstone of national industrial policies that aim for economic growth.

Also, aligning foreign direct investment (FDI) with the promotion of local supporting industries and small and medium enterprises (SMEs) in developing countries will play an important role in three aspects: (1) promoting and advancing the manufacturing industry through value chain formation, (2) training practical industrial human resources, and (3) improving the income of wider segments of the population through labor absorption. This in turn will lead to inclusive economic growth.

On the other hand, the manufacturing industry in recent years is in the process that may be described as the Fourth Industrial Revolution (Industry 4.0) as it accelerates its convergence with information and communication technology and artificial intelligence. Recently, there has been growing interest in technological innovation that leaps the paths that developed countries have trodden and the backflow of new technologies that have been demonstrated and commercialized in developing countries to developed countries (reverse innovation).

In light of these circumstances, JICA is assisting developing countries with private sector development in three major categories: (1) the formulation of industrial promotion policies coupled with institutional and operational development and improvement for a better business climate, (2) the promotion of

investment and the development of special economic zones, and (3) capacity and competitiveness building and industrial human resources development for local SMEs [→ see the Case Study on page 36].

In the process, JICA aims to



Mexico: The Project for Automotive Supply Chain Development
[photo by Kenshiro Imamura]

serve as a catalyst for mutually beneficial relationships between companies and research institutions in Japan and the private sector in developing countries—relationships in which the former’s expertise and experience are put to good use for the latter’s development, which in turn benefits the former.

Energy and Mining

Stable energy supply is one of the most fundamental and essential policy issues for the developing world, not least from the perspective of human security. Meanwhile, some 80% of CO₂ emissions originate from the energy sector and about 40% are associated with power generation. Adopting a transition to low carbon is strongly required in accordance with the Paris Agreement of December 2015.

JICA, through its energy sector assistance, is committed to contributing to achieving two of the Sustainable Development Goals (SDGs): Goal 7, ensuring access to energy, and Goal 13, combatting climate change.

1. Energy

JICA’s energy policy aims to contribute to ensuring a stable supply of low cost and low carbon energy in developing countries by balancing the 3 L’s: low cost, low carbon, and low risk. To this end, JICA has been working on the following two aspects, primarily through human resources development and financial assistance.

(1) Promoting Better Access to Electric Power and Stable Power Supply

JICA provides a range of technical cooperation activities in order to improve access and stable power supply. For example, it supports its partner countries to develop power sector master plans, to build institutional capacity, and to efficiently operate and maintain power facilities. It also provides financial assistance to develop power infrastructure, such as high-efficiency thermal power plants and power grids.

(2) Promoting Low-Carbon Power Sources

JICA supports its partner countries to achieve low carbon growth by providing assistance to include renewables and low carbon power sources in their power mix. For example, JICA is supporting geothermal power development in Asia, Africa, and Latin America and the Caribbean. Its assistance ranges from resource mapping, exploration, plant construction, and plant operation and management. In Pacific island countries and other island nations, JICA is supporting the optimal use of renewable energy under its Hybrid Island Initiative program [→ see the Case Study on page 47].

2. Mining

Mineral-resource exploration and production require large

amounts of capital and advanced technology. However, many developing countries' governments have weaknesses in mining policy as well as in their legal systems, and lack basic geological information and infrastructure. JICA extends assistance to developing countries to improve the investment environment and develop human resources. In particular, JICA has been working with Japanese universities to enhance the training program it offers in Japan, known as the *Kizuna Program* (*kizuna* means "bonds of friendship" in Japanese). The program is also aimed at building and strengthening a human network involving Japanese people.

Governance

The term "governance" refers to the overall social system and is the basis for the socioeconomic development of developing countries. JICA is conducting various kinds of cooperation as described below from the perspective of assistance in democratic growth and development in developing countries by sharing universal values, such as freedom, the market economy, and the rule of law.

1. Promoting and Consolidating Democracy

JICA extends assistance for a range of measures to strengthen the foundations for democratic rule in developing countries. The assistance covers such measures as improving the capacity of election management committees in order to ensure fair elections, strengthening the functions of parliament, and reinforcing the capacity of the media, which functions as a monitor of the use of power and influence.

2. Promoting and Consolidating the Rule of Law

For promoting the market economy and post-conflict social stabilization, JICA supports human resources development for countries where legal systems need to be established or improved.

3. Establishing the Functions of Fair Public Safety Maintenance and Law Enforcement

Toward better public safety in developing countries, JICA

Nepal: An official at the Central Bureau of Statistics of Nepal filling out a survey sheet during a round of office inspections for the nation's economic census



works with the National Police Agency and prefectural police departments of Japan to provide assistance in community policing (*Koban*) and criminal investigation skills as represented by expertise in fingerprint and palm print identification.

4. Enhancing Administrative Functions and Improving Their Quality

In order to strengthen the comprehensive administrative functions of developing countries, JICA has been working on the enhancement of civil servant training and the planning capacity of local governments for better delivery of public services.

5. Ensuring Effective and Sustainable Fiscal Management

In many developing countries, the fiscal base is fragile, and expenditure management is not disciplined or sustainable enough. To address these problems, JICA assists these countries in making expenditure management more sustainable, bolstering the revenue base, collecting customs duties fairly and appropriately, and facilitating trade.

6. Appropriate Monetary Policy and Financial Systems Development

Many developing countries are in the process of modernizing their financial sector, important infrastructure that supports their economic activities. JICA supports these countries in building their capacity to formulate and implement monetary policy, fostering financial markets, and developing national settlement systems.

Pacific Region: Hybrid Islands Initiative Program

Cooperation in the Era of Renewable Energy



Japanese experts and their counterparts checking the operation of solar power generation equipment

Many of the Pacific island countries have set out high targets for renewable energy (RE) use. On a few small isolated islands, the percentage of RE in total power generation is set to exceed 90%. Yet massive deployment of RE entails the major risk of unstable power supply caused by natural disaster or power output fluctuations due to the weather.

These circumstances call for efforts to achieve the objectives of increased RE share and stable power supply simultaneously. This can be attained by the hybrid operation of "RE and diesel power generators," or in the case of small isolated islands, of "RE and

storage batteries."

To support such operations, the Japanese government and JICA launched the Hybrid Islands Initiative in 2015 as a regionwide cooperation program that capitalizes on the experiences and technologies of the isolated islands in such as Okinawa and Kyushu of Japan. This program takes full advantage of a wide range of assistance schemes, including master planning, feasibility studies, technical cooperation, a training program (in Okinawa), and Grants. The comprehensive cooperation program is contributing to the promotion and expansion of RE use in the Pacific.