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## Special Reports

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2012 saw us set out our vision of becoming the best partner for sustainable development by 2022. To achieve this, we will allocate resources and implement projects across five priority areas: agriculture, public health, education, information and communications technology (ICT) and environmental protection.

The special reports in this chapter explain the specific objectives and actions involved in these five priority areas. These introductions to a wide selection of our projects show how we are effectively striving to respond to the UN's MDGs, promote reform and put the principle of ownership into practice.

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## Agriculture

In the face of the increasingly urgent problem of global food security, we aim to assist partner countries to safeguard food safety by drawing on Taiwan's technological advantages and experiences. We hope to minimize the impact of food crises, increase the added value of agricultural products and improve farmers' livelihoods.

### **Increasing Production of Crops and Animal Protein Through Technical Cooperation:**

To minimize the impact of food crises, we have taken measures to increase the production of crops and animal protein through technical cooperation, introducing the comparative advantages of Taiwan's production sectors, such as rice production and aquaculture, to improve productivity and ensure balanced nutrition, as well as to enhance partners' rates of self-sufficiency in food production.

In terms of rice production, for example, our Torbeck Rice Production and Marketing Project in Haiti has aimed to increase the income of farmers and rice millers by establishing contract farming practices, repairing irrigation facilities and establishing a production and marketing system. These activities have prevented social unrest by improving food self-sufficiency in Torbeck and mitigating rising food prices.

Elsewhere, our Upland Rice Expansion Project in The Gambia has aimed to extend farming areas and convert dry farmland so that it is suitable for upland rice production. We are encouraging farmers to form organizations and providing rice seed, fertilizer and training to increase per-unit production rates and achieve the country's objective to become self-sufficient.

In terms of aquaculture, our Aquaculture Project in Honduras, for example, aims to produce high-quality

sources of protein for children in remote areas of the country by cultivating broodstocks, demonstrating breeding, producing fry, organizing and guiding farmers to form cooperatives to facilitate the transportation and sale of aquatic products, and developing various species suited to aquaculture.

### **Promoting the Development of the Agricultural Sector in Partner Countries:**

In terms of production management, we are promoting the development of the agricultural sector in partner countries by introducing partners to the experiences and methods that Taiwan has used to support its own farmers, such as production and marketing groups, cooperatives, and farmers' and fishermen's associations. Production and marketing information is integrated to develop the essential technologies that sustain the development of agribusinesses. The purpose of these measures is to enhance the development and implementation efficiency of agricultural policies, as well as to increase incomes and improve the livelihoods of farmers in our partner countries.

Our Papaya Export Project in Petén, Guatemala, for example, has aimed to establish a complete supply chain for the export of agricultural products, giving production guidance to farmers and others working in the agricultural sector while also promoting local agricultural development. This is supporting the Guatemalan government's efforts to diversify its industries, promote the development of remote areas and develop unconventional export products.

Meanwhile, in response to the decline of the sugar industry and release of government-owned land in St. Kitts and Nevis, our Agronomy Development Project has been implemented to develop alternatives to sugar in



► Working under the guidance of the Taiwan Technical Mission in Nauru, local farmers take part in practical training at the mission's demonstration field.

cooperation with the Ministry of Agriculture and Marine Resources. The ministry will implement the project on a sustainable basis, with the TaiwanICDF providing technical support and helping to build capacity where relevant.

**Providing Short- to Medium-term Financing to Farmers and Small-scale Agribusinesses:**

To ensure that projects develop sustainably and continue to expand the benefits of development, we began to implement Small Farmholders' Financing Schemes some years ago. The purpose was to assist farmers to raise production funds and to receive an initial injection of two-tier technical and financial assistance, and to increase the economic scale and depth of assistance projects. Such microcredit projects have been combined with agricultural assistance projects to provide short- to medium-term financing for farmers and microbusinesses and thereby promote sustainable agricultural development in our partner countries, as well as to achieve the first MDG, "Eradicate extreme poverty and hunger."

**Promoting Aid for Trade by Improving Animal and Plant Disease Prevention and Quarantine Measures:**

Aid for Trade, which has become the focus of various organizations since its launch by the World Trade

Organization's General Council in 2006, aims to improve the trading capabilities of developing and underdeveloped countries through technical assistance, capacity building, economic reform and infrastructure, so that such nations can be integrated into the multilateral trading system and enjoy the economic benefits of trade liberalization.

With trade liberalization ongoing, the type and quantity of agricultural products being exported and imported are increasing. This has increased the risk of spreading invasive plant species and pests, such as Huanglongbing in citrus fruits in Central America and Black Sigatoka in St. Lucia. It is therefore important to improve partner countries' animal and plant disease prevention and quarantine measures in order to control the spread of diseases, protect the safety of agricultural products and increase the value of agricultural trade. A recent project commissioned by the Ministry of Foreign Affairs, implemented jointly with the International Regional Organisation for Plant and Animal Health (OIRSA) and designed to strengthen the control of Huanglongbing and manage other plant pests and diseases, for example, is geared toward just this kind of outcome.

## Case Study 1

### Upland Rice Expansion Project in The Gambia

The Upland Rice Expansion Project in The Gambia was implemented at the explicit request of Gambian authorities. Building upon our previous Doubling Rice Yield within Five Years Project, this project drew on Taiwan's comparative advantages in agriculture and associated technologies. The overall aim of the project, which ran for four years from 2009 to 2012, was to reclaim 32,000 hectares of land for the cultivation of upland rice. The project's specific objectives were to raise upland rice yields to 2.2 tons per hectare, provide workshops and training courses and establish standard operating practices for the cultivation of upland rice. The effectiveness of the project was ensured by conducting annual production surveys.

In keeping with the principle of ownership, this project involved cooperation from the Taiwan Technical Mission in The Gambia, the Gambian Ministry of Agriculture and six provincial offices, as well as local research stations with the National Agricultural Research Institute. All told, around 200 Gambians were involved in project implementation. A mission leader and three technicians from the Taiwan Technical Mission assisted with the project, which guided participants to use better rice varieties and improve growing techniques. Overall, rice production increased and the project had a deep effect on both the government and civil society.

#### ■ Building Self-reliance and Working toward Sustainability

Taiwanese personnel from the local technical mission were responsible for coordinating all of the operations on the Gambian side. The staff worked with Gambian participants to achieve the hoped-for expansion of upland rice coverage, improve rice yield per hectare and build the skills and abilities of farming organizations. Specific tasks included: creating the project's annual work plan, liaising with relevant organizations, assisting in the deployment of project materials, handling relevant training work and ensuring that our collaborators' work was progressing smoothly. Gambian authorities directed the funding they received to training and subsidies for agricultural machinery for farmers' organizations. This provided a good incentive for Gambian farmers to work on improving the cultivation of upland rice, thus raising the country's self-sufficiency in rice production. We will also provide continued guidance and annual monitoring of yields by area to help the project become sustainable.



▲ Farmers participating in the Upland Rice Expansion Project in The Gambia gather at rice production demonstration fields to take part in the first phase of transplanting activities.

#### ■ Objective in Sight: Far-reaching Impact on Upland Rice Cultivation in The Gambia

Under the guidance of the Taiwan Technical Mission, this project has significantly expanded the coverage of upland rice production in The Gambia beyond the 32,000 hectares in the original plan. Despite a noticeable decrease in the stability of the local weather, most likely due to climate change, the project yielded approximately 30,000 tons of grain. In terms of the overall implementation of the project, we successfully established distribution mechanisms for agricultural materials and set up training programs for extension officers. The contributions of local farmers and the benefits they gained from the project have both exceeded expectations. After four years, the project trained roughly 38,000 farmers of around 67,000 farmers participating in the project. Overall, the project reached as many as 170,000 beneficiaries.

The project has had a profound impact on upland rice cultivation in The Gambia having already reclaimed roughly 22,000 hectares for the production of rice seed. With the Gambian government having expressed a hope that Taiwan can continue to provide technical assistance, we have offered to extend the operations of the Upland Rice Expansion Project through the Upland Rice Consolidation Project, scheduled to run from 2013 to 2017. This will build upon the outcomes of the present four-year project by continuing to elevate The Gambia's currently low self-sufficiency in food production. It will also stabilize upland rice production and move the country toward the vision of Gambian authorities to become a rice seed supply hub in the sub-region of West Africa.

## Case Study 2

## Aquaculture Project in Belize



▲ A Taiwanese consultant, dispatched on short-term assignment as part of efforts to refine the operations of the Aquaculture Project in Belize, helps out a local fish farmer while conducting appraisal work on the state of aquaculture in the country.

Belize is blessed with vast expanses of land and abundant water resources — all of the prerequisites needed to support the development of a successful aquaculture sector. At present, however, the country's industry is hampered by certain constraints, such as a reliance on expensive imports of fry feed. Although many farmers have shown strong interest in investing in the aquaculture industry, they face excessively high production thresholds due to expensive raw materials. Insufficient domestic fry production in Belize has limited the development of the aquaculture industry. With these issues in mind, the Belizean government approached the TaiwanCDF for assistance in developing a small-scale tilapia industry in Belize. The TaiwanCDF started this project in response to Belize's request.

#### ■ Bringing Projects to Fruition with a Project Management System

During the project appraisal process, we dispatched a project manager to Belize so that we could understand the views and needs of the various stakeholders in the aquaculture industry and ensure that the project would effectively respond to Belize's needs. Since then, hundreds of local people have been involved in the project's activities, including personnel from the Agriculture Department, the Fisheries Department and the Ministry of Works, as well as fish farmers, producers

of raw materials used in feed production and vendors involved in sales and marketing. On this basis, our project manager worked with cooperating units to jointly develop a results-oriented project plan and establish a specific consensus on project implementation. This plan, completed by the beginning of 2012, was confirmed through the signing of a bilateral agreement that set out the rights and obligations of Taiwanese and Belizean stakeholders.

#### ■ Helping to Establish a Foundation for Industry

In this project, we will help Belize establish and develop a foundation for small-scale tilapia production primarily through capacity building and institutional improvements. These tasks are described below.

- **Capacity Building:** By dispatching a number of Taiwanese aquaculture specialists to provide guidance on site in Belize, we will assist Belize in establishing best practices for fry management and tilapia breeding. We will also train a selection of Belizean technicians from the Fisheries Department and provide guidance on setting up fishermen's organizations and small-scale fishery distribution centers to improve local marketing and promotional abilities.
- **Institutional Improvements:** The project's consultancy-based approach will assist cooperating units in drafting a National Tilapia Aquaculture Development Plan and establish a plan to operate a tilapia hatchery center. In this way, the project will strengthen the institutional capacity of cooperating organizations and establish the basic capacity Belize needs to develop its aquaculture sector.

By the time the project is complete, Belize should have the capacity to meet its objective of producing one million tilapia fingerlings domestically per year — enough to fully satisfy the needs of local tilapia farmers.

## Case Study 3

### Strengthening the Control of Huanglongbing (HLB) and the Implementation of Integrated Pest Management (IPM) in Citrus Project

Huanglongbing (HLB), or citrus greening disease, is one of the most destructive diseases to affect citrus fruits. In the last four years, the disease has spread to a number of the International Regional Organisation for Plant and Animal Health's (OIRSA) countries of operation throughout Central America as well as parts of the Caribbean. If the disease is not effectively prevented and treated, it could result in huge losses of production output in an industry worth an estimated US\$1 billion and pose a grave threat to the region's citrus industry and private growers. The disease also threatens the region's poorest people who rely on citrus fruits as their primary source of vitamin C.

The OIRSA approached Taiwanese authorities with a request for technical assistance because of Taiwan's wealth of experience in controlling HLB over the past 60 years through prevention, detection, monitoring, field trials and nursery-based seedling production. MOFA then commissioned the TaiwanICDF to handle the project.

#### ■ Joint Execution According to Project Implementation Processes

Taiwan's ambassador to El Salvador and the executive director of the OIRSA signed a formal agreement on the five-year project on December 11, 2012. The initiative, which will be jointly implemented in accordance with the project cycle and associated processes, has been designed to emphasize the principle of ownership: OIRSA teams in each of its countries of operation will work with relevant government agencies in those countries to implement the project. Meanwhile, the TaiwanICDF will focus on capacity building and institutional improvements. We will dispatch a project manager as well as short- and long-term experts and consultants to assume overall responsibility for supervising the project, ensuring its effectiveness and assisting the OIRSA in resolving any problems that arise.

#### ■ Building Capacity in Regional Disease Prevention And Control

In terms of key practices and projected outcomes, the project will:

- Assist the OIRSA to establish a seedling nursery and replace 100 percent of HLB-infected citrus plants with healthy seedlings throughout beneficiary countries by



▲ Taiwan's ambassador to El Salvador H.E. Jaime Chen (second from left), accompanied by TaiwanICDF Secretary General Tao Wen-lung (right), signs and exchanges agreements with Ing. Guillermo Alvarado Downing (left), Executive Director of the OIRSA, as part of efforts to help Central American countries combat Huanglongbing.

project completion.

- Provide training on diagnosing HLB to personnel throughout beneficiary countries with the goal of raising diagnostic accuracy by 50 percent by project completion.
- Expand the use of IPM technology to 25 percent of citrus growing areas in each beneficiary country.
- Strengthen HLB monitoring and reporting systems in pest-free countries and/or pest-free areas throughout the region.

By achieving these objectives, the project will help the OIRSA build capacity in disease prevention and treatment in countries already infected with HLB, as well as introduce mechanisms to prevent the spread of HLB to two pest-free countries, El Salvador and Panama. The project will therefore help safeguard the continued quality, yield and production capacity of the region's citrus industry.

## Case Study 4

## Pig Development Project in São Tomé and Príncipe



▲ In São Tomé and Príncipe, local farmers raise their pigs in captivity before releasing them into the wild. Specimens are generally thin and of poor quality.

According to statistics published by the Food and Agriculture Organization of the United Nations (FAO), the total global output of pork was 102.60 million tons in 2009, equivalent to around 15 kg of pork consumed per person. Although pork is the second-most popular meat in São Tomé and Príncipe after chicken, recent statistics published by the São Toméan government as part of plans to develop slaughterhouse operations indicated that only 3,825 pigs had been processed in 2010, yielding 96,160 kg of meat. Among the country's 160,000-strong population, this works out to an annual average consumption of much less than 1 kg per person, falling far short of the worldwide average. Furthermore, the average weight of a pig slaughtered in São Tomé and Príncipe is 25 kg, indicating that there is much room for improvement in terms of the quality and quantity of output.

The substandard pork industry in São Tomé and Príncipe has led to low-quality pork at limited availability and imbalances in production and marketing. The lack of local production keeps prices high despite the generally poor quality, which further dampens people's willingness to purchase and consume. The São Toméan government is committed to resolving issues surrounding its domestic supply of meat and protein and to reviving

its flagging pork industry. Thus, in 2012, we proposed a six-year, US\$5.2 million project designed to support the development of the pork industry in São Tomé and Príncipe.

#### ■ Achieving Self-Sufficiency through Ownership

Using the principle of ownership, the project will assist São Toméan authorities to conduct an overall redesign of its swine industry and to improve local specimens by importing new breeds and introducing an improved breeding system. In the future, assistance will also be provided to establish a national breeding and promotion center to help maintain breeding lines and supply high-quality piglets for distribution to farmers. The project will help boost production by providing guidance to farmers on fattening and raising their herds. Production and marketing classes will also be organized for the benefit of farmers' organizations.

Furthermore, we plan to assist the government to improve sanitary conditions and raise the value of carcasses by renovating the only national slaughterhouse in operation. We also plan to establish a unified production and marketing system, improve the overall structure of the industry and generate sustainable business opportunities to achieve self-sufficiency in the local pork industry. Overall, we expect the project to deliver 5,080 pigs to the local market over the course of six years.

#### ■ Emphasizing Partner Countries, Building Autonomy

In addition to the design of a complete industrial chain, the other key theme underpinning project implementation will be the idea that we should not only "provide fish, but also teach others how to fish" — a direction backed by the São Toméan government. In 2012, authorities there began to assemble a project team and opened a dedicated project account. They will continue to see the project through its course with the guidance of Taiwanese professionals and gradually put each of the project's various components into place. Our approach allows us to respect our partner countries as they build the capacity to develop their industries in a self-sufficient manner. This is our highest objective in terms of the effectiveness of international aid projects.



## Public Health

At present, the two strongest trends in global health care are the globalization of health care-related humanitarian assistance and environment-oriented improvements to international health care. Firm efforts are also being made to achieve the MDGs. The TaiwanICDF's operations in public health and medicine are integrating Taiwan's 50 years of experience in implementing foreign aid projects – such as those involving epidemic prevention and the implementation of medical and public health systems – by focusing on four core areas:

### **Public Health Programs:**

We are implementing a Maternal Health Improvement Program in The Gambia in pursuit of one of the eight MDGs, "Improve maternal health." The project, which is being implemented in cooperation with the Gambian Ministry of Health and Social Welfare, is providing assistance to improve maternal health services in the Upper River Region by improving associated midwifery skills, by providing better care throughout the various stages of a term of pregnancy, and by increasing the

coverage and number of visits made by midwives throughout the project's area of operation. The quality of facilities at basic clinics in the region is also being upgraded, as is the quality of maternity services on offer, all of which will help to reduce maternal and neonatal mortality.

### **Donations of Used Medical Equipment:**

We are integrating the strengths of various Taiwanese medical institutions through projects such as our Used Medical Equipment Donation and Training Project, which collects and collates used medical equipment. Donating equipment enhances standards and medical equipment in partner countries' medical institutions and provides citizens in such countries with better medical services. The project also includes components that support the maintenance and operation of equipment, together with education and training, thereby building the capacity of medics assigned to operate such equipment. Nurturing human resources is actively assisting medical professionals in partner countries to enhance their

knowledge, skills and experience, and realizing our development objective of enhancing the quality of medical services in these countries.

#### **Training for Partner Countries' Medical Personnel:**

To harmonize our efforts with the health care-related MDG targets of partner governments, we are strengthening cooperation with other countries, supporting visits and on-the-job training to enhance the competencies of government officials working in medical administration and management so as to improve the skills of health practitioners and primary health care services. For example, our Workshop on Healthcare Management, organized for participants from the South Pacific and Africa, covers the management of human resources and the development of medical management policies and practices, which cultivates talent in medical management among such partner countries and promotes international health care affairs through associated exchanges.

#### **International Medical Cooperation:**

In order to integrate the professional expertise and experience of Taiwanese medical institutions we are working with such institutions to tie together the government's health care-related foreign aid policies, jointly assist our partners to upgrade the quality of their medical services and the international humanitarian assistance skills of Taiwanese medics, and generate

opportunities for working with international organizations. To do these things, we have established the International Health Care Strategic Alliance (IHCSA) with 37 private medical institutes, so as to recruit more expertise from the private sector.

Supported by the abundant medical and human resources of this medical community, we are assisting medics from IHCSA institutions to visit partner countries, where they enhance the quality and depth of local medical work by providing clinical demonstrations and training. And our Healthcare Personnel Training Program, for example, involves the cooperation of dozens of medical institutes, with whom we have jointly developed workshops to share the strengths of Taiwan's health care system. This provides participants with a rich clinical experience that they can share, as seed teachers, upon returning to their home countries.

Furthermore, we have been contributing assistance toward plans to station medics in Pacific partner countries on a permanent basis. The next step is to assist partner countries to research their most pressing needs in terms of medical cooperation, and to allocate the proper resources needed for cooperation in the field of international health care. Transferring projects involving clinical technologies as successfully as possible requires that we integrate and deepen the resources involved in public health projects.



◀ A group of medical management trainees visit the Clinical Skill Learning Center at Kaohsiung Medical University Chung-Ho Memorial Hospital under the guidance of local Taiwanese doctors.

## Case Study 1

### Healthcare Personnel Training Program

For many years, we have dispatched permanent and mobile medical missions to partner countries to facilitate medical cooperation. In our experience, we have often found that partner countries face a serious shortage of educational resources pertaining to health care. In places where medical systems are underdeveloped and lack funding and human resources, it is much more difficult to provide local medical personnel with the training they need, making it difficult to raise the standard of medical services in these countries.

To help our partner countries achieve the MDGs related to health care and to deepen our cooperation with them in matters of public health, we have been working with IHCSA institutions since 2006 to implement the Healthcare Personnel Training Program. This program provides medical personnel from partner countries with annual opportunities to visit Taiwan and learn about advanced medical technologies. This increases the skills, experience and professional, clinical know-how of medical personnel from partner countries and realizes the objective of upgrading the quality of the health care services available in their country.

#### ■ Raising Project Effectiveness by Adjusting Curricula to Partners' Needs

As part of our efforts to refine the program, we considered the fact that we had previously offered only one medical training program per year at a fixed time. Unfortunately, a number of medical staff in our partner countries may not have been able to attend due to scheduling conflicts. Therefore, since the second half of 2011, we have changed the system to cater to the needs of individual partner countries. We now plan two- to three-month training courses based on the availability of their medical personnel to help build capacity and put the principle of ownership into practice.

We are also employing more pre- and post-training communications tools to allow us to understand and track the needs and learning outcomes of trainees. This helps us ensure that the program provides genuinely effective training and keeps with the spirit of the project cycle. For example, we design curricula based on trainees' initial needs prior to the commencement of training. After training, trainees provide feedback and confirm the effectiveness of our training content, which allows us to make moderate changes to the program based on their



▲ Ms. Kimberly Tmilchol Idip, a nurse from Palau, checks items in an operating theater stockroom as part of management training during her Healthcare Personnel Training Program placement at Shin Kong Wu Ho-Su Memorial Hospital.

practical needs. We have also implemented moderate controls during training, including weekly training reports to be completed by trainees, to help us understand their progress and accomplishments. We also ask representatives of each training unit to complete a questionnaire to check that the progress and content of each program conforms to the original plans.

#### ■ Ensuring Skills Transfer by Tracking the Effectiveness of Post-training Outcomes

After trainees have returned home, we dispatch Taiwanese units to trainees' home countries to assess the quality of services they are providing in their local organizations. We respond with demonstrative teaching methods to ensure that they are using the training they received properly. This ensures that the program is transferring skills as effectively as possible. In the past year, we have dispatched personnel to Burkina Faso, Nauru and Tuvalu to appraise the effectiveness of our programs for our trainees. In this way, we improve the content of our program and help our partners to improve and enhance their health services.

## Case Study 2

## Maternal Health Improvement Program in The Gambia



▲ A mother and baby health monitoring activity is carried out at Basse Hospital in The Gambia's Upper River Region as part of efforts to reduce maternal and neonatal mortality in the country.

Maternal health and child health are the foundations of national health well-being. The UN attaches great importance to these issues with both the fourth and fifth MDGs targeting maternal and child health and related issues.

The Taiwanese government has been promoting comprehensive measures to address maternal and child health since 1952, effectively reducing Taiwan's maternal mortality rate to the eighth lowest in the world. By contrast, the maternal mortality rate in The Gambia is nearly 40 times higher than in Taiwan. We have therefore stepped in to share some of Taiwan's successful experiences and, at its request, assist the Gambian government to improve the country's maternal health.

After performing in-country appraisals and consulting The Gambia's Ministry of Health and Social Welfare, we decided to implement this project in the Upper River Region, which suffers from the country's highest rates of maternal and neonatal mortality. Although as many as 60 percent of pregnant women in the region are attended to by a traditional birth attendant (TBA) during childbirth and receive pre- and post-natal care, only 125 of the 226 TBAs working in the region have previously received any kind of formal training. This is the main reason why maternal mortality rates (mortality during a mother's term of pregnancy plus 42 days following the end of the term) and neonatal mortality rates (mortality during the first 28 days of a newborn's life) both exceed the national average.

#### ■ Four Core Approaches to Reducing Maternal and Neonatal Mortality Rates

The project has been designed to follow the principle of ownership. After a negotiation period, we signed

formal agreements at the end of August stating that the Ministry of Health and Social Welfare would be primarily responsible for the day-to-day implementation of the project. We also dispatched our own project manager to the Upper River Region in September to jointly implement the initiative.

The project is taking four core approaches to reducing maternal and neonatal mortality rates:

- **Training seed teachers:** A group of outstanding local midwives have been selected to receive training in Taiwan. This will improve their midwifery skills so that they can go on to become seed teachers themselves.
- **Expanding on-the-job training:** On returning to The Gambia, these seed teachers will handle on-the-job training in midwifery for health care personnel working at all levels throughout the Upper River Region. This will comprehensively build the professional skills of midwives and similar personnel in the area.
- **Integrating operations with the Taiwan/CDF International Higher Education Scholarship Program:** Each summer, a number of trainee midwives who are studying in Taiwan as part of our scholarship program will return to The Gambia to assist in midwifery training courses. In addition to improving the quality of the local courses, the training experience will also improve the scholarship recipients' own practical know-how. This ensures that once they have graduated and returned home for good, they can continue to assist in the sustainable implementation of associated projects in The Gambia.
- **Improving facilities and referral systems:** Facilities will be improved at 11 basic health clinics throughout the Upper River Region. Each clinic will be equipped with a range of donated instruments and equipment designed to support maternal health operations. Local midwives will also make regularly scheduled visits to expecting mothers for checkups, which will ensure better antenatal coverage and the early detection of problems. This means that treatment will be provided sooner and allows mothers to be sent through the referral system and receive timely and appropriate assistance from the relevant medical unit.

Overall, we expect that this project will reduce maternal and neonatal mortality throughout The Gambia's Upper River Region by improving the coverage of pre- and post-natal health care, improving associated facilities at basic health clinics and strengthening the quality of local maternity services.



## Education

Capacity building has become a much-discussed topic in recent years. In addition to shaping the response toward developing countries' human resources needs, capacity building also reflects something of a new direction in foreign aid strategy. Working in accordance with such trends and drawing on Taiwan's comparative advantages, we aim to meet partners' national development needs by assisting them to strengthen education systems, build a pool of basic human capital, cultivate professional expertise in a variety of fields and nurture quality skills throughout their labor forces, as discussed in further detail below.

### **Reducing Barriers to Enrollment; Achieving Universal Primary Education:**

With basic education forming the bedrock of personal and national development, we are supporting one of the MDGs, "Achieve universal primary education," especially through our promotion of a Taiwan/CDF Scholarship Program in Burkina Faso.

The project is funded by the Taiwan/CDF, while Terre des Hommes – a Lausanne, Switzerland, based organization – is implementing the project. The Taiwan/CDF, the Taiwanese embassy in Burkina Faso and UNICEF are all responsible for monitoring project progress. Funding is being employed at gold mines and quarries throughout nine districts in three provinces, sufficient for at least 2,000 cases of financial support,

including for families who lack the means to support preschool children, children of school age or young children who have not had the chance to pursue primary education before. Providing assistance to improve primary education facilities at such sites will improve students' learning environments, enhance the schooling opportunities and learning outcomes of impoverished children, and gradually reduce instances of exploitation and child labor through the provision of education.

### **Meeting Regional Demand for National Development Through a Range of Workshops:**

Since 2011, we have been gradually organizing a greater number of specific courses as part of our program of workshops, including worldwide, regional and single-country workshops. This is introducing partners to Taiwan's unique experiences of social and economic development and assisting them to develop their human resources. Every year we organize around 20 workshops, whose main themes cover economics and trade, agriculture, fisheries, social development, human resources, TVET, environmental protection, health care and ICT. As many as 400 people – government officers from developing countries, together with high-level government officials and NGO personnel – visit Taiwan annually to participate in these events.

### **Assisting Partners to Cultivate Talent through Higher Education:**

The accumulation of knowledge is crucial to long-term development in our partner countries. We will continue to assist partners to cultivate talent through higher education as part of our approach toward technical cooperation, and by strengthening academic exchanges. This will provide the human capital needed for development in such nations and build Taiwan's "soft power." Through our International Higher Education Scholarship Program, we are presently providing full scholarships to talented young people who come recommended by our partner countries, providing undergraduate and graduate courses, taught entirely in English, to help such countries to cultivate high-quality professionals.

### **Providing Short-term Training and Promoting Projects involving Seed Teachers:**

Since 2005, our Healthcare Personnel Training Program has drawn on cooperation with dozens of Taiwanese medical institutions to provide two to three months of clinical training to medics from our partner countries. On returning home, these participants become seed teachers responsible for promoting TaiwanICDF medical projects, or become involved in project-related assistance. This expands the depth and scale of bilateral medical and technical cooperation between our organization and our partner countries, creating a pool of local personnel who have the potential to serve as contacts during future cooperation with Taiwan and laying the foundation and the pipeline for long-term bilateral medical cooperation.

### **A Commitment to Enhancing Vocational Training Programs:**

We promote vocational training in order to assist

partner countries' economic development and to meet the private sector's need for a range of professional human resources. Emphasizing quality and professionalism as part of the development of vocational training in our partner countries, promoting industrial-academic cooperation and convergence, enhancing students' employability through TVET and helping local people to actively seek employment opportunities all advance the objective of realizing economic and social prosperity. For example, in the Marshall Islands and The Gambia, where we have been promoting TVET-related projects, in addition to cultivating the talents of the actual trainees involved, we have also assisted government or cooperating units to build capacity, which enables such stakeholders to take on and continue to operate these projects, ultimately enhancing the skills and quality of the local workforce.

### **Utilizing Financial Instruments and Consulting Services:**

Other than technical cooperation, we also utilize financial instruments and consulting services which, through their close connection to industrial trends, assist partner countries to strengthen their TVET systems. As part of our Technical and Vocational Education and Training Project in The Gambia, for example, we are hiring Taiwanese consultants who will assist Gambian authorities to develop factory management standards and security measures, as well as plan professional training courses for personnel. At this stage of human resources development we are focusing on youth capacity and providing timely, lending-based assistance, to encourage entrepreneurs in our partner countries to study and then become actively involved in social and economic endeavors.



◀ Recreational, intercollegiate activities, organized each year as part of the International Higher Education Scholarship Program, promote exchanges between scholarship students. To assist partner countries to nurture talent, the program draws on Taiwan's experience and higher education resources, providing students with full scholarships for a range of professional, English-language courses.

## Case Study 1

### Overseas Workshops

The purpose of the TaiwanICDF's program of international workshops is to support the development of human resources training in developing countries and share the comparative advantages Taiwan gained during its own development. Each year we adjust the range of topics offered to reflect international trends and partner countries' needs, which enables participants to get the most out of learning synergies.

#### ■ Improving Project Transfer by Improving Partners' Capacity

In keeping with the priority areas of operation determined in our medium-term strategy for 2011-2016 and in coordination with relevant TaiwanICDF projects, we are assisting partner countries to train local personnel and develop the professional skills of staff from cooperating organizations. By enhancing the capacity of stakeholders involved in our bilateral projects, we can transfer project-related technologies with confidence and ensure that projects can be implemented sustainably.

We organized our first overseas workshop – a Workshop on Tilapia Culture – in Honduras in 2011. We dispatched Taiwanese experts to impart their skills and know-how, and design a localized curriculum whose details were customized to reflect the genuine state of the aquaculture industry in Central America.

Given the outstanding results of that particular course, we expanded on the idea this past year with: a Workshop on Crop Production and Cultivation in The Gambia, a Workshop on Agricultural Marketing in St. Lucia, a Seminar on the Bamboo Industry in Guatemala, an advanced-level Workshop on Tilapia Culture in Honduras, a Workshop on Hog Breeding and Raising in the Solomon Islands, a Workshop on Micro-sized Enterprise Formation and Creation in Burkina Faso and a Workshop on the Project Cycle in São Tomé and Príncipe.

#### ■ Promoting Customized, Localized Curricula

An example of localized curricula can be seen in our Workshop on Crop Production and Cultivation in The Gambia, which was organized in response to the four- to six-year project migration programs in place at a number of our overseas technical missions. The workshop was designed to enhance partners' capacity to take on TaiwanICDF projects and meet the needs of local rice production programs. The workshop divided trainees



▲ Participants attending the Workshop on Agricultural Marketing in St. Lucia visit a fish farm working with Taiwan's local technical mission. Hands-on training activities like this foster growth among teachers and students alike.

into rice production extension trainees and TaiwanICDF project coordination trainees. The primary theme for the workshop was the sustainable development and operation of rice cultivation programs.

The content of the workshop was designed to closely meet local conditions, the environment and local needs with a curriculum customized to promote ownership. A number of Taiwanese experts were dispatched to give lectures on the workshop's main topics – rice seed production, seed selection and breeding – while students were mainly agricultural technology and extension specialists hailing from The Gambia, Haiti and Swaziland. The workshop's curriculum and experience-sharing activities improved rice seed production, selection techniques and management skills among professionals in Africa and Haiti. This will improve the quality of their human resources, help to establish rice extension systems and promote sustainable social and economic development in the region.

In addition to raising the TaiwanICDF's international visibility, these overseas workshops allow us to get closer to the needs of trainees and their countries. This is a win-win situation for all. Taiwan can pass on its own experiences more successfully, and Taiwanese experts can provide a more interactive experience within partner countries than perhaps they would in Taiwan.

## Case Study 2

## TaiwanICDF Scholarship Program in Burkina Faso



▲ A social worker discusses social issues with young people as part of regular sessions held at this project-funded "Hope Point" in Bobo-Dioulasso, Burkina Faso.

To echo and put into practice one of the MDGs, "Achieve universal primary education," we have promoted the TaiwanICDF Scholarship Program in Burkina Faso since 2011. The project is being implemented in cooperation with Terre des Hommes, a Swiss NGO, under the framework of a number of local UNICEF cooperation projects. Combined with the funding offered by the TaiwanICDF, this approach will provide primary education opportunities to local children throughout Burkina Faso between October 2011 and September 2013. The initiative is currently progressing smoothly under the supervision of the TaiwanICDF, the Taiwanese embassy in Burkina Faso and the country's Ministry of Social Action and National Solidarity and Ministry of Labor and Social Security.

#### ■ Scholarship-based Donations Helping Poor Children to Receive a Basic Education

Of the more than 1.6 million Burkinabé children and adolescents aged 5-17 who are engaged in some kind of work or economic activity, approximately two-thirds are involved in an exploitative form of child labor.

This situation is particularly common in the more than 600 mines and quarries found throughout Burkina Faso where working parents are often forced to leave preschool children unattended in dangerous conditions, which results in numerous accidents. Meanwhile, harsh working conditions faced by school-aged children and adolescents employed at these sites can cause serious physical disabilities on top of the losses of educational opportunities suffered by all.

The project's main approach is to provide scholarships using funds provided by the TaiwanICDF. Terre des Hommes is responsible for implementing the project within Burkina Faso, with the TaiwanICDF, the Taiwanese embassy in Burkina Faso and UNICEF providing oversight. The program assists children working at nine mines and quarries in three

provinces. It directly funds basic primary education for some beneficiaries and provides remedial and literacy education to children who are not in school. The program gives children the chance to escape the fate of working at such sites for their entire lives.

#### ■ Assisting in the Improvement of Educational Facilities, Focusing on Pastoral Care and Literacy

To provide children with a better educational environment, funding has also been allocated to improve basic educational facilities at six schools situated in the vicinity of mines and quarries. The project will also fund the protection and education of selected groups of preschool children aged 3-6 and adolescents aged 10-14.

The four main activities conducted as part of the project and their outcomes to date are described below.

- **Assisting and Supporting Primary Education:** A total of 1,502 children have received TaiwanICDF scholarship grants supporting the purchase of textbooks, stationery and learning materials; 75 out-of-school children who were begging or involved in some form of child labor or

exploitation have been helped to return to school; and 36 children have taken remedial classes and are now ready to enter the formal school system.

- **Strengthening Schools and the Learning Environment:**

As well as providing grants to fund nutritious lunches at 10 school cafeterias, the project has also funded one childhood rights seminar designed to consolidate anti-exploitation concepts among the 80 primary school teachers in attendance. Six classrooms have also been refurbished with desks and chairs to provide students with a better learning environment.

- **Providing Preschool Care:** As part of project implementation, simple kindergartens were established at a number of mines. These centrally managed

facilities have protected as many as 820 infants and preschool children from dangerous environments and provided them with safe activities while their parents were otherwise engaged in work.

- **Improving Literacy Rates among Adolescents in Mining Areas:** A total of 142 adolescents have benefited from night classes designed to raise literacy.

Primary education is the cornerstone of development at an individual and national level. This project will improve the prospects of vulnerable children living in and around Burkina Faso's mines and quarries and reduce exploitation and child labor by providing schooling and development opportunities, as well as reducing the social problems faced by out-of-school children.



◀ An education officer directs a literacy class for street children in Ouagadougou.

## Information and Communications Technology

In accordance with trends in the global information economy, as well as high levels of development in Taiwan's own ICT industry, we assist our partner countries to improve their ICT capacity, reduce development gaps and cultivate their digital capabilities, which together represent an indicator of the pursuit and further upgrading of our foreign aid operations.

### **Improving Administrative Efficiency by Assisting Partners to Build E-government Systems:**

Drawing on Taiwan's experience in developing e-government, we are supporting the governments of our partner countries to expand their public services via ongoing technical cooperation. We are also introducing technologies and resources from across the private sector to assist partner countries within different regions to develop ICT and exploit its applications. Our ICT Technical Cooperation Project, for example, aims to establish a National ICT Center in St. Lucia in the Caribbean. The project includes the development of an e-government system and the introduction of administrative applications such as an advanced transport licensing authority system, a crime management system, a civil status registry system, an agriculture resource system and other related e-government systems. The purpose of the project is to develop an environment in which the use of electronic applications may flourish, and thereby improve the transparency of information at a government level, as well as improve the government's administrative efficiency.

### **Medium- to Long-term Investment of Resources:**

The development of the ICT sector takes place over different stages and is closely linked to the quality of infrastructure and national human resources. However, most of our partners are at the initial stages of developing their ICT sectors and are limited by a number of constraints. For these reasons, ICT projects must be comprehensive and take medium- to long-term planning and the investment of resources into account. For example, our ICT Technical Cooperation Project in Belize, which has been under implementation since 2007, has centered on the construction of a National ICT

Center and the development of e-government systems. Project handover was completed during 2012. Based on this successful implementation, which has received the plaudits of the government of Belize, the second phase of this cooperative project will take the medium- to long-term development of the country into account, focusing on the further development of existing systems to ensure that the public can be provided with convenient services in keeping with international standards.

### **Strengthening Capacity Building:**

Since human resources are crucial assets for the development of ICT, some of our most important tasks involve training government employees to operate e-facilities and enhancing their capacity to use ICT applications, in addition to assisting in the construction of knowledge management and work platforms. The purpose of such training is to ensure that projects can be handed over to local specialists, so as to improve governments' administrative efficiency and enhance such countries' ICT competitiveness. In both Belize and St. Lucia, for example, we have already completed the transfer of educational and training courses. Now, these partners can design ICT training courses of their own, using their ICT centers as a base from which to train and educate governmental officials to improve ICT-related capacity, and marching forward toward independent, sustainable forms of ICT development.

### **Assisting Regional Integration:**

We assist our partner countries to manage and develop regionwide forms of ICT, as well as improve links and interaction with international organizations, including the acquisition, integration and application of resources. To do this, we have developed a systematic and professional training system, offering technology and management workshops and organizing exchanges of technology, research and development and training activities. Moreover, we have successfully established a positive image for Taiwan by offering assistance to developing countries and helping them to develop their soft power.

## Case Study 1

### ICT Technical Cooperation Project—Belize

Taiwan has built up a catalog of successes in ICT over the years as can be seen in the country's dazzling array of hardware products, software designs and telecommunications applications. ICT, if integrated into the activities of overseas development assistance, can play to Taiwan's unique advantages and have a key impact upon development work.

Taiwan's own process of development began in the agriculture sector, later progressing to industrial production and expanding national output through SME-based trade. However, it was the country's eventual expansion into ICT and our key role in global production that really raised Taiwan's status to that of a global economy. This journey has considerable value as a reference for developing countries today.

More importantly, by integrating Taiwan's flourishing private ICT sector into its development work, Taiwan can echo the trend in the international community of using ICT to spur development. This way, Taiwan can open up new opportunities for development aid that can generate a win-win-win situation for: developing countries, government actors involved in development aid and those seeking opportunities in the private sector.

#### ■ Raising Partners' Performance and Finding Ways To Improve Efficiency

In response, MOFA commissioned us to implement an ICT Technical Cooperation Project in several Central American and Caribbean nations starting with Belize in 2006. The project helped Belize establish a National ICT Center that authorities could use as a hub to promote ICT development, assist in the development of e-government systems, enhance the effectiveness of governance and provide convenient public services. At the same time, the project also promoted training for ICT personnel to improve administrative efficiency within the Belizean government and increase national competitiveness. In terms of the project's approach to bilateral cooperation, the initiative was mainly implemented by Belizean stakeholders with Taiwan providing technical assistance from the sidelines. The project saw the establishment of the National ICT Center as well as five other e-government systems.



▲ The National ICT Center in Belize, built with assistance from the TaiwanICDF. The development of e-government systems and the provision of ICT training at the center have made the site a hub for the promotion of ICT development.

#### ■ Completing Project Transfer, Continuing Development Through a Second-phase Project

With all objectives completed, the project was officially handed over to Belize in December. The National ICT Center and e-government systems are now being operated independently. We continue to work with authorities to develop plans for a second phase of the project, which, among other things, is due to significantly expand the benefits of Belize's customs controls through the development of a database and associated systems for the Bureau of Standard's Supplies Control Unit.

This will provide a convenient portal for businesses to apply for import and export licenses, helping to promote the flow of goods, reduce price volatility and stabilize domestic prices.

Building on this success, Belize will also progress to interfacing with the United Nations Conference on Trade and Development's ASYCUDA customs system, working to international standards and enhancing the accuracy and efficiency of customs data. In the future, we will build upon the first stage of the project and continue to assist Belize to deepen its use of these customs systems.



## Environmental Protection

Basing our approach upon global environmental protection strategies, we use advanced equipment already well established in Taiwan, together with Taiwan's development experience and educational resources, to assist partner countries to improve energy efficiency and promote sustainable, environmentally friendly development.

### **Improving Natural Disaster Response and Management Mechanisms:**

Based on Taiwan's experience of using GIS applications, the technical assistance that we provide to our partner countries assists them to estimate the extent of disaster areas and minimize injury and damage by drawing up the appropriate emergency response. For example, we have cooperated with Nicaragua since 2009 to implement the Application of Geographic Information Systems to Improve Environmental Sustainability in Nicaragua project. A number of severe disasters, including forest fires, landslides and water spouts, have occurred during the project period, and we have provided real-time monitoring images to assist Nicaraguan authorities to assess such disasters. The second phase of satellite image analysis was conducted during 2012, while the project's annual education and training program was conducted in May.

Based on this successful cooperation with Nicaragua,

we went on to cooperate with Honduras to implement a similar project, 2012 Satellite Monitoring of Forest, Natural Resources and Mitigation of Natural Disasters in Honduras using GIS and RS. Satellite images and analysis data relating to land changes were provided to the Honduran government so that authorities could understand, at any time, how land resources were changing at specific sites within protected areas, and then take appropriate measures to minimize damage to life or public property.

### **Using Financing to Assist Partner Countries to Develop Green Energy:**

On the issue of energy sustainability, we use financial instruments to provide partner countries with the funding required to develop green energy in pursuit of the seventh MDG, "Ensure environmental sustainability." For example, we have invested in the European Bank for Reconstruction and Development's (EBRD) Green Energy Special Fund, to assist the organization's countries of operation to replace old, energy-inefficient infrastructure with efficient, energy-saving technology or equipment. The project effectively lowers the threshold for manufacturers of low-carbon technologies to enter the market and demonstrates an acceptance of energy-saving efficiency and low-carbon technology programs.

### **Renewable and Clean Energy Technology:**

In terms of the development of new sources of energy, we assist partner countries to implement pilot projects involving renewable energy technologies, usually in the form of technical assistance projects. Our Panama Water Resource and Renewable Energy TA Project in Panama and a Renewable Energy Technological Assistance Project in St. Kitts and Nevis are two such examples. Using solar power to drive feedwater equipment has ensured that reliable water resources are available to Panamanian residents, increasing agricultural production value and improving the living standards of local people.

We are also involved in assessing the feasibility of using clean energy in six Pacific island partner countries, having provided suggestions and assistance regarding potential clean energy developments, such as solar energy and wind power. Future cooperation will focus on energy development and improvements to the utilization of energy resources.

### **Safeguarding Environmental Sustainability:**

For our partners who are most threatened by climate change, the assistance we provide focuses mainly on risk management and adaptation measures that minimize damage. Our Access to Potable Water in Rural Swaziland Project, for example, was implemented in response to water safety issues in Africa as raised at the United Nations Conference on Sustainable Development. Another project, Application of Geographic Information Systems to Improve Environmental Sustainability in Nicaragua, is focusing on land planning and disaster controls in Nicaragua, as part of which, through project workshops and regional seminars, we have held extensive discussions on the concept of using GIS in land-use planning or as disaster prevention tools. Both projects were implemented with an eye to promoting environmental sustainability.

### **Agricultural Waste Treatment:**

We have introduced many agricultural waste treatment technologies into cooperation projects that focus on partner countries' agricultural production. These technologies have been effective in reducing agricultural pollution in places that still have relatively fragile environmental systems, thereby ensuring that environmental resources are utilized sustainably. In Honduras and Nicaragua, we are now implementing biogas energy projects; in Nauru, an organic composting project involving the processing of agricultural waste; and in Guatemala, an organic waste-based carbon reduction and recycling project.

### **Environmental and Energy-saving Education:**

To assist partner countries in responding to climate change effectively, we are attaching great importance to mitigation and the need to reduce carbon footprints without affecting economic growth, drawing on Taiwan's past experiences of environmental protection. We are making the best use of existing technology to increase efficiency, and improving partner countries' self-reliance through capacity building and project handover, thereby responding to international initiatives requiring that emissions mitigation activities take efficiency and equity into account. Our Workshop on Clean Energy Development, for example, is organized mostly for the benefit of governmental officials responsible for energy resources and related affairs. We have also dispatched volunteers to Palau, St. Lucia, Panama and other partner countries to provide environmental protection services. We hope to introduce concepts and technologies relating to environmental sustainability from Taiwan to our partner countries and thereby fulfill our obligations as citizens of the Earth.



◀ A member of the Taiwan Technical Mission in Nicaragua explains the operations of one of the TaiwanCDF's biogas renewable energy projects to visitors at the 11th Earth Day Fair using a scale model of the project farm. The mission was invited to attend the event by the government of Nicaragua.

## Case Study 1

## 2012 Satellite Monitoring of Forest, Natural Resources and Mitigation of Natural Disasters in Honduras using GIS and RS



▲ Trainees participating in this GIS project in Honduras use equipment to monitor land use.

Geographic information systems (GIS) have become an important technical instrument used by advanced nations to facilitate decision-making on matters of land use, as well as national development planning. GIS has many applications, including environmental impact assessment, resource management, land planning, urban and regional planning, transportation management, forest protection and conservation and archaeological investigation. GIS can be used to support decisions whenever there is a need for geographical information or solutions involving spatial data and associated analyses.

#### ■ Promoting a Pilot GIS Project: Nicaragua as a Successful Case

To make the best use of Taiwan's FORMOSAT-2 satellite and to assist our Central American partners to incorporate geographic factors into their national policies, we have been promoting a pilot GIS project in Nicaragua since 2009. The initiative, designed to assist the Nicaraguan Institute of Territorial Studies and Nicaragua's Ministry of the Environment and Natural Resources to engage in environmental monitoring and enhance their ability to operate GIS technologies and applications,

began in earnest in 2010.

During this time, by sharing satellite images and data and providing training and technical cooperation, we were able to help Nicaragua tackle important changes as they took place within protected ecological zones. We broke through previous constraints imposed by only being able to carry out limited foot patrols and continually raised the GIS proficiency of personnel involved in implementing the project. This meant that the use of such technologies could be gradually expanded to monitor agricultural production and provide surveillance on areas prone to flooding and a world heritage site. GIS was also used to shape land-use policies and conduct disaster prevention work.

#### ■ Extending a Project's Successful Experiences, Expanding the Influence of Overseas Assistance

Based on the successful experiences of the pilot GIS project in Nicaragua, we expanded this combination of overseas assistance and GIS technology with a new project in 2012 in cooperation with the government of Honduras. This project will assist Honduras' National Institute for Conservation and Forest Development, Protected Areas and Wildlife to monitor the country's Rio Platano reservation. One of the most important protected ecological zones in Honduras, the area has been under constant threat of illegal logging in recent years, which has led to a significant decline in biodiversity. Through this project, in 2012 alone the government was able to take action at 33 sites where unlawful activities were underway. Compared to previous efforts that passively relied upon park rangers and members of the public for reports and information, the project has enabled conservation activities to proceed with much greater efficiency.

## Case Study 2

### EBRD Green Energy Special Fund

Global warming and associated climate anomalies may well be the root cause of a growing number of problems such as food insecurity and natural disasters, which frequently cause significant damage to infrastructure. In their efforts to mitigate the effects of climate change, international aid agencies have focused on carbon reduction schemes for some years now. The MDGs also feature similar indicators.

Carbon reduction efforts often require the complete modernization of basic infrastructure in energy, transportation and other sectors so as to reduce energy inefficiencies. Since the scope of such projects can be very wide, there is a real need for capital injection from international aid agencies, supplemented by technical assistance, to help improve the environment and energy efficiency.

#### ■ Working with the EBRD, Expanding Our Ability to Participate in International Cooperation

In recent years, the EBRD has responded to the issue of climate change by becoming actively involved in sustainable forms of energy generation. We have also made environmental protection one of our priority areas of concern. Thus, the significance of joining forces with the EBRD, a multilateral development organization that has been providing continual assistance to Central and Eastern European, Central Asian and former Soviet nations, cannot be overstated. Our cooperation in the establishment of the Green Energy Special Fund (GESF) came after a two-year period of due diligence, which culminated in negotiations with the EBRD in May 2011 and our subsequent commitment of a contribution of US\$80 million. Our participation in the fund offers opportunities to draw on the EBRD's expertise in this field and allows us to leverage our limited resources through co-financing initiatives, thereby expanding our ability to participate in cooperative international endeavors.



▲ By providing concessional loans, the Green Energy Special Fund will encourage the EBRD's partner countries to import more green energy products and technologies.

#### ■ Providing Concessional Loans, Effectively Reducing Barriers to Participation

The initial investment required to kick-start energy projects, in terms of both capital and technology, is enormous. If, by providing concessional loans, the EBRD can use the GESF to encourage our partner countries to invest in more green products and technologies, this will ultimately reduce the cost of financing those projects. Providing the optimum economic incentives effectively reduces the barriers to participation in energy-saving and renewable energy projects.

At present, the target beneficiaries of the GESF are municipal governments in the EBRD's countries of operation, including local government and public utilities units engaged in environmental infrastructure projects. As such, we hope that our involvement in the GESF will provide opportunities for Taiwanese industries, such as manufacturers of LED and solar photovoltaic equipment, to expand into these regions.