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Overview

A better
world,
a brighter
future

International Development and Cooperation Strategies

Development assistance began to become a trend in the international community in the middle of the 20th century, forming an important paradigm for international interaction. International cooperation and development work combines humanitarian concerns with the interests of donor and partner countries. Development assistance projects not only boost economic growth and quality of life in partner countries, they also play a role in promoting the universal values of democracy and human rights.

In 2000, the United Nations announced its Millennium Development Goals (MDGs). Eight goals and 18 targets were set forth in the MDGs, setting out priorities and directions for international development cooperation. Basic goals include eradicating extreme poverty, hunger, and disease, but on a broader level, the MDGs also covered topics such as education, gender equality, health, environmental sustainability, trade, finance, debt relief, and information and communications technology (ICT). The announcement of the MDGs provided concrete objectives for the international community in carrying out aid work, and helped to promote the coordination and integration of aid resources. As Taiwan's premier institution dedicated to development assistance, the TaiwanICDF is acting in accordance with global trends and working with the international community to achieve these far-reaching goals.

Taiwan's Strengths in International Development and Cooperation

Taiwan is one of several countries that has gone from receiving foreign assistance to becoming a donor country. The nation's development experience is an example for developing countries facing similar challenges. Taiwan was particularly successful in making the transition from agriculture to agribusiness. In addition, the vibrant growth of small and medium enterprises (SMEs), the subsequent rise of the ICT industry, and impressive achievements in health care, are four strengths which make Taiwan a useful model for other countries. Within the global Chinese community, Taiwan also stands out for its democratic political

system and emphasis on human rights. Coupled with the aforementioned strengths, this provides a strong foundation from which the TaiwanICDF conducts its international development cooperation work.

Medium- and Long-term Development Cooperation Strategic Platform

The TaiwanICDF seeks to work in line with trends in international development cooperation and carefully considers the significance and value of Taiwan's participation in such activity. It looks to exploit Taiwan's strengths in order to map out a blueprint for medium- and long-term international cooperation strategies.

The TaiwanICDF makes clear objectives and sets out methods to reach them. It emphasizes four highly coherent levels: Goals, strategies, methods, and projects. By creating the broadest benefits possible from each of its projects, medium- and long-term development goals can be achieved.

Medium- and Long-term Development Cooperation Strategic Goals

The TaiwanICDF has four objectives in carrying out its projects: 1) Working in tandem with government policies to emphasize Taiwan's unique strengths and advantages through development operations, and addressing issues related to global, social, and economic development 2) Promoting sustainable development and integrating domestic resources 3) Encouraging the public at large to participate in development cooperation activities 4) Fostering broad-based development in partner nations to promote well-being among the population. The following is an introduction to each of these objectives:

1. Highlighting Taiwan's unique strengths; focusing on current global topics of interest

Taiwan has for many years actively participated in various activities in the international community, and has sought to assist in reducing the development gap throughout the globe. However, in light of its unique diplomatic situation, Taiwan has faced difficulty in



▲ The ADOC Project boosts ICT capabilities in partner nations.

engaging in bilateral and multilateral cooperation on an official development assistance (ODA) level. This limits formal avenues through which Taiwan can provide its development experience to others. As a result, if Taiwan seeks to effectively participate in projects implemented by international development organizations, it must have a clear understanding of the current focus of development assistance, and work in conjunction with global political and economic trends. The TaiwanICDF must incorporate these trends into its core strategies, enabling it to remain in step with international practice. This will help not only to boost Taiwan's cooperative relationship with aid organizations, but also to highlight Taiwan's unique strengths, increase its meaningful participation in international affairs, and develop innovative strategies for engaging in international relations.

2. Promoting sustainable development; integrating domestic resources

Taiwan's development cooperation focuses on international ideological trends, and seeks to provide long-term assistance models for partner countries, helping these nations to experience sustainable development, and fostering self-reliance. The TaiwanICDF seeks to bring together government and private sector resources, along with those of NGOs and civil society, in executing development cooperation work. Through a combination of fund injection and the introduction of technology and human resource development, the TaiwanICDF aims to provide comprehensive assistance to partner nations.

3. Encouraging participation by the public

International development cooperation is multi-



▲ Experts offer instruction in cultivation to farmers in St. Vincent and the Grenadines.

faceted work that involves both specialized techniques and humanitarian concerns. Achieving project goals requires the participation of highly trained personnel. In addition to integrating domestic resources and expanding the range of cooperative organizations, the TaiwanICDF also operates the TaiwanICDF Overseas Volunteers and Taiwan Youth Overseas Service to get the public involved in international cooperation and development work. By doing this, the TaiwanICDF pumps new blood into overseas missions, allowing for the transfer of valuable knowledge and experience to a younger generation. Moreover, it also provides channels for participation by Taiwan's elite talent, enriching the pool of people working in this field and expanding the breadth of foreign assistance work.

4. Fostering broad-based development in partner nations

The TaiwanICDF has long focused on agriculture and SMEs as areas for cooperation, with the aim of promoting economic growth among the grassroots, and overall progress in partner countries. Other areas, however, such as health care, the creation of equal employment opportunities, and education, require working in unison with government capacity building, so that the people of these countries can enjoy the benefits brought by development. Therefore, when outlining development assistance strategies, the TaiwanICDF not only aims to assist partner countries on the economic front, but also to promote social development, democracy, equality, and human rights, paving the way for balanced development.

Strategies to Achieve Medium- and Long-term Development Cooperation Objectives

The TaiwanICDF has adopted four strategies in order to achieve the objectives set out in its medium-and long-term development operations, namely: 1) Cooperating with international institutions and NGOs to create strong partnerships 2) Utilizing Taiwan's strengths to assist partner countries in economic and social development 3) Integrating public- and private- sector resources, both in Taiwan and overseas 4) Fostering ownership within partner countries, and strengthening multilateral harmonization.

1. Cooperating with international institutions and NGOs

The TaiwanICDF has consistently sought to cooperate with international organizations and NGOs in an effort to integrate resources, be in step with international practices, and help ensure that development cooperation projects are executed successfully. By doing this, the TaiwanICDF's financial resources and technical strengths can be employed for maximum benefit. Meanwhile, the specialized experience of international organizations, coupled with a greater pool of resources, and a broader scope in implementing projects, works to establish new core abilities for the TaiwanICDF in international cooperation.

2. Utilizing Taiwan's strengths to assist partner countries

Agriculture was the primary foundation from which Taiwan transformed its economy. The next stage was the



▲ The vocational training project in El Salvador trains the local manpower needed to support industrial development.

development of essential goods industries, SMEs, and trade, all of which helped to raise the GDP per capita in Taiwan. This gave way to the development of an ICT industry that has made Taiwan a critical link in the global manufacturing network. The nation's economic development history has, in this way, conformed with the history of modern developed countries. Emerging from the post-war rubble, in the late 1940s, Taiwan sought development that would enable it to stand on its own. Over the years, it has gradually created outstanding medical services, and public health and disease prevention systems, while also providing universal education at elementary through high school level and training the talent required by advanced industry. The TaiwanICDF integrates Taiwan's development experience and strengths in assisting with comprehensive development on a socio-economic level, in friendly and allied nations.

3. Integrating resources from the public and private sectors

As the premier organization in Taiwan dedicated to development assistance, the TaiwanICDF has accumulated a wealth of experience over the years, and has established strong cooperative relationships with many domestic and foreign institutions and organizations. The TaiwanICDF integrates both internal and external resources, and prudently plans how to allocate those resources in order to maximize their benefit and to meet the specific needs of partner countries.

4. Fostering ownership in partner countries

The international community is increasingly paying



▲ Volunteer Lee Hui-min explains the prescriptions provided to people in northern India.

attention to the results of development assistance, as well as ownership among locals. The TaiwanICDF formulates development strategies to assist partner countries in fostering an ability to become self-reliant, with an emphasis on capacity building. The TaiwanICDF respects the systems and policy priorities of its partner countries. As well as serving in the role of assistance provider, it functions as an adviser and supervisor, helping to pave the way for reform, and strengthening systems in partner countries. The TaiwanICDF operates closely with related agencies in friendly countries, including government sectors, local groups, and NGOs, and particularly emphasizes communication with the public. This maximizes the effects of each assistance plan and helps to achieve local development goals.

Methods of Executing Projects

In general, the TaiwanICDF drafts 10 effective methods of implementation for each project, according to clear goals and strategies: 1) Utilizing Taiwan's strengths in ICT to develop comprehensive international cooperation projects to reduce the digital divide 2) Promoting the growth of agricultural enterprises in order to boost the economy of farming villages and pave the way for sustainable development 3) Nurturing a new generation of individuals to work in the field of international development cooperation, and developing human resources in partner countries 4) Creating an SME investment platform, providing credit guarantees,



▲ The Technical Mission in Fiji provides production, grading, and packaging technology to farmers.

and promoting investment in friendly and allied nations 5) Supporting the development of micro, small, and medium enterprises (MSMEs) to reduce the wealth gap 6) Integrating local and overseas medical and health care resources, dispatching medical missions overseas, and participating in cooperation projects spearheaded by international medical organizations 7) Sharing Taiwan's experiences in democratic development, gender equality awareness, and community creation, in order to help to strengthen the social infrastructures of partner countries 8) Having the TaiwanICDF serve as a coordinator of resources, and working in cooperation with domestic and international institutions 9) Strengthening international and local publicity campaigns to spread the word about Taiwan's efforts in international cooperation and development 10) Seeking to hold or participate in international conferences, thereby expanding the channels through which the organization can encourage public involvement in international cooperation and development.

The TaiwanICDF drafts individual development projects based on the aforementioned goals, strategies, and methods, creating a seamless network to implement the projects. A detailed introduction to the goals, strategies, and methods of the projects in the TaiwanICDF's four key areas of cooperation, namely agriculture, private sector development, ICT, and medical and health care, will be provided in the next section of this chapter.



▲ The Mobile Medical Mission visiting Kiribati excises an abdominal tumor from a local patient.

Key Areas of Cooperation

Agricultural Upgrading: Pursuing Added-Value and Sustainability

In recent years, developing nations have felt the impact of globalization and the rapid pace of technological progress. These nations must find a means to maintain national economic growth, assist local industries in upgrading, balance development between urban and rural areas, and ensure the sustainability of natural resources. All of these tasks present serious challenges to developing countries. Agricultural development plays a key role in determining the prosperity of these countries and is an important element in social stability and resource sustainability.

Having ample staple foods is one of the basic requirements for mankind. With this in mind, the first of the eight MDGs unveiled by the United Nations in 2000 is to eradicate extreme poverty and hunger. According to comparative advantage and free market economy

theories, globalization should enable countries to obtain the staple foods they need via international trade. However, the least developed or developing countries still have difficulty competing with developed countries from the standpoint of technology and regulations. As a result, the problems of excess production of staples and the unequal distribution of this food continue to this day. In addition, globalization has triggered increasing competition for resources, climatic change, and immense ecological concerns brought about by highly developed industry. This has forced countries throughout the world to reconsider the importance and necessity of agricultural development. Therefore, the value and function of agricultural development is no longer limited to the production of staple foods, but must also include sustainable goals, such as helping to eradicate hunger and

Agro-shopping in Asuncion, Paraguay

The Technical Mission in Paraguay began the Agricultural Crop Extension Project in 1998, introducing agricultural products that previously had not been grown in Paraguay, such as sweet corn, plum tomatoes and Oriental vegetables, in the hope of developing new markets and raising income for farmers. In order to promote the sale of these crops, the technical mission cooperated with the local agriculture and livestock ministry to set up an agro-shopping market once a week in the parking lot of a popular department store in Asuncion. This served as a venue at which farmers could directly sell their products to consumers.

Since sweet corn is not a traditional crop to Paraguay, the technical mission organized production and marketing teams among farmers and conducted farming technology training. The mission also held courses instructing the public about the various ways to cook the sweet corn, which was vital to extending cultivation of the crop. The technical mission offered packaging and marketing technology to the teams and arranged for the corn to be transported in refrigerated vehicles, reducing damage to the corn while it was in shipment. Loans were channeled to farmers to enable them to acquire packaging machinery. Meanwhile, a label was designed to promote product quality and recognition.

In the eight years since its establishment, the agro-shopping market has become Paraguay's most successful farmers market. Besides vegetables, farmers sell fresh and processed foods. Sales at the market have grown to 600 million guarani (US\$100,000) monthly. Over half of the crops sold at the market were cultivated



with the assistance of the technical mission. When the market was first opened, production and marketing teams provided only 8-10 types of vegetables. Today, the market features 150 varieties and about 650 products in total. This market has not only significantly raised farmers' income, but also has sparked development of Paraguay's agricultural sector.

Small-Sized Corn Grinding Factory Project in Malawi

Corn is one of Malawi's staple foods. Since 2000, the Technical Mission in Malawi has assisted local farmers in forming corn-growing groups, resulting in a substantial boost in yield. In 2002, the mission assisted farmers with the establishment of small corn-grinding factories, in the hope of further developing economically viable agribusiness in Malawi.

The first step of the project was to select five farmers' organizations in north, central and south Malawi, which would find land and build the factories. The technical mission then supplied grinding machinery and technical assistance. In the future, these factories will be centers for processing technology training and the development of community agribusinesses.

Experts were sent to Malawi between 2003-2006 to conduct detailed feasibility assessments, and helped members of the technical mission to design a comprehensive assistance mechanism. The technical mission assisted the five farmers' organizations with the establishment and management of the factories, and provided grinding machinery to each factory. Each factory also served as a technical training center, holding courses to instruct farmers on how to raise their crop yields. In order to transfer the technology successfully, the technical mission held demonstrations and seminars, and also compiled a handbook to instruct farmers on various technical and operational methods.

The project is still in the process of being implemented, and management methods and related technology have already been provided to farmers' organizations and technicians involved in extension. Rather than working on their own, farmers now work



as part of agribusiness. The small-sized grinding factories have helped agribusiness take root and serve as centers for the purchase and sale of grain. In the future, the introduction of food-processing technology will create profits and boost economic activity among farming villages in Malawi, and will also help to ensure stable incomes for local farmers.

poverty, promoting rural development, ensuring ample food supplies, and protecting the environment.

Strategies and Methods

Agriculture has been one of the key foundations from which Taiwan has staged economic transformation and development. As Taiwan's agriculture was made up primarily of small-sized farms, technology research was applied to farming, helping to boost agricultural output and develop niche farm products. These earned foreign currency that helped to support the development of the commercial and industrial sectors. This experience is a useful model for Taiwan's partner countries. In executing agricultural development projects, the TaiwanICDF makes use of Taiwan's advantages and seeks to address the common development goals of the international community. The TaiwanICDF's programs are designed first and foremost to improve partner countries' supply of staple foods. In helping the residents of those countries meet their basic needs, the TaiwanICDF takes into consideration development conditions, meteorological

factors, economic infrastructure, and the available resources of each nation. It maps out appropriate projects to meet the most urgent development needs of each country, and then provides technical transfers, injection of capital, and human resource training to help that country bolster its agricultural development. The result is not only self-sufficiency and safe supplies of staple foods, but also protection of the environment and a reduction of the development gap between urban and rural areas.

Given the relatively strong economic situation of some Asian and Middle Eastern nations, the TaiwanICDF formulates agricultural cooperation strategies to raise technology, expanding the variety of crops, linking production and sales networks, and stimulating agricultural investment. One example of this is the Technical Mission in Bahrain which has helped locals to develop their horticulture and diversify the economy.

On the other hand, agricultural output in many Pacific island nations fails to meet the consumption needs. The TaiwanICDF not only helps these countries

increase production of staple foods, but also encourages them to diversify crops. This reduces the need for imports of food and enables these countries to save foreign exchange expenditures. These projects also improve the nutritional intake of islanders. The TaiwanICDF also effectively utilizes the natural resources of each nation. For instance, organic cultivation media are produced from local materials. This helps to boost the fertility of the land as well as promote recycling and re-use of resources.

Many Latin American countries possess outstanding climates for agriculture and have the advantage of being situated near to major export markets in North America. In addition, consumption within these countries is rising. The TaiwanICDF's agricultural projects in this region aim to raise the competitiveness of agricultural products, and boosting product quality and food safety. In addition to market-oriented production and sales projects, the TaiwanICDF also promotes the establishment of

agribusiness and farmers' organizations. In Honduras, for example, the TaiwanICDF has paved the way for cooperation between farmers' organizations and agricultural exporters in growing and exporting eggplant, bitter melon, and other Oriental vegetables to the United States. The TaiwanICDF has also helped promote proper use of pesticides and established quick tests for chemical residues. The economies of east Caribbean island nations rely mainly on agriculture and tourism. The TaiwanICDF is assisting farmers in these countries with growing and selling a range of produce that is needed by the tourism sector.

Given that Africa still has an urgent need for staple foods, the foremost consideration of the TaiwanICDF's development cooperation here is to increase agricultural yield so as to ensure self-reliance. In addition to reclaiming land for agriculture, the TaiwanICDF has introduced highly efficient, low cost farming methods, as well as organic fertilizers that conform to the concept

Small Farmholders' Financing Scheme in Panama

Of the fishermen engaging in traditional fishing along the Panama coast, only about 40% have their own vessels. This figure and the use of unsophisticated fishing techniques mean their catches are limited. Due to the lack of government subsidies and the high interest rates of fishermen's organizations, these fishermen have insufficient income to support their families. In light of this, the Technical Mission in Panama has helped small-scale fishermen to forge cooperatives and has instructed them in new methods of fishing. The TaiwanICDF has also established a fisheries fund, providing loans to fishermen and cooperatives to employ new techniques and to expand the scale of their operations. The mission of this fund is to enable these fishermen to become self-reliant and to pave the way for sustainable operations.

This project also offers preferential loans to fishermen and cooperatives receiving assistance from the technical mission to acquire fishing vessels, outboard machinery, and sounders. This raises the ratio of fishermen owning their own boats and strengthens the organizational function of fishermen's cooperatives, which provide services, joint transportation of catches, and improved refrigeration and processing equipment. Fishermen who do not have their own vessels get priority in applying for the loans, with each person able to borrow up to US\$5,000. Repayment is scheduled over six years, with a number of flexible repayment plans available. Under the principle that 30% of the income from a fishermen's catch is used to pay off loans, fishermen are able to adjust their monthly payments based on seasonal catches. They can also choose to make payments every two weeks or on a monthly basis. Upon full repayment, fishermen receive the title to the vessel or



equipment. If a fisherman is unable to pay off the loan, the rights to the vessel belong to the technical mission and the funds previously paid by the fishermen will be designated as rental fees.

This project began in 2000 with capital of US\$100,000. As of December 2006, a total of US\$303,144.19 had been loaned out under the project. The non-performing loan ratio is only 1.28%. This project has not only helped to raise the incomes of fishermen, but has also improved the structure of fishermen's cooperatives.

Workshop on the Quarantine, Biosecurity and Drug Residue of Livestock and Poultry

According to the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), all agricultural products for export must conform to the standards and regulations outlined in the agreement. In 2006, the TaiwanICDF held a Workshop on the Quarantine, Biosecurity and Drug Residue of Livestock and Poultry to help partner countries to establish health inspection systems, expand their trade in agricultural products, and have their exports meet WTO standards.

The primary mission of the workshop was to explain health inspection and quarantine concepts as stipulated in the WTO's SPS framework. Participants also received an introduction to Taiwan's practical experience in the use of software and hardware devoted to poultry and livestock inspection and quarantine, as well as methods Taiwan uses to test for drug residues in meat products. This course helped participants learn how to design quarantine and health inspection systems, which will help reduce the spread of animal and plant diseases that can occur with the import and export of agricultural products. It will also help avoid the spread of plant diseases or pests into their countries, while helping them produce clean, drug residue-free livestock products. Ultimately, this will boost exports while also helping these countries protect their ecosystems and ensuring the health of the public, as well as flora and fauna.

The workshop emphasized both theory and practice. In addition to lectures by scholars, government officials from related departments also presided over classes. Participants were taken on field trips to visit the Animal Health Research Institute, the National Animal Industry Foundation's laboratory, the Bureau of Animal and Plant Health Inspection and Quarantine, Kaohsiung



Port Quarantine Station, and other agencies involved in first-line defense.

In all, 26 participants from 22 countries attended the workshop. The participants agreed that the combination of theory and practice would be beneficial to them in their efforts to help their countries to establish proper concepts and methods of health inspection, quarantine and food safety, and they all thought that the workshop had helped to hone their knowledge and their abilities in this regard.

of environmental sustainability. These measures boost yields of staple foods and also ensure the conservation and sustainable use of resources. The TaiwanICDF has also supplied technology for post-harvest processing in order to preserve crop freshness. This extends the storage life of the foods and adds value to farming products. In Burkina Faso, for instance, the TaiwanICDF has helped to establish an irrigation system to enable rice cultivation. It has also introduced high quality seed rice and has extended cultivation technology to boost yields. Meanwhile, the organization has helped to boost corn output in Malawi, where a corn-grinding factory has been established. These projects gradually enable farmers to engage in production on their own, generate cash income, and raise their standard of living.

Teams of experts and specialists form technical missions that are stationed in partner countries. The missions plan and execute agricultural development projects. At present, the TaiwanICDF maintains 29

overseas technical missions throughout Africa, Latin America and the Asia-Pacific region, overseeing farming, fishing, animal husbandry, and processing projects. New or improved varieties of produce are introduced under these projects, which include technology transfer, enterprise operations management, product transport, and market development, as well as help with establishing community awareness and farmers' organizations. The missions assist partner countries in applying a wide range of technologies and agricultural concepts that are beneficial to the overall development of the agricultural sector.

Most farmers have a limited ability to obtain the production resources they require. Therefore, in addition to technical assistance, the TaiwanICDF provides loans to help partner countries establish agricultural infrastructure, which ultimately helps to raise agricultural productivity. The TaiwanICDF also cooperates with local financial organizations to offer microcredit to farmers. Missions stationed in each country channel loans to

farmers to procure production materials and equipment, addressing the needs of farmers who lack sufficient capital. Even more important is that these measures hone farmers' understanding of savings, repayment of loans, investment and risk control, and their overall ability to manage capital.

The technical missions stationed in these countries cooperate with local agencies in training local technicians, helping to raise the ability of local agricultural workers. This training is expected to strengthen the ability to implement extension projects in the partner countries. The TaiwanICDF also holds workshops on issues such as policy development, production technology, trade and marketing, quarantine, and food safety. Scholarships for undergraduate and postgraduate studies in subjects that touch on these areas are also offered to students from partner countries. The workshops and scholarship programs are expected to give an insight into Taiwan's own experiences in these areas, as well as international agricultural issues. It is hoped that the combination of technology transfer and knowledge will help nurture a group of seed technicians in partner nations who can take charge of future agricultural development projects.

Looking Ahead

The TaiwanICDF will continue to assist partner countries in developing their agricultural industries and enterprises to raise output. The organization will also plan and execute projects with the specific conditions of each country in mind, as well as focus on crops with significant potential and competitiveness. This will increase profits for the agricultural sectors of the countries concerned and improve standards of living. In addition, the TaiwanICDF will assist agricultural agencies in partner countries in developing the hardware and software they require, and supply capital to improve agricultural infrastructure and yield. Long- and short-term human resource training projects will transfer Taiwan's expertise in agriculture to partner countries. Missions will also help undertake capacity-building projects for agricultural agencies in partner nations, in areas such as policy development and planning, the building of agricultural databases, and export. Attention will be paid to topics of global significance such as better management of resources, ecosystem conservation, and environmental protection, enabling the agricultural sectors of these countries to achieve sustainability and development, while avoiding problems associated with overdevelopment and climatic change.

Recycling and Re-use of Agricultural Resource Materials in Tuvalu

The main island of Tuvalu, Funafuti, is an atoll that lacks arable land and is almost at sea level. At high tide, much of the area is submerged in water. Soil salination stunts the growth of crops. As a result, the primary objective of the Technical Mission in Tuvalu has been to assist with the recycling and re-use of agricultural resource materials, and to research how to make local natural resources into media that can be used to cultivate crops. This will serve as the basis for agricultural development.

Initially, the mission used bags and containers to engage in trial cultivation. After much research and improvement, a medium suitable for crop cultivation was developed, comprised of decomposed compost, sifted pebbles, peat moss and an appropriate amount of chemical fertilizer. The technical mission offers farmers step-by-step instruction, which begins with the shredding of a combination of coconut fiber and leaves, and banana leaves. This is then combined with pig waste. After an appropriate amount of pile-turning and moisture, the mixture becomes compost. Meanwhile, sand is sifted from the atoll's small rocks. These items have been combined to make land that previously could not be plowed arable. Tuvalu, which relied entirely on imports of vegetables, is now able to grow over 20 types of vegetables on its own land, constituting a "green miracle" for this island nation.

The technical mission has also introduced successful tilling techniques. In addition, the income derived from a demonstration



farm it operates on the island is used to fund the cooperative agricultural project. Through the use of revolving funds, and the recycling and re-use of resource materials, sustainable agricultural development has been fostered in Tuvalu.

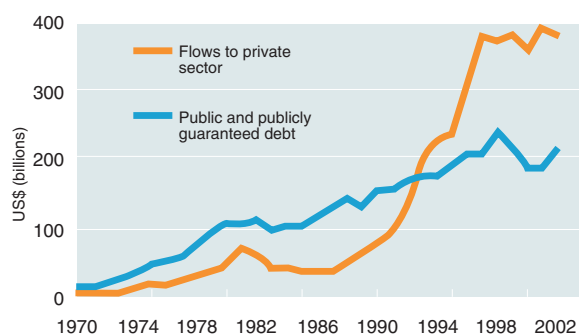
Private Sector Development: Building a Better Business Environment, and Raising Efficiency

The private sector plays a crucial role in fostering economic growth, creating job opportunities, and reducing poverty. As a result, private sector development has been emphasized by governments and international development organizations. In light of globalization, the technology revolution, and the formation of regional economies, private sector development is playing an increasingly important role in the process of economic growth for developing countries. In addition, attention is now not only on small- and medium-scale enterprises (SMEs), but also micro-sized enterprises. Loan, investment, guarantee, and grant are methods that have been utilized to spur private enterprises and strategic investment, which work together to facilitate economic development. Lending operations and technical assistance help establish a legal structure and financial environment that support opportunities for private sector development

and sustainable operations. Equity investment and a credit enhancement mechanism are also used as a tool to catalyze private investment. The benefits of private sector investment can be seen via statistics showing capital inflows to emerging markets¹.

Data from the World Bank indicates that financial

Chart 1 Inflows of Capital from Donor Nations²



BTS Private Equity Fund

In recent years, multilateral and bilateral development organizations have begun indirect investment in private equity funds as a means of assisting companies in developing nations in honing their technical expertise and raising international competitiveness. Equity investment in such companies also helps to introduce corporate governance, ensuring the healthy development of these firms. This investment also has the benefit of creating jobs and overall economic growth.

The TaiwanICDF has sought to expand the breadth of its investment projects and aims to strengthen economic cooperation to promote private sector development in allied and friendly countries. The organization seeks to maximize the use of funds available for investment projects that can be recovered in a relatively short period of time. It also seeks to diversify risk in terms of the allocation of its assets. In 2006, the TaiwanICDF began participating in private equity funds with international organizations, and India became the first target of this investment. The TaiwanICDF invested US\$5 million in the BTS Private Equity Fund. BTS has initial capital of about US\$50 million, and this is expected to be gradually expanded to US\$80 million. The main investors in BTS include the Asian Development Bank (ADB), and bilateral development organizations from Switzerland and Belgium. BTS will invest in companies that have outstanding development potential in the information and communication, pharmaceutical, manufacturing/ engineering, telecommunications and entertainment sectors. It is hoped that the injection of funds and business management techniques will pave the way for the healthy development of these companies.



This type of investment project enables industrial and financial experts from international organizations and advanced companies to conduct investment analysis. Then, companies requiring funds in developing countries will receive direct investment, strengthening their operational ability, improving corporate governance, and helping them to achieve the goals of promoting corporate growth and economic growth on a national level.

^{1,2} International Development Association (November, 2004), "Strengthening the Private Sector in IDA Countries: Status of World Bank Group Collaboration"

EBRD Trade Facilitation Program

The EBRD began its Trade Facilitation Program (TFP) in Central and Eastern European, and the Commonwealth of Independent States (CIS) in 1999. The goal of the program is to assist in the development of trade financing, promoting trade in and outside the region.

Under the program, the EBRD provides guarantees for international confirming banks, shouldering the political and commercial risks. In addition, the EBRD also offers short-term financing to select issuing banks in beneficiary nations to be used as loans to local importers and exporters. Central and Eastern European, and CIS nations are in an important position between Europe and Asia, and are gradually transforming into free market economies with huge business opportunities.

The TaiwanICDF and the EBRD signed an agreement for a contribution to the Financial Intermediary Investment Special Fund-Trade Facilitation Program (FIISF-TFP) in 2006. The program, with a fund of US\$5 million, seeks to create a safe trade environment and promote economic and trade cooperation between Taiwan and these countries. The project is enabling Taiwanese financial organizations to participate in the development of business in Central and Eastern Europe. The TaiwanICDF also engages in research on cooperative investment platforms, which will establish a means for Taiwanese financial organizations to participate in EBRD investment and financing projects.

As of the end of 2006, 105 banks have become issuing banks under the FIISF-TFP, and have carried out more than 5,658



trade-financing transactions. To this point, there has been not one example of a party seeking damages or claiming losses. In Taiwan, seven local banks and three foreign banks with branches here have become confirming banks under the program. In addition, many companies are using the mechanism to as a framework for trade with Central and Eastern European, and CIS nations.

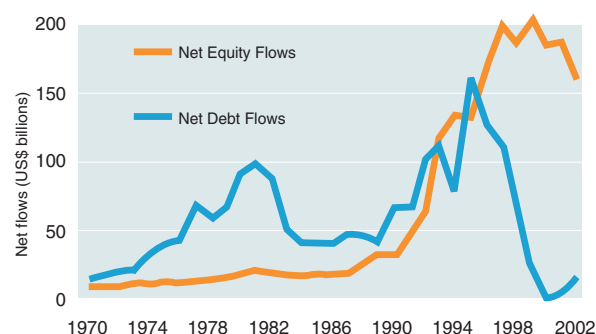
assistance by the international community in the private sectors of developing countries has grown rapidly since 1990. By 2002, the net amount of funds channeled into the private sector had doubled public sector funding (Chart 1). Meanwhile, an analysis of financial inflows to developing countries by type (Chart 2) shows that since 1994, net cash inflows via equity investment far exceed that of net cash inflows associated with loans. This shows that the international community's private sector investment in developing countries is replacing investment in the public sector.

Strategies and Methods

Private sector development and commercial activity by private enterprises effectively raise a nation's GNP. In addition, MSMEs play an important role in the industrial structure of many countries and therefore are a crucial factor in economic development. In light of this, promotion of MSME development has become an important topic in mapping out economic development

strategies. Since the 1970s, the private sector has been crucial to Taiwan's economic take-off. The government has long implemented policies to support and assist corporate development, seeking to ignite SME growth, create high levels of employment, and maintain a smaller wealth gap than seen in other advanced nations. Taiwan's development experience and achievements have attracted the attention of the international community

Chart 2
Financial Flows to Developing Countries by Type³



³ Global Development Finance



▲ Workshops are held to enable participants to learn about Taiwan's development experience.

and developing nations. The TaiwanICDF draws on this experience to assist partner countries in designing key strategies and methods to establish the foundation for economic development.

In promoting private sector development, the TaiwanICDF's cooperative projects are primarily in the areas of technical assistance, capital, financial support, and human resource development. In the

course of the projects, Taiwan shares its experience in MSME development with partner nations, as well as the resources of Taiwan's government and private sector. Projects are carefully designed to meet the specific needs of each country, and the most appropriate technology and knowledge is transferred. This fosters the establishment of a stable economic environment and sustainable development in partner countries.

The TaiwanICDF sends experts to partner countries to help those nations design private sector development strategies and create a political and legal environment that enhances the development of the sector. It also offers consultation and advisory services, as well as technical assistance to help in the development of key sectors. These efforts promote the upgrading of industrial technology and introduce modern production and operational models. The TaiwanICDF also supplies updated hardware and machinery as well as human resource training to boost the professional expertise of government policy-makers and the capacity of individuals at industrial consultation organizations.

Vocational Training Cooperation Projects in Swaziland and Malawi

The technical missions in Swaziland and Malawi conduct vocational training cooperation projects to furnish the youth of both nations with specialized skills that will help them find jobs and improve their lives. These projects also promote development of key industries in each country. The TaiwanICDF has sent vocational training instructors and experts from Taiwan to these two countries to give demonstrations and train seed teachers. The experts are stationed at Swaziland's handicrafts center and Malawi's Lilongwe Technical College, and they also help to develop instructional materials and improve educational facilities.

Courses in sewing, machinery, plumbing, computers, carpentry, and auto repair and machinery, have been designed to meet the industrial needs of the two countries. For example, the sewing courses are aimed at meeting the needs of local garment factories by enabling students to become first line workers on completion of training. Those taking machinist courses learn about heavy agricultural machinery and engine repair, maintenance of machinery in ordinary factories, and repair of gasoline and diesel-powered machinery. Computer courses are designed to train people to become computer instructors and to help them become certified in computer operation. Meanwhile, unemployed young people can learn skills through these classes to become certified plumbers, carpenters, electricians, and auto mechanics, increasing employment rates, and boosting industry development.

In recent years, the technical mission and a cooperating agency in Swaziland have trained over 300 people annually at the handicrafts center, with classes in sewing, machinery, plumbing,



and computers being the most popular, and many youths vying for slots in the courses. Meanwhile, the Lilongwe Technical College is the only place in Malawi that trains electrical engineers, and the school has the best equipment and teachers of any vocational training school in the country. Up to 70% of graduates pass the test to receive certification as technicians, which is higher than the 52% average in the country as a whole.

Workshop on Women's Development

One of the UN's MDGs is to promote gender equality and empower women. To reflect this goal as well as global trends, the TaiwanICDF in 2006 held a workshop on women's development. The aim of this seminar was to explore how to harness the power of the public and private sectors to promote opportunities for women in today's knowledge-based economy.

The workshop was divided into two portions. The first was a seminar to discuss women's rights in contemporary society. Representatives from local and overseas women's groups, along with experts, were invited to talk about this issue, enabling students to understand research presently being carried out, and policy implementation. Scholars also explained problems presently facing women in Taiwan as well as strategies to address them, providing reference for other countries in mapping out similar policies. The second part of the workshop was devoted to introducing methods to assist women in setting up their own businesses. This fosters economic independence and self-reliance among women, and also enables them to play an important role in the development of their countries. It also effectively raises the social position of women.

In addition to discussions, brainstorming, and the exchange of experiences, the workshop curriculum also examined success stories and models. Several successful Taiwanese female entrepreneurs were invited to share their experiences in business. Government and social group representatives also discussed the assistance that their agencies offer. Arrangements were made for students to visit Chungliiao Township in Nantou County to see



firsthand the businesses that women have set up following the devastating earthquake of September 21, 1999, and the role that women play in their communities. This experience showed how women's rights are a crucial link in the development of a well-balanced society.

In order to better understand the present state and potential of the private sector in partner countries, the TaiwanICDF collects information on their economy, trade, society and education. It engages in policy research and system analysis, after which suggestions are produced and supplied to policy-makers in the partner nations. These suggestions also serve as blueprints for cooperative projects further down the road.



▲ Trainees in Swaziland learn tailoring skills.

The TaiwanICDF employs a variety of avenues to furnish the capital needed for private sector development in partner countries. These include the provision of funds to commercial banks or NGOs in partner countries for re-lending to MSMEs. Efforts are made to avoid providing subsidized interest rates. As a result, financial organizations are willing to take part in programs that loan funds to MSMEs in order to promote development. The TaiwanICDF also works with the Inter-American Development Bank (IDB), the European Bank for Reconstruction and Development (EBRD), and other international organizations involved in cooperative lending or investment, to enhance the condition of financial institutions so they can offer new services to MSMEs in partner countries. Alternatively, through the effective use of remittances to those countries, domestic infrastructure projects and investment can be promoted. The TaiwanICDF has also started to participate in private equity funds and co-invest in international development organizations, marshalling the industrial and financial expertise of developed nations, and introducing advanced



▲ A textile factory in Nicaragua received funding from the TaiwanICDF, helping it to expand operations.

management concepts to partner countries, to foster industrial development.

The TaiwanICDF cooperates with other government agencies in Taiwan through the “Co-prosperity Project with Allies Countries” to assist companies investing in allied or friendly Latin American or Caribbean nations. The TaiwanICDF also provides credit guarantees to

Taiwanese firms that engage in medium- or long-term investment in allied nations. In 2006, it signed an agreement for a contribution to the EBRD’s Financial Intermediary Investment Special Fund—Trade Facilitation Program (FIISF—TFP), which provides guarantees to confirming banks as a means to promote international trade among enterprises in Central and Eastern Europe.

The other focus of our efforts is human resource training. Based on the economic and industrial needs of the partner country in question, the TaiwanICDF arranges education and vocational training to nurture the talent needed to boost private sector development. The organization also helps strengthen the national vocational training system of partner countries through loans. This includes developing appropriate software, upgrading hardware, and training seed instructors, all of which will help boost the quality and impact of the technical and vocational education. The TaiwanICDF has also established scholarships and has arranged to

Specialized Financial Intermediary Development Fund

The extension of microcredit has been shown to be effective in alleviating poverty and reducing the wealth gap. One of the most important development operations of the TaiwanICDF is microfinancing. The organization aims to provide microloans and other financial products to MSMEs in developing countries. In addition to implementing microfinance projects on its own, the TaiwanICDF also cooperates with international organizations in setting up microfinancing funds. Assistance is offered based on the different requirements and stages of financial development in the countries concerned. Other objectives of these projects include strengthening the services of local microloan financial organizations, fostering a market economy, and hastening MSME development.

In 2006, the TaiwanICDF and the IDB’s Multilateral Investment Fund (MIF) jointly established the Specialized Financial Intermediary Development Fund. Managed by the IDB/MIF, the Fund assists Latin American nations in establishing banking mechanisms, and channels investment and loans to specialized microcredit organizations with outstanding track records. These efforts are expected to promote growth in microcredit banking services and increase private sector investment and financing. In 2006, two sub-projects were initiated, including a pilot project to create a housing finance market for transnational families between the United States and El Salvador, and a project in Honduras to enhance the development impact of workers remittances. The aim of these projects is to employ foreign exchange to help people acquire homes, or to provide investment for MSMEs, rather than simply for consumption purposes. Ultimately, these projects will



reduce poverty and create economic growth.

In addition to these two sub-projects, the MIF will employ capital from the TaiwanICDF to participate in similar funds operated by other specialized fund management companies in the future. The MIF will also participate in investment screening conferences or board meetings, playing a role in corporate governance.

provide undergraduate and postgraduate coursework in technical- and business-related management with selected universities in Taiwan. This enables outstanding students from friendly countries to study in Taiwan, nurturing the talent that is vital to industrial development back in their countries. The TaiwanICDF cooperates with local vocational training institutes in a number of countries. It sends experts to partner countries to engage in corporate consultation and advisory services, and also holds training courses or seminars that will be helpful to government policy planners or companies. These seminars impart know-how and transfer skills, help to train individuals, and boost industrial competitiveness. In addition to sending experts overseas, the TaiwanICDF also invites officials and businessmen from allied and friendly nations to Taiwan to participate in various workshops, with topics ranging from trade and SME development to development of the tourist industry. In 2006, the TaiwanICDF held a workshop on women's development for the first time. The workshop introduced ways to assist women trying to set up businesses, as well as other employment opportunities, and successful examples. In addition to bolstering development of the MSME sector, efforts in this regard will empower women and raise their economic status.

Looking Ahead

Given changes in the global economic and trade environment, and the increasingly close relationship between national development and regional economic activity, the promotion of private sector development and investment is becoming one of the focal points of international development cooperation. In the future, the TaiwanICDF will work toward becoming a platform for pooling and coordinating resources that can be used to assist private sector development. It will cooperate with international, regional, and bilateral development organizations, as well as local NGOs and financial organizations. It will also integrate the resources of Taiwan's public and private sectors to support partner countries in the areas of policy, technology, management, human resources, and capital. Efforts will be made to establish efficient governmental and legal frameworks for partner countries, as well as investment incentives that will create an environment beneficial to the development of private enterprises, and which will attract foreign investment. Measures will also continue to be taken to nurture talent in partner countries, paving the way for sustainable growth in these nations.

ICT Applications: Reducing the Digital Divide; Establishing the Information Society

Enormous advances have been seen in ICT in recent years, changing the way that people live. Distance between people, nations, and regions has been reduced. Business can be conducted and information exchanged over the Internet, creating closer ties between nations. The Information Society has already thoroughly changed people's lifestyles and the ways we behave. These changes have had an enormous impact on economic and social development. As a result, countries throughout the world are sparing no effort to boost their abilities in ICT, realizing that an inability to utilize the latest digital technology and reap the benefits it brings will result in marginalization or isolation.

The UN's 2004 global digital divide research report showed that the Gini index for global Internet access stood at over 0.6, indicating the seriousness of the digital

divide. As a result, the UN in its MDGs, unveiled in 2000, followed by the World Summit on the Information Society (WSIS) in 2003 and 2005, called for efforts to raise the ICT ability of under-developed nations in order to narrow the gap in digital know how. Governments, international organizations, NGOs and the private sector were urged to work together to promote cooperative ICT projects, to help to reduce the divide, and create digital opportunities in developing countries.

Taiwan is one of the world's largest suppliers of ICT products, including motherboards, notebook computers, and liquid crystal displays, and has abundant experience in ICT development and technology. As a result, helping partner countries develop digital capabilities is naturally one of the focal points of development projects executed by the TaiwanICDF. At the APEC forums of 2000 and

APEC Digital Opportunity Center

Taiwan seeks to live up to its responsibilities as a member of APEC, and contribute through its successful experiences in developing an information society over the past two decades. In October 2003, former President of Academia Sinica Lee Yuan-teh attended the APEC leader's summit in Bangkok on behalf of President Chen Shui-bian. At the summit, Lee floated the idea of an APEC Digital Opportunity Center (ADOC) to assist APEC member nations in utilizing ICT to promote economic development and transform the digital divide into digital opportunities.

The idea was well received by the economic leaders attending the meeting and was formally put into practice in 2005. Thus far Taiwan has supported Vietnam, the Philippines, Indonesia, Peru, Chile, and Papua New Guinea in establishing digital networks, laying the foundation for the creation of digital opportunities. In 2006, the TaiwanICDF was commissioned to execute the project. To date, 13 Digital Opportunity Centers (DOCs) have been set up and 60 ICT experts, industry representatives and government officials from the partner members economics (PMEs) have been trained in Taiwan. In addition, Taiwan has sent experts and instructors to PMEs to hold workshops, training over 15,000 people. To ensure the sustainable development of these centers and encourage partner countries to utilize ICT to create economic prosperity, the TaiwanICDF has conducted trainers' training and has held an SME Entrepreneurship Workshop. It is hoped that after studying in Taiwan, students from these countries will return home and continue to promote digital education, and utilize ICT to boost the competitiveness of SMEs.

This program has established a foundation for these countries



to close the digital divide. Chen Chung-chuan, the executive secretary to the APEC Secretariat, along with senior officials from Papua New Guinea, Peru, Vietnam, and the Philippines, pointed out the enormous economic and social development benefits resulting from the program, citing the education that residents in rural areas and from underprivileged groups have received, as well as the boost in competitiveness to local companies.

ICT Initiatives in Africa

In 2002, the Technical Mission in Swaziland added computer courses to its Vocational Training Project in an effort to extend information education to friendly African nations. This marked the beginning of the TaiwanICDF's initiatives in Africa to reduce the digital divide. In 2004, the TaiwanICDF held international seminars in Swaziland and Senegal devoted to developing digital opportunities. Then, in 2005, ICT experts were dispatched to The Gambia to have a firsthand look at the state of development of that nation's ICT sector. The experts collected data, which was used to formulate plans for future projects.

The government of The Gambia has set a goal of creating a West African Silicon Valley by 2020. In order to help the nation achieve this objective, the TaiwanICDF has provided training of seed instructors as well as extension training. It has also assisted in e-government efforts, creating a portal Web site. This has effectively boosted government administrative efficiency, and is helping to make information education available to a wider group of people. Meanwhile, in 2006, the TaiwanICDF worked together with local information, education, and agricultural ministries in establishing three Taiwan-Gambia ICT stations in Banjul and Sapu. Basic and advanced courses in computer operation have been held. In addition, a network training course certified by Cisco has been held to train officials who work in the education and finance ministries, the nation's agricultural research institute, and elementary and junior high school teachers in nearby areas.

Also in 2006, the TaiwanICDF sent ICT experts to São Tomé and Príncipe, and Burkina Faso to undertake assessments and project planning. An information center has been established in São Tomé's national library, and the center is becoming a



hub for the promotion of information education in that country. Meanwhile, Voice over Internet Protocol (VoIP) and e-mail systems have been established in Burkina Faso's four major cities to boost administrative efficiency. Fiber optic systems donated by the UN and other international organization are being used to improve efficiency in communications among government agencies, increasing the nation's competitiveness, and helping it keep in step with global trends.

2003, the government advocated assisting APEC member nations in raising their digital abilities. It also called on the private sector to engage in public service efforts to reduce the international digital divide by, for example, participating in the UN's One Laptop Per Child (OLPC) project, and manufacturing low cost computers to be supplied to children in developing countries. These initiatives will help increase the ability to understand and use computers and the Internet, bridging the chasm between developing and advanced nations.

Strategies and Methods

In response to declarations by the WSIS and APEC, as well as international trends in development cooperation, the TaiwanICDF has made "ICT for development" one of its primary areas of work. The aim is to raise the ability of friendly countries to utilize ICT, and therefore create digital and business opportunities.

The TaiwanICDF's ICT assistance programs seek to

benefit governments, the private sector, rural communities, and underprivileged groups. Four methods are employed to enhance partner countries' ICT capacities, including projects to help: 1) Bolster the ICT policy planning ability of governments in partner countries 2) Enable governments to better apply ICT and boost efficiency 3) Cultivate local ICT experts 4) Help rural communities and underprivileged groups access digital opportunities.

The TaiwanICDF's projects in this area are implemented throughout Latin America, Africa, and the Asia-Pacific region. In addition to employing its own funds, in 2006 the TaiwanICDF was commissioned by Taiwan's government to oversee the APEC Digital Opportunity Center (ADOC) Project and other projects in allied and friendly nations, to strengthen information-related education and to reduce the digital divide. The TaiwanICDF also works closely with international organizations and NGOs, pooling expertise and resources to maximize the impact of projects.



▲ An expert from Taiwan offers instruction in computer assembly to Marshallese students.

An important part of the TaiwanICDF's ICT projects is to raise the ability of partner countries' governments to map out ICT development policies. For example, experts were sent to Burkina Faso for a short period to evaluate the state of that nation's ICT industry and help the government there establish priority development goals and appropriate strategies. Experts have also been stationed in Latin American nations. For instance, policy advisory services have been provided to Guatemala's Consejo Nacional de Ciencia y Tecnología (CONCYT), assisting Guatemala in setting up a dedicated organization to promote ICT development. Specialists also assisted with the Dominican Republic's Program for Micro-, Small and Medium-sized Enterprises (PROMIPYME), promoting the use of ICT among local companies to raise

output and expand markets. In 2006, the TaiwanICDF and World Links jointly held an information education summit in Latin America, attended by ministry heads and technology policy officials from seven countries in the region. The participants drafted information education development strategies. In addition, after the summit, each country received online policy consultation services, which will also be of use in creating information education plans.

The TaiwanICDF has also promoted e-government projects in The Gambia, Panama, and Belize, promoting transparency of information in the public domain and raising proper governance and service quality among governments. In tandem with the ADOC Project, the TaiwanICDF has initiated the SME Entrepreneurship Workshop in which SMEs and individuals in partner countries can share their experiences in ICT-related startups. These workshops have been held in Asia-Pacific nations, and in Peru and Chile, and have paved the way for a boost in clientele in Internet-based trading, and a reduction in startup and corporate operation costs, as well as creating digital opportunities. In 2006, the TaiwanICDF held its first workshop on geographic information systems (GIS). This course showed how remote sensing and GIS can be used to help partner countries with national land planning, and the monitoring of the state of rural and urban development, all of which can be used to establish a foundation for sustainable development.

Software for Vocational Education

Outstanding vocational education and training in Taiwan established the foundation to train high level technicians who were crucial in leading a successful economic transition from an agriculture-based economy to an industrial, commercial and high-tech based one. Similarly, human resource training projects must be implemented in tandem with each country's education policies and short-, medium- and long-term employment requirements. As such, when implementing vocational training projects, the primary considerations of the TaiwanICDF are the economic and social needs and priorities of the partner country. Having established these, the TaiwanICDF then selects training institutes in partner countries that feature the most appropriate educational frameworks. It sends Taiwanese vocational training experts to the institutes to assist in planning curriculums and updating software and hardware. These experts also help design educational materials, train instructors, and establish mechanisms to evaluate vocational skills.

In 2002, the TaiwanICDF began developing software to support vocational training courses and help students strengthen

their expertise and knowledge through network-based learning. At the same time, this nurtured a group of individuals with basic computer skills. At the beginning of 2007, the TaiwanICDF completed work on software courses in electronics, electrical engineering, and mechanical engineering, bringing the total number of available software packages to 150. The TaiwanICDF has issued Chinese, English, Spanish, and French versions of the software.

A unique feature of the packages is that developers have considered the limited laboratory, computer, and information network facilities available in developing countries when designing the software. Basic graphics are used to enable students to simulate operation of machinery and answer related questions. The students learn theory through a series of drills, while the interactive software increases their interest in learning. The software can be used to train seed teachers, and also as teaching material. The long-term goal is to cultivate new groups of technicians, raising the industrial competitiveness of partner countries and sparking economic growth.

Workshop on the Application of GIS for Land Development Planning

Employing remote sensing (RS) and geographic information systems (GIS) in national land planning and management is quite common in advanced nations. However, most developing nations, including those friendly to Taiwan, have a limited number of experts who have been trained in GIS and the processing of spatial data. Most of these countries still rely primarily on surface survey technology and the compilation of artificially generated spatial data for national land resource planning work.

In 2006, The TaiwanICDF held a workshop on the Application of GIS for Land Development Planning for the first time, in order to introduce GIS-related concepts to developing countries, and show how Taiwan's experience in GIS technology can be applied in forestry management, ocean surveying, pollution surveillance and monitoring, land surveying, and natural resource management. This technology is especially useful in disaster prevention, developing environmental sustainability, and firefighting. Furthermore, to encourage exchanges between students and related Taiwan agencies, a field trip to the Ministry of Interior's Information Center was arranged, to help participants understand GIS-related policies. Participants also visited the Soil and Water Conservation Bureau and the Land Survey Bureau, enabling them to see firsthand the application and benefits of Taiwan's GIS technology.

Participants came to understand Taiwan's RS and GIS technology policy framework, practical systems, and how the injection of government resources has helped foster industrial development and technology upgrading, and created a model for



cooperation between the government and the industrial sector. In addition, students saw how Taiwan's GIS software service providers are able to offer tailor-made services to meet the needs of customers. Harnessing the advantages of Taiwan's GIS industry in assisting with the sustainable development of partner countries will be an important feature of future development work.

Short-term training opportunities and postgraduate coursework are also arranged to train the high-ranking policy development talent needed by governments as well as the top quality manpower required by companies. The TaiwanICDF and selected Taiwan universities and colleges have cooperated in establishing master's and Ph.D. programs in ICT and management in order to train people in the skills needed by partner countries to

foster development of the ICT sector. The TaiwanICDF also holds short-term training courses and workshops in Taiwan and overseas. Since vocational training and education is crucial to industrial upgrading and economic transformation, the TaiwanICDF has established information networks and hardware at vocational training academies. It has also developed software to successfully support the training required. This not only addresses any



▲ Participants attending a workshop on Bridging the Digital Divide visit a semiconductor laboratory and listen to an introduction to the manufacturing process.



▲ The industry service mission stationed in the Dominican Republic holds a course to teach locals computer skills.

Policy Makers Seminar on ICT in Education for Central America

In 2000, the TaiwanICDF and World Links cooperated in creating community information centers at schools throughout Central America, providing local residents with an opportunity to learn computer skills. In a further effort to reduce the digital divide, the two organizations cooperated again on the Central America Information Education Summit in Costa Rica in September 2006. Participants included policy-makers in the field of education from Central American nations, and representatives from the Organization of American States (OAS), Inter-American Development Bank (IDB), and other regional development organizations, along with education policy-makers and scholars from Taiwan. The participants discussed the content of information education and related development strategies. In addition, model examples were presented to the officials from Central America for reference.

After comprehensive discussions and exchanges, government representatives from Costa Rica, Nicaragua, Belize, Honduras, El Salvador, and Guatemala signed a Memorandum of Understanding (MOU) to work toward the targets agreed upon at the conference. They also agreed to convey the spirit of the MOU to other organizations undertaking international development projects, in the hope of pooling resources for future information education-related projects.

After reaching the aforementioned consensus in the first phase of the summit, representatives from each nation then drafted information education policies for their country. Education experts



assisted each country in clarifying these policies. In the third phase, which consisted of audio-visual conferences, experts made suggestions on the drafts made by each country and the parties exchanged opinions. The final drafts consist of what are expected to be the most effective policies to help Central American nations bolster information education.

shortcomings in traditional education, but also bolsters the ability of students and teachers to use computers, creating a pool of talent to help spark industrial development.

Promoting equality of digital opportunities is one of the UN's MDGs. The TaiwanICDF has established Internet capabilities, and Digital Opportunity Centers (DOCs) in partner member economies (PMEs) under the ADOC Project, to help people in developing countries gain access to ICT. The TaiwanICDF has sent experts to these centers to establish operational management systems for the facilities. In particular, low cost training courses are offered to underprivileged groups, to instruct them in the use of the Internet and various hardware and software. These courses give people skills that help them find employment. The TaiwanICDF has also donated hardware and software to communities and schools in rural areas, enabling these places to connect with the rest of the world through the Internet. Seed teachers are also being trained in African, Latin American, and South Pacific countries, where DOCs have been established.

Looking Ahead

In this age of the knowledge-based economy, ICT has become critical to economy, education, and culture. Indeed, it has become the cornerstone of raising both a nation's and an individual's competitiveness. In the future, the TaiwanICDF will continue to assist partner countries in developing e-government and information-related education policies. It also aims to strengthen the training of outstanding individuals needed in the field. The TaiwanICDF will draw on the ICT development advantages of Taiwan in executing its digital opportunity development projects, and will seek to join relevant international organizations and expand opportunities for cooperation. It will also boost cooperation with local ICT companies to jointly engage in private sector technology, and human resource training-related development cooperation work. Digital opportunities will be used to create real business opportunities. Resources will be coordinated and maximized, paving the way for a broadening in the scope of each project implemented.

Health Care: Training Locals; Creating a Comprehensive Public Framework

Three of the eight UN MDGs stress health issues, including reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria, and other diseases. Improving health and medical treatment has long been an urgent issue for developing countries, and likewise has been a focus of aid work among international organizations. According to World Bank data, the health-related outlays of international organizations in sub-Saharan African countries exceed those made by the countries themselves by 20%. This shows how developing nations still rely heavily on international assistance and resources to cover health and medical expenses.

Rapid globalization has exacerbated many health issues, impacting on international health and medical care concepts, as well as health care and disease prevention strategies in each country. The spread of any specific

disease is no longer limited to a single region. With the daily movement of huge numbers of people, diseases are easily spread throughout the world. Cases in point include SARS, malaria, and tuberculosis. Meanwhile, the overuse of resources has caused a decline in the quality of life in many places, making it even more difficult to control various pathogens. As a result, advanced nations have established research centers or local officers in many developing or under-developed nations in order to obtain firsthand information. Cooperation between countries and international organizations helps provide the needed information and expertise to address these issues. International health aid assists developing countries in improving their health care environment and establishing a stable health care system that serves as a foundation for sustainable development.

Training of Midwives in Malawi

Each year, about 500,000 women worldwide die during pregnancy or childbirth, with the highest rates being in developing nations. Many midwives in these nations have not received professional training in nursing and therefore do not have the skills required for delivery.

In Malawi, about 3,000 women die each year in the course of pregnancy or childbirth, while over 45,000 women suffer from chronic illnesses after giving birth. In an effort to improve the health of pregnant women in this country, the Technical Mission in Malawi began holding training courses for midwives in 2004. It is hoped that in the future, over 50% of the infants born in Malawi will be delivered by professionally trained midwives. This is an especially urgent objective in mountainous and remote areas. Meanwhile, the ability to identify high-risk pregnant women at an early stage and give them appropriate medical care will also reduce the number of deaths in childbirth. The medical mission is helping rural communities to establish delivery rooms, and obtain clean sources of water. It is also providing transportation fees for midwives taking the courses as well as drugs that they can use on their patients when necessary. The medical mission has established a system to follow-up on students who have taken the courses and will periodically offer supplemental education in new techniques and knowledge. Advanced courses are provided to students the year after their completion of the basic course.

Over 50 midwives have been trained under the project as of the end of 2006. The students have come from all regions of Malawi. Those from remote areas that are lacking in medical



resources have made enormous strides in reducing mortality among pregnant women and increasing the survival rate of newborns. They have also improved the quality of public health and sanitation in these areas. Furthermore, midwives taking the courses are also educated on the prevention of AIDS. These efforts are helping to gradually reduce the spread of HIV/AIDS, one of the country's most serious threats.

Mobile Medical Missions in Central America

In April 2006, the TaiwanICDF dispatched Mobile Medical Missions (MMMs) to Panama and Guatemala for two-week periods to conduct outreach clinical services. These missions were organized in light of insufficient medical resources in Panama, and to provide medical assistance to Guatemala in the wake of Hurricane Stan.

While Panama is a relatively affluent nation within the region, the wealth disparity between urban and rural areas remains enormous. Remote regions still suffer from insufficient medical resources; Indian villages have particularly felt the brunt, with many children malnourished. A TaiwanICDF MMM has made five visits to Panama, providing medical services to nearly 10,000 people all around the country. In October 2005, Guatemala was ravaged by Hurricane Stan, with the San Marcos region near the Mexican border particularly hard hit. Faced with a lack of medical resources in the area, an MMM from the TaiwanICDF cooperated with Guatemalan medical workers to offer care to around 5,500 patients in the region. In November 2006, at the request of the first lady of Guatemala, the TaiwanICDF sent an MMM to the remote region of Petan to provide medical services to local people, who have long suffered from insufficient medical care and resources.

The MMMs have not only addressed the suffering of the ill in poor areas of Panama and Guatemala, they have also supplied rural clinics with medicines and health care equipment. In the course of treatment, patients are instructed in basic concepts of



health and sanitation. In addition, local medical workers have had the opportunity to receive instruction, and witness operations performed by Taiwanese doctors. This has injected a new vitality into the medical systems of developing nations.

Strategies and Methods

In general, international medical assistance comprises injection of capital and the provision of technical support. This consists of sending medical experts or volunteers to hold clinics, training health care personnel in partner countries, and working to upgrade medical facilities. Research is also carried out on infectious tropical diseases and diagnosis, while efforts are made to develop low-cost drugs that can be used in treating illnesses.

Taiwan has been successful in eradicating malaria and polio, and it has established a family health planning system. The island also has abundant experience in medical treatment technology and hospital management. All of this experience is highly valued by developing countries that face the threat of malaria, or that have weak disease treatment systems. As a result, the TaiwanICDF has designed its development cooperation strategies and methods to conform to the UN's MDGs. In addition to stationing long-term medical missions at hospitals in partner countries to conduct comprehensive medical services, the TaiwanICDF cooperates with domestic and overseas NGOs and specialized medical institutions to



▲ Residents of a village in Guatemala wait to receive health care from doctors with the Mobile Medical Mission.

provide humanitarian assistance and support in human resource development. The TaiwanICDF also sends Mobile Medical Missions (MMMs) to partner countries to conduct health care assistance and instruction, and education campaigns. The various efforts of both kinds of mission are described below:

1. Stationed Medical Missions

Stationed medical missions perform regular services

in the hospitals and clinics in which they are located, and also engage in in-depth research on important health-related topics in partner countries. The long-term nature of the missions enables them to effect a fundamental improvement in the health care environment. As well as the regular clinics, the missions also hold outreach clinics in remote areas, and engage in public health education. The clinical teaching conducted by mission members helps to train medical workers, and improve health care systems and institutions in these partner countries. Presently, the TaiwanICDF has three long-term medical missions stationed in Africa. These missions have specialists in internal medicine, surgery, obstetrics and gynecology, and pediatrics. In addition, Taiwan Youth Overseas Servicemen, with backgrounds in medicine and public health, are also stationed in the missions. In keeping with health-related initiatives cited by the UN and the WHO, stationed medical missions also develop assistance projects tailored to the specific medical needs of the populations of each partner country. For instance,

the Medical Mission in Malawi has established the Rainbow ARV Clinic that focuses on the prevention of AIDS. It has also developed a fingerprint recognition system that is used to log the distribution of medicines to individuals, track the health of patients, and monitor inventories of drugs, maximizing the use of resources. In another example, the Medical Mission in São Tomé and Príncipe has helped establish methods to control the spread of malaria and other diseases in that country, where malaria is one of the top ten killers.

2. Mobile Medical Missions

MMMs are a low cost alternative to stationed missions, providing short term, multiple outreach clinic services. The short-term nature of these missions attracts the participation of Taiwanese medical professionals, who bring their skills and areas of expertise to humanitarian medical and health care assistance work. MMMs are the best option in providing medical services to residents of rural areas, and address the needs of countries or areas

Healthcare Personnel Training Program

One of the most pressing objectives for international medical aid workers is to offer short-term relief from suffering. However, even more important is the establishment of stable medical systems that can function over the long run, and improving the professional abilities of medical workers in developing countries. In light of this, the TaiwanICDF and Taiwan Nongovernmental Hospitals and Clinics Association (NHCA), along with Chang Gung University's School of Medicine, jointly established the International Healthcare Cooperation Strategic Alliance (IHCSA), which in 2006, held its second Healthcare Personnel Training Program. A total of 20 medical professionals from 14 partner countries came to Taiwan to attend the program.

In its inaugural year, only medical workers from Vietnam participated. This latest training program, however, was expanded to include medical professionals from many developing countries. The TaiwanICDF arranged for many local hospitals to take part, with specific medical institutions responsible for providing training in their respective specialties. The program aimed to impart a wider range of knowledge, in order to reach out and improve the situations of more people in developing nations. The 20 trainees taking part had backgrounds in fields such as internal medicine, surgery, nursing, anesthesiology, obstetrics and gynecology, epidemiology, and dentistry. They were dispatched to nine private hospitals, including Chang Gung Memorial hospital and Mackay Memorial Hospital, based on their areas of expertise, to receive training for a period of three months.

The training program helped Taiwan share decades of



medical experience with friendly nations, enabling it to make a contribution to the quality of medical and health care worldwide. Even more striking is the manner in which private medical resources and official international medical assistance have been brought together to create opportunities for Taiwan to demonstrate its willingness to contribute to international medical assistance.

Malaria Control Project for the Tibetan Communities in Orissa

The Orissa area comprises 22 Indian villages and a population of 3,500 Tibetans, the largest community of Tibetans in exile in central and southeastern India. Meanwhile, 25% of India's malaria cases originate in Orissa. Due to its remote location, international NGOs had not previously provided medical services or assistance in Orissa. Also, a lack of medical resources in the area discouraged exiled Tibetans with a background in medicine from going to the area to offer their services. Therefore, in 2006, the Taiwan Tibet Exchange Foundation proposed a cooperative project to the TaiwanICDF, with the goal of improving the quality of grassroots medical care in Orissa.

The aim of the project is to improve facilities in local hospitals and bolster malaria- testing techniques and prevention measures. Training courses in Quantitative Buffy Coat diagnostic technology, hematology, blood smear examination, and other areas, were held to improve the ability of local medical technicians in diagnosing malaria, and reducing the incidence of sickness and death from the disease. Hospitals have been renovated and equipment improved, ensuring stable supplies of water and electricity. Malaria testing equipment has also been purchased. These efforts have effectively strengthened the ability of the hospitals to provide better medical and health care. Mosquito nets treated with pesticides have been distributed to 4,000 residents in Tibetan communities in Orissa and nearby Mainpat, as well as people in 20 neighboring Indian villages.



These measures have already successfully reduced the incidence of malaria in the area. Nearly 10,000 residents in the exiled Tibetan communities and Indian villages in Orissa have benefited from the project.

in which the TaiwanICDF does not have any stationed medical missions.

In December 2005, the TaiwanICDF sent its first MMM to Darjeeling in northern India to provide a free clinic, an initiative which was well received among residents of Nepal and India. This initiative was the catalyst for members of the Taiwan Nongovernmental Hospitals and Clinics Association (NHCA) and the TaiwanICDF to establish the International Healthcare Cooperation Strategic Alliance (IHCSA). The alliance



▲ A doctor with a Mobile Medical Mission performs an ultrasound on a woman in Tuvalu.

supplies medical professionals, equipment, and medicine in an effort to expand the breadth of the MMMs. Each MMM formed by the Alliance and the TaiwanICDF comprises 8-12 people, including doctors, nurses, pharmacists, administrative assistants, and medical volunteers. As well as providing clinical services, the MMMs conduct public health campaigns, clinical demonstrations and training, and compile data on illnesses in the areas where they serve. In 2006, a total of 16 MMMs were sent to 12 countries in Africa, the Asia-Pacific region, and Latin America, helping over 35,000 patients. Over 200 Taiwanese and foreign medical professionals participated in the missions.

3. International Humanitarian Assistance

As well as addressing the long-term needs of developing countries by implementing medical and public health improvement projects, emergency medical assistance is also provided in the event of natural disasters or crises caused by war. Since these catastrophes commonly result in large losses of property and life, the international community devotes an enormous amount

of manpower and resources to this assistance work. Working with local and foreign NGOs, the TaiwanICDF adopts a cooperative mechanism under which it supplies resources to international relief agencies, which already have comprehensive networks and experience in specific nations, and which can immediately deliver aid. This model is especially effective since it is difficult for official assistance from Taiwan to be delivered to many countries. Based on successful experiences in transporting goods to refugees in Afghanistan and Iraq, the TaiwanICDF again cooperated with Mercy Corps in 2006 on the establishment of the Emergency Response Fund. Emergency shipments of sanitation items and drinking water were made to southeastern Sri Lanka, helping in efforts to resettle residents of that country who have been displaced by the civil war. In 2006, the TaiwanICDF and the Taiwan Tibet Exchange Foundation cooperated in the renovation of clinics used by the Tibetan community in Orissa, India. Public health and sanitation measures were also introduced to address the high incidence of malaria in the area.

Looking Ahead

According to the United Nations Development Programme (UNDP), the concept of human security

stresses the right of each individual to existence, and this is reflected in the TaiwanICDF's guiding principle of "working for humanity." In the future, the TaiwanICDF will continue to uphold the spirit of humanitarianism and compassion that has always fuelled its efforts, participating in an even wider range of cooperative projects to assist with health care and medical services in developing countries. This will help to close gaps in the global health care network. Stationed medical missions will offer long-term assistance in specific locations in allied countries, while the more flexible MMMs will serve in to countries that do not maintain diplomatic relations with Taiwan. The TaiwanICDF will also expand its humanitarian assistance in cooperative efforts with international organizations, maximizing its use of resources. In addition, the IHCSA will play a role in pooling the medical resources of private medical institutions and companies engaging in international medical assistance. This will also be an important initiative in cultivating medical and health experts in developing countries and expanding Taiwan's contribution to the international community.

Emergency Response Fund

Mercy Corps has a high level of professional expertise and significant resources at its disposal as a result of its considerable experience in international humanitarian assistance. At the same time, for political reasons, Taiwan often faces difficulty in channeling official aid to certain countries. As a result, the TaiwanICDF and Mercy Corps have worked together in the past to ensure assistance reaches areas in need as soon as possible. To better coordinate resources, in April 2006, the TaiwanICDF and Mercy Corps formally created the Emergency Response Fund, which is to run for an initial period of three years. Both organizations contributed US\$500,000 toward the creation of the fund.

The fund was first tapped in 2006 to carry out emergency assistance to residents of Sri Lanka displaced by the ongoing conflict in the southeastern region of the country. Daily necessities, including collapsible mattresses and covers, basic sanitation products, eating utensils, water bottles, and drinking water, were donated to residents of Muttur who had to flee to nearby Kantale, Trincomalee, and Kinnaya. As well as the TaiwanICDF and Mercy Corps, AusAID, and USAID/OFDA also participated in the assistance project, helping to resettle refugees.

The initial plan was to supply material assistance to 1,250 people over a two-month period. However, in just one month, clean



drinking water and emergency goods were delivered to four villages 11 times. A total of 480 households received assistance, benefiting 2,400 people, nearly double the original goal.