



2018

International Cooperation and Development Fund

**Annual Report** 

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Cooperation Projects with International Organizations and NGOs 2018

### Introducing the TaiwanICDF

Since the International Cooperation and Development Fund (TaiwanICDF) was founded in 1996 as Taiwan's professional development assistance organization, we have been dedicated to assisting friendly or developing countries in economic, social and human resource development, and in promoting economic relationships among these countries through technical cooperation, lending and investment, international education and training, and humanitarian assistance. By utilizing the organization's funds and their yields to engage in direct and indirect investments, and by implementing bilateral and multilateral technical cooperation, humanitarian aid, or educational training programs, the TaiwanICDF's mission is to provide humanitarian assistance for countries that suffer from natural disasters, or for international refugees.



The operational scope of the TaiwanlCDF covers seven duties and responsibilities:



Facilitating social and economic development in our partner countries.



Promoting better economic ties to partner countries.



Cooperating with international organizations, institutions or governments to facilitate social and economic development in our partner countries.



Providing humanitarian assistance to international refugees or countries hit by natural disasters.



Providing technical and human resources training to partner countries, and providing technical assistance or services in order to foster industrial capacity.



Operating overseas missions to improve and develop agricultural, industrial, economic, medical and education sectors in our partner countries.



Other initiatives designed to bolster international cooperation and development or foster good relations with other partner countries.

# Vision Vision

Partnerships for progress
Sustainable development

## Mission (

 Strengthen international cooperation and enhance foreign relations to promote economic development, social progress, and the welfare of all mankind

## Strategy \*

- Respond to internation development trends
- Draw on Taiwan's
- Integrate public and private sector resources
- Strengthen cooperative

### **Cooperating Partners**

The TaiwanICDF's main partners are governments, international organizations or their designated agencies, corporate bodies, and non-governmental organizations.

### **Sources of Funding**

The TaiwanICDF was established with an initial endowment of NT\$11.6 billion, which was the net value of the IECDF's funds at the time of its dissolution. Sources of funding include the general fund, interest, returns on investments and income from commissions by the government or other institutions. As of December 31, 2018, the total balance of all funds was NT\$15.62 billion.

142 Overseas Exper



109 Domestic Personnel





Partner Countries 30

Accurate as of December 31, 2018

### **Project Planning Principles**

To ensure that our core strategies can be implemented with tangible effect throughout the normal course of operations, we have developed a set of project planning principles designed to improve effectiveness and results by standardizing the way we carry out our assistance projects.

Implementing a Project-oriented Methodology

Considering Effectiveness and Efficiency

Successful Experiences

Safeguarding oject Outcomes,
Sustainable

#### History

1959

Republic of China (Taiwan) initiates overseas technical assistance, sending its first group of agricultural specialists to Vietnam.

1961

Under Operation Vanguard, technical missions help to improve agricultural production in many African countries, expanding its operations to become the Sino-Africa Technical Cooperation Committee (SATCC) the following year.

1972

SATCC merged into the Committee of International Technical Cooperation (CITC), leading Taiwan's overseastechnical cooperation work and assisting partner nations in their agricultural development.

1989

At a time when Taiwan enters a period of rapid economic growth, the government establishes the International Economic Cooperation Development Fund (IECDF) to provide economic assistance to developing partners.

1995

To integrate Taiwan's foreign aid resources in response to the expansion of the nation's foreign aid operations, the government drafts and passes the Statute for the Establishment of the International Cooperation and Development Fund.

1996

The government dissolves the IECDF and establishes an independent organization, the International Cooperation and Development Fund (TaiwanICDF), on July 1. The following year, the CITC is incorporated into the TaiwanICDF.

### Preface

# Brave and Confident – One with the World Taiwan can help



As Taiwan's professional foreign aid agency, the International Cooperation and Development Fund (TaiwanICDF) values the needs of partner countries, emphasizes mutual development, and is committed to long-term investment. This Taiwanese model is used to promote development aid projects and serves as a bridge between Taiwan and the international community. In 2018, we substantially transformed our approach toward integrating public and private resources and strengthening cooperative partnerships. To do this, we were proactive in establishing links to domestic and overseas resources, expanding the TaiwanICDF's capabilities. We also consolidated our best practices and shared them at important international forums, helping showcase Taiwan's role and values on the global stage.

### Employing a range of resources to develop cooperative opportunities

The OECD Development Co-operation Report 2016 pointed out that official development assistance provided by member governments of its Development Assistance Committee covered only 3.6 percent of development needs. Faced with the challenge of limited global resources, the private sector and civil society must jointly invest to address this urgent gap. Taking note of trends in international funding for sustainable development and leading enterprises' increasing sense of social responsibility, 2018 saw the TaiwanICDF launch

an initiative calling for project sponsors and donors. Using ODA as a catalyst, we invited private actors to contribute to and participate in several projects, thus developing even more cooperative partnerships across a wider range of areas.

Besides attracting private sector resources, we also considered how projects can best be used to create cooperative and commercial opportunities. By utilizing lending instruments, for example, the Marshall Islands Home Energy Efficiency and Renewable Energy Project created opportunities for Taiwanese companies to jointly participate in energy transformation in the Marshall Islands. We also complemented our program of professional workshops with thematic business opportunity forums, discussion sessions and seminars. Taiwanese firms were invited to share industry best practices with overseas participants, establishing channels for matchmaking business opportunities with Taiwan's partner countries.

To improve linkages to international resources, in 2018 the TaiwanICDF looked to enhance project impacts by combining Taiwan's advantages and experiences with the power of international academic and research institutions and nongovernmental organizations. Teaming up with such important agricultural research institutions as the International Center for Tropical Agriculture and the International Rice Research Institute, we helped partner countries promote climate-resilient agriculture. We also cooperated with such international nonprofit organizations as Food For The Poor from the United States, jointly expanding the scope of projects and helping prevent famine in countries hit by food shortages. And in terms of cultivating international talent, we sought to step up cooperation with such international organizations as Asia-Pacific Economic Cooperation and the International Council for Local Environmental Initiatives, recommending speakers or collaborating on international education and training programs. This allowed us to keep up with the latest international trends, promote exchange, and enhance the breadth of our training programs.



## Actively displaying the results of development aid to the international community

Although our country's international participation and presence continue to meet with difficulties throughout 2018, Taiwan never shirked its international responsibilities. Taiwan's mission to the 71st World Health Assembly staunchly conveyed that we will continue to cooperate on global public health security and development in a professional and pragmatic spirit, and seek to make substantive contributions. The TaiwanICDF played a role in this, holding our first ever forum in Geneva during the WHA to publicize our accomplishments. The event, "Strengthening Health Care System in Partnership with the TaiwanICDF," promoted the achievements of Taiwan's international public health and medical programs among an audience of diplomatic allies, friendly countries and international nongovernmental organizations. The case studies discussed underscored Taiwan's importance to the global health security system.

Speaking at the UNFCCC COP24, Chairman Michal Kurtyka said: "Today, the world is a global village. We are all interdependent and we have to come together to protect our planet. To do this the world must act in unity." In 2018, attending COP24 after a 10-year absence from previous events, we cooperated with our diplomatic allies to promote a number of ongoing climate change adaptation projects. This showed the international community how we have employed the Taiwanese model in working with our peers to address climate issues, and let the world that Taiwan can help.

The TaiwanlCDF's achievements attracted attention at numerous other international events in 2018. The European Bank for Reconstruction and Development produced a short film on the Greater Amman Municipality Solid Waste Project in Jordan, which is cofinanced by the TaiwanlCDF. The film very well received when screened at the EBRD's annual meeting. Elsewhere, the Belize City House of Culture and Downtown Rejuvenation Project, implemented to promote sustainable tourism in response to SDG 11, was

cited as a model case by academics from Berlin Technical University during the Ninth World Urban Forum. And in accordance with international development aid trends, we also presented papers detailing the results of our work at the Columbia University International Conference on Sustainable Development, Edinburgh University World Symposium on Social Responsibility and Sustainability, and the sixth Australasian Aid Conference. This raised the international visibility of Taiwan's development aid model in academic and professional circles.

### Contributing to international society – Taiwan one with the world

Article 1 of the UN Charter states that the UN's purpose is "to achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion." Now is a crucial time for the world to work together to tackle global challenges, and at the TaiwanICDF, we have successfully transformed our approach toward partnerships and implementing projects, establishing an effective platform that can really push Taiwan farther onto the international stage. An old African proverb says, "If you want to go fast, go alone, if you want to go far, go together," and as a member of the global community, Taiwan will continue to make whatever contribution it can. Looking forward, the TaiwanICDF will continue to forge ahead - brave, confident and one with the world.

> Jaushieh Joseph Wu Minister of Foreign Affairs

Minister of Foreign Affairs Chairman, TaiwanICDF

# **Strategic Planning** and Direction

Faced with the progress and gaps in sustainable development and determined to ensure Taiwan becomes an important global partner for sustainable development, the TaiwanICDF links performance indicators and sustainable development goals based on international trends and the needs of partner countries. On that basis, the fund uses Taiwan's development experience to promote cross-disciplinary projects and

enable substantial transformation, while developing assistance and management tools that expand the breadth and depth of cooperative projects. Through collaboration on new issues, we foster mutually beneficial exchanges between the public and private sectors and help partner countries establish sustainable development models, to make more efficient use of finite resources in response to global partnerships.



## Steady and pragmatic transformative approach to actively develop partnerships

With the aim of achieving the United Nations Sustainable Development Goals (SDGs), countries around the world are continuing to steadily and determinedly implement various related programs on the existing foundation and also actively putting innovative thinking into practice, to transform into sustainable and resilient societies and, together, respond to the rapid global environmental, economic and social changes we face.

#### **Progress on the SDGs**

In July 2018, the UN Economic and Social Council (ECOSOC) issued the Progress towards the Sustainable Development Goals, presenting an overview of progress toward achieving the SDGs around the world. In food security, although ending hunger and ensuring access to safe, nutritious and sufficient food all year round by 2030 are emphasized, international conflicts, climate change and other factors have caused hunger to actually increase. In sub-Saharan Africa reduction in food output caused by climate change, currency depreciation and other factors have resulted in increases in the price of food and cereals, overall having a negative effect on food security.

In health, relatively good progress has been achieved globally; however, preventable diseases still take the lives of many people and there are still differences from region to region. With regards to women's and children's health, the infant and child mortality rate has declined and, apart from sub-Saharan Africa, fertility rate in adolescence everywhere has declined steadily. In infectious diseases, there has been no improvement in malaria infection and data showed that in 2016, 1.5 billion people needed treatment for neglected tropical diseases. Factors such as unsafe drinking water, unsafe sanitation and lack of hygiene caused around 870,000 people to die in 2016, mostly from diarrheal diseases.

In education, more investments in education infrastructure in the least developed countries are urgently needed and disparities in education in terms of gender, urban-rural location and other dimensions need to be reduced. With respect to the economy, although global labor productivity has increased and the unemployment rate has decreased, more effort is needed to increase employment opportunities, reduce informal employment and labor market inequalities, promote work environments that are safe and secure, and improve access to financial services to ensure inclusive and sustained economic growth

On the environmental front, 2017 was one of the three warmest years on record, with the average temperature up by 1.1°C compared to pre-industrialization levels.

Sea levels are also rising around the world, increasing the intensity of hurricanes in the North Atlantic hurricane season and the concentrations of greenhouse gases. All countries need to be more proactive with regard to all these issues when implementing their commitments under the United Nations Framework Convention on Climate Change-Paris Agreement.

### Closely linking to SDG indicators to ensure consistency of targets and results

In this context, to respond to international trends. in September 2017, the minister of the Environmental Protection Administration (EPA) presented Taiwan's Voluntary National Review at a seminar during the UN General Assembly in New York. This report highlighted various public policies and their progress while also showing Taiwan's concrete contribution to its partner countries. In September 2018, regarding the global threat of climate change, EPA unveiled a progress report on Taiwan's implementation of the SDGs in 2018. sharing Taiwan's achievements in six areas, namely: smart management of water resources, the transition to sustainable power, clean air, sustainable materials management and circular economy, environmental protection networks, and international collaboration, showing Taiwan's determination to be an important partner for the implementation of the SDGs. Facing the global sustainable development progress and gaps, the TaiwanICDF adjusted its steps and reviewed its own resources to respond to global challenges.

In terms of core operations, the TaiwanICDF continued to track international trends and the needs of partner countries and, in 2018, reviewed its performance indicators to ensure that all operations are aligned with the SDGs. These include: Number of people who have an increased daily intake of fruits and vegetables in their diet (SDGs indicator 2.2); number of reimbursable assistance projects to increase the value of agricultural activities (SDGs indicator 2.3); number of public health facilities with enhanced functionality and number of medical personnel provided with advanced training (SDGs indicator 3.c); number of scholarships provided to partner countries to study in Taiwan (SDGs indicator 4.b); number of projects related to sustainable production and consumption as well as environmentally friendly technology (SDGs indicator 12.a); number of reimbursable assistance projects including financial inclusion under implementation in the year (SDGs indicator 8.10); number of measures which have helped to increase resilience in humanitarian assistance projects, and number of facilities which have



TaiwanICDF discusses the achievements of climate-smart agriculture technical assistance projects, highlighting that climate change has caused more than US\$96 billion in agricultural losses in developing countries in the past 10 years and assisting farmers in partner countries through technology has become an urgent task.

enhanced resilience through humanitarian assistance projects (SDGs indicator 13.1).

### Enhancing project efficiency to jointly respond to global challenges

In order to improve project effectiveness, the TaiwanICDF uses Taiwan's substantial development experiences to promote cross-disciplinary projects, expands project scale and influence on the existing foundation. For example, information and agriculture were combined to help our diplomatic-ally respond to climate change in the St. Kitts and Nevis Enhancing Agricultural Adaptive Capacity to Climate Variability Project. In public health and medicine, we broadened the scale of existing projects, such as the Maternal and Infant Health Care Improvement Project in Eswatini, in which we strengthened cooperation with Eswatini to improve its public health system and expanded the project's influence by initiating the second phase.

In education and economic growth, the TaiwanICDF invested more resources in vocational training projects to respond to the needs around the world to boost employment opportunities and reduce inequality in the labor market. In 2018, 193 youths from 15 allied and friendly countries received intensive training on 11 vocational subjects, including Mobile Phone Repair and App Program Design and Application, Computer Assisted Machinery Manufacturing, Baking Arts, Hotel and Hospitality Management, as well as Tourism and Hospitality.

In environment, the TaiwanICDF draws on Taiwan's advantages to assist partner countries enhance their climate adaptation capability. Taking the Capability Enhancement in Using Flood Warning Technology in Belize project as an example, we used Geographic Information System (GIS) to assist with the drawing of flood potential maps and established an early warning mechanism and emergency response group to help the country strengthen climate resilience. Also, to respond to extreme changes in global climate and record-breaking highly destructive natural disasters, the TaiwanICDF has increased the commitment of resources to humanitarian assistance projects and increased cooperation with international organizations such as Mercy Corps, Action Against Hunger, Care International and World Vision to implement multiple projects; we also increased project efficiency by dispatching project volunteers.

### Connecting domestic and overseas resources to jointly create a multi-win situation

According to data from the Organisation for Economic Co-operation and Development (OECD), in the past 10 years Official Development Assistance (ODA) provided by members of the Development Assistance Committee (DAC) has continued to increase. In 2017, the DAC's ODA totaled US\$146.60 billion, up by 43 percent in 2007. However, the total ODA of the member governments of the DAC accounted for just 3.6 percent of development needs. Facing the challenge of limited global resources, concerted involvement of the public and private sectors and civil society is crucial in order to fill the gap in resources to allow the SDGs to be achieved.

To integrate public and private sector resources and strengthen cooperative partnerships, the TaiwanICDF adopted transformative approaches to effectively utilize limited resources and extend global partnerships. Concrete methods include adjusting the assistance framework that has been in place for 20 years, launching a call for sponsors and donors for aid projects, and actively linking domestic and overseas community resources to expand our institutional capability.

Based on extensive experience and involvement in international assistance, the TaiwanICDF carried out fundraising and enhanced cooperation with enterprises in international public health and humanitarian assistance projects, and by doing so, expanded connections to the private sectors in Taiwan. In terms of individual projects, private sector resources are linked up to create potential cooperation and business opportunities; these include the Marshall Islands Home Energy Efficiency and Renewable Energy Project that provided Taiwanese companies with the opportunity to jointly participate in energy transformation in the Marshall Islands. Also, business opportunity and discussion forums were added to our professional workshops to provide a platform for business matching between enterprises in partner countries and Taiwan.

In international resources, the TaiwanICDF taps into the energy of academic and research institutions and NGOs to boost project effectiveness. This includes effectively drawing on the capabilities of the International Center for Tropical Agriculture (CIAT) and International Rice Research Institute (IRRI) to improve implementation in partner countries of projects that enhance agricultural resilience

in face of climate change; integrating with the resources of Food For The Poor (FFP) to expand project scale; and enhancing cooperation with Asia-Pacific Economic Cooperation (APEC), Local Governments for Sustainability (ICLEI) and other international institutions on education and training programs to promote exchange and increase the breadth of training.

## Increasing management effectiveness and raising profile

While continuing to develop various aid and management tools and deepening and broadening cooperation projects, to enhance the management effectiveness of the TaiwanlCDF, in 2018 the overseas mission framework was reintegrated to ensure maximum benefits from the use of resources. Internal coordination was also strengthened to increase domestic and overseas integrated management capability and combine important operations; various types of videos on different themes were produced to enhance the understanding of the TaiwanlCDF's operations.

In international promotion, the European Bank for Reconstruction and Development made a video about the TaiwanICDF's Jordan GAM Solid Waste Project, which was screened at its annual meeting and was very well received. The Belize City House of Culture and Downtown Rejuvenation Project echoes SDG 11 and assisted Belize in promoting sustainable tourism; it was shared as a good showcase by German scholars from Berlin Technical University at the Ninth session of the World Urban Forum. Moreover, we reviewed the results of our projects and, in accordance with international development aid trends. presented papers at the International Conference on Sustainable Development at Columbia University, the World Symposium on Social Responsibility and Sustainability in Edinburgh and the sixth Australian Aid Conference, raising the international profile of the Taiwan development aid model in the academic and geopolitical fields.

To further share with the international community the various actions taken by Taiwan, in line with international trends and issues, the TaiwanlCDF took part in a number of conferences. These include hosting a forum titled 'Strengthening Health Care System in Partnership with the TaiwanlCDF' for the first time in Geneva at the 71st World Health Assembly in 2018; continuing to take part

in the UN High-level Political Forum (HLPF) and, after an absence of 10 years, taking part in UNFCCC COP24 (United Nations Framework Convention on Climate Change 24th Conference of Parties), as well as sharing the important experience of the Taiwan model in various side events during the UN General Assembly and using these opportunities to create diverse partnership opportunities to bring Taiwan closer to the world, and the world closer to

#### Accompanying the world using the Taiwan model

In face of the urgent needs of the global community to the challenges of climate change and economic transformation, the TaiwanICDF will continue to serve as a bridge for communication with the international community. Through cooperation with partner countries on new issues such as smart agriculture, resilient cities, youth entrepreneurship and energy efficiency, mutuallybeneficial exchange between public and private sectors will be promoted. At the same time, in assisting partner countries establish a sustainable development model, we will nurture Taiwan's ability to adapt and respond to global challenges. Moreover, in the future we will increase leveraging on our strengths across different fields and combine viewpoints from multiple dimensions to integrate the power of the public and private sectors, and, with the Taiwan model, continue to move forward with the world towards sustainable development.

## Operations

## **2018 Cooperating Countries and Projects**



and using areas of comparative advantage is one of the TaiwanICDF's core strategies. With limited resources, we prioritize our work in areas in which Taiwan has a comparative advantage, including agriculture, public health

Responding to international development trends | and medicine, education, information and communications and the environment. This seeks to ensure resources are reasonably and efficiently invested to achieve project objectives and visions. Below we detail strategic focuses and projects in the TaiwanICDF's priority areas.

### **Agriculture**

#### **Strategic Key Points**

Taiwan is built on agriculture. With the abundance of agricultural products it produces, its agricultural technology is world-renowned. Since the first agricultural technical assistance mission was dispatched to Vietnam in 1959, projects in agriculture have been an important foreign assistance aspect of the TaiwanICDF. In recent years, as the issue of global warming has increased in urgency and the SDGs were proposed by the UN in 2015, the TaiwanICDF has continued to improve the agricultural production and marketing capabilities and food security of partner countries, as well as helped to reduce hunger through agricultural projects. We have provided technology, renewal of facilities and customized training courses with regard to the farming, forestry, fishing and animal husbandry industries of these partner countries, with the aim of improving farmers' production efficiency and optimizing cost structure to achieve the goals of reducing poverty and improving health and well-being.

In addition, to preserve our natural resources and ensure the sustainable development of the environment, the TaiwanICDF has also sought out qualified financial institutions in partner countries to provide financial services that promote inclusive growth to support farming activities when farmers or agricultural enterprises are affected by climate change, to engage in sustainable development work in a substantive way.



Case Study

## **Eswatini Pig Industry Enhancement Project**



Echoes UN SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.



Project technical personnel demonstrates artificial insemination techniques to related extension staff.

In terms of animal protein, the people of Eswatini are usually willing to eat medium priced pork over lowcost chicken. However, domestic pork production has long been unable to meet demand, so the shortfall is usually made up by pork imports. To amend this situation, in 2013, the TaiwanICDF invited experts to visit Eswatini to appraise the situation; they found that the capacity of the Mpisi National Pig Breeding Station (Mpisi Station), the main source of breeding pigs for local farmers, was insufficient to rear high-quality breeding pigs. Adding to this problem was the general lack of correct pig rearing concepts and techniques, resulting in low feed conversion rate, poor pork quality and continuing inability to increase output.

## A four-pronged approach to promoting the Pig Industry Enhancement Project

TaiwanICDF began implementing the Pig Industry Enhancement Project in 2016 using a four-pronged approach, namely: rearing highquality pig breeding stock and establishing a high-quality supply system; improving the pig rearing environment in accordance with local conditions; training Ministry of Agriculture personnel and farmers to increase the level of feeding and nutrition management; and advocating the importance of improving meat quality. The aim was to increase the country's production of pigs with the target of reducing

imports of pork by 25 percent.

In the early stages of the project, the TaiwanICDF actively assisted Eswatini technicians to improve the facilities of Mpisi Station and purchased pure breed boars and sows from South Africa. After quarantine, they were delivered to the Mpisi Station to increase breeding efficiency and the quality of LY gilts. In addition, breeding pig testing and grading systems were formulated step-by-step and a survey of the current situation of livestock farmers carried out; according to the rearing cost of each grade of breeding pig, the price of the breeding pigs was clearly marked and then the pigs produced in line with the quantity ordered by farmers. Also, for people who were interested in joining the ranks of pig farmers, courses such as pig shed planning and pig rearing and nutrition management were provided. At the same time, with regard to Mpisi Station workers and Ministry of Agriculture extension personnel across the country, breeding and rearing techniques were disseminated. As of the end of 2018, 20 training sessions involving

917 participants had been held.

In terms of guidance for demonstration farms, purebred gilts were provided and guidance given with respect to improving the livestock rearing environment and

management as well as assisting them to produce "LY gilts" to increase the market penetration of high-quality pigs. At the same time, construction of a national artificial insemination center began and, through training, the level of breeding boar semen collection, testing, dilution, and storage and transportation techniques of Eswatini technical personnel was increased. By means of establishing and implementing the standard operating procedures, pig artificial insemination techniques were promoted to livestock farmers nationwide to reduce the livestock farmers' production cost of raising boars.

After the first batch of Taiwan high-quality purebred boar frozen semen arrived in Eswatini at the end of 2018, three breeding sows were impregnated, and it is estimated that the first Taiwan-Eswatini mixed-blood high-quality breeding pigs will be produced in the first half of 2019. It is believed this will push Mpisi Station towards the goal of establishing Eswatini's own breeding pigs and thus improve the overall quality and production of Eswatini pork.

## Plantain Development Project in Nicaragua



Echoes UN SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.



Nicaraguan farmers use tissue culture banana seedlings, effectively improving the quality and quantity of produce.

Plantain is one of the staple foods of Nicaragua; as well as being an indispensable side dish for the three daily meals it is also processed into popular local snacks. In the last 20 years or so, plantain production has increased fivefold, not on the strength of per-hectare production increase by improving farming technology, but as a result of expanding the land area under cultivation. This has resulted in a failure to achieve maximum synergy for production cost and crop productivity.

Consequently, the TaiwanICDF together with Nicaraguan Institute of Agricultural Technology (INTA) and Ministry of Family Economics, Community, Cooperative and Associative (MEFFCA) jointly implemented the Plantain Development Project in Nicaragua from October, 2016 with the aim of strengthening local farmers' cultivation skills and assisting Nicaragua establish a national tissue culture center to produce highquality plantain seedlings for use as cultivation material, thereby improving productivity and product quality and developing technology management capability.

## Establishing a national-level culture center to produce high-quality plantain seedlings

TaiwanICDF utilized the experience and knowledge accumulated in Taiwan for many years to help Nicaragua set up a national tissue culture center to produce high-quality plantain seedlings and improve overall development of the industry. The advantage of the plantain seedling tissue culture method is that disease and pest damage can be avoided. Only exporting banana companies use this method in the country, with the other plantain farmers all using the perennial root cultivation method, which can easily result in poor plant growth and quality; costs are also increased by the expenditure needed for disease and pest prevention

To date, the tissue culture center has been established and includes a culture plant, offices, in vitro growth seedlings, three satellite nurseries, and a high-quality plantain conservation station. It is estimated that from 2019 to before the project ends in 2021, 1.6 million tissue culture plantain seedlings can be produced and supplied, and the utilization rate of plantain tissue culture plantlets will increase from 0.5 to 4 percent.

In line with the principle of using suitable varieties for the local conditions, aside from introducing

the Enano variety from Central America, local plantain varieties Gigante and Cemsa 3/4 were produced in cooperation with the National Agrarian University's laboratory and the culture center assisted with training

related operational personnel. Also, regulations of mother plant preservation and collection of promising lines, collection of banana species seedlings, cultivation research, survey of cooperatives' demand and other work were all important basic items for this project's improvement of the Nicaraguan plantain industry.

In terms of extension, the establishment of 140 field demonstration nurseries and 16 assessment stations in the main cultivation areas of the country were planned with the cooperating unit; and, through instruction and field observation, pioneer farmers were nurtured, which then had the effect of increasing local farmers' acceptance of culture seedlings. To date, under this project, 86 training workshops on plantain, seminars and business matching events have been held. It is believed that, through technological development and promotion, the project will enhance the quality of plantains and increase the incomes of plantain farmers in Nicaragua in the

The estimated production of seedlings in 2021 can reach

750,000 units

3 Case Study

#### Rice Seed Production Capacity Enhancement Project in Haiti







Echoes UN SDG 1: End poverty in all its forms everywhere; 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture; 8. Promote inclusive and sustainable economic growth, employment and decent work for all.

The project assists farmers with rice seed production. After the seeds are inspected at the rice seed lab, they are placed in a project-dedicated bag, packaged and a certification label affixed, in preparation for the batch to be delivered to a buyer.

Affected by the dumping of foreign rice and domestic fiscal difficulties, Haiti has had a low rice self-sufficiency rate for years, which has been impacting the nation's food security. In May, 2017, Haiti's President Jovenel Moïse launched the Change Caravan initiative and requested to Taiwan's ambassador to Haiti that the countries cooperate on the National Rice Seed Production Enhancement Project in 2018, hoping that, before 2021, Taiwan would assist the country increase its rice production to 20,000 tons annually.

#### Developing different action plans in different areas has increased the national supply rate of rice by 100 percent

Consequently, with Haiti's largest granary the Artibonite river valley plain as the base, the TaiwanICDF, on the basis of the results of the Rice Seed Production Capacity Enhancement Project which began in 2014 and will end this year, together with the Ministry of Agriculture of Haiti, initiated advance preparations for the National Rice Seed Production Enhancement Project. Firstly, with regard to the part of the project involving Artibonite province, we continued to expand the use of the three-grade seed rice propagation system and national seed inspection certification system and to increase breeding varieties, as well as enhanced agricultural mechanization

and post-harvest mixing and storage processes. Secondly, because the development of the rice industry chain in south, north and northeast of Haiti is not as advanced as in Artibonite, re-integration of local small cooperatives and community seed banks was planned. Through technical guidance and resources provision, the project provided farmers' organizations with guidance with regard to production of the highquality rice seeds needed by local farmers, and then were instructed on how to self-test seed quality, establishing a high-quality seed rice local supply chain and fully bringing into play the function of community seed banks. The aim was to facilitate the implementation of the new project, to give farmers' organizations in every province the capability to provide good quality seed and thus increase overall rice production nationally.

Looking at the results of the Rice Seed Production Capacity Enhancement Project over the past five years, through the introduction of the rice seedling laboratory as

well as the increase in agricultural automatic production, aside from increasing rice production to 2,650 tons annually and increasing the national rice supply rate to 63 percent, it is estimated that the high-quality

seed rice produced will be enough to plant 37,000 hectares and the average production of beneficiary households will increase by 20 percent.

In terms of building the capacity of country personnel, to date 20 agricultural technicians, 225 agricultural machinery operators, 50 agricultural maintenance personnel, 15 seed testing technicians and 800 seed production farmers have been trained. In the future, on the basis of the existing production of rice seedlings, we will implement seed quality inspection, three-tier rice breeding system, and the system of community seed bank in hopes to achieve the goal of having a national rice supply rate of 100 percent at the end of 2021.

National supply rate of rice

2014

2018

14%

63%

 $\checkmark$ 

# **Strengthening Incubator Agribusiness** with Human Resources Development in Bandung



Echoes SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.



The project seeks to improve field cultivation and management, postharvest processing of fruits and vegetables, and marketing capability of farmers in the area.

Indonesia is one of the major agricultural countries of the world. The Bandung area in West Java Province is an important agricultural center and is where the Indonesian government established the Lembang National Agricultural Training Center (LNATC). The center actively counsels farmers to integrate agribusiness models to increase their income by strengthening farmers' cultivation technology and developing new forms of agricultural sales channels. As it lacks experience in providing marketing counseling to farmers, the government aimed through this project to enhance the local counseling capacity of LNATC to assist farmers improve agricultural business operations.

# Providing professional agricultural training courses, establishing a monitoring and counseling mechanism

Launched in 2015, the Strengthening Incubator Agribusiness with Human Resources Development in Bandung project mainly involves providing professional agricultural training to improve field cultivation management, fruit and vegetable post-harvest processing technology and marketing capability of local farmers

To assist LNATC improve its functions, in addition to farm planning for greenhouse healthy seedling cultivation, the TaiwanICDF

provided training for extension and seed farmers in conjunction with practical shipping and marketing courses. Through establishing a long-term monitoring and evaluation mechanism, feedback could be given to improve course design, thereby helping LNATC increase the effectiveness of counseling.

In terms of practical guidance, farmers were counseled to become familiar with processes such as gathering, grading, packing and distribution, an agricultural production and marketing mechanism that suits local needs was set up, and farmerowned brands of agricultural products were developed. Also, LNATC was assisted to establish one shipping point and four greenhouses, with one of the greenhouses equipped with a smart environmental control greenhouse system developed in Taiwan. The aim was, by accurately controlling various local environmental factors, to increase the quality of locally-grown fruits and vegetables, while also providing business opportunities for Taiwan's agricultural

cultivation technology. With regard to the monitoring and evaluation mechanism, LNATC was assisted to establish a databank containing data on the farmers receiving counseling and to regularly track the

current progress of trainees to understand whether there is a gap between what they learn and what they actually need for practical application, for reference when amending course plans in the future.

In order to enhance the marketing aspect, in addition to technical counseling on cultivation management and post-harvest processing to improve the quality of farm produce, the project helped develop a sales channel and successfully sold vegetables and fruits to supermarkets such as Carrefour. Farmers on average sold 500 kg of produce, further expanding their access to markets with higher profits and increasing their incomes.

Number of people who received counseling since 2015

More than 1,080 farmers

5 Case Study

## FINCORP MSME Re-lending Project (Eswatini)











In line with Eswatini's national strategy for MSMEs development, the project channelled funding from the TaiwanICDF through local financial intermediaries, breathing new life into local enterprise development.

Eswatini's Development Finance Corporation (FINCORP) was established in the mid-1990s, funded by the Eswatini royal family and the government of Taiwan. As it differs from an ordinary commercial bank in nature, its sources of funding are constrained by not being able to take public deposits. To enhance its lending capacity, the TaiwanICDF entered into an official agreement with FINCORP in 2012 for a relending project to assist more of the country's farmers and micro-, small and medium enterprises (MSMEs) obtain the capital needed for operation.

Cane sugar is the main pillar of Eswatini's economic development. As growing sugar cane is heavily reliant on irrigation, when the country was hit by a severe drought in 2016-2017 the sugar cane industry was heavily impacted and production output fell by 14.8 percent. Therefore, assisting the financial institutions that can help farmers to get through the difficulties is more in line with the needs of farmers.

### Promoting a farmer-friendly loan model

Looking back over past cooperation projects, the TaiwanICDF implemented the Lower Usuthu Smallholder Irrigation Project (LUSIP) with international organizations through lending cooperation. LUSIP was intended to help small farmers transform into commercial

producers to increase household income and achieve the aim of poverty reduction. The FINCORP loan project was structured so as to address Eswatini's national strategy for MSMEs development through relending in the local currency to MSMEs in agriculture, manufacturing, haulage and transportation, forestry, construction, and irrigation to infuse the development of enterprises with sustainability.

Taking the 2016-2017 drought as an example, facing droughtstricken farmers, unlike an ordinary commercial bank FINCORP didn't "Lend an umbrella when the sun shines and take it back when it rains." It adopted the approach of loan restructuring by extending the grace period or the loan term. From the ranks of sugar cane farmers, it chose suitable farmers to be loan officers who provided suggestions about planting and harvesting to borrowers and kept abreast of their cash requirement schedule to allow loans to be quickly approved when farmers needed money the most.

FINCORP's assistance allowed many farmers to overcome the crisis and continue to expand their business when stability was achieved.

For the TaiwanICDF, choosing a suitable local financial institution

can improve the results of the project. Through the modification of its business model, FINCORP relieved the repayment pressure of farmers and agricultural enterprises while improving their trust in FINCORP.

Loan amount to production sector issued by FINCORP

Over SZL 300 million

6

### **Public Health**

#### **Strategic Key Points**

Public health has always been a key field for development in international assistance. In the SDGs put forward by the UN in 2015, the goals of public health include zero hunger, ensure healthy lives and promote well-being for all at all ages, and ensure access to water and sanitation for all. At this year's 71st World Health Assembly (WHA), the World Health Organization (WHO) forcefully advocated for universal health coverage, hoping that all countries can cooperation and top-down integration of community resources and, through health promotion, increase awareness of personal health management.

As an international assistance and development organization, the TaiwanlCDF has, for many years, used Taiwan's public health development experience to assist our diplomatic allies and friendly countries to develop a better medical care environment and level of health. This year, the TaiwanICDF has comprehensively promoted projects at the policy level, medical institution level and community level to assist partner countries improve their capabilities in policy planning and strategies, healthcare personnel training and community health education to move towards the goal of universal health coverage hand in



Case Study

#### **Capacity Building Project for the Prevention and Control of Diabetes in** St. Vincent





Echoes SDG 3: Ensure healthy lives and promote wellbeing for all at all ages; 17:



Through community health education and promotion activities, the project ensures the people of St. Vincent and the Grenadines are better informed about how to prevent diabetes.

Taiwan's Caribbean diplomatic ally St. Vincent and the Grenadines (hereafter SVG) has seen an increase in deaths from diabetes in the last 10 years (2008-2017) of 39.6 percent, placing diabetes third in the top 10 causes of death in the country. The diabetes death rate in 2017 alone was 4.6 times higher than the global average. Improving diabetes care quality to bring down the death rate has long been an important development issue for SVG.

In light of Taiwan's achievements in the prevention and control of diabetes and health promotion, in February this year the TaiwanICDF cooperated with Mackay Memorial Hospital, known for its excellence in the field of diabetes, to launch the Capacity Building Project for the Prevention and Control of Diabetes in SVG for the first time. The aim is to jointly strengthen the diabetes prevention system in SVG and assist the country to build a prevention and integrated care system of diabetes.

#### Introducing experience on integrated care model, bringing a new strategy to St. Vincent

In the early stages of the project, Dr. Del Hamilton (consultant of General Preventive Medicine and Public Health/Non Communicable Diseases coordinator), Ms. Patsy Wyllie (chief health promotion officer) and Mrs. Andrea Robin (chief nutritionist) of the Ministry of Health,

Wellness and Environment and other policy-level members were invited on a two-week visit to Taiwan. As well as visiting Mackay Memorial Hospital to learn more about the diabetes integrated care system, they visited the Ministry of Health and Welfare, the Health Promotion Administration, Tamsui Public Health Center, Taipei City Hospital Zhongxiao Branch and other institutions to gain a full understanding of Taiwan's diabetes prevention policy, integrated care strategies and methods and promotion measures for related health education programs.

During the visit, the SVG representatives were inspired by Taiwan's 'blood sugar control A to G strategy' and, on returning home, proposed the Recommendations for the Diabetes Integrated Care Model Strategy and set about designing a corresponding action plan and diabetes integrated care model, laying a solid foundation for the execution of the project in the following project period.

Also, this project has adopted

the train-the-trainer approach to help SVG establish a diabetes professional care team; doctors, nurses, nutritionists and community health promoters go into the community together to carry out health

self-management capabilities that people need to prevent diabetes. The aim is to use Taiwan's many years of experience of diabetes integrated care to develop a good trilateral partnership and work together to improve SVG's diabetes prevention and control system.

education activities to increase the

The number of diabetic patients who take the glycosylated hemoglobin test is expected

to increase 40% in 2021

### Health Information Management Efficiency Enhancement Project in Paraguay



Echoes SDG 17: Revitalize the global partnership for sustainable development.



The introduction of a medical information system allows medical institutions to see twice as many patients and reduces waiting time by two thirds.

With advantages in cuttingedge medical technology and ICT, Taiwan has led the world for many years in the development of medical informatization. Thus, many countries are keen to learn from Taiwan how to build a high efficiency medical information management system and integrate medical information on the outstanding technology of cloud computing.

In order to strengthen the medical information management efficiency of Taiwan's diplomatic ally Paraguay and increase the quality of medical care, from 2016 the TaiwanICDF cooperated with Cathay General Hospital and Paraguay's Ministry of Public Health and Social Welfare in implementing the Health Information Management Efficiency Enhancement Project.

The project covers three aspects: establishing a medical information management system, improving digital learning material production capability and establishing a medical care management system. The aim is to assist Paraguay to gradually set up a medical information system and enhance medical care and service quality in the country, which match Target 18 of SDG 17: enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of highquality, timely and reliable data.

## Digitization of health management substantially improves medical care quality

In the first three years of project implementation, the Taiwan-Paraguay project team carried out a series of system development and examination and, at the end of 2018, had developed a medical information system that spans registration, making an appointment, doctor's consultation, examination, pharmacy, account, shift schedule management and report form output, and introduced the system to 31 medical institutions in designated demonstration areas.

For example, Villarrica provincial hospital in Guairá Province, which was the first to introduce the system, had an average of 200 patients per day in the outpatient clinics. Following introduction, the number is already up to 360; people are able to save two-thirds of the time spent in clinics, while diagnosis and treatment efficiency has been sustainably increased by management of patient data through the system. Also, this system can assist medical institutions

by automatically uploading patients' data on to the central server of the Ministry of Public Health and Social Welfare every month to allow the Ministry to instantly obtain patient statistics.

Before the system

was introduced, when Paraguayan citizens went to the hospital to see a doctor, manual registration and finding paper medical records were time-consuming, seriously affecting medical service efficiency. After the system was introduced, the diagnosis and treatment efficiency of the benefitting hospitals was greatly improved and people also could actually feel that they no longer had to wait so long to see a doctor. Additionally, the system can assist medical institutions to automatically upload patients' data to the central server of the Ministry of Health on a regular monthly basis, and the Ministry of Health can access statistics results of health information from medical institutions. These achievements were highly affirmed by the Government of Paraguay, who further requested to introduce tthe system to medical institutions in the capital Asunción so that more citizens can benefit from the system for more convenient and better quality of medical care services.

Average waiting time to see a doctor

2017

2018

3 hours

One hour

3 Case Study

## Philippines Integrated Action for Children's Nutrition Project





Echoes SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture; 3: Ensure healthy lives and promote wellbeing for all at all ages.



The project established the Pinoy Nutrition Hub (PNH) to better inform community residents about how to obtain affordable nutritious food and teach healthy cooking methods.

The economy of the Philippines has developed rapidly in recent years, with per capita income taking the country into the ranks of middle income countries globally; however, it still has a large portion of poor people in its population, with many poor affected by malnutrition. To address this problem, the Philippine Development Plan 2017-2022 put forward the Philippine Plan of Action for Nutrition (PPAN) with the aim of reducing malnutrition in the country, especially with regard to women and children.

# Providing training in feeding practices and building health stations to alleviate the problem of child malnutrition

To expand the scope of the TaiwanICDF's humanitarian assistance from post-disaster recovery and reconstruction to new fields and in response to the Taiwan government's New Southbound Policy, from September 2018, the TaiwanICDF began implementing the Philippines Integrated Action for Children's Nutrition Project in cooperation with the World Vision Development Foundation, Inc. (WVDF) in Levte and Samar provinces in Eastern Visayas. The aims are to improve child health by building child feeding capacity of caregivers in these areas and to assist in the repair and construction of a number of health clinics where local children and their families can

receive appropriate nutrition and health services.

Eastern Visavas is one of the poorest regions in the country, with 45 percent of people in Leyte and Samar provinces living under the poverty line and widespread child malnutrition. The poor population is a high-risk group for malnutrition and malnutrition also has serious and irreversible effects on children's growth and health, making nutrition improvement an issue actively promoted by the international community and the Philippine government. To echo this trend, three municipalities in the target area were selected for implementation of the project, which will last 14 months.

This project provides training in proper feeding practices, child care and public and personal hygiene to caregivers in families with children under the age of five years old, and has established community-based Breastfeeding Support Groups to promote correct breastfeeding concepts and methods to help underweight children return to normal.

In addition, this project will build one health facility and rehabilitate two old ones to allow local people to obtain health care and nutrition services more easily; it is estimated that 29,502 residents in 35 villages will benefit.

Also, in early 2019, two project volunteers with nutrition expertise will be dispatched from Taiwan to assist with project implementation. Through their in-depth participation, local children's nutritional needs can be improved.

Number of beneficiaries

29,502 people

## Healthcare Personnel Training Program



Echoes SDG 3: Ensure healthy lives and promote wellbeing for all at all ages; 17: Revitalize the global partnership for sustainable development.

The implementation model of this program since its inception in 2005 has been that countries with which Taiwan has diplomatic relations and friendly countries put forward training requirements. Then, after matching by the TaiwanICDF, on-the-job training is provided for healthcare personnel lasting from one to three months in Taiwan in cooperation with suitable related professional health facilities. This year, 23 trainees from 10 countries came to Taiwan for training at 10 different hospitals.

One of this year's trainees was Dr. Alejandro Enrique Young Sarmiento from Honduras, who received training in pediatric care operational procedures, care facility and environment settings at Kaohsiung Veterans General Hospital. Even before returning home he shared the knowledge and experience gained in Taiwan with his peers in Honduras. Another, Dr. Ioanna Beiatau from Kiribati, trained in gynecologic oncology patient treatment and prevention measures at Mackay Memorial Hospital, substantially increasing her skills and knowledge in the field of gynecology. This year, for the first time, the TaiwanICDF was entrusted to train five obstetricians and pediatricians from Ethiopia by the Ministry of Foreign Affairs, allowing Ethiopia to also benefit from Taiwan's medical prowess.



Belize students learn on-the-job about hemodialysis and nursing care for patients with chronic renal failure at Far Eastern Memorial Hospital.

#### Bringing into play program synergy to increase the professional capabilities of healthcare personnel

In addition, to achieve synergy between projects, this program is paired with training under the TaiwanlCDF's public health projects to allow trainees to serve as contact windows for future cooperation with Taiwan or seed trainers. This speeds up the process of communication in the project preparation phase and capacity building of related healthcare personnel in the future.

For example, in 2018 a nephrology nurse and information engineer who were trained at Far Eastern Memorial Hospital under the Capacity Building Project for the Prevention and Control of Chronic Renal Failure in Belize assisted with conducting training courses on the promotion of chronic kidney disease prevention and control when they returned home, sharing what they learned in Taiwan, allowing it to be used by local healthcare professionals when seeing outpatients. Also, two nephrologists

who were trained at Kaohsiung Medical University Hospital under the Strengthening of the System for the Prevention and Treatment of Chronic Kidney Disease (CKD) Project that is planned to be implemented in 2019 in Nicaragua and two obstetricians who received training at National Taiwan University Hospital under the Promotion of Medical Technology for Improvement of Maternal-Neonatal Health in Guatemala project set down a solid foundation for follow-up work on the projects.

In the 14 years since its implementation to date, the Healthcare Personnel Training Program has trained a total of 403 persons. The TaiwanICDF will continue to pursue the objective of building the capacity of healthcare personnel in friendly countries and make every effort to assist healthcare personnel in various countries increase their professional knowledge and expand skills and experience exchange, to improve the quality of medical care in Taiwan's diplomatic allies and friendly countries.

Number of healthcare personnel trained this year

23 individuals

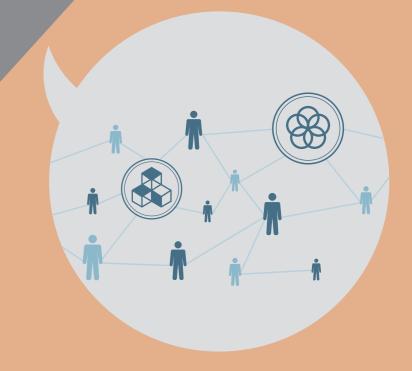
## Information and Communications Technology

#### **Strategic Key Points**

Information and communications technology (ICT) continues to develop and transform. Since 2001, many countries around the world have steadily implemented policies for electronic government. The UN defines e-government as the continuous innovation in the delivery of services, public participation and governance through the transformation of external and internal relationships using information technology. In concrete terms, it means that governments use ICT to improve relations with citizens other governments (G2G) to build a government that is responsive, efficient, responsible and provides higher service quality.

As the content and functions of digital governance become increasingly diverse, governments around the world are making a great effort with regard to infrastructure such as internet broadband and increased transmission speed to stimulate the digital economy and the development of digital governance, to increase national competitiveness overall. After Taiwan introduced digital government services in 1998, it acquired valuable experience in promoting the establishment of broadband and excellent digitized government services.

In light of this, the TaiwanICDF continues to assist diplomatic allies and partner countries to upgrade their telecommunications infrastructure and build e-governance systems and raise the skill level of related personnel through bilateral cooperation involving ICT-related technical assistance projects and loans. The aim is to use Taiwan's experience of advanced government service integration to assist partner countries in building smart cities with digital technology, allowing citizens to enjoy faster and more convenient administrative services and thus increase overall national competitiveness.



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## Electronic Document and Records Management System (EDRMS) project for Saint Vincent and the Grenadines



Echoes UN SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The government administrative operations of Taiwan's diplomatic ally St. Vincent and the Grenadines (hereafter SVG) were previously mainly conducted using paper documents. In addition to the loss of documents and delays, the tracking and checking of these documents was not easy and there was no way to carry out effective file management, causing low administrative efficiency.

# Integrating electronic document system and digital certificate system to increase administrative efficiency and information security

In response to international trends in ICT and in line with the UN SDGs and with the aim of stimulating Taiwan's ICT industry to develop internationally, from 2016 the TaiwanICDF has cooperated with the SVG government, using this project to introduce Taiwan's e-government experience by establishing an "Electronic Document and Records Management System (EDRMS)" and a "Public Key Infrastructure (PKI) and Digital Certificate System". The purpose is to assist the SVG government in converting its existing manual document management system to an electronic one and, moreover, ensure the document handling process meets various security requirements to build a system that conforms to international standards.



managers to approve documents at

a faster pace. Also, the document

process can be tracked and past

documents checked and important

government information digitized and

preserved, substantially increasing

the administrative efficiency of the

This project will be handed over to

the SVG government at the end of this

vear. The complete training provided

by the TaiwanICDF and online Q&A

Help Desk to resolve problems will

help the SVG government build an

electronic government that is efficient,

improves the quality of decision-

making, is environmentally friendly

and provides a higher quality service.

In order to help St. Vincent and the Grenadines develop e-government, Taiwan Technical Mission, Taiwanese firms and local personnel held discussions and jointly established a system that conforms to international standards.

SVG government.

This project involved cooperation with major information service provider in Taiwan. Chunghwa Telecom Co., Ltd. Data Communications Business Group, and along with the Ministry of Finance, Ministry of Foreign Affairs, Service Commissions Department, Customs & Excise Department, Treasury Department, Inland Revenue Department, Information Technology Services Division and other SVG government units, planning and design of the PKI and digital certificate system and Certification Registration Office (CRO) has been completed and 662 PKI smart cards made and issued. The planning and design of the registration system, exchange system, document authoring system, record management system and EDRMS Operation Center of the EDRMS have also been completed. A total of 400 hours of system operation and maintenance training have been provided with around 2,000 civil servants taking part, and 16 system operation seed personnel trained.

Minister of Finance, Economic

Planning, Sustainable
Development
and Information
Technology of SVG
Camillo Gonsalves
stated that the EDRMS
and PKI smart card
established under
this project help civil
servants to edit and

ben Center of the been completed. A of system operation training have been round 2,000 civil

Number of departments with the sylogy of SVG

3 departments

2 Case Study

## St. Lucia Government Island-wide Network (GINet)



Echoes UN SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

CASTRIES

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MICOUD ZONES!

VIEUX FORT

Oginetsaintlucia en mare interested.

In June 2018, trial operations were conducted on the WiFi system established by the project and the results promoted through advertising on public buses (picture shows an advert for the government's Wide Area Network project).

Taiwan's Caribbean Sea diplomatic ally St. Lucia had an internet penetration rate of just 43 percent in 2010 and was affected by problems such as urban and rural digital divide and low family internet usage rate. This situation, in the long-term, would hold back social and economic development. Consequently, drawing on Taiwan's comparative advantage of high internet usage and development experience, the TaiwanICDF, for the first time, used the technical cooperation method to implement the St. Lucia Government Island-wide Network (GINet) Project, assisting St. Lucia carry out Wide Area Network (WAN) infrastructure building.

The project mainly includes setting up wireless backbone networks and, in the public areas of five administrative districts, namely Castries, Canaries, Dennery, Micoud and Vieux Fort, establishing wireless network hotspots, operation and maintenance centers and online management platforms, as well as carrying out maintenance personnel capacity building.

#### Building the national digital nervous system with wireless area network infrastructure

Since its launch in April 2015, under the project, 20 wireless backbone networks have been laid and 61 wireless hotspots and network management and operations centers'

systems installed. Multiple equipment installation and maintenance training sessions have been held as well in 32 public areas of the five districts, so that primary and secondary school teachers and students in the GINet area can learn correct information security concepts.

After trial operation of GINet began in June 2018 it has received public affirmation and attention. Aside from local residents, tourists and business travelers can connect to the internet and to the world through GINet wireless hotspots. It is estimated that, annually, GINet can draw over one million potential tourists to connect through the tourism portal. In the future, if the GINet system's portal webpage contents can continue to be supplemented with more information on tourist attractions, shopping, restaurants, and local festivals, and advantage taken of the instant promotion effect of social media, it can bring win-win results in terms of driving business activities and promoting economic development.

In addition, to ensure that the

cooperating country is able to operate the network sustainably after the project ends, the TaiwanICDF has put in a lot of effort in capacity building. At the pre-, mid- and post-installation stages, St. Lucia was assisted

with carrying out onsite testing and operation and its personnel took part in operation, system maintenance and troubleshooting; a two-year warranty was provided after the network was handed over. Local media described the project's effectiveness in these terms: "A Step in the Right Direction: Island-wide Internet Access," meaning that not only has a big step been taken towards increasing the penetration rate of the internet in St. Lucia, it also has spurred the government and enterprises to continue to provide more diverse and innovative application services.

Average number of users per month

2015
2018
O people 19,697 people

 $\checkmark$ 

## **Belize Motor Vehicle Registration and License System Project**



Echoes UN SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Transport processes and services in Taiwan's Central American diplomatic ally Belize are still carried out mainly through manual paper-based systems. The central and municipal governments work independent of each other at their respective traffic offices and don't have access to an information sharing platform. Autonomy has created a situation in which there is "one country many licenses", which has resulted in inefficient supervision and monitoring and insufficient enforcement of regulations, leading to various social problems. For example, transport enforcement officers cannot immediately obtain the vehicle registration or driver's license information of traffic offenders,

#### Inter-agency information sharing platform makes motor vehicle registration and license information more transparent

widespread stolen vehicles on the

roads cannot be suppressed, court

judgments are difficult to enforce, and

the public often ignore traffic fines.

To address issues of security and transport regulations enforcement, the Government of Belize requested assistance from Taiwan and put forward the need for a Belize Motor Vehicle Registration and License System Project. Drawing on Taiwan's experience and technology with regard to traffic supervision services, management



After the system went online, project managers helped Belize personnel familiarize themselves with its operation to enhance the sustainability of the project.

system, consultation and system development, the objective is to help build a motor vehicle registration and license information database system, to reform and digitalize the transport processes and services, and introduce necessary audit mechanisms. This will increase government efficiency and protect the lives and property of citizens.

Under this project, establishment of a motor vehicle registration and license system began this year. The system allows the processing of vehicle registration, driver's license, vehicle license, license plate management, traffic violation record, fines, fees, drivers exam and national annual statements from each area of Belize, serving as an information sharing platform for the country's motor vehicle supervision stations and related units. The system also provides an online service function, allowing citizens to submit applications, enquire about fines and make payments online. The system is connected to, and information shared with, police and customs unit

systems, with the aim of creating an effective weapon for fighting crime and suppressing stolen vehicles. To date, four traffic offices have begun using the system. The system has issued more than 5,000 card-type driver's

licenses, and over 80,000 items of vehicle import data have been obtained. The system's information is renewed on a daily basis and it has become an important tool for checking motor vehicle registration and license information by transport supervision stations nationwide.

The achievements of this project have been affirmed highly by the Ministry of Transport of Belize. In the future, the TaiwanICDF will focus on capacity building for system management and maintenance and new service applications, and will expand the project to every supervision station and other agencies to achieve the objectives of simplifying administration and giving the public convenience, increasing the effectiveness of motor vehicle supervision in Belize and thus improving the safety of drivers and pedestrians and reducing the number of road accidents.

Number of card-type driver's licenses issued

2017 2018

O card > 5,000 card

Case Study

#### **National Broadband Plan (Belize)**



Echoes SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

In the digital economy era, ICT infrastructure is essential to a country's economic growth. As digital content becomes more diverse by the day, there is an ever increasing demand by users for broader bandwidth and rapid transmission. The World Bank's World Development Report 2016 pointed out that a 10 percentage point increase in fixed broadband penetration would increase a country's GDP growth by 1.19-1.35 percent. Consequently, countries around the world are committing substantial resources to broadband infrastructure to stimulate the development of the digital economy and increase overall

For many developing countries, under-investment in infrastructure is a major obstacle to developing ICT. A 2010 national census showed that only 13.1 percent of all Belizean households had internet in their homes and the cost of a 4 MB internet connection was approximately three quarters of the household's annual income. The high cost makes many people unwilling to be Internet-connected at home, in turn restricting the power of the globalized ICT to drive national economic growth.

national competitiveness.

In view of this, the Government of Belize presented the National ICT Strategy in 2011, positioning upgrading ICT infrastructure as one of the key development focuses. In 2017, the prime minister of Belize Belize financial secretary of Ministry of Finance (standing on the left) thanks the TaiwanICDF for financing and helping the development of ICT in the country (Timothy T. Y. Hsiang, TaiwanICDF secretary general on the right).

policy of deploying and Fiber to the fiber optic network that has made

brought benefits in entertainment.

This broadband network project has successfully linked Taiwan, Belize, the TaiwanICDF and BTL, to create a double win-win partnership. In addition to helping make life more convenient for Belize's citizens, the broadband infrastructure can be the foundation for the government to develop more ICT applications such as e-learning, public services and e-commerce and to promote the development of the digital economy and, in doing so, increase the nation's competitiveness.

business transactions smoother.

offers more learning options and has

put forward the policy of deploying internet broadband Fiber to the Home (FTTH) service throughout the country. Through the National Broadband Plan of Belize Telemedia Limited (BTL), it is estimated that in three years, the current copper networks will be completely replaced with fiber optic networks and connect to homes; 90 percent of households and businesses will benefit under the plan.

## Rolling out broadband network, deploying fiber to the home

In quick response to the prime minister's request, the TaiwanICDF actively discussed with BTL. As the company is state-owned it was decided by both sides that cooperation would take the form of a loan. The National Broadband Plan was the TaiwanICDF's first ICT infrastructure project. The loan agreement was signed in June this year and, as of December, the network had been rolled out in Belize City, Belmopan and main cities and towns, with the capacity to connect

to 61,740 premises. In addition, BTL launched different service offerings for different user needs. As of December, there are 19,455 subscribers of the fiber optic network. The users are full of praise for the increase

Estimated percentage of Belize households with fixed broadband access in 2021

90%

26

### **Education**

#### **Strategic Key Points**

For many years, through education and training, the TaiwanICDF has assisted allied and friendly countries in human resources development and capacity building. In education, we provide higher education scholarships to cultivate elite talent from partner countries in combination with Taiwan's higher education resources. As for training, focusing on Taiwan's development advantages, workshops and vocational training are carried out to nurture partner countries' policy officials and professional technical personnel.

This year, the TaiwanICDF has conducted workshops with the aim of promoting international linkages and increasing foreign relations. Apart from inviting international human resources experts to Taiwan to analyze international trends for TaiwanICDF trainees and scholarship students, we have also held related workshops in cooperation with international organizations. The aim was, through cooperation and exchange, effective use of resources and each side bringing its own strengths, to enhance regional exchange and development cooperation. Moreover, we have organized business opportunity forums, invited private domestic companies to interact with participants and arranged visits to related forums and expositions, to promote mutual exchange and allow them to keep abreast of international business trends. Also, feedback rates and level of participation have been increased by providing trainees with 4G Internet connection,

cloud access to teaching material, interactive systems for meetings, and livestream. As to vocational training, we carry out intensive capacity building for participants through our vocational training projects which integrate Taiwan's industrial and academic resources and vocational education system, thus increasing the youth employability of our allies.

allies.

People-centered is the core spirit of the education related programs implemented by the TaiwanICDF. In the future, the TaiwanICDF will continue to provide diverse approaches to learning to assist allied and partner countries nurture the professional talent needed for economic and social development and, together with partner countries, nurture the human resources needed for sustainable development.



Case Study

#### **Vocational Training Projects**



Echoes UN SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all



Students from allied countries come to Taiwan to learn advanced skills so they can help to promote future industry development in their home countries.

Human resources are an important pillar for national socio-economic development. For many years, the TaiwanlCDF has used technical and vocational education and vocational training to assist partner countries train the technical talent needed for the development of various industries, to promote vigorous overall economic and social development. Vocational training projects have always been one of the types of cooperation projects that allies most look forward to and benefit from.

# Vocational training for 11 types of occupation, with the new addition of micro-enterprise case study sharing

In support of Taiwan's foreign policy, this year the TaiwanICDF initiated various vocational training projects including Vocational Training Project for the Pacific, Vocational Training Project for Latin America and Vocational Training Project for the Caribbean. In addition to traditional manufacturing, the scope of training extended to the tertiary industry, that is the service industry, to include 11 subjects: Baking Arts, Hotel and Hospitality Management, Creative Woodwork, Mobile Phone Repair and App Program Design and Application, Computer Assisted Machinery Manufacturing, Refrigeration and Air-conditioning (including electrical and plumbing services), Motor Vehicle Mechanics,

Information and Communications Technology Equipment Applications and Maintenance, and Tourism and Hospitality. In total, 193 young people from Taiwan's allied countries came to Taiwan for intensive training lasting from two to three months.

Aside from theory and handson practice, this year the courses also included micro-enterprise case study sharing with visits to successful micro-enterprises in Taiwan so that participants could learn about the latest entrepreneurship trends and gain a full understanding of the entire process of setting up a business and establishing a business model. Participants from Paraguay, Nicaragua, Honduras and St. Vincent and the Grenadines indicated the vocational training held in Taiwan helped them to expand their vision. learn advanced techniques and enhance their own capabilities, and they plan on sharing their experience and what they had learned here with their colleagues back home to further promote the development of related fields in their countries.

Moreover, trainees from Guatemala, Tuvalu and the Solomon Islands indicated that they have a better understanding of Taiwan through the vocational training course, which has motivated them to

make future plans of studying for a degree in Taiwan to improve their professional knowledge and techniques. The vocational training projects are important not only because they enable the students who come from distant places to enhance their professional abilities; at the same time, they serve to further deepen the ties between the people of partner countries and the people of Taiwan, who come to know each other from being strangers to becoming acquaintances, from being friends to becoming family. In the future, the TaiwanICDF will continue to assist the youth of allied countries build professional technical and business management capacities so that technical talent can find a place in their domestic employment market, thereby reaching the goal of promoting the development of their economy overall.

Number of people from allied countries trained in 2018

193 persons

 $\sqrt{28}$ 

## International Human Resources Development Workshop Program



All workshop themes and content aim to echo the 17 SDGs



Participants of the Workshop on Healthy Seed Production and Management visit a potato field in Chiayi County and spend time with local farmers.

By holding workshops, and effectively combining with the resources of industry, government, academia and research in Taiwan, the International Human Resources Development Workshop Program assists allied and friendly countries nurture professional talent and promote international exchange and cooperation. Apart from the UN SDGs, this year's workshop themes also considered how to enhance cooperation with international institutions; workshops were held in cooperation with the public and private sectors in Taiwan to increase course depth and breadth as well as innovative thinking used for course planning, with the aim of increasing workshop synergy and the spillover effect overall.

# Enhancing international cooperation, increasing course effectiveness through innovative thinking

In international cooperation, APEC Human Resources Development Working Group (HRDWG) Lead Shepherd Prof. Dong-Sun Park was invited to Taiwan for the Workshop on Administrative Management of Higher and Vocational Education, to present a keynote lecture on how APEC promotes regional higher education cooperation and talent exchange. For the Workshop on Smart Agriculture Applications, Regional Director for Asia of International Center for Tropical Agriculture (CIAT), Dr. Dindo Campilan, shared on the topic of

agricultural industry transformation in face of climate change. As to the Workshop on the Application and Management of Smart Water, Mr. Tim van Hattum, Program Leader Green Solutions of Wageningen University in the Netherlands, shared his experience of water utilization and climate change governance. Moreover, we cooperated with ICLEI -Local Governments for Sustainability. which is headquartered in Bonn, Germany, to organize Towards Water Smart City Program, introducing the current context of water resources management development in Taiwan and sharing green city and green building related cases. The TaiwanICDF will continue to draw on various resources and train more talent with international mobility and perspective through cooperation with international organizations.

To increase exchange between participants and Taiwanese companies, the courses also included visits to related forums and expositions such as Southern Taiwan Forum on Water Management,

Smart City Summit & Expo, Taiwan Int'l Green Industry Show, E-commerce Expo Asia, and International Agriculture Machinery and Materials Exhibition. The aim was to give participants a chance to directly

obtain product information and try out the products onsite to allow them to gain an understanding of the latest industry developments in Taiwan, and also to provide Taiwanese companies with overseas trade opportunities.

This year, we approached course design with innovative thinking, including live online streaming during participants' country reports to expand the benefits of information dissemination, echoing the government's open government platform and resources sharing principle; and cultural field trips such as in the Workshop on Healthy Seed Production and Management, where participants were taken to an old courtyard inside a historic site for an outdoor banquet to give them an experience of Taiwan's unique rural roadside banquet culture. The effect of this cultural experience was further enhanced by online live broadcast to boost the understanding and positive image of Taiwan in the international community.

Number of people trained to date since the programs began in 1997

8,203 individuals

3 Case Study

## International Higher Education Scholarship Program



Echoes SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



The scholarship program for foreign students allows young people from diplomatic allies to study in Taiwan.

Since 1998, the TaiwanICDF has partnered with domestic universities to implement the International Higher Education Scholarship Program with the aim of meeting the higher education talent requirements of allied and friendly countries. The program provides students recommended by the cooperating countries and then approved full scholarships to come to Taiwan for study, to nurture highlevel policy planning, technical and management personnel for partner countries.

This year, in cooperation with the 21 universities of the Taiwan International Cooperation Alliance (TICA), the TaiwanICDF held 35 bachelor's, master's and doctoral degree programs, spanning the five main areas of agriculture, engineering, public health, business management, and others. This year, a total of 500 foreign students from 35 countries came to Taiwan to study and, to date since the beginning of the program, 2,083 foreign students have benefitted.

## Drawing on APEC's successful human resources development experience

This year, the TaiwanICDF and TICA jointly organized the Taiwan International Cooperation Forum on Higher and Technical Education at National Chung Cheng University, inviting APEC HRDWG Lead Shepherd Prof. Dong-Sun

Park to Taiwan to deliver a keynote lecture to share APEC's experience of promoting higher education cooperation and talent exchange in the region.

Prof. Park stated that the fourth industrial revolution has brought new challenges to human resources development and pushed the development of higher education in the directions of high speed, new technology, high convergence, high connectivity and lifelong learning. Massive Open Online Courses (MOOCs) and Minerva Schools have broken through the spatial and temporal barriers of learning, allowing students to have a globalized learning experience anytime; cross-border education and international mobility will be future higher education development trends. Taking the APEC example, Prof. Park said that apart from continuing to strengthen cooperation and exchange between members and assisting talent flow and talent building in the region, the qualifications and skills certification mechanisms of each regional

economy will be integrated to promote global talent mobility.

This Forum also provided the participants from different countries with the opportunity to interact and discuss with TaiwanICDF

representatives of higher education institutes in Taiwan, to share and exchange each country's experience in education policy development, industry-academia cooperation and talent cultivation. This further drew the attention of domestic academia to the subject of foreign aid in higher education and stimulated discussion. It can also serve as reference for Taiwan and the TaiwanICDF when refining foreign assistance for higher education in the future and will help develop diverse multidimensional cooperation.

scholarship recipients and

Number of benefitting students since the program began in 1998

2,083 students

 $\frac{1}{2}$ 

### **Environment**

#### **Strategic Key Points**

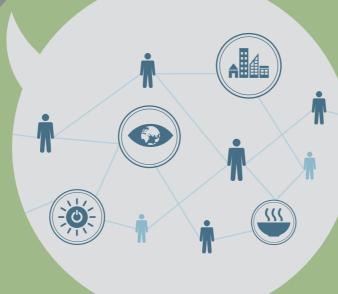
In 2000, the United Nations drafted the Millennium Development Goals (MDGs) to address the challenges posed by environmental issues such as climate change, global warming and greenhouse gas emissions that have severely undermined human security and economic development. The seventh MDG is to ensure environmental sustainability. In 2015, the Sustainable Development Goals (SDGs) pointed out the responsibility borne by private enterprises in while also encouraging civil society and governments to develop partnerships to that end. In the same year, the United Nations Framework Convention on Climate Change in Paris urged signatories to focus on helping less developed countries (LDCs) adapt to the impacts of climate change.

Taking the example of Latin America and the Caribbean where Taiwan has the most diplomatic allies, the UN has designated the region as highly vulnerable to the impact of climate variability. In recent years, the TaiwanlCDF has sought to integrate Taiwan's development experience and technological tools in the fields of agriculture, climate and disaster prevention in order to provide technical assistance

and capacity building. This is intended to strengthen the capacity of partner countries to adapt and mitigate disasters in the face of climate change, while also promoting sustainable development and consumption in primary industries, using technology to facilitate sustainable resource management and improve post-disaster recovery and adaptive capacity.

Energy efficiency and carbon reduction is already an important focal point in the development of national policies around the world. In addition to bilateral cooperation, the TaiwanICDF works closely with international organizations through green financing and loans, to jointly promote renewable energy

a n d



greenhouse gas reduction

projects, shouldering its

responsibility as a global

citizen in environmental

protection.

Case Study

### St. Kitts and Nevis Enhancing Agricultural Adaptive Capacity to Climate Variability Project





Echoes UN SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture; 13: Take urgent action to combat climate change and its impacts

Project technician Sung-Han You (left) and Central Weather Bureau

Project technician Sung-Han You (left) and Central Weather Bureau expert Shao-Liang Sung (right) consult on the installation of meteorological station equipment.

In recent years, the increased frequency of extreme climate across the world has highlighted the vulnerability of island nations such as St. Kitts and Nevis in the Caribbean in the face of climaterelated disasters. In its annual report released in February of 2018, the United States Agency for International Development (USAID) pointed out that agriculture in St. Kitts and Nevis faces a number of problems: most farms are small and fragmented, industrial farming has become less profitable, agricultural labor costs are high, agricultural populations are aging and traditionally grown crops lack diversity. As such, how to strengthen the adaptive capacity of the agricultural sector to climate variability is an important challenge

Following field studies by Taiwanese experts and their assessments of agricultural vulnerability to climate change of the country, it was proposed that the TaiwanICDF and the Government of St. Kitts and Nevis collaborate on the Enhancing Agricultural Adaptive Capacity to Climate Variability Project. The project focuses on three measures: Establish an early warning information collection mechanism, develop or introduce techniques to prevent and reduce crop disasters, and increase the dissemination of agricultural information. These are expected to improve the adaptive capacity and

facing the country.

resilience of the agricultural sector in St. Kitts and Nevis to climate variability by using Taiwan's many years of experience of integrating agricultural and climate information in disaster risk reduction and prevention.

## Agricultural hardware and software to help improve the agricultural system

This project was started in 2018 and has already helped set up four new agricultural weather stations in St. Kitts and Nevis with remote real-time data transmission function, ensuring that local farmers receive information on meteorological changes as soon as possible. Furthermore, the project has continued to conduct crop disaster prevention and reduction experiments and produced a crop growing calendar aimed at disaster prevention for farmers. In the future, an agricultural data platform will be installed to integrate commonly used agricultural information, including popular agricultural databases, international agricultural organization websites, practical agricultural

apps, local weather information, and discussion groups. After the platform officially goes online it will provide local farmers with the information they need, which will enhance the overall agricultural

system, enabling them to better deal with climate variability.

In addition to installing related hardware and software, the project also attaches much importance to capacity building. This includes sending personnel to Taiwan's Central Weather Bureau to receive basic training in meteorological observation, while also exchanging information and sharing resources as well as working on training programs with local agricultural agencies and international organizations such as the Food and Agriculture Organization of the United Nations (FAO), Caribbean Agricultural Research and Development Institute (CARDI) and Inter-American Institute for Cooperation on Agriculture (IICA). In this model, St. Kitts and Nevis can cultivate its own agricultural disaster management professionals. In addition, the agro-meteorological information collected as part of the project will also be shared with the Caribbean Institute for Meteorology and Hydrology (CIMH), to help improve collection of climate data in the Caribbean.

Number of new agricultural weather stations established in 2018

4 station

 $\sqrt{3}$ 

#### **Bulgaria Sofia Electric Buses Acquisition Project**



Echoes UN SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all; 11: Make cities and human settlements inclusive, safe, resilient and

The transportation sector consumes a great amount of energy and is a major source of greenhouse gas emissions. In December 2015, the 21st United Nations Climate Change Conference (COP21) signed the Paris Agreement. After it came into effect in November 2016, the trend toward global action to combat climate change and the development of low carbon transport became more pronounced. It was against that backdrop that Bulgaria, in Eastern Europe, selected its capital Sofia as the base for the development of a sustainable, safe and environmentally friendly public transport service.

In 2012, the World Health Organization (WHO) listed the exhaust fumes from diesel vehicles as carcinogenic. At the same time, the Bulgarian government sought financing from the European Bank for Reconstruction and Development (EBRD) Green Energy Special Fund (GESF), as part of an effort to replace the old high-pollution diesel buses with electric buses and transform Sofia into a low-carbon city on the basis of its existing subway, trolley bus and tram transport network.

#### **Using Green Energy Special** Fund to create green transport networks in Sofia

TaiwanICDF and the EBRD jointly worked on the Bulgaria Sofia Electric Buses Acquisition Project to provide a loan to the Sofia Electric



In recent years, the city of Sofia has actively sought to improve transport infrastructure in an effort to create a public transportation service that is sustainable, safe and environmentally friendly. Electric buses are an important part of that program.

Transport Company (SETC), owned by the city government, to support the acquisition of 30 fast-charging ultra-capacitor electric buses with 12 charging stations.

Ultra-capacitor electric buses were chosen because electric battery technology has improved considerably. For example, whereas it used to take a long time to charge electric battery buses, ultra-capacitor electric buses would function well for about 200 km in just one hour of charge, making them 18 times more efficient than standard electric buses. The consumption of electricity is also less than 1kWh for each kilometer traveled. Together with the widespread installation of charging stations, it is possible to not only promote the use of electric buses and reduce pollution caused by traffic congestion, but also to reduce the risk of cancer and effectively reduce the carbon emitted by public transportation. This also represents a major step forward for Bulgaria in the ways of clean transport under the European Union.

As more attention is being given to environmental and health issues, the promotion of clean energy vehicles is a clear global trend and so after purchasing these electric buses. SETC will add a further

existing nine trolley bus and 14 tram routes. This will help to expand the green transport network in Sofia, establishing a municipal transport system that is both clean and energy

six bus routes to complement its

Estimated number of ultra-capacitator

30 huses

3 Case Study

#### **Jordan GAM Solid Waste Project**



Echoes UN SDG 7: Ensure access to affordable, reliable, sustainable and modern

increase in the volume of garbage,

there has been an effort to monetize

these trends through waste-to-energy

technology. These efforts seek to

resolve the pressing issue posed

by the increase in waste disposal

As a result of the dual impact of

rapid population growth and the

influx of refugees, it is estimated that

the population of Greater Amman.

the Jordanian capital, will more than

double in size by 2025, which makes

the waste processing problem even

more severe. However, Greater

Amman currently has only one landfill

site, the Al Ghabawi urban waste

landfill, which processes 4,000 tons

of solid waste daily. Such a huge

volume of garbage produces noxious

odors and methane which increases

the volume of air pollution and the risk

In view of the waste crisis in

Jordan, the TaiwanICDF, through

the Green Energy Special Fund

(GESF) jointly established with the

European Bank for Reconstruction

of fire.

worldwide by re-cycling it.

Although the Middle East is the and Development (EBRD), provided world's most important oil producing loan proceeds to assist Greater area. 96 percent of the energy used by Jordan is provided by neighboring countries. Therefore, in recent years the Jordanian government has proactively sought to develop renewable energy in an effort to reduce its reliance on imported energy. At a time when there is a gas (LFG) recovery system. global energy shortage and a rapid

### **Development and application** of renewable energy sources

gas and prevent it contributing to global warming, this project has completed capping for the second stage, regularly recycling landfill gas from sealed landfill cells. Currently, stage three is underway with plans to transform the gas into electricity and it is estimated that the system will be connected to the national power grid in early 2019. Thereafter, the fixed income made from selling electricity will be used to maintain and operate the system. This will ensure financial

gradually reduce reliance on imported energy by increasing power generation. In addition, the project will reduce annual CO2 emissions by more than 200,000 tons, helping Jordan

The influx of refugees has caused a dramatic increase in the amount of waste in Jordan. This project introduces waste management and new technology that transforms waste into energy, using the waste problem as an opportunity to develop green power

> achieve its National Determined Contribution (NDC) for carbon emissions reduction.

It is worth noting that through this project the Government of Greater Amman Municipality has not only established a new solid waste management company, it has also contracted the design, execution and operation of the landfill-gas recovery system to a private sector company based on a build-operate-transfer (BOT) contract. This partnership with the private sector seeks to increase the operational efficiency of the landfill-gas recovery system and will serve as a model for cities across the Middle East.

Amman import new technology that transforms methane into energy and build new landfill cells to increase waste processing capacity. Moreover, the loan is to help introduce new solid waste processing technology and implement a comprehensive landfill-

in Jordan: Transforming landfill gas into electricity In order to recycle/reuse landfill

sustainability and

Minimum amount of CO<sub>2</sub> emissions reduction per annum by 2020

200,000 tons

### **Others**

#### **Strategic Key Points**

Elimination of poverty is not only a global challenge but also an indispensable goal for sustainable development. Since 2010 the TaiwanICDF has been working with Central American Bank for Economic Integration (CABEI) to provide a of Taiwan's diplomatic allies; and, with the loan from World Bank and the grant from Global Environment Facility (GEF), as well as in-kind contributions from municipal governments and project beneficiaries, all parties have been jointly involved in improving of infrastructure services that can enhance rural people's quality of life. Moreover, in order to expand international participation and vision of many years implemented the Taiwan Youth Overseas Service. Under the guidance of Taiwan's embassies and technical missions abroad, the servicemen assist in project operations

by contributing what they learned while acquiring abundant experiences. Through the TaiwanICDF Overseas Volunteers Program, our volunteers perform issue analysis and provide implementation advice, innovative workflows and ways to increase productivity to the government units of partner countries. Through their work, the volunteers not only built partnerships with local people but also broadened their perspectives, infusing new vitality into Taiwan's foreign aid.



Case Study

#### **Rural Infrastructure Project in Honduras**









Echoes UN SDG 1: End poverty in all its forms everywhere; 6: Ensure everyone has access to sustainable drinking water and health facilities; 7: Ensure access to affordable, reliable, sustainable and modern energy for all; 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.



TaiwanICDF works with CABEI to provide safe drinking water and sanitation services in rural Honduras, making the living environment healthier for residents.

The elimination of poverty is a problem faced by the whole world and one that cannot be ignored as we pursue sustainable development. Taking Honduras as an example, in 2003, an estimated 70 percent of the population lived under the poverty line, with poverty in rural areas and medium-sized cities reaching as high as 77 percent. Rural areas also tend to lack access to electricity, transport, water and sanitation services, exacerbating poverty and inequality between the urban and rural areas.

In 2001, the Honduran government approved the Poverty Reduction Strategy Paper (PRSP) which emphasized two areas of strategic focus: Strengthening rural infrastructure and decentralization. The hope was to meet the basic daily needs of rural residents by improving access to roads, water and sanitation, and electricity through a coordinated and decentralized delivery of rural infrastructure, conferring the responsibilities of delivering services to local governments. As such in 2010, the TaiwanICDF and Central American Bank for Economic Integration (CABEI) jointly provided a concessional loan in parallel to the loan from World Bank and the grant from the Global Environment Facility (GEF), with counterpart funding from municipalities and beneficiaries. The aim was to bring together the experience, resources and respective strengths of development partners

and local stakeholders, to provide rural people with wider access to quality, integrated and sustainable infrastructure services.

# Community participation in infrastructure planning and execution greatly improves quality of life of rural residents

This project covers the nine provinces of Honduras, with funding from the TaiwanICDF and CABEI going to mancomunidades (voluntary associations of municipalities) in the poor areas of three provinces, to help promote local infrastructure. By the end of December this year 208 km of transmission and distribution lines had been constructed, providing 1,991 households with electricity; 1,050 households had been provided with drinking water and 2,341 had sewage systems installed. A total of 111.6 km of rural roads had been rehabilitated and almost 13.900 people received training, with more than 51,100 rural residents benefiting. It is estimated that the project will be completed in 2019.

This project was community-driven and involved local participation in planning and construction, which enhanced the ability of local residents to plan and provide infrastructure services.

Once infrastructure activities were completed, they were handed over to a local committee to manage and determine a fee collection mechanism. This seeks to ensure sustainability of the works and enhance the quality of life of rural residents.

Number of rural residents benefitted from the completion of infrastructure in 2019

51,100 people

 $\sqrt{3}$ 

### Diplomatic Alternative Military Service Project: Taiwan Youth Overseas Service (Alternative Military Service)



Draftees at a training completion ceremony, all set and ready to serve overseas.

In order to expand participation in international affairs and the perspective of Taiwanese vouth, the TaiwanICDF has long helped the government promote the Taiwan Youth Overseas Service. Since 2001, this has included dispatching outstanding conscripts with expertise in horticulture, animal husbandry, aquaculture, plant pathology, public health, nutrition, ICT, management and foreign languages to take part in overseas technical missions. Over the years many foreign affairs technical personnel have been trained, promoting civilian-based diplomacy.

In contrast to the period served by general substitute servicemen in Taiwan, the diplomatic alternative military service period includes intensive training at Chenggongling followed by four weeks of specialized training, then service overseas for nine to 11 months. In 2017, the TaiwanICDF sent 86 conscripts overseas as part of the 17th group (January-September 2018) and in 2018 dispatched 69 individuals as part of the 18th group (October-December 2018), for a total of 155 servicemen.

## Alternative military service conscripts praised by diplomatic allies

The conscripts performed outstandingly this year. For example, Kai-Chih Chan visited 39 bean seed banks and more than 300 farmers

in Nicaragua to conduct a market demand perspective analysis of the benefits from improved seeds provided by seed banks. He also used data visualization in the presentation of his research results to enhance project promotion and counseling benefits. Jia-Rong Yang, a member of the same group, optimized the salt-jar test to determine the moisture content in bean seeds, which became an annual technical promotion focal point for Nicaraguan Institute of Agricultural Technology. Ying-Tsang Lo, who served in Paraguay, assisted in the development of a medical information management system and wrote a research report, greatly improving administrative management efficiency in hospitals. Yu-Ren Chuang in Nauru designed microwave cooking recipes to improve the cooking method of vegetables at the Nauru Dialysis Center; while Chia-Han Hou in the Solomon Islands was proactive in graft seedling production and visiting schools to promote guava as part of a fruit and vegetable diet. The hard

work and contributions of these individuals have all been praised by their host countries.

During their time overseas, these conscripts serve as assistant technicians and carry out their tasks in host countries

under the leadership of Taiwan's embassies and Taiwan Technical Missions. Other than contributing the latest knowledge and techniques learned at school to various projects, these individuals also experience first-hand the different culture and customs of the countries where they serve. The richly diverse overseas training helps them improve their foreign language skills, professional expertise and ability to adapt to life overseas. Since the establishment of the diplomatic alternative military program, a total of 1,420 youths have been sent overseas. Invariably after joining the workforce these individuals become leading figures in foreign affairs in the public and private sectors, and a source of renewed vitality among expert technical personnel sent on overseas aid missions by Taiwan.

Number of individuals posted overseas

1,420 persons

3 Case Study

#### **TaiwanICDF Overseas Volunteers Program**



Volunteer I-Ting Wang (first left) helps the St. Kitts and Nevis Ministry of Tourism organize a Food Week.

Since the establishment of the TaiwanICDF Overseas Volunteers Program in 1996, the TaiwanICDF has sent long-term volunteers to serve overseas based on our five priority areas, the needs of diplomatic allies or friendly countries and the volunteers' aspirations. The program also dispatches project-based volunteers with relevant experience and expertise to help with the work involved in different phases of the

To date the TaiwanICDF has sent a total of 743 volunteers to serve in 39 countries. In 2018, 26 new volunteers were dispatched under the program, with 51 volunteers working overseas in that year in 14 allied countries.

### Cultivating international affairs and leadership talent

TaiwanICDF volunteers serve in a wide range of fields, with most working in government units or agencies of diplomatic allies. During their posting individuals might be involved in analyzing departmental issues, providing implementation suggestions, or innovating work processes to improve efficiency. This allows volunteers to establish partnerships by sharing in the ups and downs of daily work with local personnel, while also enabling them to develop a new outlook. A survey of volunteers' career development after returning to Taiwan indicates that some choose to devote themselves

to international affairs or business although some return to their original professional fields. For example I-Ting Wang, who served in St. Kitts and Nevis, returned to the travel agency where she originally worked and made the best out of her overseas experience. Her perseverance and problem-solving skills learned from her volunteer service have enabled her to become an important overseas sales representative at the company. Others chose to study for a related degree or registered to take the foreign service examination. For example, Yuan-Ting Huang was a volunteer in Nicaragua who after returning to Taiwan became a foreign affairs officer, working to promote diplomatic relations.

Other volunteers decide to work at the TaiwanICDF or other non-governmental organizations. For example, on returning home Kuen-Muh Zen, who volunteered in Panama and Hsiao-Chu Chiu, who served in Honduras both joined the TaiwanICDF, were stationed overseas and today use their related expertise in the

field of development aid. In addition, many former volunteers find work that involves overseas companies or organizations, such as Ching Hwa Lin who formerly volunteered in Palau and is now currently employed as a public health coordinator stationed in Taiwan by the Palau Ministry of Health, in which capacity she assists with medical referral related matters between Palau and Taiwan.

For 22 years, the TaiwanICDF has dispatched volunteers to serve overseas in the fields of education, public health and medicine, agriculture, ICT, and the environment, cultivating much international talent in the process. This year, in order to attract even more young people, the TaiwanICDF held public lectures in collaboration with nine universities and colleges across Taiwan. At these events, returning volunteers are given an opportunity to speak directly to young people in Taiwan and share their experience of living and working overseas. It is hoped the lectures will help the younger generation to have a better understanding of the overseas volunteers program, thereby increasing the interest and willingness of young people to participate in the program in the future.

Number of volunteers dispatched since the inception of the TaiwanICDF Overseas Volunteers Program

743 volunteers

 $^{8}$ 

## **3** Special Reports

## As Taiwan's specialized foreign assistance agency, the TaiwanICDF combines international development aid trends and its mission to strengthen international cooperation and enhance foreign relations, achieving bold breakthroughs and rethinking the focus and direction of assistance work while proactively supporting Taiwan's steadfast diplomacy. This year, we focused on assisting diplomatic allies and friendly countries enhance environmental resilience and strengthen their ability to adapt to change. The TaiwanICDF also adopted an innovative model in working with utilizes their experience and resources to enhance global partnerships, involves the private sector in Taiwan, strengthens capacity building in cooperating countries, and expands public-private cooperation, while also taking a more flexible approach to respond to the needs of partner

# Focus

## Improving environmental resilience and capacity to adapt to change

As global natural and man-made disasters become increasingly complex and more frequent, there is no single solution to solving these problems. In the SDGs, the UN includes building more resilient infrastructures, making cities inclusive, safe, resilient and sustainable, and also improving capacity on climate change risk management and early warning as important targets, highlighting resilience as an issue of focus.

### Aspect 1/

Using technology such as satellite, Geographic Information System (GIS) to improve urban and agricultural disaster resilience

Making good use of Taiwan's satellite and GIS technologies, the TaiwanICDF provides partner countries with geographical disaster risk monitoring, carries out surveys on climate change, establishes early warning systems, develops community disaster-prevention mechanisms, and provides education and training to equip people with survival skills as well as improving disaster response capacity.

An example of reducing damage caused by extreme climate and infrastructure construction in both inland low-lying and densely populated areas is Belize in Central America. The TaiwanICDF cooperated with the Belizean government on the Capability Enhancement in Using Flood Warning Technology project, using GIS to set up an early warning system and improve engineering structures in disaster-prevention demonstration sites. Moreover, in 2019, the TaiwanICDF will initiate a project to improve disaster prevention and resilience in the cities of Belize.

With the help of technology, resilience and recovery capacity of cities will be improved gradually.

In agriculture, the TaiwanICDF cooperated with the Government of St. Kitts and Nevis to implement the Enhancing Agricultural Adaptive Capacity to Climate Variability Project. Through establishing weather stations and collecting meteorological information, we can predict the potential of impending disasters. Additionally, with a geographical information application system, we are able to mark high-potential areas where disasters might occur, produce a map of plant hardiness zones for growing suitable crops, and establish a crop growing calendar aimed at disaster prevention. These methods have strengthened the adaptability and resilience of the country's agricultural system in the face of climate change. Moreover, we assist farmers with capacity building by carrying out planting experiments under disaster simulations and developing or introducing appropriate crops and disaster-prevention techniques.

### Aspect 2/

Emphasizing community connection and participation to help improve disaster resilience in vulnerable communities

Another of Taiwan's diplomatic allies is Honduras in Central America, in which the Dry Corridor in the south has been facing a drought crisis for years. Therefore, the TaiwanICDF cooperated with CARE Honduras to implement the Improving Community Resilience in the Dry Corridor of Honduras Project.

This project focuses on 15 vulnerable communities severely affected by droughts in the

40



Dry Corridor of Honduras. The implementation arrangements include assisting Local Emergency Committees (CODELES), organized by community members, to improve their ability of collecting data on agroclimatic variables, with the aim of turning each CODEL into a hub for integrating disaster risk reduction resources. In addition, the project aims to strengthen community members' knowledge and skills on risk management related to climate variability through conducting training workshops on drought early warning systems, drawing community risk maps, defining community drought mitigation and adaptation actions, and organizing a simulation focusing on drought emergency. Also, through providing geomembrane bags for harvesting rainwater and micro-irrigation infrastructure to the communities, and promoting smart agricultural practices, the availability of water resources and the efficiency of water use were increased.

### Aspect 3/

Promoting suitable adaptation measures in the fragile islands of the Pacific and providing loans to Central America for disease-resistant crops

In the Pacific region, primary partner nations of the TaiwanlCDF include Palau, Nauru, Tuvalu, Marshall Islands, Solomon Islands, Kiribati, Fiji, and Papua New Guinea.

Technical cooperation projects pursued by the TaiwanlCDF in the six nations, including Palau, Nauru, Tuvalu, Marshall Islands, Solomon Islands, and Kiribati, are based upon the assisted production model. Under this model, the technical mission stationed in these countries establish demonstration farms and

provide consultation to farmers to improve agriculture, livestock farming and aquaculture techniques using methods suitable to the place. In addition, the technical mission promotes the biological cycle concept of the circular economy approach to reduce the use of electricity and fertilizer on farms, enhance availability of food and highgrade food proteins in the local area, and mitigate hunger and extreme poverty in these countries or regions.

Furthermore, we assist small-scale coffee producers in Central America to decrease the impact of coffee rust disease. The TaiwanICDF cooperates with Central American Bank for Economic Integration to provide farmers with loans to replace the plants with disease-resistant varieties and undertake integrated field management practices. The methods help increase resilience of coffee plantation to climate change, with the aim of helping the coffee industry in Central America to restore productivity.

### Aspect 4

Referring to the experience of international organizations and focusing on capacity building in smart agriculture and water resources application

Since Taiwan is located in a compound disaster area, which is a vulnerable area of high risk under climate change, over a good few years we have accumulated valuable experience in developing smart water safety management. To help our diplomatic allies with capacity building, we planned our International Human Resources Development Program from the perspective of building a resilient environment and, in line with SDG 6, focused on smart

operations management and smart technology application as the main themes.

In the Workshop on the Application and Management of Smart Water, the TaiwanICDF shared Taiwan's ICT and new technology in water generators. We collaborated with Kaohsiung Capacity Center of Local Governments for Sustainability (ICLEI) on the workshop, providing international students with an understanding of the sustainable use of water resources in Taiwan. In addition, participants visited ChinaSteel Industrial Waste Water Purification Plant, where we shared Taiwan's smart technology for fresh water generators and how we achieve sustainable water resources management, thereby opening a new page in the water resources industry with innovative thinking and development model.



## "Project will increase drainage ability in low-lying areas, saving people's lives and property"

In recent years the world has been affected by climate change and increasing frequency of extreme rainfall. Due to urbanization, widespread construction has changed the hydrologic cycle in our diplomatic ally Belize. Since the drainage system is old, the inland low-lying areas and densely populated areas are threatened by floods, river overflows and mudslides.

To minimize the impact caused by extreme weather, the Belizean government, the town of San Ignacio and the TaiwanICDF initiated a halfyear Capability Enhancement in Using Flood Warning Technology project in July this year. With industrygovernment-academia collaboration between Taiwan and Belize, we held the Belize Flood Prevention Seminar and flood disaster prevention training courses, and established potential flood maps in preparation for the next stage of cooperation on the Belize Urban Resilience and Disaster Prevention Project. The aim is to build capacity in the use of a geographic information system, based on the types of natural disasters in Belize and existing software and hardware conditions of its disaster prevention units, to assist in marking out the

potential flood areas and strengthen monitoring, as well as establish an early warning mechanism for floods. Furthermore, foundation engineering improvement was carried out in demonstration sites together with capacity building and training courses to enhance the technical capabilities of Belize's disaster prevention and protection units.

### Involving both government and citizens

The project will start in 2019 and will last for three years. Project contents include strengthening overall flood preparedness and prevention and updating basic maps, applying advanced monitoring techniques, carrying out flood control in flood-prone areas, and raising awareness and knowledge of disaster prevention. With regards to this project, Earl Trapp, the Mayor of San Ignacio and Santa Elena, points out that the government has been dealing with the flooding problem for years, including carrying out rectification engineering and building a drainage system etc. However, there are still old drainage systems and steep mountain areas that are affected by heavy rain, causing floods and mudslides and putting residents' lives in danger. The mayor feels sad and helpless: "I believe when the project's benefits are seen, it will relieve the mental effects on the residents in the low-lying areas. They won't have to worry about their properties being inundated whenever it rains."

He also talks happily about the promise he made to citizens: Taiwan's government will assist our towns in solving the flooding problem; the government and citizens are ready to be involved in this project together and witness the changes and effects brought by the project when it is completed. He has expectations as well: "The project may not be able to solve the flooding problem entirely, but at least we're on the way to achieving success. When the project is finished, it will increase drainage ability in low-lying areas, save people's lives and property, and even boost economy and increase job opportunities. Through improvement plans in phases two and three, we will finally be able to reach an ideal situation."

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## "TaiwanICDF brings in expertise at all phases and is a good partner"

The Improving Community Resilience in the Dry Corridor of Honduras Project, implemented by the TaiwanICDF in collaboration with our ally Honduras in Central America, aims to increase the knowledge and skills to manage risks related to climate variability in target communities and improve the capacity of local emergency committees for monitoring and forecasting droughts. Moreover, through implementing small-scale infrastructure in the target communities, the project will assist them in preparing for disasters and further improve their capacity to recover from disasters.

To improve implementation efficiency and momentum of humanitarian assistance projects, the TaiwanICDF has frequently cooperated with international nongovernmental organizations (INGOs) in recent years. This project referred to the experience of CARE Honduras in building disaster resilience in the country. CARE Honduras has a highly developed operating model in drought risk management and has standardized the procedures for early warning mechanisms, and has continued promoting and replicating the mechanisms in local communities in cooperation with the central government to develop drought response plans.

An expert on climate change, water resources, sanitation and environment in the program quality unit of CARE Honduras, Eduardo Gonzalez provides advice on water storage facilities and related techniques in this disaster resilience improvement project.

## Smart water application and management strategies for long-term development

Gonzalez points out that the project is part of a long-term process which aims to develop, test and transfer knowledge of sustainable and adaptive practices, so that communities can implement simple and low-cost actions to adapt to cope with climate change; for example through optimizing the use of green water (soil humidity) and blue water (superficial sources). Moreover, simple practices that are easy to adopt for farmers are introduced and transferred through Farmers Field Schools, where they can learn by doing and later apply to their own houses and fields. In the same way, practical and small infrastructure works, e.g., geomembrane bags, are built and shared among community members to provide water resources for household consumption or agricultural irrigation, to preserve and

make better use of the water sources.

In late August 2018, Gonzalez participated in the TaiwanICDF's Workshop on the Application and Management of Smart Water in Taiwan. The two main themes in the workshop were smart operations management and smart technology application. Through in depth participation in the Taiwan experience, exchange between the two sides was enhanced.

In the course, he witnessed how various measures are applied in Taiwan to adapt to climate change and to make more effective use of hydric resources, and the strategy to 'bring people closer to water' captivated him most. He points out: "The strategy implements many actions to alter the rivers' surrounding environment so that it's easier for the public to access and enjoy the space. I believe this will effectively raise people's awareness of the importance of protecting the water resources."

Speaking of the experience of cooperation with the TaiwanICDF, Gonzalez says: "TaiwanICDF has supported the project not just with funding, but also bringing its expertise to all phases of the project. The TaiwanICDF has been a great partner for CARE not just in Honduras but globally, by supporting many initiatives around the globe."



## "Using the successful experience of Taiwan's agriculture to achieve continuing progress in Saint Kitts and Nevis"

According to the CARIBSAVE Climate Change Risk Atlas (CCCRA), which is funded by official foreign aid agencies in the UK and Australia, climate models predict the Federation of Saint Kitts and Nevis (SKN) will face challenges including rising atmospheric and seawater surface temperatures, lower mean annual rainfall, and stronger tropical hurricanes in the future. Facing such a sharp change in the environment, only few professional farming households can handle the situation. Ordinary farmers lack the capacity to adapt; therefore, they can only face challenges passively.

Minister of Agriculture, Health, National Health Insurance, Human Settlement, Community Development, Gender Affairs, Social Services, Cooperatives and Lands Eugene Alastair Hamilton indicates that SKN has included agriculture under its adaptation contribution in the country's Intended National Determined Contributions; thus there is an urgent need for technical training and research, capacity building, and professional consultation for an adaptation program. Since Taiwan has been cooperating with SKN for years, SKN sought assistance from Taiwan to implement a five-year Enhancing Agricultural Adaptive

Capacity to Climate Variability Project that helps to improve the resilience of its agricultural system.

#### Early warning and disasterprevention cultivation techniques, increased availability of agricultural information

To establish an early warning data gathering mechanism, project components include setting up agricultural weather stations; creating a map of plant hardiness zones for growing suitable crops and a crop growing disaster prevention calendar; providing capacity building for staff in weather station operation and maintenance; and performing data analysis, agricultural disaster and loss surveys, and crop growing experiments. Developing or introducing crop disaster mitigation and prevention techniques will involve setting up a model farm and demonstration fields, and annual reports on crop disaster mitigation and prevention techniques. As to increasing the availability of agricultural information, besides formulating plans and strategies for agricultural information dissemination, establishing an agricultural information integration platform and agricultural disaster mitigation and

prevention information dissemination mechanism, activities that promote application of agricultural information will be held and project related personnel assisted with capacity building.

"The early warning system is designed to alert farmers of impending disasters or hazards and allow them time to prepare. As for the agricultural information integration platform, it disseminates all kinds of agricultural information on the latest technology or best practices for farmers and extension officers." He thinks more importantly that this project provides farmers with practical mitigation and adaptation strategies, which fits into the third national communication and implementation plan SKN is currently preparing for the United Nations Framework Convention on Climate Change, which emphasizes building local resilience through adaptation and mitigation. Facing the future. he says confidently: "With Taiwanese development and success in agriculture, the continued strategic collaboration in capacity building for local agricultural extension officers and farmers could be of benefit to the agricultural sector in the long run."

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## "Hope to use capacity building to share Taiwan's experiences on climate change response with cities around the world"

Established in 1990 and headquartered in Bonn, Germany, the International Council for Local Environmental Initiative (ICLEI) is the leading global network of cities, towns and regions committed to building a sustainable future. Members include over 1,000 local and regional governments in 86 countries.

As one of the member cities of ICLEI, Kaohsiung Capacity Centre (ICLEI KCC) was established in Kaohsiung and is hosted by the Kaohsiung government. Besides providing training and information exchanges and holding symposiums on sustainable development in East Asia, it is also the only ICLEIrecognized capacity center in the region. In both 2017 and 2018, ICLEI KCC cooperated with the TaiwanICDF's International Human Resources Development Workshop Program to provide workshops on clean energy and smart water management for government officials responsible for related strategies and implementation plans, and technology and product R&D personnel from allied and friendly countries.

The acting director-general of ICLEI KCC Ching-Hui Liao indicates, Taiwan is doing extremely well with

regard environmental issues such as recycling and waste management in cities. Besides these two issues, Taiwan has also put in substantial efforts in action on climate change mitigation and adaptation, disaster prevention management and urban resilience, clean and sustainable energy, sustainable and smart transport, development of smart and livable cities, low-carbon development and the circular economy, and adaptation in small islands. "If ICLEI ranked over 1,500 cities in the world, Taiwan's would be in the top 10 percent."

## Promoting environmental sustainability with Taiwan as a platform for global interaction

She further points out, to assist Taiwan's diplomatic allies and friendly countries' decision makers with capacity building, the design of the projects on the one hand focuses on the Taiwan experience as the main theme, including taking members to visit domestic energy-saving industry, local environmental education and 100 percent renewable energy smart ecological communities, AQUA TAIWAN, and forums to show Taiwan's methods and experience in building

resilient low-carbon cities. On the other hand, the projects focus on bringing new knowledge to Taiwan, including inviting renowned experts in the field of sustainable energy development to Taiwan, holding numerous workshops, and sharing the latest development models for members' reference after they return to their homeland.

Liao indicates, in 2019 ICLEI KCC will focus on issues such as UNISDR Making Cities Resilient Campaign, mainstreaming climate change agenda in municipal operations, and Asia LEDs Partnership (including clean energy and clean mobility), and Front-Line Cities and Islands initiative. Liao hopes wholeheartedly that the TaiwanICDF will continue to use capacity building to contribute to solving climate change and other sustainability issues in cities worldwide.

# Focus 2

# Actively participating in international organizations to connect with the world

As Taiwan's professional foreign aid agency, the TaiwanICDF integrates trends in international development assistance with the objective of strengthening international cooperation and enhancing foreign relations. The TaiwanICDF works in harmony with Taiwan's steadfast diplomacy, daring to break new ground and rethink the focus and direction of our operations to take mutual responsibility for diplomatic relations.

This year, in view of budgetary constraints, the TaiwanICDF continued to seek external resources, increase opportunities to cooperate with international organizations and NGOs which are willing and more capable of providing resources, and increase the number and scope of cooperation projects. With our experience and resources, the TaiwanICDF aims to spread the risks of implementing projects and lower costs to create leverage.

#### Aspect 1/

## Inclusive and integrated local development and cultural heritage preservation

TaiwanICDF is taking concerted action towards the eleventh United Nations Sustainable Development Goal (SDG 11): sustainable cities and communities. The TaiwanICDF has been assisting partner countries with urban regeneration through cultural heritage preservation and by promoting community participation in project implementation to achieve inclusive and integrated urban development. The Belize City House of Culture and Downtown Rejuvenation Project, implemented in collaboration with the Belize Ministry of Tourism and Civil Aviation, is one such example.

This project draws on Taiwan's successful experience in urban development. With the assistance of a consulting team from National Taiwan University Building and Planning Foundation, in the initial project design stage, stakeholders were invited to join the planning and brainstorm tourism development strategies for the historic downtown of Belize City, which resulted in a proposal of an eco-museum that integrates a network of local colonial buildings. At the Ninth World Urban Forum (WUF 9) held by the United Nations Human Settlements Programme (UN-Habitat) in Malaysia this February, this project was shared with the international community as an example of sustainable tourism development. The Forum discussed how to strike a balance between tourism economy and cultural preservation for sustainable urban development.

### Aspect 2/

## Promoting green finance: using innovative models to cooperate with financial institutions

While environmental issues have attracted more and more attention internationally, the TaiwanICDF has worked with the European Bank for Reconstruction and Development (EBRD) for over twenty years. In 2011, the TaiwanICDF and the EBRD established the Green Energy Special Fund together. The Fund provides financing for projects implemented in public and private sectors of EBRD countries of operations, allowing them to adopt the best available green technologies in municipal and environmental infrastructure projects. For instance, green energy components include LED street lights, ultra-capacitor electric buses, waste-

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to-energy and so on, with subsidized interest rates proportional to expected carbon reduction as incentive.

Enterprises have shouldered the social responsibility for environmental protection in recent years, while the international community has been actively developing the green industrial value chain. In addition to support from government policies, capital investment is necessary. Green finance acts as a bridge linking the financial industry, environmental protection and economic growth. Since 2017, TaiwanICDF's Financial Intermediary Investment Special Fund—Small Business Account has supported the Green Economy Financing Facility (GEFF) promoted by the EBRD. Through financing offered through local financial institutions, GEFF aims to increase the willingness of Micro, small, and medium enterprises and households to voluntarily improve energy efficiency and use renewable energy. Moreover, through launching the GEFF Technology Catalogue, it connects both ends of supply and demand in the green industry, encouraging more supply chain participants to join in the low-carbon transition.

### Aspect 3/

Combining international professional skills networks and improving overseas agricultural technology projects

TaiwanICDF has assisted partner nations to improve techniques in various fields over the years, accumulating an excellent foundation of experience and connections. The implementation style has changed from development and donation to capacity-building partnerships, integrating development issues of

partner nations and international trends to more efficiently focus on the project's goals.

In response to the urgent food crisis caused by extreme climate, the TaiwanICDF has reevaluated agricultural cooperation projects and worked with partner countries on improvement of variety, policies and agriculture extension systems to find feasible aid methods to deal with extreme climate in the future. To think outside of traditional agricultural techniques, the TaiwanICDF uses concepts such as artificial intelligence, big data analysis and social enterprise development to enable agricultural transformation.

During exchange visits this year, the TaiwanlCDF and the International Center for Tropical Agriculture (CIAT) agreed to conduct research on climate change adaptation measures in Central America. The plan is to develop a cultivation method adapted to droughts and an automatic information system through production models, environmental sensors, mobile information devices and analysis of farming culture, to allow farmers to improve the sustainability and quality of their lives.

### Aspect 4

Leveraging experience and resources of international organizations, sharing agricultural transformation experiences in response to climate change

In order to help allied and friendly nations with capacity building, this year's International Human Resources Development Workshop Program focused on labor shortages in agriculture and problems caused by extreme weather. We held the Workshop on Smart Agriculture

Applications, helping improve agricultural productivity with technology. Moreover, considering the importance of water security, we organized the Workshop on the Application and Management of Smart Water, sharing the importance of climate adaptation and mitigation measures to help countries maximize the use of available water resources in their land use planning.

The contents of the classes are based on the experience and resources of international organizations. For instance, we invited the Regional Director for Asia of CIAT, Dindo Campilan, to our Workshop on Smart Agriculture Applications to share experiences of global agricultural development and transformation in response to climate change. As to the Workshop on the Application and Management of Smart Water, we collaborated with ICLEI KCC, using smart business management and smart technology applications as the main themes to enhance international participants' understanding of the sustainable use of water resources in Taiwan.



## "Thinking in Multi-Stakeholder Partnerships (MSPs), actively connecting with the world"

The United Nations established the World Urban Forum in 2001, which is the world's premier global conference on urban issues. It aims to examine the most pressing issues in the contemporary world; for example, rapid urbanization and its impact on communities, cities, economies, climate change and policies.

In February 2018, UN Habitat held the Ninth session of the World Urban Forum (WUF 9) in Kuala Lumpur. The Belize City House of Culture and Downtown Rejuvenation Project, supported by the TaiwanICDF, was presented as a case study during a training event in WUF 9, becoming the focus of members and experts in governments and NGOs.

Ying-Chih Deng is a former senior consultant of EU Climate KIC and currently an associate professor in the Technical University of Berlin's Institute of Sustainable Design and Urban Planning, and a visiting associate professor of National Taiwan University of Science and Technology. In the training event he held on 'Making Productive Tourism and New Culture Destination', he led participants to discuss how to combine community empowerment, cultural preservation and tourism

development to build a sustainable tourism development model.

## Sharing Taiwan's experience with the world

Speaking of the reason why he used the Belize City House of Culture and Downtown Rejuvenation Project as an example, Deng indicates that the project uses Taiwan's experience of establishing eco-museums. Through community participation in the project, repurposing of old buildings and improvement of public space, the project combines local knowledge, memories and skills to create an eco-museum in Belize City. It includes both historic preservation and residential livelihood, which makes it a great example of international cooperation in sustainable tourism.

"I think this kind of structured, localized and international collaborative development project should be encouraged", he further points out. During the presentation, plenty of UN members showed interest in the project, and some national representatives and European Development Fund (EDF) members expressed hopes of cooperating in the future.

He suggests to consider multistakeholder partnerships (MSPs) when implementing future projects in order to actively connect with global partners. Taiwan has accumulated a wealth of skilled personnel and experience in community empowerment and development of cultural industry. Systematic sharing of Taiwan's diverse experiences would not only assist allied and friendly countries, deepening global partnerships, but would also improve Taiwan's visibility internationally and create more information integration platforms for diplomacy and global contribution.

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"TaiwanICDF is taking a leading role in Taiwan's financial sector to create an international platform for green finance in Taiwan"

Having served in the Taiwan Stock Exchange and Taipei Exchange for over 25 years, Zhuyuan Zhu, the current deputy managing director of the Taiwan Corporate Governance Association and former board member of Business Council for Sustainable Development (BCSD) Taiwan, has deep understanding of how green finance is promoted worldwide and how Taiwan's financial industry should participate.

He points out that the participation of the financial industry in green finance should start with assisting the development of the green economy. Since the Paris Agreement, many countries are encouraging enterprises to make efforts in energy conservation, carbon reduction and the development of the green economy, and many innovative and transformative green industries have emerged.

"In the foreseeable future, it would trigger a chain of revolutionary green products and innovative services. This may be an important chance for Taiwan to reshape its industry and find competitive advantages." Zhu thinks that the "five plus two" innovative industries plan Taiwan has been promoting recently, covering

intelligent machinery, Asia Silicon Valley, green energy, biomedicine, national defense, new agriculture, and the circular economy, will be at the core of Taiwan's industrial growth in the next era.

## The next move for Taiwan's financial industry: green finance

The global financial industry has developed many innovative services in the areas of green energy technology, new agriculture and the circular economy, such as green financing, green bonds, green insurance, green funds and so on. Zhu reminds us that following the official release of the SDGs, Taiwan's financial players should also be considering the goals while developing their business model. In addition to traditional financial business, they should develop green financial services with their own characteristics.

Zhu was impressed by how the TaiwanICDF promotes innovative green financial projects globally through lending and investment, including offering concessional loans through local banks, assisting island countries to improve energy efficiency and promote household

solar energy equipment, cooperating with multilateral development banks (such as EBRD) to establish the Green Energy Special Fund (GESF), and providing concessional loans to municipalities. The TaiwanlCDF also participates in the Green Economy Financing Facility (GEFF) which offers technical assistance and concessional funding to enhance the willingness and capacity of financial intermediaries to provide green loans.

"I would be delighted to see TaiwanICDF take a leading role in Taiwan's financial industry in creating a platform for green finance and international cooperation." He suggests that the TaiwanICDF communicate more with financial authorities and financial players, sharing practical examples of green finance practices and methods of project financing to truly implement green finance.



## "Combining strengths to support global agricultural transformation and capacity building"

Established in 1967 and headquartered in Columbia, the International Center for Tropical Agriculture (CIAT) works in 73 countries and employs over 1,000 staff members. Long focused on food security and nutrition, CIAT works to ensure that all people can have access to affordable and healthy food through sustainable food systems. It also helps move smallholder agriculture from subsistence to profit, and helps communities, regions and countries strengthen resilience and adaptive capacity to the impacts of climate change and extreme events.

#### Using digital technology to assist development and transformation of agriculture in Central America

To provide Taiwan's foreign aid programs with more technical skills, TaiwanlCDF has cooperated with the members of the Consultative Group on International Agricultural Research (CGIAR) since 2017 (CIAT is one of them). Tailored training courses by Taiwan Technical Mission staff paved the way for cooperation between the TaiwanlCDF and CIAT, with the Rice Production Improvement Project (Nicaragua) being the first joint

project

Maya Rajasekharan, Program Management Director of CIAT, states that the project targets smallholder rice farmers in Nicaragua. The project conducts research on climate change adaptation measures and attempts to develop farmer feedback mechanisms, such as the design of a warning application (cellphone app) for upland rice-specific regions to control risks. She emphasizes in Nicaragua in particular, the organization's use of solid techniques, research and educational training for specific crops (e.g., rice), as well as vast amounts of data generated from a network of research plots, can be combined with CIAT's expertise in smart agriculture, big data application, sustainable agricultural production and eco-system services, and together with the Nicaraguan Institute of Agricultural Technology (INTA), provide more complete support to projects.

Using digital tools not only shortens the research cycle and helps accelerate learning, data mining techniques can help bring together different kinds of data and explore the data in new ways. For instance, incorporating climate variables into variety trials may allow for a better

interpretation of the behavior of different varieties in different agroclimatic regions of the country. Crop modeling techniques, based on past research, can help to identify promising varieties or agronomic practices more quickly for specific sites within the country.

Rajasekharan is excited about the cooperation with the TaiwanlCDF and says: "Working together, CIAT and TaiwanlCDF can integrate our capacities and generate synergies, and provide a more integrated or stronger support to the national research institutions in Central America. It would assist important partner countries with capacity building for transformation in agriculture, so they can respond to challenges brought by globalization and climate change."

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## "Facing global agricultural development, we share a common mission"

In late August this year, Regional Director for Asia of CIAT Dindo Campilan came to Taipei from Hanoi to speak at the Workshop on Smart Agriculture Applications. Using 'Global Agriculture Transformation—Managing impacts of climate change' as the theme, he held group discussions on the impacts of climate change, global transformations in agriculture and the future of agriculture with the 27 participants from around the world and TaiwanICDF staff members. He also proposed the application of advanced smart technologies to effectively adapt to and mitigate the likely impacts of climate change, to be better equipped for development and transformation in agriculture.

Campilan has been devoted to international agricultural research for development for over 20 years, particularly on themes related to agrifood systems, value chain and natural resources. In the workshop, he interacted closely with TaiwanICDF partners from around the world to understand their agricultural development needs, and discussed how to make agriculture more productive, sustainable and resilient. In addition, he asked questions

and shared experiences on smart technologies, resources, capacities, support services, and policies.

### Agriculture with climate resilience for the future

Campilan states that agriculture in the developing world faces the critical question: How to produce more, with less, in an uncertain future? Within the overarching challenge of climate resilience, agriculture faces the responsibility not only to feed the world but making the world well-fed. In other words, we not only have to produce more food but also ensure that this food is nutritious, safe and healthy enough. It requires farmers to rethink the role of agriculture in national development - to nourish people and help them lead healthier, productive lives. Therefore, CIAT helps smallholder agriculture continue to be productive and profitable for the longer term through partnerships with and among countries. This is done through smart innovations to enable farmers to better manage weather, soil, water, carbon and related climatic risks.

Campilan believes that CIAT and the TaiwanICDF share a common mission, to help build a world of economic prosperity, social equity and environmental sustainability – through technological cooperation for knowledge-sharing and capacity building. If the two organizations could organize joint program planning events, facilitate staff exchange visits, and establish knowledge-exchange platforms, "Once we combine each other's expertise, experience and resources to address the developing world's pressing issues in agriculture, food and environment, I believe the effect would be widespread and of huge potential!"

# Focus 3

## Using Taiwan's experience to assist global chronic disease prevention

Noncommunicable diseases (NCDs) have become a threat to health globally in recent years. According to the World Health Organization (WHO), NCDs killed 41 million people in 2016, equivalent to 71 percent of all deaths globally. 15 million people die from an NCD between the ages of 30 and 69; over 85 percent of these "premature" deaths occur in low- and medium-income countries.

To call for global attention to the socio-economic impact of NCDs, the World Health Assembly (WHA) endorsed the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 in 2013, and set Target 3.4 of the SDGs to reduce premature mortality from noncommunicable diseases by one third through prevention and treatment, and promote mental health and well-being.

To address the global burden of NCDs, on the one hand, the TaiwanICDF cooperates with domestic hospitals and uses Taiwan's experience to assist allied and friendly countries to strengthen chronic disease prevention and control by implementing public health projects. On the other hand, the TaiwanICDF focuses on nutrition improvement, bringing nutrition education to horticulture projects executed in partner countries in the Pacific. The TaiwanICDF hopes that through establishing healthy eating concepts in schools and daily life, it can gradually reduce the prevalence of NCDs in fragile island nations.

### Aspect 1/

Cooperating with domestic hospitals, drawing on Taiwan's experience in disease prevention and control

In response to actions and

goals proposed by the WHA and SDGs, the TaiwanICDF has been cooperating with hospitals in Taiwan to implement public health projects since 2016. Till 2018, there were four projects under implementation, including the Capacity Building Project for the Prevention and Control of Chronic Renal Failure in Belize, in collaboration with Far Eastern Memorial Hospital, and the Capacity Building Project for the Prevention and Control of Diabetes in St. Vincent and the Grenadines, which is jointly undertaken with MacKay Memorial Hospital.

The above-mentioned projects are built on the bilateral cooperative model. Partner countries can dispatch healthcare personnel to Taiwan for training, and Taiwan's medical experts can visit the country to offer professional advice. In this model, health personnel from partner countries can learn and make use of Taiwan's valuable experience in the prevention and control of NCDs. For instance, in 2018, eight medical staff from the St. Vincent project trained at MacKay Memorial Hospital to learn the integrated diabetes care model that Taiwan has developed over the last 20 years. After returning home, they taught local medical personnel in St. Vincent by conducting workshops, benefiting locals with Taiwan's experience.

During the implementation of the Belize Project, Far Eastern Memorial Hospital dispatched 16 medical consultants in all to conduct on-site monitoring. In addition to supervising the workshops run by Belize healthcare personnel, they offered professional advice for the improvement of the dialysis center in Belize, the continued education of registered nurses, and the analysis of epidemiology surveys. The Ministry of



Health of Belize highly valued the first ever preliminary findings to identify the epidemiological risk factors for chronic kidney disease, which provide the basic evidence for policy development.

#### Aspect 2

## Introducing nutrition education to instill the concept of a balanced diet

Taiwan's Pacific allies are mostly coral reef cays. Due to soil depletion, poor plant growth, and low average income, the staple food of residents are grains and canned goods. The low intake of fruits and vegetables, combined with a lack of basic nutritional knowledge, has led to nutritional deficiencies, increasing the prevalence of hypertension, diabetes, obesity, and other NCDs. There is an urgent need to improve malnutrition in the South Pacific.

Taiwan's ally, the Republic of Kiribati (Kiribati), is an excellent example of how the TaiwanICDF's technical cooperation has been improving with time. While implementing horticulture projects in the Pacific Islands in 2015, the TaiwanICDF designed the Nutrition Enhancement Project for Kiribati, combining the existing production and supply of fruits and vegetables with nutrition education in schools. The TaiwanICDF also dispatched dietitians for the first time to help design recipes, encouraging island residents to improve their diet and helping decrease the rate of NCDs.

TaiwanICDF sent out staff members to Kiribati in 2017 to evaluate the effects of the Horticulture Project. After field visits, the TaiwanICDF found that the Government of Kiribati has linked the results of the project with the SDGs. The beneficiary households' intake of fruits and

vegetables is prominently higher than non-beneficiary households, meeting the goal and design of the project. To enhance the benefits of the project, we not only expanded the scale of beneficiary households and cultivation area, but also used school curriculums and campus gardens as platforms to introduce classes in horticulture, nutrition and cooking.

The Kiribati cooperating unit's goal for production of fruits and vegetables this year is 40 tons, increasing beneficiaries to 1,300 people and providing each person 85 grams (target aim 100 grams) of fruits and vegetables daily on average. In the future, the project plans to expand related promotion activities and community services to enhance the understanding of nutrition in Kiribati.



Technician Hsiang-Chi Chen (second from right) of Taiwan Technical Mission in Kiribati teaches cooking skills to the kitchen staff in Mormon High School.



## "Using the nutrition enhancement project to encourage balanced diet and the participation of civilians in agriculture"

Kiribati is defined by the UN as a small island developing state. The prevalence of chronic diseases has risen to over 70 percent over the years, in which the mortality rate of diabetes is the highest among South Pacific island countries.

Since 2004, the TaiwanICDF has been conducting the Horticulture Project in Kiribati, assisting the nation to promote the intake of fruits and vegetables and improve the diet of its citizens. The first 10 years of the project aimed to create a demand for seedling, including establishing demonstration farms, distributing free seeds, and teaching cooking lessons. After the ten-year process, the TaiwanICDF transferred the relevant techniques to farmers, allowing them to reach self-sufficiency. We helped them to establish nursery centers, a production and marketing center, and access to restaurants and markets, creating a complete production and supply chain of fruits and vegetables.

In response to one of the SDG targets - improvement of nutrition - the TaiwanICDF has emphasized the issue of balanced diets in the Pacific Island countries since 2015 through the horticulture projects. The Nutrition Enhancement Project in Kiribati

focuses on the younger generation. Based on the Horticulture Project, the TaiwanICDF chose to increase production of 12 kinds of vegetable to expand the supply of school lunches, and assigned dietitians to increase the vegetable intake of students and adults through nutrition education and promotional activities. In addition, dietitians introduced a nutrition survey system and developed healthy menus that take into account Kiribati's eating habits to achieve a balanced nutritional intake.

## Improving eating habits through health education in schools and the community

Minister of Environment, Lands and Agriculture Development of the Republic of Kiribati, Hon. Alexander Teabo expressed his thanks: "For the people of Kiribati, the Nutrition Enhancement Project has not only increased the level of awareness, knowledge and skills in farming vegetables and their nutritional values, but has also greatly increased the level of participation in agriculture amongst communities and island councils."

Minister Teabo considers NCDs as a major health concern in South

Pacific countries. In local dietary culture, awareness of the health benefits of fruit and vegetable intake is often insufficient. To effectively solve this problem and bring about changes in people's eating habits, children and students must be targeted as they are the future leaders of the country. Community and school education programs can be designed to include extra-curricular activities on farming of vegetables, farming and cooking competitions, having information and video clips (on farming and cooking and nutritional training) readily available on the Ministry's website, as well as providing plentiful and affordable fruit and vegetables.

Minister Teabo states: "We've learned a wealth of experience and technical expertise from Taiwan over the years. We hope to have more opportunities for closer collaboration in the future to assist Kiribati in the design and implementation of programs, creating a healthier and happier future for our people."

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"Borrowing from Taiwan's medical expertise to tread a new path of people-to-people diplomacy"

Taiwan's diplomatic ally St. Vincent and the Grenadines (SVG) officially started the three-year Capacity Building Project for the Prevention and Control of Diabetes in February this year, becoming the first country to run a diabetes prevention and control project in the Caribbean. The organizations involved include the TaiwanICDF and MacKay Memorial Hospital, which has been conducting overseas medical aid and improving the quality of medical care for Taiwan's diplomatic allies and friendly countries for years.

Vice superintendent of MacKay Memorial Hospital Dr. Wen-Han Chang stated that since diabetes is one of the top 10 causes of deaths in SVG, the government has included the disease in its National Health Sector Strategic Plan 2015-2019. In addition, since diabetes is one of the priorities of chronic disease prevention and control in development assistance, Mackay Memorial Hospital decided to cooperate with the SVG Ministry of Health and the TaiwanICDF.

"The challenges SVG is currently facing include a lack of integrated care strategies and practices. In addition, improving integrated care capability in hospitals and improving

health education in communities are urgent tasks that have to be addressed quickly." In April 2017, Dr. Chang dispatched Dr. Chun-Chuan Lee, Chief of Division of Endocrinology and Metabolism and other experts to SVG to evaluate the situation. After a number of meetings and discussions, a suitable draft of the prevention and control project was produced.

#### Establishing a complete diabetes care network in government, medical institutions, and communities

Dr. Chang indicates the three main aspects of the project: Firstly, for government decision-makers, the focus is to assist in planning effective integrated care strategies and practices for the prevention and control of diabetes. This includes inviting SVG officials to Taiwan to understand our relevant policies and strategies, holding an international conference, and providing an integrated diabetes care model report with recommendations. Secondly, with regard to medical institutions, the project will strengthen integrated diabetes care ability in healthcare facilities. This will be achieved by conducting an interventional study of

diabetes, improving the capability and hardware equipment of integrated chronic disease care teams in district hospitals, planning training in diabetes integrated care, assigning healthcare personnel to train in Taiwan, and sending consultants to evaluate the local situation. Thirdly, in terms of the community, the project will improve community healthcare self-management for the prevention and control of diabetes, including capacity building for health education personnel. This involves training seed instructors in Taiwan, planning health promotion courses, dispatching consultants to monitor the situation, holding health education and promotional activities in the communities, using mass media or social media to promote health education, along with health education in coordination with screening activities.

"Taiwan has extensive experience in the management of diabetes. MacKay Memorial Hospital is proud to share that expertise with Taiwan's diplomatic allies." Dr. Chang also expects colleagues in MacKay Memorial Hospital to learn valuable lessons and establish meaningful partnerships with diplomatic allies through participating in the project.



"Learning to be independent and helping others gives me courage to face the world"

A graduate of Taipei Medical University, Pei-Wei Sung has years of experience working in public health in Taiwan. She worked in Belize as a project-based volunteer from October 2017 to September 2018, assisting with the implementation of the chronic kidney disease project.

TaiwanICDF cooperated with Far Eastern Memorial Hospital and the Ministry of Health in Belize to launch the three-year Capacity Building Project for the Prevention and Control of Chronic Renal Failure in Belize. The project aims to assist Belize in establishing a system for the prevention and control of chronic renal failure by building the capacity of healthcare professionals, promoting health knowledge, establishing a case management system for chronic disease cases, and providing epidemiological reports. As part of the project, Sung assisted in conducting community survey, analyzing data, producing health education materials, and conducting health promotion.

She recalls that when surveying communities, she and the interviewers, nurses, and phlebotomists had to visit households and hand out questionnaires. Since

there were no house numbers, they had to rely on the short descriptions in the information given to search for the houses based on their location and appearance. If interviewees weren't at home or the appointments were delayed by traffic, weather or security issues, they would have to visit twice or even three times. To increase the number of valid questionnaires, when entering responses on laptops, interviewers not only had to design a foolproof mechanism to avoid human error, but also had to account for cultural differences during analysis by grouping data types and variations.

## Focusing on the details to create practical health promotion materials for Belize

Sung demands the highest standards of herself. She produced health promotion materials for education on chronic kidney disease in order to effectively remind residents of the importance of regular screening, early diagnosis and treatment, and of maintaining a healthy lifestyle. When designing the materials, she created the first draft by hand, and had numerous discussions with Far Eastern Memorial Hospital and the Ministry of Health in Belize

about the word choices and contents. She also communicated in person with the design company about the image layout and typesetting. Because health promotion materials are easily damaged when it rains, she also requested the use of waterproof coatings, and used vibrant colors in the material to relate to local residents' preference for high color saturation

Speaking of her ten-month experience of overseas volunteer work, Sung discovered that she was braver than she imagined. Facing cultural shock in a foreign country, she reminded herself to be open-minded and respectful. When confronted with frustration, she had to think entirely outside the box, be flexible, and communicate sufficiently to find solutions. "Helping others actually helps you to reflect on your own motives. Facing the pressure of living in a foreign land, only independence, autonomy and adaptability will help you create your own unique and unforgettable experience."

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# Focus 4

# Adopting flexible approach to respond to partner countries' needs effectively

In its foreign policy, Taiwan upholds the principle "steadfast diplomacy and mutual assistance for mutual benefits," participating actively and pragmatically in international affairs. In recent years, the TaiwanICDF has followed this principle and used more flexible ways of responding to the needs of diplomatic allies and partner countries rapidly and effectively.

The methods include integrating current projects and assuring early preparation, balancing diverse aspects of projects, introducing successful experiences and new techniques of Taiwan's industry, using TaiwanICDF's financing tools and resources of invested companies, effectively assisting diplomatic allies in developing a strong economic foundation, and using the innovative thinking and expertise of substitute civilian servicemen. The most important of these is that the TaiwanICDF takes the assessment methods of international agencies into consideration to evaluate completed projects in line with Taiwan's legislations and regulations. This helps to effectively manage the



Project manager of the Honduras Forest Pest Management Project installs a bristletail trap

results of project implementation and enhance the transparency of project management, improving the effectiveness of aid work.

### Aspect 1

Integrating current projects and assuring early preparation to quickly respond to the administrative needs of diplomatic allies

Taking the SME Development Project (Guatemala) as an example: When the Government of Guatemala presented its local development program, 'Mi Pueblo, Mi Producto' at the end of 2017, the TaiwanICDF immediately dispatched additional staff to the long-running SME Development Project. On one hand, we provided guidance to the established craft industry of this project: on the other hand, we made preparations for the new project. Aditionally, we conducted surveys on industry development, local cultural enterprises, resources inventory and media publicity. In addition, in collaboration with Taiwan's embassy in Guatemala and the Guatemalan government, we negotiated details and structure of cooperation for the project, and drafted a specific implementation plan with detailed contents, thereby accelerating the launch of the new project.

### Aspect 2/

## Introducing the latest tech trends into industry to add value to the project

When developing the Honduras Forest Pest Management Project in response to the severe pest problem in pine forests of central Honduras, the TaiwanICDF proposed forest health management, finding the

cause of the pest, and a platform to support forest management strategy. The solutions combine the strengths of Taiwan's industry-government-university collaborations in information technology, forest management and satellite technology to assist Honduras with sustainable forest development.

In July, in order to enable the use of large amounts of damaged pine trees, the TaiwanlCDF conducted a feasibility study to evaluate the lack of related industry and techniques in management of discarded pine wood. The TaiwanlCDF also introduced technical assistance from Taiwan's industrial and academic circles to commercialize approximately 450,000 hectares of infected pine trees. Not only did this make good use of timber resources and boost the timber industry in Honduras, but also created added value for the project.

### Aspect 3/

#### Making good use of TaiwanICDF's financing tools to assist diplomatic allies in developing economic infrastructure

TaiwanICDF responded quickly to the Government of Belize by providing a loan to an ICT infrastructure project which helps provide fiber to the home broadband service throughout the country. In order to expedite processing of the project, the TaiwanICDF set up a platform for close communication and consultation among Belize Ministry of Finance, the Belize Telemedia Limited, Taiwan's embassy in Belize, Taiwan Technical Mission to Belize, and the TaiwanICDF.

To respond to the 49th Pacific Island Forum held by the Government of Nauru to improve connectivity of

the local network in the country, the TaiwanICDF adjusted the applicable scope of the grant framework of the fund for microfinancing. It was originally meant for developing Nauru's private sector and was expanded to be used in the Fiber Optics Local Connectivity Project to have positive spillover effects on local business, health, education, tourism and other developments in the private sector.

Moreover, whenever diplomatic allies or partner countries are in need of economic infrastructure development, the TaiwanlCDF will communicate with the Overseas Investment & Development Corp (OIDC) to dispatch a team to assess the demands in order to provide suggestions on construction design or turnkey solutions, or take responsibility for the construction process.

### Aspect 4/

#### Making good use of the skills and creativity of substitute conscripts to add innovative thinking into projects

Every year, the TaiwanICDF dispatches alternative civilian servicemen to assist technical missions with projects overseas. Since 2016, the conscripts have been required to complete a project report to encourage them to integrate individual skills with their own observations of the local situation and requirements of the project. Under the guidance of mission leaders, project managers and technical staff, the servicemen provide many innovative and practical ways to solve problems.

Take Belize Motor Vehicle Registration and License System Project for example. When two conscripts with IT backgrounds

were traveling in Belize, they found it difficult to obtain information on bus timetable, and information on tourist attractions were sparse. As a result, they produced the country's first inter-city bus time mobile app, which pleasantly surprised officials in the Department of Transport in Belize and greatly enriched the original ICT project. Later, in conjunction with the sightseeing buildings that the Belize City House of Culture and Downtown Rejuvenation Project helped to restore, the two young men created a new tourist guide app focusing on the old city in Belize.

#### Aspect 5/

## Enhancing the effectiveness of project execution through systematic project evaluation

In recent years, to enhance the effectiveness of our aid work, the TaiwanlCDF has chosen to conduct theme-based evaluation. Recently, we assessed the impact of horticulture projects (Nauru, Kiribati, Marshall Islands) and food projects (Haiti, Nicaragua). The evaluation indicators focused on the change in behavior of participants and the framework was based on the Knowledge Attitude Practice (KAP) model.

To confirm the intervention effect of the projects, when analyzing the data, the TaiwanICDF uses counterfactual analysis to eliminate errors caused by background factors or other variables. The focuses of the assessments include confirming relevance between projects and the outcomes, effectiveness brought by the results achieved, efficiency in using resources to attain the objectives, and sustainability of the projects in the countries.

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"Using Taiwan's expertise in traffic management to improve service efficiency in Belize"

Since GDP in Belize has been rising, amounts of all types of vehicles are increasing, creating an urgent traffic management problem. However, the Department of Transport in Belize, which is responsible for traffic management and revenue collection and enforcement, lacks a national database. Vehicles and driving license records are mostly managed manually. Since information is scattered in different districts, it is difficult to file and search records, leading to inefficiency in administration and loss of revenue. Not only does this make it hard to track inter-district information and fines, it is also difficult to trace illegal license plates and stolen vehicles.

## Introducing e-software and e-hardware to improve traffic management system

Tirso Eugene Galvez, Chief Transport Officer of the Department of Transport, Belize, recalled that in order to improve the efficiency and effectiveness of its traffic management, Belize approached the TaiwanICDF in 2014. In 2017, the TaiwanICDF launched the Belize Motor Vehicle Registration and License System Project. Using

Taiwan's extensive experience in traffic management as a reference, the main focuses were the establishment of standard operating procedures for transport services, data digitalization and system informatization, capacity building, and information security. The TaiwanICDF proposed mediumand long-term project development strategies, introducing a motor vehicle registration and license system, information integration service, and a back-end centralized database and system equipment, as well as building up standard operating procedures for traffic management, system maintenance and information security. The TaiwanICDF also assisted in training system developers and seed trainers.

From the project's launch in June 2017, Galvez has felt the change evidently. In addition to the fact that all systems in the Department of Transport now operate online, what amazed him even more was the city bus schedule inquiry mobile app Bus Time Belize designed for commuters in Belize by the TaiwanICDF's alternative civilian servicemen. The app combines the functionality of the Bus Tracker Taipei, Taiwan High

Speed Rail and TimePage apps in user operation and interface design, allowing people who take buses to obtain timetable information rapidly on their cellphones, increasing the convenience of using public transport.

Although there is still some time before the project's final year, Galvez has high expectations and is happy about the current progress: "I am very satisfied with the current project execution; the project's purpose does meet the roadmap and vision of the DOT on road safety and transport management. As the project goes on, I believe it will improve the efficiency and scope of our services, breathing life into the governance of Belize!"



## "Assign staff in advance to help integrate resources and effectively accelerate project launch"

Micro-, small and medium enterprises in Guatemala represent 99 percent of businesses nationwide. They not only provide employment opportunities for the country, but are also the pillars of local economic development. However, the overall revenue of MSMEs only accounts for 35 percent of national revenue, which highlights their disadvantaged position in the market. Gloria del Carmen Zarazúa, Vice Minister of Development of Micro-, Small and Medium enterprises in the Ministry of Economy, points out that "Helping MSMEs improve their competitiveness is our main challenge."

She indicates that Taiwan has helped Guatemala to promote assistance to MSMEs for almost 20 years, benefiting a large number of MSMEs along the way. In all of the TaiwanICDF's collaborative projects with the Ministry of Economy, the TaiwanICDF is able to rapidly respond to the needs of the government, and has been of great support in promoting MSMEs.

## Localizing the project by using experience adapted to the local environment

Zarazúa takes Entrepreneurship Strengthening Law, approved officially on October 2 last year, as an example. The objective is to strengthen the entrepreneurship ecosystem and incubation, and after it was passed, the TaiwanICDF immediately proposed the Project for the Capacity Strengthening to Support the Incubation and Entrepreneurship for MIPYMEs to assist the Guatemalan government in combining resources of industry, government and academia to improve institutional capacity to provide entrepreneurship consultation for small and medium enterprises. In addition, the Project for the Revitalization of Crafts and Youth Entrepreneurship in Antigua slated for next year runs in parallel with the local cultural industry development policy, 'Mi Pueblo. Mi Producto'. which was presented in Guatemala in December 2017. Based in the old city of Antigua, the project aims to revitalize the traditional handicraft industry and further promote the local cultural industry through the participation of young people, integrated efforts of industry, government and universities, and branded marketing.

To accelerate the speed and efficiency of mutual cooperation, the TaiwanICDF has adjusted its operating procedure in recent years. Through dispatching personnel

ahead of time to the country, first collecting relevant information and completing all preliminary documents and procedures onsite, the TaiwanlCDF won high recognition from Zarazúa. She says: "Before the project even began, TaiwanlCDF assigned staff in advance to integrate resources of each department. In addition to speeding up the initiation of the new project, it helped strengthen the general public's understanding of government priorities and effectiveness."

She appreciates the help of the TaiwanICDF in bringing the experience from Taiwan to Guatemala over the years. Through localizing and adapting projects to local conditions, the TaiwanICDF has developed talents and helped the country accumulate technical skills for sustainable development. Furthermore, the TaiwanICDF has strengthened business operations of companies with a marketoriented concept and established a cooperation mechanism between the industrial, academic and public sectors. She believes these results will have positive impact on Guatemala and the sustainability of future projects.

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## "I sincerely hope that this project will help Honduras to improve the development of forest resources"

The area of Honduras is 110,000 square kilometers, 55 percent of which is forested. This includes 20,000 square kilometers of commercial pine trees, which accounts for a third of the total forest area. In 2014, due to the effects of climate change and droughts, Honduras suffered a severe pest problem. Over 22 percent of pine trees were infected by southern pine beetles, and the disaster even spread to Guatemala and El Salvador, having a huge impact on the forestry economy in Central America.

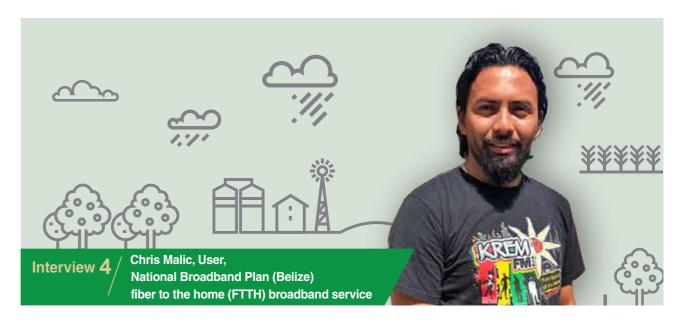
In 2015, the president of Honduras listed the pine tree pest catastrophe as a national emergency in an executive order. While high temperatures and droughts then alleviated the pest problem, Honduras still lacked comprehensive climate change adaptation and mitigation strategies. In addition, the country had insufficient capacity in forest health management, so the TaiwanICDF responded to its request with the Forest Pest Management Project in July, 2016. In 2018, the TaiwanICDF cooperated with the National Institute for Conservation and Forest Development, Protected Areas, and Wildlife (ICF) to implement the project, using Taiwan's satellite information and GIS technology. The project helped Honduras to establish a forest health information management system and a pest early warning mechanism to stabilize the production of timber, promote the reuse of damaged pine trees, and enhance the value of timber resources.

### Managing forests through satellite information and GIS

The project is based on the Capability Enhancement in Using Geographic Information Systems in Central America project that ran from 2015 to 2016. At that time, Honduras monitored mangrove forests on the southern coast using satellite imagery and technology provided by Taiwan, and was able to draw up related protection policies based on analysis of the changes in geographical distribution. The research findings were not only published by international journals, but also are cited by United Nations Environment Programme (UNEP). As a result, Mario Antonio Martínez Padilla, Minister-Director of ICF, has high expectations regarding the Forest Pest Management Project, and how

the tools related to climate change, the decision support platform for forest health management and the warning system will be used to control the pest threat in real time.

After less than a year of operation, the project is gradually enabling the Honduran government and the public to understand the damage climate change has on the forests. This is being achieved by checking ICF's existing data on forest environments, choosing demonstration sites for pest control, producing a pest risk map, and holding activities for forest health and project promotion. Padilla attaches great importance to the abilities and experiences of related technical staff. He sincerely hopes that the project can substantially improve the capacity and knowledge of related staff, and integrate related resources of industry and universities so as to promote sustainable development of forests.



## "Thanks to Taiwan for contributing to network infrastructure, allowing Belize to connect to the internet at high speed"

In recent years, the types of network applications have been constantly evolving. Services such as video and audio streaming, online gaming and cloud computing have emerged one after another. To cope with the needs of these applications to maintain constant connection and transfer huge amounts of data, network cables evolved from copper to fiber optics become the new mainstream.

#### Local netizens immediately feel the impact of Taiwan's financial assistance

Drawing on Taiwan's successful experience in information and communications technology (ICT) development and in line with the Government of Belize's goal to provide fiber to the home (FTTH) broadband service across the country, the TaiwanICDF provided a loan to Belize Telemedia Limited (BTL) to finance its National Broadband Plan in June this year. The loan sped up the process of replacing the fixed copper-based internet infrastructure with fiber optic network in Belize, greatly enhancing transmission speed and the capacity and coverage of the network, allowing more Belizeans to

enjoy a faster and better broadband service.

Chris Malic is a beneficiary of the fiber optic network project. He is a 28-year old marketing manager in a TV station. Due to the requirements of his work, he spends 70 percent of his time surfing the internet daily. His wife also uses WhatsApp and Facebook to contact friends, and YouTube to listen to music and watch movies. Naturally, the couple has strong feelings regarding network speed. Before the project started, their only choice of fixed broadband connection was cable internet. Chris recalls: "Although we upgraded the internet speed from 512Kbps to 1Mbps, most of our time was still spent waiting for the connection to load."

When they heard BTL was installing a fiber optic network in Ladyville, where they live, they subscribed to the service and upgraded their speed to 20Mbps. Since then, they can freely surf the internet in any corner of the house, and no time is spent waiting. The quality of Mrs. Malic's online learning experience at the University of Belize also improved as media streaming ran more smoothly. She could interact

online with teachers at home in her own time instead of rushing between different cities for both work and education.

The internet is deeply connected to modern ways of life. Malic thinks the high-speed network brings convenience and new opportunities to their lives. He sincerely states: "I appreciate the financial assistance Taiwan provided to Belize for this infrastructure project. To date, the internet speed has been beyond our expectations. We are now able to do more since the internet is faster and more reliable. It's infrastructure that facilitates the lives of the Belizean people."

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"Adapting projects to local context is vastly beneficial to our economy and social development"

Taiwan is a big producer and designer of global ICT products. Using the advantages of ICT development to assist partner countries in reducing the development gap and building up digital capacity has always been a goal of the TaiwanICDF. Projects always focus on partner countries, supporting their development strategies, cooperative agencies and executive procedures, allowing them to take the lead of development strategies and resources allocation.

Nauru hosted the Pacific Islands Forum (PIF) this year, which ended in September. In the preparation phase, Nauru hoped to improve its broadband network and the speed of data transmission; therefore, the country put forth the requirement for a project to the TaiwanICDF in May. The TaiwanICDF immediately examined projects implemented in Nauru, and discussed with the government the adjustment of the Microfinance Development Fund—pilot projects in Nauru to support the Fiber Optics Local Connectivity Project. This grant project will enable local connectivity using fiber optics, providing a faster connection for the nation and higher internet bandwidth.

#### Fiber Optics Local Connectivity Project replaces Digicel Mobile Wallet Project

Looking back on the Microfinance Development Fund—pilot projects in Nauru, launched in October 2008, it was proposed by the Government of Nauru after the country faced bankruptcy problems in 2004, turning the country into cash economy. In order to boost the economy, Nauru proposed that Taiwan support a microfinance loan project to assist with the development of Nauru's private sector.

After Bandigo Bank started operating in Nauru, the financial institution problem was solved. In addition, the Asian Development Bank was working on the Improving Internet Connectivity for Micronesia Project and had promised to help Nauru in installing a submarine internet cable connection. Focusing on localization and harmony, the TaiwanICDF adjusted the project according to Nauru's needs and synergy of resources in assisting partner countries. Through the adjustments, the TaiwanICDF provided a faster and more stable network environment and assisted in improving effectiveness of data transmission.

Joel Waga, Act/Director of Information Communication and Technology Department, has high expectations for the project. He says: "The project is very important to Nauru's ICT development. It will improve the quality and speed of data transmission in medical services and education, and many other sectors will benefit to ensure that information is sent back and forth at a better standard. Moreover, Nauru plans to connect the upcoming submarine cable with the local fiber infrastructure, resulting in more positive opportunities for the nation."



## "Project evaluations are standardized worldwide, helping to make projects as beneficial as possible"

Wen-Shan Yang, a research fellow at the Institute of Sociology of Academia Sinica, specializes in demography, sociology, family studies, statistics, and social survey and research methods. He participated in the TaiwanlCDF's expost evaluation of the Horticulture Project in the Pacific Island in 2017, and has been closely observing TaiwanlCDF's project performance evaluation in recent years.

He points out, in the past, international organizations used field research to assess projects with the participation of anthropologists, focusing on in-depth interviews and participant observation. As technology has developed, more research methods have become mainstream in project evaluation work, including experimental methods developed from statistical science, differences from comparing experimental groups and control groups, strict research settings in observational study, and statistical analysis for observational data.

Yang recalls assisting in the assessment of TaiwanICDF horticultural projects focused on changes in eating behavior of local residents, data collection of

field research, GIS data, and the use of counterfactual analysis to evaluate the eating habits of project participants and those who did not join the project. Yang says: "These research methods not only conform to international standards, but also help TaiwanICDF project evaluations keep pace with global standards."

## Conducting accurate evaluations to get the most out of resources

He further points out through evaluation of projects that it is possible to carry out repeated verification and accurate statistical control. The residents who joined this type of project underwent substantial changes in their intake of vegetables. Furthermore, regarding whether the project enhanced health or not, most residents held a positive attitude. From this alone, we can tell the aid projects carried out by the TaiwanICDF are effective to some extent.

Yang has discovered from participating in many project evaluations that the TaiwanICDF values project assessment highly and is impressed by the way evaluations are conducted. Department

directors host the evaluation meetings in person, engaging in thorough discussion and providing their experiences in the countries to complete advanced project assessments and acquire research results.

Since Taiwan's foreign aid funding is limited, Yang believes that only precise and effective assessment can enable every project and disbursement to produce the best possible results. He expects the TaiwanICDF to continue to conduct systematic performance reviews. Through acquiring more resources and manpower, Taiwan will gain the respect of the world under tough diplomatic circumstances.

# Focus 5

## Developing diversified global partnerships

Partnerships for the goals is listed as SDG 17, which links all of the other goals. Linking the interconnected goals helps the most impoverished and vulnerable groups, and achieves the ultimate mission to 'leave no one behind'.

Diversified cooperation is one of the key points in partnerships for the goals. To develop diverse collaborative partnerships, TaiwanICDF continues to strengthen its partnerships with INGOs, actively cooperates with Taiwan's private sector, and makes good use of international organizational resources to explore commercial possibilities for Taiwan's enterprises. The TaiwanICDF has also been cooperating with medical institutions for several years in order to contribute to international medical services. To expand the scale of assistance, the TaiwanICDF launched a fundraising campaign this year, hoping to integrate the resources and expertise of the private sector to advance towards sustainable development.



#### Aspect 1

## Cooperating with INGOs to enhance global partnerships

In recent years, the TaiwanICDF has frequently cooperated with INGOs to initiate humanitarian aid projects. There are four globally renowned INGOs that engage in long-term cooperation with the TaiwanICDF: Action Against Hunger, CARE, Mercy Corps and World Vision.

During the initial project design, the TaiwanICDF would dispatch its staff to conduct appraisal missions onsite and jointly review whether the direction and content of the project meet the actual local needs and are in line with the standards of the Sphere Project Handbook. In the project's implementation stage, short-term experts or project-based volunteers are dispatched to assist in the execution, and staff of the cooperating agencies are invited to Taiwan to attend professional workshops to further strengthen exchange between the two sides.

In addition, the TaiwanICDF actively searches for opportunities to work with international or regional NGOs. For instance, we cooperated with the US aid charity Food For The Poor (FFP), carrying out several aquaculture and horticulture projects in Honduras, Guatemala and Haiti. Utilizing FFP's extensive resources and widespread social network not only shifts funds into the projects, but also gains more exposure for the projects and

TaiwanICDF works with international organization to address global environmental issues. For example, the Green Economy Financing Facilities, jointly initiated with the EBRD, contributes to the green economy transition by helping small and medium-sized enterprises and households to invest in energy efficient and renewable energy technologies.

strengthens partnerships with partner countries, creating a collective effort to enhance efficiency of the projects.

## Aspect 2

Using international organizational online platforms to introduce Taiwan's private sector

TaiwanICDF has increased its participation in environmental issues in recent years, especially with regard to the scope of cooperation with the European Bank for Reconstruction and Development (EBRD) on green economy. In 2017, the TaiwanICDF partnered with EBRD on Green Economy Financing Facilities (GEFF), providing loans through financial institutions. This enabled small and medium enterprises and households to invest in energy efficient and renewable energy technologies, a step towards a green economy transition. GEFF provided a comprehensive package, including funding, technical assistance, and a platform to promote the best green technologies and products.

In 2018, GEFF launched an online catalogue of green products, offering manufacturers and local vendors access to the global green supply chain, and allowing borrowers who participated in the projects to choose green technologies and products that meet their demands. The platform brought more commercial opportunities to eligible manufacturers in Taiwan, and enabled green product manufacturers to develop markets in Central and Eastern Europe. Moreover, this platform allows the TaiwanICDF and Taiwan's private sector to respond to issues regarding the global green economy and climate change with more definitive action.

### Aspect 3/

Cooperating with domestic medical institutions to enhance capacity building in partner countries

When conducting healthcare personnel training programs and public health and medicine projects in allied nations, the TaiwanICDF actively assists partner countries in capacity building. Since most developing countries lack medical training resources, professional personnel, and relevant techniques, the TawianICDF has been working with many domestic hospitals and professional medical institutions over the years. We provide healthcare personnel training to diplomatic allies and friendly countries, ranging from trainees to hospital superintendents, earning recognition from all levels of medical personnel in partner countries.

TaiwanICDF's public health and medicine projects are coordinated and executed by resident project managers. Participating hospitals regularly send staff on supervision missions to friendly nations, allowing the TaiwanICDF to effectively follow up on the effects of training on the returning healthcare personnel who came to Taiwan for training. Moreover, workshops held by the trainees have allowed more and more healthcare personnel in partner countries to benefit.

### Aspect 4/

Expanding cooperation between public and private sectors to jointly promote foreign aid projects with companies

According to the Development Co-operation Report 2017 of the

Organization for Economic Cooperation and Development (OECD), the total investment by members of the Development Assistance Committee (DAC) in Official Development Assistance (ODA) only met 3.6 percent of the development needs. Facing the challenge of limited global resources, as a professional development assistance agency, the TaiwanICDF plays an important role in connecting different stakeholders with international society, and joint efforts between the private sector and communities are essential. For this reason, the TaiwanICDF officially launched a call for sponsors and donors to participate in aid projects in May of this year. In the first round, the TaiwanICDF will focus on projects related to international public health and medicine and international humanitarian aid, inviting the private sector to invest and jointly participate in the project execution.

'Bring Taiwan closer to the world, and the world closer to Taiwan' is no longer just a slogan. Through the cooperative model of innovative projects, the TaiwanICDF hopes to encourage Taiwanese from all walks of life to value and participate in international affairs. In the future, the TaiwanICDF will continue to engage with companies in finance, green technology, agriculture, aviation, and information and communications technology, and discuss various methods of cooperation to increase the overall effectiveness of Taiwan's foreign aid and expand its partnerships.



"TaiwanICDF's experiences and techniques are beneficial in running projects"

TaiwanICDF has been working with World Vision (WV) to provide humanitarian assistance for more than 10 years. For the past few years, the forms of cooperation have become more diverse, such as technical assistance and staff exchanges. For instance, Typhoon Haiyan hit the Philippines in 2013, and the TaiwanICDF provided aid through a post-disaster reconstruction project with WV and dispatched a projectbased volunteer to assist in project implementation. We later cooperated in other projects, including the Solomon Islands: Addressing Health and Hygiene Needs of those affected by the Solomon Islands Flooding in Weathercoast, Guadalcanal Project in response to the flood in 2014, Assisting the Recovery of Nepal Earthquake Affected Health Posts Project after the earthquake in 2015, and Integrated Action for Children's Nutrition Project that focuses on decreasing the prevalence of child malnutrition in Eastern Visayas in the Philippines. These projects represent the success of collaboration between the TaiwanICDF and WV.

Regarding the Integrated Action for Children's Nutrition Project, Rommel V. Fuerte, Executive Director of World Vision Philippines, points out that Eastern Visayas is one of the most impoverished regions in the Philippines. More than 45 percent of people live below the poverty line in Leyte and Samar provinces, and malnutrition in children under five is common. To improve child nutrition and further enhance the quality of learning, growth and health, the TaiwanICDF provided US\$300,000 in funding and assigned two projectbased volunteers to assist with the implementation of the 14-month project. World Vision Philippines is in charge of execution and management while World Vision Taiwan is in charge of supervision.

# Sharing Taiwan's experience in public health and medicine to improve child nutrition in the Philippines

This project not only helps local residents, especially families with malnourished children, to strengthen capacities in childcare, hygiene and sanitation, but also promotes proper breastfeeding in communities. Through establishing one health facility and repairing two existing ones, the project will make it easier for local residents to access medical

and nutritional services. When the project is completed, approximately 29,502 residents will have benefited from these services.

Regarding the cooperation, Fuerte feels that the core focus and experiences of the TaiwanICDF in providing humanitarian aid and technical assistance are of great benefit to World Vision Philippines projects. He hopes that the TaiwanICDF and World Vision Philippines will have broader cooperation in the areas of public health in the future, particularly on nutrition and WASH (Water, Sanitation and Hygiene). The TaiwanICDF will continue to dispatch projectbased volunteers to participate in related cooperative projects with WV. Volunteers will share Taiwan's experience in public health and medicine, assist in training personnel, and work to improve the health and quality of life in partner countries.



"Combining each other's strengths and working together to relieve the poor"

"On behalf of the millions of impoverished people in the Caribbean and Central America, I wish to thank the Taiwanese people and TaiwanICDF. Thank you for everything you've done for them." Last year in June, Robin Mahfood, President and Chief Executive Officer of Food For The Poor (FFP), expressed his sincere gratitude for past collaboration efforts during a discussion of cooperative projects in Haiti, Honduras and Nicaragua with TaiwanICDF Secretary General Amb. Timothy T. Y. Hsiang at FFP's Miami headquarters.

Established in 1982, FFP is one of the largest international relief and development organization in America. Its charity work spans 17 countries in Latin America and the Caribbean, including caring for local destitute people, providing food provisions, medical care, education, hydraulic engineering, shelter for the poor, vocational training, and other services. The results of its humanitarian aid are outstanding and are recognized worldwide.

TaiwanICDF has been cooperating with the FFP since 2005. Through developing projects jointly with our technical mission in Honduras, the

TaiwanlCDF has helped local charity organizations establish ponds to produce and sell tilapia, providing many impoverished children with a source of food. The results of the project are remarkable. Since the collaboration, the TaiwanlCDF and FFP have continued to expand the cooperative model and scale in Central America and the Caribbean.

## Expanding cooperation in avocado cultivation to help improve farmers' livelihoods

Mahfood indicates that Taiwan has been a cherished partner of FFP for more than a decade, and continues to contribute to projects in agriculture, aquaculture and animal husbandry, as well as donations such as fruit trees, computers, and rice. Taiwan also brings practical expertise in its collaborations, finding out what aid residents truly need, thus helping projects to run more smoothly. The TaiwanICDF and FFP plan to expand cooperation in avocado cultivation to help improve farmers' livelihoods.

Mahfood praises the results of TaiwanICDF's aid projects. They not only allow beneficiary children to acquire necessary nutrition, but also enable adults to learn skills for

economic independence. He expects in the future, the TaiwanICDF will continue to support socio-economic development, foster human resources, and promote economic relations in partner countries, as well as offering humanitarian assistance in the event of natural disasters or international refugee crises.

During the course of its exchanges with FFP over the years, the TaiwanlCDF has made use of the expertise and local connections accumulated by FFP in the field of humanitarian aid to help expand the scope and effectiveness of its projects. Through closer cooperation in the future, the TaiwanlCDF and FFP will continue to build on each other's strengths, working together to relieve the poor.



# "Riding on green economy wave of EBRD to bring business opportunities to Taiwan's green industry"

The European Bank for Reconstruction and Development (EBRD) was established in London in 1991. It is a regional development investment bank in Europe, helping more than 30 countries in Central and Eastern Europe, Central Asia, and the Commonwealth of Independent States (CIS). The EBRD assists the countries with economic transformation and transition, hoping to promote competitiveness and progress gradually to democracy.

When the EBRD was first established, Taiwan set up technical cooperation funds to provide countries in Central and Eastern Europe and the CIS with technical assistance, training and advisory services to help them rebuild. Since 1998, the EBRD has cooperated with the TaiwanICDF to establish the EBRD Financial Intermediary Investment Special Fund in order to assist financial institutions in the bank's countries of operations to improve financing access of micro-, small and medium-sized enterprises. In 2017, green financing facilities were integrated into the Special Fund in the hopes of increasing the development of the green economy market to address market barriers to financing green technologies and green products, and encourage the private sector to invest in small-scale renewable energy, energy and resource efficiency, and climate resilience projects.

#### Using the Green Technology Catalogue to create opportunities for green investment

This year, under the Green Economy Financing Facility (GEFF), the EBRD launched the Technology Catalogue to link supply and demand in project funding and green products. The catalogue allows beneficiary households or businesses to obtain financing from the EBRD when purchasing green technology products through the online platform. The scheme also allows suppliers to expand business opportunities in the EBRD's countries of operations by bringing their products to the marketplace.

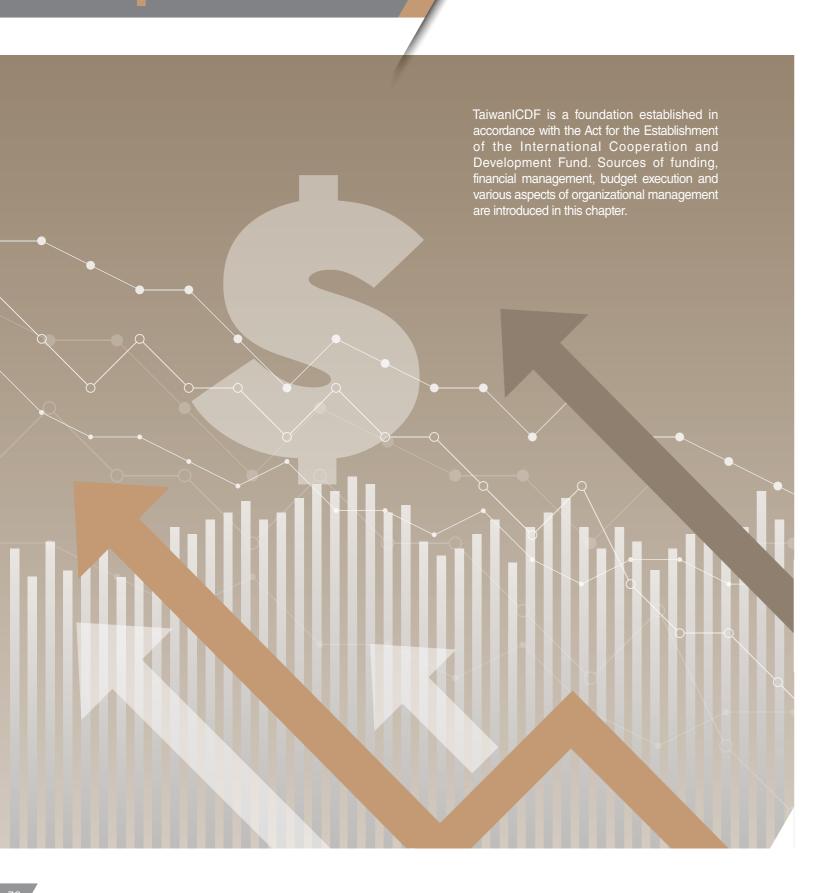
As a result of Taiwan's efforts, Ian Smith, EBRD Head of Intermediated Green Finance and Policy, Energy Efficiency and Climate Change, Ied a team to Taiwan to hold a Workshop on the GEFF Technology Catalogue to Develop a New Market. He personally

instructed Taiwan's suppliers and vendors in the green energy industry on how to develop large markets in Central Asia, Central and Eastern Europe, and the southern and eastern Mediterranean regions. Smith points out that this multilingual platform contains the details of best-in-class technologies that are technically eligible for financing under the GEFF program, providing a free of charge opportunity to match investors, financiers, and vendors and suppliers of technologies from around the world

"One clear advantage for suppliers of high performance technologies is that these products are very much in demand in the EBRD region as local investors are giving greater consideration to the operational effectiveness of technologies over a longer-term investment perspective." He states that these new markets bring opportunities for growth, and encourages Taiwan's technology suppliers to use GEFF and the Technology Catalogue to actively take advantage of the EBRD's green investment opportunities, creating more business opportunities in Taiwan's green industry.



# Administration



## **Financial Management**

Affected by escalating tensions in world trade and policy uncertainties of major economies, momentum in global growth weakened in 2018, leading International Monetary Fund (IMF), which remained optimistic about the economic prospect, to cut its forecast for global economic growth this year. Financial planning in 2018 was focused on securing the principal of investment and maintaining an abundant liquidity of the fund. Our main goal was to achieve stability and continuous income through strengthening fixed-income instruments while avoiding risk-bearing instruments.

Any financial investment plan must be set with the priority to secure the funds needed for the TaiwanlCDF's foreign aid development projects. We adhered to the principle of stable and steady asset allocation and controlled the risk-bearing assets with a preset position limit ratio, to make good use of the capital to achieve a stable income from mid-to-long term fixed income investments. This income in turn supports foreign aid development projects on a non-reimbursable basis, ensuring the goal of sustainable development of healthy financial operations.

#### **Fund Utilization**

The TaiwanICDF's overall fund balances (the Fund) are derived predominantly from two sources: the founding fund and donated fund; and proceeds of fund.

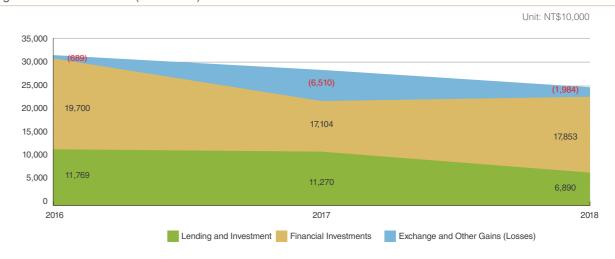
The Fund is used for international cooperation and development projects on a reimbursable basis, such as long-term investment and lending projects. To enhance the effectiveness of fund utilization, a portion of the

uncommitted Fund is set aside and invested in a portfolio of financial instruments, including low-risk fixed-income instruments such as bonds, bank deposits and short-term investments, and supplemented by few risk-bearing instruments such as exchange-traded funds (ETF).

Annual earnings are derived from three main sources: interests and revenues from lending development projects, revenues from long-term development investment projects, and income from investments in a portfolio of financial instruments. These are used to finance technical cooperation projects on a non-reimbursable basis and the TaiwanICDF's annual operational expenses.

In 2018, the overall rate of return for the Fund was 1.60 percent excluding foreign exchange gains (losses) and other income (expenses), and 1.46 percent when accounting for foreign exchange gains (losses) and other income (expenses). Affected by trade disputes among major economies in 2018, exchange losses were reported during the conversion of foreign currencies into NT dollars. Without returns from long-term investment projects, total aggregated revenue on long-term investment and lending development projects dropped. Fortunately, as uncommitted funds revenue benefited from the increased return of fixed-income instruments in US dollar and exchange losses significantly dropped, annual income was brought to NT\$ 247.44 million; taking foreign exchange gains (losses) and other income (expenses) into account, annual income comes to approximately NT\$227.59 million. The 2018 annual revenue (excluding foreign exchange gains (losses) and other income (expenses) slightly dropped compared to that of NT\$283.74 in 2017 and NT\$314.69 in 2016. Fund revenue distribution from 2016 to 2018 is shown in Figure 1.

Figure 1. Fund Revenue (2016-2018)



## Management of Long-term Development Lending and Investments

As of December 31, 2018, the TaiwanICDF was committed to 15 long-term investment projects, for which the balance of investments stood at US\$60.86 million and NT\$189 million. A total of 88 lending projects were implemented with approved loans of US\$546.95 million, €56.55 million and other currencies equivalent to US\$18.1 million. Accumulated loan disbursements stood at US\$493.75 million, €20.84 million and other currencies equal to US\$18.1 million, equivalent to 84 percent of all commitments. Total loan principal repayments stood at US\$426.99 million, equivalent to 78.8 percent of all funds extended. The total outstanding balance of long-term investment and lending development projects comprised 33 percent of the Fund, while 67 percent was allocated to a portfolio of financial instruments. Accounting for commitments made but not yet fulfilled, the value comes to 53 percent of total fund balances, while financial investments accounted for 47 percent. Fund utilization in 2018 is shown in Figure 2.

For revenue derived from reimbursable long-term investment and lending development projects, interest earned in 2018 from lending development projects stood at NT\$68.9 million (rate of return 2.28 percent), which registers an increase of NT\$5.77 million compared to that of 2017 at NT\$63.13 million (rate of return 1.89 percent). Long-term investment projects generated revenue in 2016 and 2017, while there was no revenue on long-term investment in 2018. As a result, the total aggregated revenue on long-term investment and lending development projects was NT\$68.9 million. Compared to the total aggregated income in 2017 (NT\$112.7 million, aggregated

rate of return 2.1 percent), this represents a decline of around NT\$43.8 million (1.35 percent); while compared to 2016 (total aggregated income NT\$117.69 million, aggregated rate of return (2.19 percent), a decline of NT\$48.79 million (1.35 percent). In terms of asset quality, as of December 31, 2018, the non-performing loans were only around US\$20,000 (0.003 percent of the long-term loans). In compliance with the relevant regulations, the TaiwanICDF also evaluated possible losses based on the characteristics of the assets and allocated sufficient reserves for such losses.

#### Management of Uncommitted Funds

Financial investment of the uncommitted portion of the Fund is designed to enhance the efficiency of fund utilization and increase the TaiwanICDF's revenues, so as to maintain a sound financial status. Currently, such investments, which are focused on fixed-income financial instruments, await the appropriate time to increase revenues through exchange-traded funds by way of midto long-term holdings of equities.

Fixed-income assets are primarily invested in time deposits and bonds denominated in NT dollars and foreign currencies that are held to maturity. Though the Central Bank of the Republic of China (Taiwan) left interest rates unchanged, Taiwan's interest rates stayed at relatively low levels compared to previous years. However, the US Federal Reserve raised interest rates four times, driving the rate of return of fixed-income assets denominated in US dollars to rise. In 2018, we set increasing the bond holding position as our investment strategy, and benefited from the rising US interest rates, we efficiently boosted our revenue from uncommitted funds. With the decrease of low-yield

Figure 3. Fund Asset Allocation (2018)

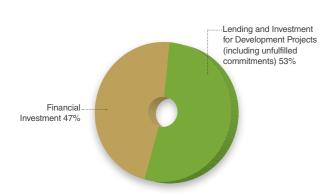
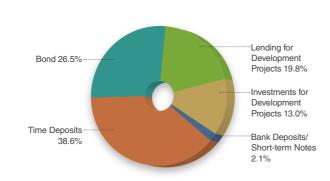


Figure 2. Fund Utilization (2018)



assets, the bond holding position as a percentage of the Fund rose from 23.4 percent last year to 26.5 percent this year, and the rate of return for bond remained 2.31 percent as in 2017; the rate of return of time deposit was 1.33 percent, which represents an increase of 0.17 percent compared with that of 2017 at 1.16 percent.

The income from uncommitted fund this year (excluding foreign exchange gains (losses) and other income (expenses)) came to around NT\$178.53 million (rate of return of the portfolio of financial instruments was 1.71 percent), registering an increase of NT\$510,000 compared with the annual budgeted income target of NT\$178.02 million. This mainly resulted from the rise of US interest rates and the income boosting through increase of our bond holding position. Revenue from uncommitted fund (excluding foreign exchange gains (losses) and other income (expenses)) increased by about NT\$7.49 million or 4.4 percent in 2018, compared with revenue in 2017 at NT\$171.04 million (rate of return 1.64 percent). The revenue dropped by approximately NT\$18.47 million or 9.4 percent compared with the 2016 income at NT\$197 million and the rate of return at 1.91 percent (mainly contributed by disposed exchange-traded funds capital gains of NT\$33.66 million). Fund asset allocation in 2018 is shown in Figure 3.

### **Accounting Management**

The TaiwanICDF's total revenues are derived predominantly from three main sources: interest and revenues from development lending and investment projects, income from financial investment, and funding for

MOFA-commissioned projects. Both interest and revenues from development lending and investment projects, and interest accrued on the Fund are mainly used to support routine operations, including technical cooperation projects, humanitarian assistance and scholarship programs, as well as the TaiwanICDF's administrative and management expenses. Income from MOFA-commissioned projects mainly supports the operation of various overseas MOFA-commissioned technical cooperation projects.

In 2018, operating revenues and non-operating income and gains amounted to NT\$1.52 billion, of which NT\$1.26 billion was allocated for commissioned projects. Revenue generated through the Fund was NT\$259.88 million, of which interest and revenues from lending and investment projects comprised 26 percent, interest on fund investments 69 percent, and other revenues 5 percent.

Total expenditures for 2018 were NT\$1.62 billion, of which NT\$1.26 billion was for MOFA-commissioned projects, and expenditures made through the Fund were NT\$363.76 million. Deducting expenditure from the revenue, the deficit in 2018 was NT\$13.88 million. Reasons for the occurrence of short deficits: The self-owned capital income of 2018 was NT\$259.88 million. In order to maintain the various foreign assistance and technical cooperation projects, our business expense was up to NT\$331.47 million, which was NT\$71.6 million greater than the amount of income. Besides, the impact of fluctuations in the exchange rate between the US dollars and Chinese RMB resulted in the loss of NT\$31.65 million

For 2018 TaiwanICDF Fund income and expenditure structure and figures, please refer to Figures 4 and 5:

Figure 4. Fund Revenue (2018)

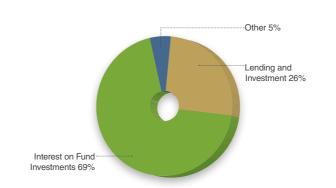
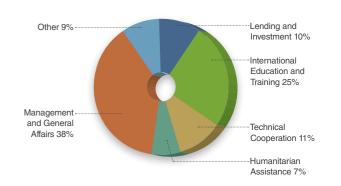


Figure 5. Fund Expenditure (2018)



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#### **Fund Utilization and Net Worth**

As of December 31, 2018, the net balance of the Fund was NT\$15.62 billion (including founding and donated funds of NT\$12.47 billion, accumulated earnings of NT\$3.15 billion). This represents a decline of NT\$13.88 million or 0.66 percent from 2017.

As of December 31, 2018, total assets stood at NT\$15.8 billion, of which current assets comprised 42.46 percent, long-term investments and loans 57.35 percent, fixed assets 0.13 percent and other assets 0.06 percent. The organization's total liabilities were NT\$144.12 million and the total balance of all funds (the Fund plus accumulated earnings) was NT\$15.62 billion.

#### **Management of Budget Execution**

To improve the effectiveness of budget utilization and project execution, the TaiwanICDF implemented management of budget execution, including review on budget implementation progress, reimbursement tracking, and budget control of overseas missions:

1. Review on Budget Implementation Progress
Review the implementation progress every
month, analyze the difference between the actual
implementation progress and the expected
implementation progress of each project and provide
advice, in hope to solve encountered problems and
further achieving the results anticipated.

#### 2. Reimbursement Tracking

Control the actual implementation situation of budget through viewing the reimbursement of project expenses every month. To meet the objective of budget control, keep track of prepayments not claiming reimbursement for more than two months and commissioned projects claiming less than 50 percent of reimbursement.

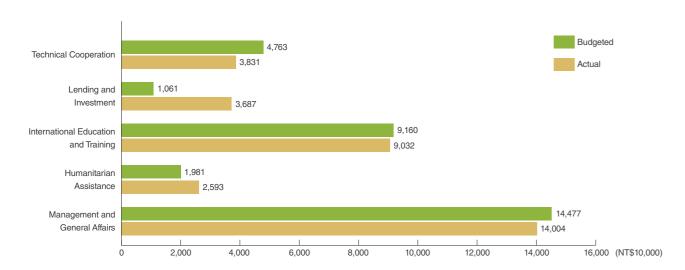
Budget Control of Overseas Missions
 Enhance control on the budget allocated each month in accordance with the reimbursement status of project expense and the actual implementation condition to avoid excessive allocation to overseas missions.

#### **Budget Execution**

In 2018, MOFA contracted the TaiwanICDF to carry out overseas operations worth NT\$1.26 billion. Overall, the total budget for MOFA-commissioned projects was NT\$1.26 billion and the implementation rate was 100 percent.

Operating expenses (excluding expenses for contracted projects) amounted to NT\$331.47 million. Compared with the budgeted plan of NT\$314.42 million, the utilization rate came to 105.42 percent. Actual budget and expenditures in 2018 are shown in Figure 6.

Figure 6. Budgeted and Actual Expenditure (2018)



### **Auditing**

#### **Key Auditing Operations**

Key auditing operations at the TaiwanICDF include:

- Examining the accuracy of financial and operational information, and the security of the management of capital, data and various securities.
- 2. Examining internal operations and determining whether procedures have followed relevant policies, regulations and procedural guidelines.
- Examining whether assets at the TaiwanICDF and overseas missions are being effectively utilized and correctly itemized.
- Examining whether projects met their intended objectives and achieved the results anticipated.
- 5. Making onsite visits to overseas missions to examine the status of internal controls and the performance of implementation.
- Appraising the essential operations over recent years and the progress of the organization's annual work plan, to ensure the objectives and results are achieved efficiently and effectively.

#### Audits in 2018

A total of 28 audits were conducted in 2018. The content of these audits, representing issues of concern to senior management and auditing units, focused on risks and internal controls.

Audits for 2018 were as follows: 10 audits related to operations, three audits to accounting, one audit to procurement, one audit to assets, two audits to investment and lending, five audits to planning and management, four audits to services management and two audits to salaries. Distribution by audit is shown in Figure 7.

#### **Results of Audits**

In 2018, audits yielded a total of 80 suggestions for improvement regarding various matters, including 26 on operations, eight on personnel, eight on accounting, 12 on assets, 17 on cashier operations, two on procurement, three on internal controls and four on services management. The distribution by audit suggestions is shown in Figure 8.

Audit results and subsequent suggestions are aimed at strengthening the functions of communication within and between different departments enhance the awareness of risks of our colleagues, guaranteeing the safety of the organization's assets, and ensuring the reliability and accuracy of financial information, in an effort to boost our operational performance.

#### **Boosting operational performance**

The 80 suggestions for improvement made by the TaiwanICDF this year can be divided into four types by audit findings: operations management, regulatory compliance, risk avoidance and project promotion. Among which, 23 suggestions were proposed to improve:

Figure 7. Distribution by audit in 2018

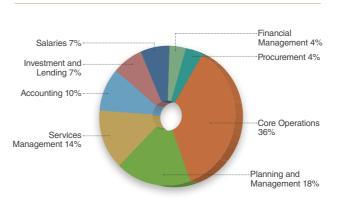
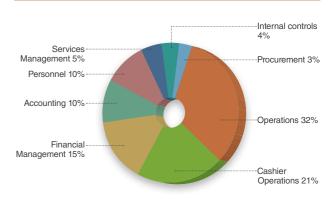


Figure 8. Distribution by audit suggestions in 2018



operational management performance on procurement contract, recipient selection of the International Higher Education Scholarship Program, system development and maintenance, managerial decision of the uncommitted portion of the Fund; reinvestment businesses, retention of commissioned project funds, identification of new projects, document processing, cooperation with international organizations and NGOs; and overseas technical missions (Guatemala, Honduras, Marshall Islands and Taiwan Investment and Trade Service Mission in Central America), in an effort to boost the operational performance of the TaiwanICDE

### **Digitizing our Organization**

The objective of setting up and planning information services is to support the development of operations, reduce operational costs and manage operational risks. To ensure that the TaiwanICDF's information services are up to date, a series of IT projects were implemented in 2018 and are further described in the section below.

#### **Development of Operations**

Over 80 percent of the TaiwanICDF's official documents are transmitted through electronic exchange and we have frequent contact with public sectors. Meanwhile, National Archives Administration, National Development Council enacted policies regarding shortening the transfer of official documents, and the new Service for the Official Document Exchange System of Ministry of Foreign Affairs was launched. We therefore adjusted and updated functions related to the operation of document exchange so as to ensure its stability.

#### Raising Efficiency

Focusing on the overall efficiency of information operations, the TaiwanlCDF upgraded the system of personal computers to a 64-bit version of Windows in 2018 to provide a more stable execution environment. We also added high-speed network cards to our host computer virtualization facilities and upgraded the virtualization software, in order to optimize data transfer speed from the base.

#### Information Security

We provided complete security protection through upgrading the antivirus system; strengthening protection against malicious software, attacks on operating systems and suspicious connections; replacing old web filtering system to block malware implanted through advertisement on popular websites; and adding new backup mechanisms. In addition, based on the Information and Communication Security Management Act implemented on January 1, 2019, we will complete follow-up measures after reviewing discrepancy between regulatory compliance and the TaiwanICDF's current situation of information security, in an effort to improve information security.

### **Human Resources**

To the TaiwanICDF, job rotation not only promotes mobility among domestic employees and encourages diverse learning, but it also helps discover and nurture talents under the concept of generalist training and build a talent pool for future successors.

We continued to promote job rotation among domestic and overseas employees in 2018 so as to encourage adaptive development among our staff. In this way, they could access a variety of jobs, enhance their knowledge and skills at work in different fields and from different angles, and strengthen their work experience in order to prevent job burnout, increase satisfaction and the sense of achievement at work, avoid parochialism and enhance cooperation and team spirit.

To effectively implement a job rotation system and help our staff make career plans, the TaiwanICDF focused on overseas dispatch, job rotation and promotions. We planned related training including new courses in management for domestic and overseas employees, basic agriculture and farming course combining theory with practice, and business-sharing sessions of different departments, to cultivate management talents, build knowledge and skills required for overseas work and vitalize job rotation.

### **PR and Promotional Materials**

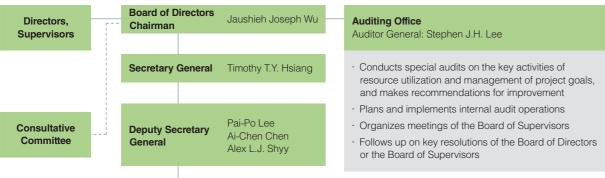
In response to the trend of digital communication, the TaiwanICDF has combined core promotional and public relations work with mainstream marketing tools, integrated various materials, and carried out promotional work efficiently in accordance with the TaiwanICDF's operations and internal policies. The key measures are as follows:

- Strengthen public communication and external liaison: we have used film materials to enhance communication in guest reception, media liaison and response to external inquiries, helping the public to quickly get a picture of the TaiwanICDF's actual operations, proficiency and efficiency. Meanwhile, to allow the public to know more about the TaiwanICDF, we authorized our promotional materials to public and private sectors.
- 2. Materials and activities facilitating project promotion: we have held a short film competition for scholarship recipients, and collected video footage, liaised with the media, and made short films to complement the TaiwanICDF's promotional activities. We have also designed large-scale prints, small promotional materials and pamphlets to support the TaiwanICDF in participating in related international meetings and raise our visibility.

- 3. Seeking creativity in publications to enhance promotional effectiveness: for the annual report, we provided not only hard copies but also USBs containing the electronic version for further use and file forwarding, in order to boost the effect for the promotion of our operations. As for film making, with a new organization promotional video and 49 self-made short films, we set records in terms of the number and diversity of videos and received much attention as well as media coverage.
- 4. Online marketing: with sliders and upgrade of key topics on the homepage of the TaiwanlCDF's official website, we have continued to optimize information transparency and effectiveness of promoting our operations. Also, under our active and swift response to the public, public satisfaction on our social media platforms including Facebook page has increased. Furthermore, we used self-made videos to expand the reach of our Facebook posts, bringing about a significant increase of subscribers on our YouTube channel.

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### **Organization Chart\***



	deneral	Alex L.J. Shyy		or the Board of Supervisors				
'								
Technical Cooperation Department Director: Ming-Hong Yen	· Plans and m	anages operations of overse anages commissioned projections anages the Taiwan Youth Over	cts					
Humanitarian Assistance Department Director: Hung-Tzu Wang	Plans and m     Plans and m	anages international coopera anages dispatch of overseas anages humanitarian assista anages the TaiwanICDF Ove	med nce p	dical missions projects				
Lending and Investment Department Director: Hui-Wen Hsu				nd supervises investment projects and supervises lending projects				
International Education and Training Department Director: Shiang-Wu Tsai	· Assesses, ev	valuates and manages intern valuates and manages intern valuates and implements inter romotes and manages the Ta	ation: rnation	onal workshops				
Research, Development and Evaluation Office Director: Yun-Ching Tseng	<ul><li>Carries out the levels</li><li>Plans and acceptance</li><li>Organizes me</li></ul>	ne organization's performand dministers the organization's	e eva know	nal cooperation and development strategies and operation aluation for operations at both TaiwanICDF and project ledge management system and other strategic meetings				
<b>General Affairs Department</b> Director: Mei-Yun Kuo	safety and so Implements Carries out of	<ul> <li>Develops and manages the organization's information system and plans and maintains the informatic safety and software/hardware facilities</li> <li>Implements and manages procurement operations</li> <li>Carries out document processing and manages the file system and library</li> <li>Manages cashier duties, properties, use of official stamps and general administration</li> </ul>						
Public Relations Office Director: Yvonne T.S. Wu		blic relations and external co ablishing and public relations		inications				
Accounting Office Director: Chou-Sheng Lan	· Carries out a	oudgeting and final accounts accounting and statistical ope d allocates funds		ns				
Financial Affairs Office Director: Calvin K. Yin		ancial planning, operations a ease of funds and repaymen						
Human Resources Office Director: Sarrinna H.Y. Chen	<ul> <li>Drafts and m</li> </ul>	<ul> <li>Plans and manages human resources</li> <li>Drafts and manages personnel related regulations and procedures</li> <li>Plans and manages general personnel related affairs</li> </ul>						
Legal Affairs Office Director: Catherine C.C. Chou		eneral legal affairs related op- ines and reviews contracts	eratio	ons 				

Compiles various internal regulations and organizes contracts

\*Accurate as of December 31, 2018

Director: Catherine C.C. Chou

# **Board of Directors, Supervisors and Consultative Committee\***

## Directors and Supervisors

The statutes of the TaiwanICDF provide for a Board of Directors of 11-15 persons and a Board of Supervisors of 3-5 persons. The Executive Yuan appoints these board members.

The Board comprises senior government ministers, heads of other government agencies, distinguished scholars and leading industrialists. One third of the Board must come from the latter two categories. The duties of the Board include shaping policy, approving specific projects and lending operations, overseeing annual budget allocations, appointing and dismissing senior management and attending to other important affairs relevant to the operation of the organization.

Membership of the eighth Board of Directors appointed to the end of June 2020

ors	Chairman	Jaushieh Joseph W	u Minister of Foreign Affairs
ors of	Directors	Jong-Chin Shen Chin-Long Yang Chi-Chung Chen Ping-Cheng Lo Shih-Chung Chen Ying-Yuan Lee Miguel Li-Jey Tsao Yung-Tung Wu Mia Twu Mei-Lie Chu Chung-Shu Wu Li-Fen Lei	Minister of Economic Affairs Governor, Central Bank of the Republic of China (Taiwan) Acting Minister, Council of Agriculture, Executive Yuan Minister without Portfolio, Executive Yuan Minister of Health and Welfare Former Minister, Environmental Protection Administration Vice Minister of Foreign Affairs President, Hsin Kuo Min Hospital Professor, Dept. of Finance, National Chengchi University Professor, Dept. of Economics, National Chengchi University and Director, Central Bank of the Republic of China (Taiwan) Chairman, Taiwan Academy of Banking and Finance Professor, Dept. of Agricultural Economics, National Taiwan University
		Wei-Wen Chang  Yvonne Chiu	Head of Graduate Institute of International Human Resource Development, National Taiwan Normal University Chairman, Information Service Industry Association of R.O.C
	Standing Supervisor	Guo-Shin Lee	Director, Department of General Fund Budget, DGBAS, Executive Yuan
	Supervisors	Bih-Jane Liu Yeh-Yun Lin	Professor, Dept. of Economics, National Taiwan University Professor, Dept. of Business Administration, National Chengchi University

#### Consultative Committee

Article Twelve of the Statute of the Establishment of the TaiwanICDF provides for the formation of the Consultative Committee. The Committee provides consultation and information services related to the operations of the Fund. Committee members include government officials, experts, scholars and persons with specialist knowledge from various sectors. The Board approves and appoints new members of the Consultative Committee.

## Members of the Consultative Committee

Ching-Shui Lee	Former Leader, Taiwan Technical Mission to the Republic of Paraguay
Hung-Yi Chiou	Professor, School of Public Health, Taipei Medical University
Wen-Shan Yang	Full-time Research Fellow, Institute of Sociology, Academia Sinica
Sheng-Hsiung Huang	CEO, Taiwan Network Information Center
Shian-Shyong Tseng	Vice President, Asia University
Chien-Ming Lee	Professor, Institute of Natural Resources Management, National Taipei University
Eddie M. Chen	Senior Specialist, Office of Risk Management, Asian Development Bank
Louis C.J. Lee	Ming Chuan University School of Law & Department of Economic and Finance Assistant Professor
Chung-Dar Lei	Chairman, Taiwan Cooperative Bank Co.
Wen-Zhong Huang	Mediator and Conciliation Member, Taipei City Government Labor Dispute Mediation Committee

<sup>\*</sup>Accurate as of December 31, 2018



### **Report of Independent Accountants**

PWCR18000278

To the International Cooperation and Development Fund (TaiwanICDF)

#### Opinion

We have audited the accompanying balance sheets of the International Cooperation and Development Fund (TaiwanICDF) as at December 31, 2018 and 2017, and the related statements of revenues and expenses, of changes in fund balances and of cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the TaiwanICDF as at December 31, 2018 and 2017, and its results of operations and its cash flows for the years then ended in accordance with the requirements of accounting policies described in Note 2.

#### **Basis for opinion**

We conducted our audits in accordance with the "Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants" and generally accepted auditing standards in the Republic of China (ROC GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the TaiwanICDF in accordance with the Code of Professional Ethics for Certified Public Accountants in the Republic of China (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Responsibilities of management for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the requirements of accounting policies described in Note 2, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the TaiwanICDF's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the TaiwanICDF or to cease operations, or has no realistic alternative but to do so.

#### **Emphasis of matters-custodianship of certain assets**

As described in Note 20 to the financial statements, certain assets were placed under the custodianship of TaiwanICDF at the request of the owners and these assets are not reflected in the financial statements. The details of these assets are disclosed for reference purposes only.

#### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ROC GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ROC GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- 1. Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- 2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the TaiwanICDF's internal control.
- 3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the TaiwanICDF's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the TaiwanICDF to cease to continue as a going concern.
- 5. Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Lee, Hsiu-Ling For and on Behalf of PricewaterhouseCoopers, Taiwan March 20, 2019



# International Cooperation and Development Fund Balance Sheets

December 31, 2018 and 2017

(Expressed in New Taiwan dollars)

Accepte	Notes		December 31, 2018	3		December 31, 2017	7
Assets	Notes		Amount	%		Amount	%
CURRENT ASSETS							
Cash and cash equivalents	4	\$	5,837,101,581	37	\$	6,415,799,711	40
Held-to-maturity financial assets - current	6		387,517,911	3		355,186,476	2
Other receivables	7		137,882,738	1		106,589,020	1
Prepayments			53,699,730	-		35,065,627	-
Other current assets			50,370,945	-		107,908,357	1
Current portion of long-term loans receivable	8,19		225,907,652	2		291,826,550	2
Current Assets			6,692,480,557	43		7,312,375,741	46
LONG-TERM LOANS AND INVESTMENTS							
Long-term loans receivable	8,19		2,949,746,881	19		2,781,831,515	18
Available-for-sale financial assets - noncurrent	5		-	-		-	-
Held-to-maturity financial assets - noncurrent	6		4,029,621,436	25		3,601,358,629	23
Financial assets carried at cost - noncurrent	9,19		2,061,417,118	13		2,094,072,076	13
Long-Term Loans And Investments			9,040,785,435	57		8,477,262,220	54
FIXED ASSETS	10						
Cost			49,709,682	-		48,073,936	-
Less: Accumulated depreciation		(	29,664,511 )	-	(	27,289,437 )	-
Fixed Assets			20,045,171	-		20,784,499	-
OTHER ASSETS							
Deposits-out			327,657	-		304,407	-
Deferred expenses			9,157,957	-		14,378,804	-
Other Assets			9,485,614	-		14,683,211	-
TOTAL ASSETS		\$	15,762,796,777	100	\$	15,825,105,671	100
LIABILITIES AND FUND BALANCES							
CURRENT LIABILITIES							
Payables	11	\$	129,720,862	1	\$	85,587,362	1
Collections payable			2,431,950	-		2,420,782	-
Other current liabilities			68,651	-		67,200	-
Current Liabilities			132,221,463	1		88,075,344	1
OTHER LIABILITIES							
Deposits-in			11,762,000	-		14,270,500	-
Other liabilities			131,873	-		193,407	-
Other Liabilities			11,893,873	-		14,463,907	-
TOTAL LIABILITIES			144,115,336	1		102,539,251	1
FUND BALANCES							
Funds	14		12,468,838,072	79		12,468,838,072	79
Accumulated earnings	15		3,149,843,369	20		3,253,728,348	20
TOTAL FUND BALANCES			15,618,681,441	99		15,722,566,420	99
TOTAL LIABILITIES AND FUND BALANCES		\$	15,762,796,777	100	\$	15,825,105,671	100

The accompanying notes are an integral part of these financial statements.

# International Cooperation and Development Fund Statements of Revenues and Expenses

For the Years Ended December 31, 2018 and 2017

(Expressed in New Taiwan dollars)

Itomo		2018							
ltems	Notes		Amount		%	Amount		%	
OPERATING REVENUES									
Revenues from contracted projects		\$	1,256,977,175		95	\$	1,062,861,803		90
Revenues from banking and finance operations			68,900,868		5		112,696,855		10
Operating Revenues			1,325,878,043		100		1,175,558,658		100
OPERATING EXPENSES	18								
Contracted project expenses	12	(	1,256,977,175 )	(	95)	(	1,062,861,803 )	(	90)
Humanitarian assistance expenses		(	25,933,639 )	(	2)	(	9,276,560)	(	1)
International human resources		(	90,327,470 )	(	7)	(	90,205,713 )	(	8 )
Banking and finance operations	9	(	36,869,369)	(	3)	(	15,429,797 )	(	1 )
Technical cooperation expenses		(	38,307,495)	(	3)	(	36,716,045)	(	3 )
General and administrative expenses		(	140,041,694 )	(	10)	(	139,716,738 )	(	12 )
Operating Expenses		(	1,588,456,842)	(	120)	(	1,354,206,656)	(	115)
NET OPERATING LOSSES		(	262,578,799 )	(	20)	(	178,647,998 )	(	15 )
NON-OPERATING INCOME AND GAINS									
Interest on fund investments			178,534,282		14		159,139,131		13
Investment income			-		-		1,956,000		-
Gain on disposal of investments	5		-		-		9,947,002		1
Other revenues	16		12,450,458		1		21,901,664		2
Sales Allowance			190,984,740		15		192,943,797		16
NON-OPERATING EXPENSES AND LOSSES									
Loss on disposal of fixed assets		(	537,344)		-	(	1,129,270)		-
Exchange losses		(	31,651,654)	(	3)	(	85,694,983 )	(	7)
Other expenses		(	101,922 )		-	(	174,139 )		-
Non-Operating Expenses and Losses		(	32,290,920)	(	3)	(	86,998,392)	(	7)
DEFICIENCY OF REVENUES OVER EXPENSES		(\$	103,884,979 )	(_	8)	(\$	72,702,593 )	(	6

The accompanying notes are an integral part of these financial statements.

# International Cooperation and Development Fund Statements of Changes In Fund Balance

For the Years Ended December 31, 2018 And 2017

(Expressed in New Taiwan dollars)

	Fund	Accumulated earnings	Unrealized gain (loss) on financial instruments	Total
2017				
Balance at January 1, 2017	\$ 12,468,838,072	\$ 3,326,430,941	\$ 1,143,384	\$ 15,796,412,397
Deficiency of revenues over expenses for 2017	-	( 72,702,593)	-	( 72,702,593)
Unrealized loss on financial instruments	-	-	( 1,143,384)	( 1,143,384)
Balance at December 31, 2017	\$ 12,468,838,072	\$ 3,253,728,348	\$ -	\$ 15,722,566,420
2018				
Balance at January 1, 2017	\$ 12,468,838,072	\$ 3,253,728,348	\$ -	\$ 15,722,566,420
Deficiency of revenues over expenses for 2018	-	( 103,884,979)	-	( 103,884,979)
Balance at December 31, 2018	\$ 12,468,838,072	\$ 3,149,843,369	\$ -	\$ 15,618,681,441

The accompanying notes are an integral part of these financial statements.

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# International Cooperation and Development Fund Statements of Cash Flows

For the Years Ended December 31, 2018 and 2017

(Expressed in New Taiwan dollars)

		2018		2017
CASH FLOWS FROM OPERATING ACTIVITIES				
Deficiency of revenues over expenses	( \$	103,884,979 )	( \$	72,702,593 )
Adjustments				
Adjustments to reconcile profit (loss)				
Depreciation		4,608,086		4,886,380
Amortization		6,687,747		6,778,622
Reversal of allowance for bad debts	(	3,514,937)	(	14,822,044 )
Written-off of allowance for bad debts		-	(	1,284,600 )
Held-to-maturity financial assets - interest amortization		3,629,616		5,791,549
Gain on disposal of investment		-	(	9,947,002)
Loss on disposal of fixed assets		537,344		1,129,270
Financial assets carried at cost-impairment loss		29,380,098		-
Changes in assets and liabilities				
Receivables	(	11,596,973 )		5,717,471
Prepayments		2,893,376		3,774,081
Other current assets		57,537,412		4,250,023
Accrued expenses		5,473,097	(	2,258,250)
Other payables		642,949	(	54,400,962)
Collections payable		11,168		705,990
Other current liabilities		1,451	(	327,766)
Other liabilities	(	61,534 )	(	354,199)
Cash outflow generated from operations	(	7,656,079)	(	123,064,030 )
Net cash flows used in operating activities	(	7,656,079)	(	123,064,030 )
CASH FLOWS FROM INVESTING ACTIVITIES				
Increase in long-term lending	(	482,233,940)	(	13,117,749)
Proceeds from long-term loans receivable		383,767,326		447,710,346
Proceeds from disposal of available-for-sale financial assets		-		67,320,618
Acquisition of held-to-maturity financial assets	(	823,132,090 )	(	518,208,343)
Proceeds upon maturity of held-to-maturity financial assets		355,686,545		88,985,388
Acquisition of financial assets carried at cost		-	(	405,270,000 )
Withdrawal of financial assets carried at cost		3,274,860		1,302,158
Acquisition of fixed assets	(	4,406,102 )	(	2,598,163)
Proceeds from disposal of fixed assets		-		507,485
(Increase) decrease in deposits-out	(	23,250 )		354,649
Increase in deferred assets	(	1,466,900 )	(	3,298,345)
Net cash flows used in investing activities	(	568,533,551)	(	336,311,956)
CASH FLOWS FROM FINANCING ACTIVITIES				
(Decrease) increase in deposits-in	(	2,508,500)		365,500
Net cash flows (used in) from financing activities	(	2,508,500 )		365,500
Net decrease in cash and cash equivalents	(	578,698,130 )	(	459,010,486)
Cash and cash equivalents at beginning of year		6,415,799,711		6,874,810,197
Cash and cash equivalents at end of year	\$	5,837,101,581	\$	6,415,799,711

The accompanying notes are an integral part of these financial statements.

# International Cooperation and Development Fund Notes To the Financial Statements

December 31, 2018 and 2017

(Expressed in New Taiwan dollars, except as otherwise indicated)

#### 1. ORGANIZATION AND HISTORY

- (1) In accordance with the Statute for the Establishment of the International Cooperation and Development Fund, promulgated by the President of the Republic of China, the International Cooperation and Development Fund (TaiwanICDF) was formed and approved by the Ministry of Foreign Affairs (MOFA) on June 29, 1996. TaiwanICDF was formed to succeed the International Economic Cooperation Development Fund (IECDF) management committee on June 30, 1996. The mission of TaiwanICDF is to provide assistance to developing countries to promote economic growth, strengthening international cooperation, developing foreign relations with allies and friendly countries, and advancing social progress.
- (2) As of December 31, 2018, TaiwanICDF had 121 employees.

#### 2. SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements of TaiwanICDF are prepared in accordance with TaiwanICDF's accounting policies approved by Ministry of Foreign Affairs, R.O.C.; the relevant laws and regulations formulated by the central government and generally accepted accounting principles. The significant accounting policies are summarized as follows:

#### (1) Accounting Basis

Government funding are recognised as revenue at current expenses plus accrual reserved fund as total annual expenses based on matching of costs with revenues. Others are accounted at accrual basis. In addition, the financial statements of TaiwanICDF adopted accrual basis, anything accounted at cash basis will be adjusted to accrual basis during closing of accounts.

#### (2) Foreign Currency Translation

TaiwanICDF maintains its accounts in New Taiwan (NT) dollars. Transactions denominated in foreign currencies are converted into NT dollars at the spot exchange rates prevailing on the transaction dates. Deposits, receivables and the unreimbursed balance of reserves payable by the Central Bank of the Republic of China due to engaged programmes denominated in foreign currencies are translated at the spot exchange rates prevailing at the balance sheet date. Exchange gains or losses are recognized in profit or loss. The other assets denominated in foreign currencies are measured at the historical exchange rate at the date of the transaction.

- (3) Classification of Current and Non-current Items
  - A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:
  - (a) Assets arising from operating activities that are expected to be realized or consumed, or are intended to be sold within the normal operating cycle;
  - (b) Assets held mainly for trading purposes;
  - (c) Assets that are expected to be realized within twelve months from the balance sheet date;
  - (d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to pay off liabilities more than twelve months after the balance sheet date.
  - B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:
  - (a) Liabilities arising from operating activities that are expected to be paid off within the normal operating cycle:
  - (b) Liabilities arising mainly from trading activities;
  - (c) Liabilities that are to be paid off within twelve months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date.

#### (4) Cash Equivalents

Cash and cash equivalents include cash on hand and in banks, and other short-term highly liquid investments, which are readily convertible to a fixed amount of cash and which are subject to insignificant risk of changes in value resulting from fluctuations in interest rates.

(5) Allowance for Uncollectible Accounts

The provision of reserve for bad debts is made based on their risk levels in accordance with the Regulation for TaiwanICDF Dealings with Past Due/Non-Performing Loans and Bad Debts.

- (6) Financial Assets and Financial Liabilities at Fair Value through Profit or Loss
  - A. Investments in equity instruments are accounted for using trade date accounting. Investments in debt instruments are accounted for using settlement date accounting, and are measured initially at the fair value of the debt instruments.
  - B. Listed stocks and exchange traded funds are measured at their fair value, and the changes in the fair value are included in profit or loss. The fair value of the listed stocks and exchange traded funds is their closing price at the balance sheet date.
- (7) Available-for-Sale Financial Assets
  - A. Investments in equity instruments are accounted for using trade date accounting. Investments in debt instruments are accounted for using settlement date accounting, and are measured initially at the fair value of the debt instruments. Market value of available-for-sale financial assets is the fair value plus increasing price.
  - B. Available-for-sale financial assets are evaluated by fair value. Moreover, value changes are recognized into the adjusted net value. The accumulated gain or loss is recognized in net income or loss when the financial assets are sold. Index stock fund is evaluated by fair value based on the closing prices at the balance sheet date.
  - C. If there is objective evidence of impairment, the accumulated loss previously recognized in net value is reclassified to profit or loss. If the fair value of equity instrument subsequently increases, the impairment loss is reversed to net value.
- (8) Held-to-maturity Financial Assets
  - A. Held-to-maturity financial assets are recorded using settlement date accounting and are stated initially at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset.
  - B. Held-to-maturity financial assets are recorded at amortized cost.
  - C. If there is any objective evidence that the financial asset is impaired, the impairment loss is recognized in profit or loss. If the fair value of the financial asset subsequently increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in profit or loss, the impairment loss shall be reversed to the extent of the loss previously recognized in profit or loss.
- (9) Financial Assets Carried at Cost

Financial assets carried at cost are recorded at cost. If there is any objective evidence that the financial asset is impaired, the impairment loss is recognized in profit or loss and is no longer recoverable.

(10) Long-term Loans Receivable

Foreign currency loans are stated at historical exchange rates.

(11) Fixed Assets

Fixed assets are stated at cost. Major improvements and renewals are capitalized and depreciated accordingly. Maintenance and repairs are expensed as incurred. When assets are disposed of, the cost and related accumulated depreciation are removed from the accounts and any gain or loss is credited or charged to income. Depreciation is provided under the straight-line method based on the assets' estimated economic service lives. The service lives of the major fixed assets are 3 to 10 years.

#### (12) Impairment of Non-financial Assets

TaiwanICDF recognizes impairment loss when there is indication that the recoverable amount of an asset is less than its book value. The recoverable amount is the higher of the fair value less costs to sell and value in use. The fair value less costs to sell is the amount obtainable from the sale of the asset in an arm's length transaction after deducting any direct incremental disposal costs. The value in use is the present value of estimated future cash flows to be derived from continuing use of the asset and from its disposal at the end of its useful life. When the impairment no longer exists, the impairment loss recognized in prior years may be recovered.

#### (13) Retirement Plan

- A. TaiwanICDF had a non-contributory pension plan originally, covering all regular employees, which was defined by the Fund. TaiwanICDF contributed monthly an amount based on 7% of the employees' monthly salaries and wages to the retirement fund deposited with a financial institution. This fund balance was not reflected in the financial statements. Effective September 1, 2009, TaiwanICDF has established a funded defined contribution pension plan (the "New Plan") under the Labor Pension Act. Under the New Plan, TaiwanICDF contributes monthly an amount based on 7% of the payroll grades corresponding to the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. No further contributions are made to TaiwanICDF's retirement fund.
- B. Under the defined contribution pension plan, net periodic pension costs are recognized as incurred.
- (14) Income Tax

Income tax is accounted in accordance with the Standard for Non-profit Organizations Exempt from Income Tax promulgated by the Executive Yuan, and Statement of Financial Accounting Standards. Under- or over-provision of income tax in the previous year is accounted for as an adjustment of income tax expense in the current year.

(15) Reserve for Contingencies of Guarantee Loss

TaiwanICDF issues guarantees for private enterprises to secure loans in compliance with the Regulation for TaiwanICDF in Providing Guarantee for Credit Facilities Extended to Private Enterprises which invest in Countries with Formal Diplomatic Relationships promulgated by the MOFA. The reserve is accrued in accordance with the Regulation for TaiwanICDF Dealings with Past-Due/Non-Performing Loans and Bad Debts.

(16) Revenues, Costs and Expenses

Revenues (including government donations) are recognized when the earning process is substantially completed and is realized or realizable. Costs and expenses are recognized as incurred.

(17) Use of Estimates

The preparation of financial statements in conformity with Statement of Financial Accounting Standards requires management to make estimates and assumptions that affect the amounts of assets and liabilities and the disclosures of contingent assets and liabilities at the date of the financial statements and the amounts of revenues and expenses during the reporting period. Actual results could differ from those assumptions and estimates.

(18) Settlement Date Accounting

TaiwanICDF adopted settlement date accounting for the financial assets. For financial asset or financial liability classified as at fair value through profit or loss, the change in fair value is recognized in profit or loss.

#### 3. CHANGES IN ACCOUNTING PRINCIPLES

None.

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#### 4. CASH AND CASH EQUIVALENTS

	D	ecember 31, 2018	December 31, 2017		
Petty cash	\$	110,000	\$	110,000	
Demand deposits		178,021,866		455,374,251	
Time deposits		5,558,969,715		5,960,315,460	
Cash equivalents					
- Bonds purchased under resale agreements		100,000,000		-	
Total	\$	5,837,101,581	\$	6,415,799,711	

#### 5. AVAILABLE-FOR-SALE FINANCIAL ASSETS - NON-CURRENT

(1) The disposal of available-for-sale financial assets are recognised as current gains as shown below:

	For the years ended December 31					
	2018	2017				
Proceeds from sale of available-for-sale financial assets	\$ -	\$ 67,320,618				
Book value	-	( 57,373,616)				
	\$ -	\$ 9,947,002				

(2) The fair values of investment in exchange traded funds are based on the closing price in market on balance sheet date.

#### 6. HELD-TO-MATURITY FINANCIAL ASSETS

	December 31, 2018 December			December 31, 2017
Current items				
Corporate bonds	\$	387,517,911	\$	355,186,476
Non-current items				
Corporate bonds	\$	3,747,688,566	\$	3,508,529,931
Government bonds		281,932,870		92,828,698
	\$	4,029,621,436	\$	3,601,358,629

#### 7. OTHER RECEIVABLES

	De	ecember 31, 2018	December 31, 2017		
Interest receivable	\$	101,992,541	\$	95,613,474	
Retained money receivable on completed projects		27,498,784		11,008,809	
Other receivable		8,981,744		542,151	
		138,473,069		107,164,434	
Less: Allowance for doubtful accounts	(	590,331 )	(	575,414 )	
	\$	137,882,738	\$	106,589,020	

#### 8. LONG-TERM LOANS RECEIVABLE

	December 31, 2018		D	ecember 31, 2017
Current items				
Current portion of long-term loans receivable	\$	234,429,930	\$	300,755,549
Less: Allowance for doubtful accounts	(	8,522,278 )	(	8,928,999)
Net	\$	225,907,652	\$	291,826,550
Non-current items				
Long-term loans receivable	\$	3,013,227,038	\$	2,848,434,805
Less: Allowance for doubtful accounts	(	63,480,157 )	(	66,603,290 )
Net	\$	2,949,746,881	\$	2,781,831,515
Total		3,175,654,533	\$	3,073,658,065

- (1) TaiwanICDF provides long-term loans in accordance with the Regulations for Loans by the International Cooperation and Development Fund as approved by the Executive Yuan. As of December 31, 2018 and 2017, the total outstanding loans denominated in U.S. dollars, Australia dollars and Euro dollars amounted to US\$60,104,801.31, AU\$20,227,983, €20,837,674.52 and US\$56,538,680.82, AU\$20,227,983 and €20,837,674.52, respectively.
- (2) Allowances for doubtful accounts were based on the Regulation for TaiwanICDF Dealings with Past Due/Non-Performing Loans and Bad Debts.
- (3) As Parque Industrial Oriente S.A. (PIO) defaulted on the loan extended for the Industrial Park Development Project in Paraguay amounting to US\$11,003,488.32, TaiwanlCDF filed a legal claim against PIO on September 1, 2003. The court in Ciudad del Este ruled in favor of TaiwanlCDF in the first trial on March 26, 2004. PIO filed an appeal, which was rejected. Accordingly, it was proposed that the Industrial Park be auctioned off. Under TaiwanlCDF's 51st board resolution, TaiwanlCDF has agreed, under a term of 20 years, for MOFA to repay the remaining loan balance. Although the MOFA agreed to pay off the remaining balance annually for 3 years beginning 2012 on December 13, 2012, payments of only US\$3,293,162.77 and US\$400,000 were made in years 2012 and 2013, respectively. The MOFA stated in a letter dated on April 16, 2014 that there were no budgets made by MOFA for the payments for year 2014. However, the installments would resume starting from 2015 through annual budgets. There were no payments made by MOFA for year 2014, and payments of US\$500,000 were made in years 2015 to 2018. As of December 31, 2018, the MOFA had repaid US\$7,793,162.77 and the remaining balance was US\$3,210,325.55.
- (4) There was no significant past due loan as of December 31, 2018 and 2017.
- (5) See Appendix 1 for the statement of changes in long-term loans for the year ended December 31, 2018.

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#### 9. FINANCIAL ASSETS CARRIED AT COST

As of December 31, 2018 and 2017, the details of financial assets at cost are as follows:

Itama		December 31, 20	18	December 31, 2017				
Items	Carr	ying Amount	Ownership		Carry	ring Amount	nt Ownership	
quity investments accounted for usin	g cost m	ethod:						
Overseas Investment & Development Corporation	\$	175,000,000	19.44%		\$	175,000,000	19.44%	
Less: Accumulated Impairment	(	6,000,000 )		(		6,000,000 )		
		169,000,000				169,000,000		
BTS India Private Equity Fund Limited		120,516,315	6.80%			123,791,175	6.80%	
	( =US\$	3,857,799)		(	=US\$	3,966,643)		
Less: Accumulated Impairment	(	96,162,718 )		(		91,859,099 )		
	( =US\$	3,135,340)		(	=US\$	2,995,225 )		
		24,353,597				31,932,076		
Taiwan's Agricultural Development Corporation		20,000,000	8.33%			20,000,000	8.33%	
Less: Accumulated Impairment	(	6,910,615 )				-		
		13,089,385				20,000,000		
Net		206,442,982				220,932,076		
nternational institution investment fun	d:							
FIISF								
-Small Business Account-Phase III		922,210,000				922,210,000		
	( =US\$	30,000,000 )		(	=US\$	30,000,000 )		
-Agribusiness Account		474,630,000				474,630,000		
	( =US\$	15,000,000 )		(	=US\$	15,000,000 )		
Less: Accumulated Impairment	(	18,165,864 )				-		
	( =US\$	591,433 )		(	=US\$	- )		
		1,378,674,136				1,396,840,000		
Specialized Financial Intermediary Development Fund		476,300,000				476,300,000		
	( =US\$	15,000,000 )		(	=US\$	15,000,000 )		
Net		1,854,974,136				1,873,140,000		
Total		2,061,417,118				2,094,072,076		

- (1) TaiwanICDF engaged the EBRD to manage the FIISF-Small Business Account III and to jointly provide funds for investments and loans in small businesses. Under the agreement, the total investment amount was US\$20,000,000. In this issue, the Financial Intermediary Investment Special Fund (FIISF)-Small Business Account II was incorporated into the Financial Intermediary Investment Special Fund (FIISF)-Small Business Account III. TaiwanICDF's accumulated contribution amounted to US\$30,000,000 as of December 31, 2018 and 2017.
- (2) TaiwanlCDF engaged the Multilateral Investment Fund (MIF), which belongs to the Inter-American Development Bank Group, to manage the Specialized Financial Intermediary Development Fund, a financing vehicle coestablished by the said two parties. MIF uses its own resources and the fund's resources on a pari-passu basis to directly or indirectly invest in, or make loans to well-performing microfinance institutions. Under the agreement, the total investment amount was US\$15,000,000, and TaiwanlCDF's accumulated contribution to the fund amounted to US\$15,000,000 as of December 31, 2018 and 2017.
- (3) TaiwanICDF engaged the Foundation commissioned EBRD for processing EBRD Financial Intermediary and Private Enterprises Investment Special Fund- Agribusiness Account, and promoting agriculture business in joint venture with EBRD. Under the agreement, the total investment amount was US\$15,000,000, and TaiwanICDF's accumulated contribution to the fund amounted to US\$15,000,000 as of December 31, 2018 and 2017.
- (4) The above listed foreign currency investments projects are stated using the historical exchange rate.
- (5) See Appendix 2 for the statement of changes in financial assets carried at cost for the year ended December 31, 2018.

#### **10. FIXED ASSETS**

	December 31, 2018					
		Cost Accumulated Depreciation				Book Value
Mechanical equipment	\$	37,035,686	\$	21,446,843	\$	15,588,843
Communication & transportation equipment		3,565,597		2,191,342		1,374,255
Miscellaneous equipment		5,251,345		3,055,767		2,195,578
Leasehold improvements		3,857,054		2,970,559		886,495
	\$	49,709,682	\$	29,664,511	\$	20,045,171

	December 31, 2017					
		Cost	ost Accumulated Depreciation		Net	Book Value
Mechanical equipment	\$	35,492,832	\$	20,029,243	\$	15,463,589
Communication & transportation equipment		3,489,497		1,892,944		1,596,553
Miscellaneous equipment		5,234,553		2,673,116		2,561,437
Leasehold improvements		3,857,054		2,694,134		1,162,920
	\$	48,073,936	\$	27,289,437	\$	20,784,499

See Appendix 3 for the statement of changes in fixed assets for the year ended December 31, 2018.

#### 11. PAYABLES

	December 31, 2018		December 31, 2017
Accrued expenses	\$ 40,536,164	\$	35,063,067
Retained money payable on completed projects	69,527,279		31,509,825
Other payables	19,657,419		19,014,470
	\$ 129,720,862	\$	85,587,362

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#### 12. CONTRACTED PROJECT EXPENSES

	For the years ended December 31					
	2018		2017			
Personnel expenses	\$ 424,192,427	\$	425,429,683			
Operating expenses	681,147,464		531,202,007			
Travel and transportation expense	45,240,798		51,174,433			
Equipment investment expense	106,396,486		55,055,680			
Total	\$ 1,256,977,175	\$	1,062,861,803			

#### 13. INCOME TAX

Activities and related expenses of TaiwanICDF are in compliance with "Standard for Non-profit Organizations Exempt from Income Tax". Accordingly, TaiwanICDF is exempt from income tax. The income tax returns through 2016 have been assessed and approved by the Tax Authority.

#### 14. FUNDS

	December 31, 2018	December 31, 2017		
Founding Fund	\$ 11,614,338,576	\$	11,614,338,576	
Donated Fund	854,499,496		854,499,496	
	\$ 12,468,838,072		12,468,838,072	

- (1) The founding fund balance of \$11,614,338,576 (Total assets of \$11,634,131,427 less total liabilities of \$19,792,851) was derived from the closure of the IECDF management committee on June 30, 1996. In the official registration with the court, the total property value filed as \$11,634,131,427 was based on the closing balance of assets of the IECDF management committee. TaiwanICDF applied the change for the registration of total amount of the assets to \$15,722,566,420 to the court on September 5, 2018, and there was no change as of December 31, 2018.
- (2) The donated fund of TaiwanICDF consisted of the following items:
  - A. The amount of \$4,423,541 from MOFA's Committee of International Technical Cooperation (CITC) was consolidated in TaiwanICDF on July 1, 1997.
  - B. The amount of \$600,000,000 was donated by the MOFA on January 16, 1999.
  - C. The MOFA provided the amount of \$250,075,955 on December 31, 2001 under the Regulation for TaiwanICDF in Providing Guarantee for Credit Facilities Extended to Private Enterprises Which Invest in Countries with Formal Diplomatic Relationships. TaiwanICDF had fulfilled the obligations of the guarantee amounting to \$152,665,834 as of December 31, 2018.

#### 15. ACCUMULATED EARNINGS

TaiwanICDF is registered as a consortium juridical person with the aim of strengthening international cooperation and enhancing foreign relations by promoting economic development, social progress and the welfare of the people in partner nations around the world. As TaiwanICDF is a non-profit organization, distribution of income is not permitted in accordance with its Articles of Association.

#### **16. OTHER REVENUES**

	For the years ended December 31				
		2018		2017	
Reversal of allowance for doubtful accounts	\$	3,514,937	\$	14,822,044	
Subsidy and donation income		4,534,050		1,595,279	
Others		4,401,471		5,484,341	
	\$	12,450,458	\$	21,901,664	

#### 17. RETIREMENT FUNDS

- (1) TaiwanICDF contributes monthly an amount based on seven percent of the employees' remuneration and deposits it with a financial institution. This fund balance is not reflected in the financial statements. The fund balance with financial institution were \$97,437,497 and \$94,130,724 as of December 31, 2018 and 2017, respectively.
- (2) The details of employees' retirement funds allocated by TaiwanICDF are as follows:

	For the years ended December 31					
		2018		2017		
Balance at the beginning of the year	\$	94,130,724	\$	97,028,704		
Interest income		980,565		1,094,161		
Contribution during the year		2,326,208		-		
Payments during the year		-	(	3,992,141 )		
Balance at the end of the year		97,437,497	\$	94,130,724		

- (3) Effective September 1, 2009, TaiwanICDF has been the entity covered by the Labor Standards Law and has adopted the following two schemes:
  - Scheme A: the pension and severance obligation are settled and the settled amounts are transferred to TaiwanICDF's retirement fund deposited with the financial institution. The employees may claim pension benefits when they retire or reach 55 years old or upon their death.
  - Scheme B: the pension and severance obligation are not settled and the old pension plan is extended. Accordingly, TaiwanICDF recognized an accrued pension reserve of \$16,014,156 for the excess of present value of pension benefits for the past and future service years under the old pension plan over the fair value of the pension fund at the measurement date, September 1, 2009 and contributed the amount to the account in 2010.
- (4) Effective September 1, 2009, TaiwanICDF has established a funded defined contribution pension plan (the "New Plan") under the Labor Pension Act. Under the New Plan, TaiwanICDF contributes monthly depending on the contribution grades an amount based on 7% of the payroll grades corresponding to the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued in the employees' individual pension accounts could be received in full or in monthly installments when the employees retire. The pension costs under the New Plan for the years ended December 31, 2018 and 2017 amounted to \$10,288,317 and \$6,697,747, respectively.

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#### 18. PERSONNEL EXPENSES, DEPRECIATION AND AMORTIZATION

	For the years ended December 31					
	2018		2017			
Personnel expenses						
Salaries	\$ 126,523,918	\$	120,967,394			
Labor and health insurance	11,025,998		10,800,351			
Pension	10,288,317		6,697,747			
Others	5,326,113		5,570,448			
	\$ 153,164,346	\$	144,035,940			
Depreciation	\$ 4,608,086	\$	4,886,380			
Amortization	\$ 6,687,747	\$	6,778,622			

#### 19. COMMITMENTS AND CONTINGENCIES

- (1) Pursuant to the Regulations for Loans by the International Cooperation and Development Fund, the loan amount in U.S. dollars under the loan agreements entered into by TaiwanICDF amounted to US\$194,474,578.92 and US\$225,909,063.81 as of December 31, 2018 and 2017, respectively. The total amount of loans drawn down amounted to US\$141,274,789.48 and US\$177,543,067.09, and the undisbursed committed balance amounted to US\$53,199,789.44 and US\$48,365,996.72 as of December 31, 2018 and 2017, respectively. Additionally, the loan amount in Euro dollars amounted to €56,553,755.54 as of December 31, 2018 and 2017. The total amount of loans drawn down amounted to €20,837,674.52, and the undisbursed committed balance amounted to €35,716,081.02 as of December 31, 2018 and 2017. Moreover, the loan amount in Australia dollars amounted to AU\$20,227,983.00 as of December 31, 2018 and 2017. The total amount of loans drawn down amounted to AU\$20,227,983.00, and the undisbursed committed balance amounted to AU\$0 as of December 31, 2018 and 2017
- (2) Pursuant to the Regulations for Investments by the International Cooperation and Development Fund, the committed amounts denominated in U.S. dollars under the outstanding contracts entered into by TaiwanICDF amounted to US\$65,000,000, of which US\$64,215,985 had been invested as of December 31, 2018 and 2017, respectively. The undisbursed committed balance amounted to US\$0 as of December 31, 2018 and 2017. Additionally, the committed amounts denominated in NT dollars under the outstanding investment agreement entered into by TaiwanICDF has been fully disbursed, with the balance of NT\$195,000,000 as of December 31, 2018 and 2017. The undisbursed committed balance amounted to NT\$0 as of December 31, 2018 and 2017.
- (3) TaiwanICDF had entered into a lease agreement with the MOFA to lease state-owned real estate properties. As per the lease agreement, the lease period is from October 1, 2015 to September 30, 2020 with the rents charged on a monthly basis. The rents are calculated as follows:
  - A. Land: 3% of the most recent official land price per square meter multiplied by the rental area and divided by
  - B. Building: 10% of the current taxable building value divided by 12.

#### 20. PROPERTIES UNDER CUSTODIANSHIP

- (1) The government has placed certain assets under TaiwanICDF's custodianship and management. These properties are entered into memo accounts: "Properties under Custodianship" and "Custodianship Property Payable".
  - The properties under custodianship were accounted for at cost. Expenditures for major procurement, renewals and improvements were debited to "Properties under Custodianship" and credited to "Custodianship Property Payable". Moreover, the repairs and maintenance expenditures shall be treated as revenues and expenditures of these projects. Upon disposal, the cost was deducted from the book amount. As of December 31, 2018 and 2017, the book value of fixed assets under custodianship was \$305,170,397 and \$247,362,094, respectively. In addition, as of December 31, 2018 and 2017, the reserve for severance pay for personnel stationed abroad in charge of the government's assignments, which were administered by TaiwanICDF on behalf of government and for contracted assistants of TaiwanICDF amounted to \$32,122,207 and \$35,356,589, respectively.
- (2) The MOFA has engaged TaiwanICDF to manage the Central American Economic Development Fund (ROC-CAEDF). As of December 31, 2018 and 2017, the total amount of ROC-CAEDF was \$7,940,072,590 and \$7,599,139,025, respectively, and the details of the financial assets of the ROC-CAEDF are as follows:

		December 31, 2018					
		US\$		US\$ NT\$		NT\$	
Demand deposits	\$	1,305,714.00	\$	40,105,005			
Time deposits		240,411,254.28		7,384,231,673			
Interest receivable		4,474,955.08		137,446,743			
Prepaid expenses		225,468.91		6,953,461			
Corporate bonds		12,137,425.66		371,335,708			
	\$	258,554,817.93	\$	7,940,072,590			

	December 31, 2017				
	US\$			NT\$	
Demand deposits	\$	688,062.61	\$	20,476,743	
Time deposits		251,416,631.69		7,482,158,959	
Interest receivable		3,019,672.41		89,865,451	
Prepaid expenses		221,299.28		6,637,872	
	\$	255,345,665.99	\$	7,599,139,025	

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# International Cooperation and Development Fund Statement of Changes in Long-term Loans

For the Year Ended December 31, 2018 (Expressed in NT\$)

(Expressed in N1\$)							
Item	Beginning Balance	Increase in long-term loans	Collection of long-term loans	Ending Balance	Collection Term		
Industrial Park Development Project in Paraguay, reimbursed by the guarantor, MOFA	\$ 126,162,771	\$ -	\$ 17,216,910	\$ 108,945,861	May. 2010 ~ May. 2029 (Note)		
Highway Construction Loan Project in Costa Rica	48,649,983	-	48,649,983	-	Nov. 2006 ~ May. 2018		
Quimistan Valley Irrigation Project in Honduras	72,398,239	-	18,648,029	53,750,210	Nov. 2005 ~ Nov. 2021		
Housing Solidarity Reconstruction Program in Honduras	55,440,000	-	9,240,000	46,200,000	May. 2004 ~ Nov. 2023		
Phase I Solidarity Reconstruction Program in Nicaragua	64,115,835	-	9,920,790	54,195,045	Jul. 2004 ~ Jan. 2024		
Phase II Housing Solidarity Reconstruction Program in Nicaragua	65,181,296	-	8,185,124	56,996,172	Mar. 2006 ~ Sep. 2025		
Guatemala Rio Polochic Region Recovery Program	41,742,059	-	6,927,300	34,814,759	Jul. 2004 ~ Jan. 2024		
Technical Education Project in Guatemala	78,584,670	-	17,563,780	61,020,890	Aug. 2007 ~ Feb. 2022		
Housing Solidarity Reconstruction Program in El Salvador	43,035,987	-	6,526,961	36,509,026	Nov. 2004 ~ May. 2024		
Program for Environmental Pollution Control in Critical Areas in El Salvador	60,369,980	-	17,533,014	42,836,966	Nov. 2006 ~ May. 2021		
Belize Tourism Development Project / Caracol road	35,802,114	-	4,237,307	31,564,807	Nov. 2005 ~ May. 2026		
Belize Southern Highway Rehabilitation Project	32,602,486	-	21,778,548	10,823,938	Aug. 2003 ~ Feb. 2019		
Program for Modernizing the National Congress and the Office of the Comptroller General in Dominican Republic	55,007,354	-	6,597,947	48,409,407	Nov. 2004 ~ May. 2026		
Drinking Water Distribution Project in Petion-Ville-Lot I in Haiti	24,835,234	-	2,871,915	21,963,319	May. 2007 ~ Nov. 2029		
Third Urban Water-Supply Project in Papua New Guinea	11,874,342	-	11,874,342	-	Nov. 2000 ~ Nov. 2018		
Two International Roads Project	3,671,147	-	3,671,147	-	Nov. 2003 ~ May. 2018		
Rural Credit Project in Burkina Faso	26,463,390	-	4,779,416	21,683,974	Nov. 2005 ~ May. 2023		
Microfinancing and Capacity Building Project in the Gambia	7,473,665	-	533,833	6,939,832	Mar. 2010 ~ Sep. 2024		
Agricultural Production Reactivation Phase II in Nicaragua	94,816,915	-	8,781,860	86,035,055	Mar. 2011 ~ Sep. 2028		
Third Urban Water-Supply Project in Papua New Guinea  Two International Roads Project  Rural Credit Project in Burkina Faso  Microfinancing and Capacity Building Project in the Gambia  Agricultural Production Reactivation Phase II in	3,671,147 26,463,390 7,473,665	-	3,671,147 4,779,416 533,833	- 21,683,974 6,939,832	Nov. 2000 Nov. 2018 Nov. 2003 May. 2018 Nov. 2005 May. 2023 Mar. 2010 Sep. 2024		

Item	Beginning Balance	Increase in long-term loans	Collection of long-term loans	Ending Balance	Collection Term
Lower Usuthu Smallholder Irrigation Project in Swaziland	75,624,570	-	8,897,010	66,727,560	Jul. 2009 ~ Jan. 2026
Information Technology School Project	96,199,477	-	7,439,598	88,759,849	Sep. 2014 ~ Mar. 2031
Technical and Vocational Education and Training Project in the Gambia	51,213,605	-	3,674,690	47,538,915	Jan. 2016 ~ Jul. 2031
CABEI's Special Fund for the Social Transformation of Central America	121,060,542	-	10,088,379	110,972,163	May. 2012 ~ Nov. 2029
CABEI SMME Re-lending Project-Phase II	124,821,429	-	41,607,142	83,214,287	Jan. 2014 ~ Jul. 2020
CABEI's Special Fund for the Social Transformation of Central America Phase II	244,768,562	-	15,681,818	229,083,744	Nov. 2014 ~ May. 2032
TaiwanICDF-CABEI Technological and Vocational Education and	43,227,549	-	6,026,815	37,200,734	Jan. 2015 ~ Jul. 2024
FINCORP MSME Re-lending Project	62,716,500	-	62,716,500	-	Jul. 2014 ~ Jan. 2019
Repair and Upgrade of Bonriki International Airport (Kiribati)	489,421,455	-	-	489,421,455	Sep. 2021 ~ Mar.2044
Belize City House of Culture and the Downtown Rejuvenation Project	28,812,749	11,833,396	2,094,168	38,551,977	Mar. 2018 ~ Sep. 2031
The Green Energy Special Fund	863,096,479	-	-	863,096,479	The period depends on the sub-projects.
The Home Energy Efficiency and Renewable Energy Project In The Republic Of The Marshall Islands	-	30,840,000	-	30,840,000	Nov. 2021 ~ May. 2031
National Broadband Plan	-	347,700,544	-	347,700,544	Jul. 2021 ~ Jan. 2030
Integral Microfinance Project (El Salvador)	-	91,860,000	-	91,860,000	Jul. 2019 ~ Jan. 2026
	3,149,190,354	\$ 482,233,940	\$ 383,767,326	3,247,656,968	
Less: Allowance for doubtful accounts	( 75,532,289)			( 72,002,435)	
	\$ 3,073,658,065			\$ 3,175,654,533	

Note: Although the MOFA agreed to pay off the remaining balance annually for 3 years beginning 2012 on December 13, 2012, payments of only US\$3,293,162.77 and US\$400,000 were made in years 2012 and 2013, respectively. The MOFA stated in a letter dated on April 16, 2014 that there were no budgets made by MOFA for the payments for year 2014. However, the installments would resume starting from 2015 through annual budgets. There were no payments made by MOFA for year 2014, and payments of US\$500,000 were made in years 2015 to 2018. As of December 31, 2018, the MOFA had repaid US\$7,793,162.77 and the remaining balance was US\$3,210,325.55.

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# International Cooperation and Development Fund Statement of Changes in Fixed Assets

For the Year Ended December 31, 2018 (Expressed in NT\$)

	Begi	nning Balance			on of Long- vestments		se in Long- vestments	Ending Balance		
	Owner- ship	Carrying Amount	Owner- ship		Carrying Amount	Owner- ship	Carrying Amount	Owner- ship	Carrying Amount	Note
Equity investr	nents ac	counted for using	g cost me	etho	od:					
Overseas Investment & Development Corporation	19.44%	\$ 175,000,000	-	\$	-	-	\$ -	19.44%	\$ 175,000,000	None
Less: Accumulated impairment		( 6,000,000 )			-		_		( 6,000,000 )	
		169,000,000			-		-		169,000,000	
BTS Private Equity Fund in India	6.80%	123,791,175	-		-	-	3,274,860	6.80%	120,516,315	None
Less: Accumulated impairment		( 91,859,099 )		(	4,303,619 )		-		( 96,162,718)	
		31,932,076		(	4,303,619 )		3,274,860		24,353,597	
Taiwan's Agricultural Development Corporation	8.33%	20,000,000			-		-	8.33%	20,000,000	None
Less: Accumulated impairment		-		(	6,910,615 )		-		( 6,910,615 )	
		20,000,000		(	6,910,615 )		-		13,089,385	
Net		220,932,076		(	11,214,234 )		3,274,860		206,442,982	
International I	nstitutio	n Investment Fun	d:							
Agribusiness Account		474,630,000					-		474,630,000	None
FIISF-Small Business Account- Phase III		922,210,000			-		-		922,210,000	None
Less: Accumulated impairment		-		(	18,165,864 )		_		( 18,165,864 )	
		1,396,840,000		(	18,165,864 )				1,378,674,136	
Financial Intermediary Development Fund		476,300,000			-		-		476,300,000	None
Net		1,873,140,000		(	18,165,864 )		-		1,854,974,136	
Total		\$ 2,094,072,076		( ;	\$ 29,380,098 )		\$ 3,274,860		\$ 2,061,417,118	

# International Cooperation and Development Fund Statement of Changes in Fixed Assets

For the Year Ended December 31, 2018 (Expressed in NT\$)

ltem	Beginning Balance	A	Acquisition		Disposal	Ending Balance	Note
Cost							
Mechanical equipment	\$ 35,492,832	\$	4,239,760	(\$	2,696,906)	\$ 37,035,686	None
Communication & transportation equipment	3,489,497		96,000	(	19,900 )	3,565,597	None
Miscellaneous equipment	5,234,553		70,342	(	53,550)	5,251,345	None
Leasehold improvements	3,857,054		-		-	3,857,054	None
	48,073,936	\$	4,406,102	(\$	2,770,356)	49,709,682	
Accumulated depreciation							
Mechanical equipment	\$ 20,029,243	\$	3,589,402	(\$	2,171,802)	\$ 21,446,843	
Communication & transportation equipment	1,892,944		314,982	(	16,584 )	2,191,342	
Miscellaneous equipment	2,673,116		427,277	(	44,626 )	3,055,767	
Leasehold improvements	2,694,134		276,425		-	2,970,559	
	27,289,437	\$	4,608,086	(\$	2,233,012)	29,664,511	
Net book value	\$ 20,784,499					\$ 20,045,171	



## **Cooperation Projects in 2018**

### **East Asia and Pacific**

Integrated Pest Management in Vegetab Production and Fruit Flies Control Project Project Foundation  Thailand  Gloriosa, Sweet Potato Virus-Free Seedling Grape Root Stock Production Project  TaiwanICDF Overseas Volunteers Prograted Strengthening Incubator Agribusiness with Human Resources Development in Band High Quality Rice Seed Development Prosouth Sulawesi (Indonesia)  Sigi-Biromaru Livelihood Support Prograted (Indonesia)  Horticulture and Nutrition Enhancement In (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Poverseas Professional Mandarin Teaching TaiwanICDF Overseas Volunteers Program  Papua New Guinea  Farmers Training Cooperation Project	et in Royal ing and am with dung oject in am Project	Production (Agriculture)  Production (Agriculture)  Economic Infrastructure and Services (Education)  Production (Agriculture)  Production (Agriculture)  Humanitarian Aid (Reconstruction)  Production (Agriculture)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)  Production (Agriculture)	Technical Assistance Technical Assistance Technical Assistance (Volunteer) Technical Assistance Technical Assistance Technical Assistance Technical Assistance Technical Asistance	Agriculture  Agriculture  Education  Agriculture  Agriculture  Agriculture  Agriculture  Agriculture  Public Health and Medicine  Education  Education  Public Health and Medicine  Agriculture  Agriculture
Grape Root Stock Production Project  TaiwanICDF Overseas Volunteers Progra  Strengthening Incubator Agribusiness wi Human Resources Development in Band High Quality Rice Seed Development Prosouth Sulawesi (Indonesia)  Sigi-Biromaru Livelihood Support Program (Indonesia)  Horticulture and Nutrition Enhancement In (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Youth Mandarin Language Training Project Overseas Professional Mandarin Teaching  TaiwanICDF Overseas Volunteers Program  Papua New	am  with dung oject in  am  Project  c  ect  ng Project	Economic Infrastructure and Services (Education)  Production (Agriculture)  Production (Agriculture)  Humanitarian Aid (Reconstruction)  Production (Agriculture)  Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Assistance (Volunteer) Technical Assistance Technical Assistance Technical Assistance Technical Assistance Technical Asistance (Volunteer)	Education  Agriculture  Agriculture  Agriculture  Agriculture  Public  Health and  Medicine  Education  Education  Public  Health and  Medicine
Indonesia  Strengthening Incubator Agribusiness wi Human Resources Development in Banch High Quality Rice Seed Development Prosouth Sulawesi (Indonesia)  Sigi-Biromaru Livelihood Support Program (Indonesia)  Horticulture and Nutrition Enhancement Incurred (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Youth Mandarin Language Training Project  Overseas Professional Mandarin Teaching  TaiwanICDF Overseas Volunteers Program  Papua New	oject in  Project  ect  ect  mg Project	(Education)  Production (Agriculture)  Production (Agriculture)  Humanitarian Aid (Reconstruction)  Production (Agriculture)  Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	(Volunteer) Technical Assistance Technical Assistance Technical Assistance Technical Asistance (Volunteer)	Agriculture  Agriculture  Agriculture  Agriculture  Public Health and Medicine  Education  Education  Public Health and Medicine
Human Resources Development in Banch High Quality Rice Seed Development Prosouth Sulawesi (Indonesia)  Sigi-Biromaru Livelihood Support Program (Indonesia)  Horticulture and Nutrition Enhancement In (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Youth Mandarin Language Training Project Overseas Professional Mandarin Teaching TaiwanICDF Overseas Volunteers Program  Papua New	dung oject in  am Project  c ect ng Project	Production (Agriculture)  Humanitarian Aid (Reconstruction)  Production (Agriculture)  Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Assistance Technical Assistance Technical Asistance (Volunteer)	Agriculture  Agriculture  Agriculture  Public Health and Medicine  Education  Education  Public Health and Medicine
South Sulawesi (Indonesia)  Sigi-Biromaru Livelihood Support Prograi (Indonesia)  Horticulture and Nutrition Enhancement I (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Youth Mandarin Language Training Project Overseas Professional Mandarin Teachin  TaiwanICDF Overseas Volunteers Program  Papua New	Project  c ect ng Project	Humanitarian Aid (Reconstruction)  Production (Agriculture)  Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Assistance Technical Asistance (Volunteer)	Agriculture  Agriculture  Public Health and Medicine  Education  Education  Education  Public Health and Medicine
Papua New  Horticulture and Nutrition Enhancement of (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Palau  Youth Mandarin Language Training Project Overseas Professional Mandarin Teachin TaiwanICDF Overseas Volunteers Program  Papua New  Farmers Training Cooperation Project	Project  c  ect  ng Project	Production (Agriculture)  Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Asistance (Volunteer)	Agriculture Public Health and Medicine Education Education Education Public Health and Medicine
Papua New (Palau)  Healthcare Personnel Training Program  Vocational Training Project for the Pacific Palau  Youth Mandarin Language Training Project Overseas Professional Mandarin Teachin TaiwanICDF Overseas Volunteers Program Papua New Farmers Training Cooperation Project	ect ng Project	Social Infrastructure and Services (Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Asistance Technical Asistance Technical Asistance Technical Asistance Technical Asistance (Volunteer)	Public Health and Medicine  Education  Education  Education  Public Health and Medicine
Vocational Training Project for the Pacific  Youth Mandarin Language Training Project  Overseas Professional Mandarin Teachin  TaiwanICDF Overseas Volunteers Progra  Papua New Farmers Training Cooperation Project	ect ng Project am	(Health)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Asistance Technical Asistance Technical Asistance Technical Asistance (Volunteer)	Health and Medicine  Education  Education  Education  Public Health and Medicine
Palau  Youth Mandarin Language Training Proje  Overseas Professional Mandarin Teachin  TaiwanICDF Overseas Volunteers Progra  Papua New  Farmers Training Cooperation Project	ect ng Project am	(Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Asistance Technical Asistance Technical Asistance (Volunteer)	Education  Education  Public Health and Medicine
Youth Mandarin Language Training Proje  Overseas Professional Mandarin Teachin  TaiwanICDF Overseas Volunteers Progra  Papua New  Farmers Training Cooperation Project	ng Project	(Education)  Social Infrastructure and Services (Education)  Social Infrastructure and Services (Health)	Technical Asistance Technical Asistance (Volunteer)	Education Public Health and Medicine
TaiwanICDF Overseas Volunteers Progra  Papua New Farmers Training Cooperation Project	am	(Education)  Social Infrastructure and Services (Health)	Technical Asistance (Volunteer)	Public Health and Medicine
Papua New Farmers Training Cooperation Project		(Health)	(Volunteer)	Health and Medicine
	1	Production (Agriculture)	Technical Asistance	Agriculturo
	n			Agriculture
Myanmar Solar PV Mini-Grid System for Lighting in Myanmar Rural Areas	-	Economic Infrastructure and Services (Energy generation, supply and efficiency/renewable energy)	Technical Asistance	Environment
Philippines Integrated Action for Children's Nutrition (Philippines)	Project	Social Infrastructure and Services (Health)	Technical Asistance	Public Health and Medicine
Vegetable and Fruit Improvement Project	t	Production (Agriculture)	Technical Asistance	Agriculture
Integrated Hog-raising Project		Production (Agriculture)	Technical Asistance	Agriculture
Food Crop Improvement Project		Production (Agriculture)	Technical Asistance	Agriculture
Beekeeping Project		Production (Agriculture)	Technical Asistance	Agriculture
Healthcare Personnel Training Program Solomon		Social Infrastructure and Services (Health)	Technical Asistance	Public Health and Medicine
Islands Vocational Training Project for the Pacific	С	Social Infrastructure and Services (Education)	Technical Asistance	Education
Youth Mandarin Language Training Proje	ect	Social Infrastructure and Services (Education)	Technical Asistance	Education
Overseas Professional Mandarin Teachin	ng Project	Social Infrastructure and Services (Education)	Technical Asistance	Education
TaiwanICDF Overseas Volunteers Progra	am	Production (Agriculture)	Technical Asistance (Volunteer)	Agriculture
Vegetable Production and Nutrition Enha Project	ancement	Production (Agriculture)	Technical Assistance	Agriculture
Egg Production Project		Production (Agriculture)	Technical Assistance	Agriculture
Nauru Microfinance Development Fund—Pilot F	Project	Economic Infrastructure and Services (Banking and Financial Services)	Technical Assistance	Other, ICT
Vocational Training Project for the Pacific	0	Social Infrastructure and Services (Education)	Technical Assistance	Education
Youth Mandarin Language Training Proje	ect	Social Infrastructure and Services (Education)	Technical Assistance	Education
Marshall Horticulture Project		Production (Agriculture)	Technical Assistance	Agriculture
Islands Livestock Project		Production (Agriculture)	Technical Assistance	Agriculture
Home Energy Efficiency and Renewable Project	e Energy	Economic Infrastructure and Services (Energy generation, supply and efficiency/renewable energy)	Lending	Environment
Vocational Training Project for the Pacific	0	Social Infrastructure and Services (Education)	Technical Assistance	Education

Country	Project	Sector	Type of Assistance	Priority Area
	Youth Mandarin Language Training Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
Marshall Islands	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Health/Environment/Other)	Technical Asistance (Volunteer)	Public Health and Medicine, Environment, Other
Tuvalu	Horticulture Expansion Project	Production (Agriculture)	Technical Assistance	Agriculture
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Vocational Training Project for the Pacific	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Youth Mandarin Language Training Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Education/ICT/Health)	Technical Assistance (Volunteer)	Education, ICT, Public Health and Medicine
	Milkfish Aquaculture Project	Production (Agriculture)	Technical Assistance	Agriculture
	Nutrition Enhancement Project	Production (Agriculture)	Technical Assistance	Agriculture
	Pig rearing Project	Production (Agriculture)	Technical Assistance	Agriculture
	Repair and Upgrade of Bonriki International Airport	Economic Infrastructure and Services (Transport and Storage)	Lending	Other
Kiribati	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Vocational Training Project for the Pacific	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Youth Mandarin Language Training Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
Fiji	Vegetable Production, Marketing Extension and Capacity Building Project	Production (Agriculture)	Technical Assistance	Agriculture
-	Aquaculture Project	Production (Agriculture)	Technical Assistance	Agriculture

### **Africa and West Asia**

Country	Project	Sector	Type of Assistance	Priority Area
	Quality Seed Production Project	Production (Agriculture)	Technical Assistance	Agriculture
Burkina Faso	2017-2019 ROC and Burkina Faso Medical Cooperation Project	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Maternal and Neonatal Health Care Improvement Project in Burkina Faso	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
Tunisia	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III— Tunisia Leasing S.A. SME Project	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
	Electronic Document and Records Management System (EDRMS) Development Project	Economic Infrastructure and Services (ICT)	Technical Assistance	ICT
	Pig Industry Enhancement Project	Production (Agriculture)	Technical Assistance	Agriculture
	Technical and Vocational Education and Training Enhancement Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Seed Potato Production Project	Production (Agriculture)	Technical Assistance	Agriculture
Eswatini	Fruit Tree Production and Marketing Project	Production (Agriculture)	Technical Assistance	Agriculture
	FINCORP MSME Re-lending Project	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
	Maternal and Infant Health Care Improvement Project in the Kingdom of Eswatini	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Education)	Technical Assistance (Volunteer)	Education
Turkov	FIPEISF-Agribusiness Account-Subproject 5: Yayla Turkey project	Production (Agriculture)	Lending	Agriculture
Turkey	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education



Country	Project	Sector	Type of Assistance	Priority Area
	Improvement of Solid Waste Management for Host Communities and Syrian Refugees in Azraq Town Project	Humanitarian Aid (Reconstruction)	Technical Assistance	Other
	Rain water catchment systems for schools and community centers in Jordan	Social Infrastructure and Services (Water Supply and Sanitation)	Technical Assistance	Other
Jordan	Green Energy Special Fund—GAM Solid Waste Project	Economic Infrastructure and Services (Energy generation, supply and efficiency/renewable energy)	Lending	Environment
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Other)	Technical Assistance (Volunteer)	Other
	Date Palm Cultivation and Tissue Culture Consultant Dispatch Project	Production (Agriculture)	Technical Assistance	Agriculture
Saudi Arabia	Marine Fish Research Consultant Dispatch Project	Production (Agriculture)	Technical Assistance	Agriculture
	Transport Technical Cooperation Consultant Dispatch Project	Social Infrastructure and Services (Transport and Storage)	Technical Assistance	Other
Bahrain	Horticultural Crops Development Consultants Dispatch Project	Production (Agriculture)	Technical Assistance	Agriculture
Banrain	Aquaculture Development Consultant Dispatch Project	Production (Agriculture)	Technical Assistance	Agriculture
Ethiopia	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
Lebanon	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III—Lebanon Green Economy Financing Facility-Bank Audi Pilot Project	Multisector/Cross-cutting (Environmental Protection)	Lending	Environment

### **Latin America and the Caribbean**

Country	Project	Sector	Type of Assistance	Priority Area
	SME Development Project	Production (Industry	Technical Assistance	Other
	Bamboo Industries Project	Production (Agriculture)	Technical Assistance	Agriculture
Guatemala	Institutional Enforcement Project for Agribusiness	Production (Agriculture)	Technical Assistance	Agriculture
	TaiwanICDF-CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
	TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Vocational Training Project for the Latin America	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Strengthening Aquaculture Development among Rural Families Project	Production (Agriculture)	Technical Assistance	Agriculture
	Establishment of Mariculture Center Project	Production (Agriculture)	Technical Assistance	Agriculture
	Capability Enhancement in Using Geographic Information Systems	Multisector (Environmental Protection)	Technical Assistance	Environment
	Healthy Tropical Fruit and Vegetable Seedling Propagation Center Project	Production (Agriculture)	Technical Assistance	Agriculture
	Farmers' Organization Marketing Capacity Enhancement Project	Production (Agriculture)	Technical Assistance	Agriculture
El Salvador	Local Characteristic Industries Development Project	Economic Infrastructure and Services (Other)	Technical Assistance	Other
	TaiwanICDF-CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
	TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Specialized Financial Intermediary Development Fund—Extending Financial Services for Small Enterprises in El Salvador through Factoring Project	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other

Country	Project	Sector	Type of Assistance	Priority Area
	Integral Microfinance Project	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
El Salvador	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Aquaculture Project	Production (Agriculture)	Technical Assistance	Agriculture
	Genetic Improvement in Sheep and Goat Project	Production (Agriculture)	Technical Assistance	Agriculture
	Belize Motor Vehicle Registration and License System Project	Economic Infrastructure and Services (ICT)	Technical Assistance	ICT
	Capability Enhancement in Using Flood Warning Technology in Belize Project	Multisector/Cross-cutting (Other multisector)	Technical Assistance	Environment
	Belize City House of Culture and Downtown Rejuvenation Project	Multisector/Cross-cutting (Environmental Protection)	Lending	Environment
	National Broadband Plan	Economic Infrastructure and Services (ICT)	Lending	ICT
Belize	Capacity Building Project for the Prevention and Control of Chronic Renal Failure in Belize	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Vocational Training Project for the Caribbean	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Youth Mandarin Language Training Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (ICT/Health)	Technical Assistance (Volunteer)	ICT, Public Health and Medicine
	Healthy Seed Potato Production Project	Production (Agriculture)	Technical Assistance	Agriculture
	Fonseca Net Cage Aquaculture Project	Production (Agriculture)	Technical Assistance	Agriculture
	Healthy Avocado Seedling Production Project	Production (Agriculture)	Technical Assistance	Agriculture
	Pig Breeding and Reproduction Project	Production (Agriculture)	Technical Assistance	Agriculture
	Forest Pest Management Project	Multisector/Cross-cutting (Other multisector)	Technical Assistance	Environment
	Improving Community Resilience in the Dry Corridor of Honduras Project	Humanitarian Aid (Disaster prevention and preparedness)	Technical Assistance	Agriculture
	CABEI Special Fund for the Social Transformation of Central America (FETS II)-Rural Infrastructure Project	Social Infrastructure and Services (Other Social Infrastructure and Services)	Lending	Other
Honduras	Vocational Training Project for the Latin America	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF-CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
	TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Production (Agriculture) Social Infrastructure and Services (Other)	Technical Assistance (Volunteer)	Agriculture, Other
	Rice Seed Research, Development and Production Extension Project	Production (Agriculture)	Technical Assistance	Agriculture
	Bamboo Cultivation and Handicraft Production Efficiency Enhancement Project	Production (Agriculture)	Technical Assistance	Agriculture, Environment
Nicaragua	Common Bean Research, Development and Production Extension Project	Production (Agriculture)	Technical Assistance	Agriculture
	Plantain Development Project	Production (Agriculture)	Technical Assistance	Agriculture
	Strengthen Capacity for GIS Metadata and Disaster Resilience Project	Multisector/Cross-cutting (Other multisector)	Technical Assistance	Environment
	Family Fish Farming Promotion Project	Production (Agriculture)	Technical Assistance	Agriculture



Country	Project	Sector	Type of Assistance	Priority Area
	Mariculture Project	Production (Agriculture)	Technical Assistance	Agriculture
	Strengthening Fruit and Vegetable Production Project	Production (Agriculture)	Technical Assistance	Agriculture
	Capacity Building for Commercialization of Agricultural Products Project	Production (Agriculture)	Technical Assistance	Agriculture
	One Town, One Product Project	Economic Infrastructure and Services (Other)	Technical Assistance	Other
	The Research on Adjustment Measures for Climate Change in Upland Rice Project	Production (Agriculture)	Technical Assistance	Agriculture, Other
	Specialized Financial Intermediary Development Fund—Support for Access to Financial Services for Mini-markets (Pulperias), Microenterprises and Small Businesses in Nicaragua	Economic Infrastructure and Services (Banking and Financial Services)	Lending/Investment	Other
	TaiwanICDF-CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
Nicaragua	TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
	CABEI-TaiwanICDF Fund for Consulting Service - Pre-investment Project for Replacement of Nueva Segovia Department Hospital	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Vocational Training Project for the Latin America	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Education/Health) Production (Agriculture)	Technical Assistance (Volunteer)	Agriculture, Education, Public Health and Medicine
	Health Information Management Efficiency Enhancement Project	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Project to Strengthen Capacity for Commercial Production of Orchids	Production (Agriculture)	Technical Assistance	Agriculture
Paraguay	Project to Strengthen Capacity to Support Development of MSMEs	Production (Industry)	Technical Assistance	Other
	Surubi Fingerling Breeding and Cultivation Project	Production (Agriculture)	Technical Assistance	Agriculture
	Vocational Training Project for the Latin America	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
Ecuador	Oyster Cultivation Development Project	Production (Agriculture)	Technical Assistance	Agriculture
	Rice Seed Production Capacity Enhancement Project	Production (Agriculture)	Technical Assistance	Agriculture
Haiti	National Rice Seed Production Enhancement Project in South	Production (Agriculture)	Technical Assistance	Agriculture
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Bamboo Industry Development Project	Production (Agriculture)	Technical Assistance	Agriculture
	Health Management of Greenhouse Vegetables and Product Safety Inspection Project	Production (Agriculture)	Technical Assistance	Agriculture
Dominican	MSME Consulting System Capacity Building Project	Production (Industry)	Technical Assistance	Other
Republic	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Eco-Park Maintenance Project	Production (Agriculture)	Technical Assistance	Agriculture
	Enhancing Agricultural Adaptive Capacity to Climate Variability Project	Production (Agriculture)	Technical Assistance	Agriculture
St. Kitts and Nevis	Land Administration Information System Project	Social Infrastructure and Services (ICT)	Technical Assistance	ICT
	Capacity Building Project for the Prevention and Control of Chronic Kidney Disease	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine

Country	Project	Sector	Type of Assistance	Priority Area
	Vocational Training Project for the Caribbean	Social Infrastructure and Services (Education)	Technical Assistance	Education
St. Kitts and Nevis	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Tourism/Health/Education)	Technical Assistance (Volunteer)	Education, Public Health and Medicine, Other
	Electronic Document and Records Management System (EDRMS) project	Economic Infrastructure and Services (ICT)	Technical Assistance	ICT
	Project for Strengthening Farmers' Organizations and Improving Fruit and Vegetable Production Technology	Production (Agriculture)	Technical Assistance	Agriculture
0. 15	Vocational Training Project for the Caribbean	Social Infrastructure and Services (Education)	Technical Assistance	Education
St. Vincent and the Grenadines	Youth Mandarin Language Training Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
G. O.I.aa.ii.oo	Capacity Building Project for the Prevention and Control of Diabetes	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (ICT)	Technical Assistance (Volunteer)	ICT
	Fruit and Vegetable Demonstration and Extension Project - the Second Phase	Production (Agriculture)	Technical Assistance	Agriculture
	Banana Productivity Improvement Project	Production (Agriculture)	Technical Assistance	Agriculture
	Government Island Wide Network Project	Economic Infrastructure and Services (ICT)	Technical Assistance	ICT
St. Lucia	Overseas Professional Mandarin Teaching Project	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Vocational Training Project for the Caribbean	Social Infrastructure and Services (Education)	Technical Assistance	Education
	TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Education)	Technical Assistance (Volunteer)	Education
	Specialized Financial Intermediary Development Fund	Economic Infrastructure and Services (Banking and Financial Services)	Investment	Other
	CABEI Special Fund for the Social Transformation of Central America (FETS II)	Social Infrastructure and Services (Other Social Infrastructure and Services)	Lending	Other
	TaiwanICDF-CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
Regional Cooperation	CABEI-TaiwanICDF Fund for Consulting Service	Multisector/Cross-cutting (Other multisector)	Technical Assistance	Other
Projects	TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Regional Lending Program for Coffee Rust in Central America	Production (Agriculture)	Lending	Agriculture
	Specialized Financial Intermediary Development Fund – Prospero Microfinanzas Fund	Economic Infrastructure and Services (Banking and Financial Services)	Investment	Other
	Huanglongbing (HLB) Prevention and Capacity Building Project	Production (Agriculture)	Technical Assistance	Agriculture

### **Central Asia and Middle East**

				1
Country	Project	Sector	Type of Assistance	Priority Area
Turkmenistan	FIPEISF-Agribusiness Account-Salty Snacks Project	Production (Agriculture)	Lending	Agriculture
	FIPEISF-Agribusiness Account-DFF Taze Ay Extension	Production (Agriculture)	Lending	Agriculture
	FIPEISF-Agribusiness Account-Atamyrat Ali poultry meat producer Turkmenistan	Production (Agriculture)	Lending	Agriculture
	FIPEISF-Agribusiness Account-Taze Ay Halal project	Production (Agriculture)	Lending	Agriculture
	FIPEISF-Agribsuiness Account-D Group Turkmenistan	Production (Agriculture)	Lending	Agriculture



Country	Project	Sector	Type of Assistance	Priority Area
Moldova	Green Energy Special Fund—Chisinau Urban Road Sector Project	Multi/Cross-cutting (Other Multisector, including Urban and Rural Development Projects)	Lending	Environment
	FIPEISF—Agribusiness Account—Moldova Glass Container Company	Production (Agriculture)	Lending	Agriculture
	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III— Moldova Express Leasing Microcredit	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
Azerbaijan	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III—TBC Kredit Project	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III—Demirbank Syndicated A/B Loan	Economic Infrastructure and Services (Banking and Financial Services)	Lending	Other
Romania	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III—Romanian Green Economy Finance Facility	Multisector/Cross-cutting/ Environmental Protection	Lending	Environment
	Green Energy Special Fund—Romania Bacau Urban Energy Efficiency Project	Multi/Cross-cutting (Other Multisector, including Urban and Rural Development Projects)	Lending	Environment
Bosnia and Herzegovina	Green Energy Special Fund—BiH Elektrokrajina Power Distribution Upgrade Project	Economic Infrastructure and Services (Energy generation, supply and efficiency)	Lending	Environment
	Green Energy Special Fund—BiH Elektro- Bijeljina Smart Metering Expansion Project	Economic Infrastructure and Services (Energy generation, supply and efficiency)	Lending	Environment
Bulgaria	Green Energy Special Fund—Bulgaria Sofia Electric Buses Acquisition Project	Multi/Cross-cutting (Other Multisector, including Urban and Rural Development Projects)	Lending	Environment

## Inter-regional Projects

Country	Project	Sector	Type of Assistance	Priority Area
Inter-regional Projects	Overseas Investment & Development Corp.	Production (Industry)	Investment	Other
	Taiwan Agricultural Global Marketing Company	Production (Agriculture)	Investment	Agriculture
	Healthcare Personnel Training Program	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
	International Human Resources Development Workshop Program	Social Infrastructure and Services (Education)	Technical Assistance (Workshop)	Education
	International Higher Education Scholarship Program	Social Infrastructure and Services (Education)	Technical Assistance (Scholarship)	Education
	Taiwan Youth Overseas Service	Social Infrastructure and Services/ Economic Infrastructure and Services/ Production (Overseas Service)	Technical Assistance (Health/ Communications/ ICT/ Agriculture, Forestry and Fishery)	Other
	TaiwanICDF Overseas Volunteers Program	Production/Social Infrastructure and Services (Agriculture/Education/ICT/ Health/Environmental Protection/ Tourism/Other)	Technical Assistance (Volunteer)	Agriculture, Education, ICT, Public Health and Medicine, Environment, Other
	EBRD Financial Intermediary Investment Special Fund—Small Business Account—Phase III	Economic Infrastructure and Services (Banking and Financial Services)	Investment	Other, Environment
	Green Energy Special Fund	Multisector/Cross-cutting (Environmental Protection)	Lending	Environment
	EBRD Financial Intermediary and Private Enterprises Investment Special Fund- Agribusiness Account	Production (Agriculture)	Investment	Agriculture

## **Cooperation Projects with International Organizations and NGOs**

	Organization	Project	Sector	Type of Assistance	Priority Area
	European Bank for Reconstruction and Development (EBRD)	EBRD Financial Intermediary Investment Special Fund— Small Business Account— Phase III	Economic Infrastructure and Services (Banking and Financial Services)	Investment	Other, Environment
		Green Energy Special Fund	Multisector/Cross- cutting (Environmental Protection)	Lending	Environment
		EBRD Financial Intermediary and Private Enterprises Investment Special Fund— Agribusiness Account	Production (Agriculture)	Investment	Agriculture
	Central American Bank for Economic Integration (CABEI)	CABEI Special Fund for the Social Transformation of Central America (FETS II)	Social Infrastructure and Services (Other Social Infrastructure and Services)	Lending	Other
		CABEI Technological and Vocational Education and Training Student Loan Fund	Social Infrastructure and Services (Education)	Lending	Education
Internatoinal		TaiwanICDF TVET Technical Assistance Fund	Social Infrastructure and Services (Education)	Technical Assistance	Education
Organizations		CABEI-TaiwanICDF Fund for Consulting Service	Multisector/Cross-cutting (Other Multisector)	Technical Assistance	Other
		Regional Lending Program for Coffee Rust in Central America	Production (Agriculture)	Lending	Agriculture
		International Human Resources Development Workshop Program	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Inter-American Development Bank (IDB)	IDB/MIF—Specialized Financial Intermediary Development Fund	Economic Infrastructure and Services (Banking and Financial Services)	Investment	Other
	Pan American Development Foundation (PADF)	International Human Resources Development Workshop Program	Social Infrastructure and Services (Education)	Technical Assistance (Workshop)	Education
	International Regional Organisation for Plant and Animal Health (OIRSA)	Huanglongbing (HLB) Prevention and Capacity Building Project	Production (Agriculture)	Technical Assistance	Agriculture
	Afro-Asian Rural Development Organization (AARDO)	International Human Resources Development Workshop Program	Social Infrastructure and Services (Education)	Technical Assistance	Education
	Mercy Corps	Rain Water Catchment Systems for Schools and Community Centers in Jordan	Social Infrastructure and Services (Water and Sanitation)	Technical Assistance	Other
		TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Other)	Technical Assistance (Volunteer)	Other
	World Vision	Integrated Action for Children's Nutrition Project	Social Infrastructure and Services (Health)	Technical Assistance	Public Health and Medicine
		Sigi-Biromaru Livelihood Support Program (Indonesia)	Humanitarian Aid (Reconstruction)	Technical Assistance	Agriculture
NGOs	CARE Honduras	Improving Community Resilience in the Dry Corridor of Honduras Project	Humanitarian Aid (Reconstruction)	Technical Assistance	Other
		TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Other)	Technical Assistance (Volunteer)	Other
	Action Against Hunger	Improvement of Solid Waste Management for Host Communities and Syrian Refugees in Azraq Town Project	Humanitarian Aid (Reconstruction)	Technical Assistance	Other
		TaiwanICDF Overseas Volunteers Program	Social Infrastructure and Services (Other)	Technical Assistance (Volunteer)	Other
	ICLEI Local Governments for Sustainability	International Human Resources Development Workshop Program	Social Infrastructure and Services (Education)	Technical Assistance	Education



#### **International Cooperation and Development Fund**

The TaiwanICDF's organization identity system emphasizes the core values of co-prosperity and professionalism. The use of the image of sprouting leaves illustrates the central areas of our work. Green reflects our focus on agriculture to eradicate poverty and hunger, and our growing attention to environmental sustainability; and blue represents our use of technology and innovative management to bridge the digital divide and enhance industrial growth. Finally, the white of the lettering stands for our efforts to ease the shortage of medical resources in partner countries. As Taiwan's dedicated development assistance body, we are determined to work as part of the international community to do our utmost to ensure a better world and a brighter future.

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