

Table of contents

- 1 Foreword
- 2 About the Japan International Cooperation Agency

Development Cooperation in Luzon

- 6 Building north-south connectivity is no longer a dream
- 7 Upgrading Metro Manila's railway system
- **8** Support to win the race against tuberculosis
- **9** Learning innovations on rabies diagnosis in Japan
- **10** Paving the path to sustainable agriculture
- 11 Farmers in Central Luzon find niche in mulberry farming
- 12 Filipino officers and local farmers learn the ropes of marketing vegetables
- 13 At the forefront of health promotion in local communities
- 15 A league of their own: Japanese volunteers share their expertise with Filipinos

Development Cooperation in Visavas

- 18 Alternative fuel from Japanese technology driving Boracay's journey to sustainable tourism
- 19 Japanese, Filipino scientists conduct pioneering research towards science-based coastal conservation policy
- 20 How a forest conservation project is making a difference in upland communities

Development Cooperation in Mindanao

- 22 A flood prevention project seen to boost Mindanao business potential
- 23 Road leading to rehabilitation and recovery in conflict-affected
- 24 Lighting up Bangsamoro's future
- 25 From green to gold: How industry clustering helps farmers in Mindanao's conflict area see potential in seaweeds

Sectors at a Glance

- **27** Railways
- 29 Roads and Bridges
- **32** Maritime Safety and Security
- **34** Investment Promotion
- **36** Energy
- **38** Environment
- **41** Disaster Risk Reduction and Management
- 44 Agriculture
- **47** Social Development
- **49** Peace and Development in Mindanao

Special Features

- An affirmation of Japan-Philippine ties through JICA
- 54 Partnering with private companies for social impact
- **56** Redefining relations with Asia

- **58** Advocating for peace and development in Mindanao
- **60** Building future leaders
- **62** Filipino youth find their voices

Corporate Profile

- 63 Fast Facts
- 64 Operations Map and Project List
- 66 Organizational Chart
- **67** People behind JICA

ABOUT THE COVER

The cover shows how JICA and the Philippines are traversing their journey through a partnership based on trust and friendship. The Philippine map is dotted with images of JICA's cooperation with different sectors in the Philippines, geared to promote sense of self-reliance among Filipinos while working with JICA towards a more inclusive, sustainable future.

Fortifying the future through trusted partnerships



Let us learn from each other's experiences that we may fortify a future that is more innovative, inclusive, and resilient.

11

VER THE PAST YEARS leading the Japan International Cooperation Agency (JICA) Philippine Office, I witnessed the concerns and hopes of many Filipinos. Their aspirations to have quality jobs, better living standards, and equal opportunities are similar challenges that JICA seeks to address in our partnership with the Philippines.

Through our annual publication, JICA would like to share with you how we are working with the Filipino community, with Japanese citizens, and with other development aid organizations in forging the way forward. At the core of all these in the Philippines is the culture of partnership and trust our nations built over the years.

I hope that the stories in this publication inspire our partner agencies, communities, local governments, and other stakeholders in pushing boundaries so we can better the lives of the people of the Philippines and Japan. Let us learn from each other's experiences that we may fortify a future that is more innovative, inclusive, and resilient.

In the same way, JICA looks forward to the successful implementation of our ongoing projects in the Philippines, and harness them in keeping our partnership and trust. As part of moving to that direction, we are underscoring other emerging key development issues through our features in this report, namely a free and open Indo-Pacific as maritime nations, private sector participation, climate resilience, social inclusion of youth, and people-to-people exchange between our nations.

On this note, I would like to thank you for your support to JICA and to our work in the Philippines. We will continue to share Japan's knowledge with the Filipinos, and learn from our common experiences. As we enter a new decade, let us strive to work together to fortify the future, building on our partnership and trust.

WADA YOSHIO

Chief Representative

4. Wade

About the Japan International Cooperation Agency



Who We Are

The Japan International Cooperation Agency (JICA) is the executing agency of Japan's Official Development Assistance (ODA) in the Philippines. It is the world's largest bilateral aid agency working with over 140 countries and regions. JICA acts as bridge towards stronger relations and friendship between Japan and the Philippines.

Our Vision

Leading the world with trust

Our Work

JICA seeks to contribute to peace, stability, and prosperity of its partner countries like the Philippines by addressing key priority areas.

1. Achieving sustainable economic growth through further promotion of investment

To improve the Philippines' investment climate and achieve sustainable economic growth by providing assistance on: improvement of traffic and transport network of the Greater Capital Region (GCR) and major cities outside GCR; improvement of energy and water infrastructure; securing maritime safety; and human resource development for industries

2. Overcoming vulnerability and stabilizing bases for human life and production activity

To overcome vulnerability to risks affecting the impoverished sector and stabilize the foundation for human life and production activities by providing assistance on: improvement of hard and soft infrastructure related to natural disasters and environment; development of safety nets including healthcare; and enhancement of agriculture productivity and processing and distribution of agricultural products

3. Peace and development in Mindanao

To help stabilize peace in Mindanao through the peace process and achieve socioeconomic development in conflict-affected areas and poverty alleviation by providing assistance on: reducing poverty through improvement of access to social services; community development through improvement of infrastructure and industry promotion; and strengthening local governance

Types of Cooperation

JICA supports developing countries through various types of assistance methods.



Technical Cooperation

JICA assists developing countries in developing human resources, strengthening organizations, formulating policies, and building institutions. JICA sends trainees in Japan and dispatches Japanese experts as part of sharing Japan's knowledge, experience, and technologies. Its components are:

- Dispatch of Experts
- Technical Training or Knowledge Co-Creation Program
- Technical Cooperation Projects
- Technical Cooperation for Development Planning
- Science and Technology Research Partnership for Sustainable Development (SATREPS)

Finance and Investment Cooperation

JICA extends Official Development Assistance (ODA) loans in concessional

terms to support large-scale projects and implements Private Sector Investment Finance for private sector activities in partner countries.



Grants

JICA provides funds to developing countries without obligation of repayment to improve schools, hospitals, water supply facilities, roads, as well as to provide equipment.



Emergency Disaster Relief

In case of major disasters, JICA dispatches Japan Disaster Relief (JDR) teams in response to requests of governments of

affected countries or international organizations. JICA also provides e m e r g e n c y relief supplies in disaster-affected areas.



Public-Private Partnerships

JICA helps solve socioeconomic issues of partner countries through Japanese companies' participation in projects and introduction of technologies and products. This support includes:



- Private Sector Investment Finance
 JICA supports private enterprises involved in
 business with positive impact in certain fields like
 infrastructure improvement, poverty reduction,
 and climate resilience among others. More in p. 54
- Preparatory Survey for Public-Private Partnership JICA assists developing countries in identifying and formulating infrastructure projects that will incorporate the expertise of the private sector through public-private partnership.
- SDGs Business Supporting Surveys
 JICA supports Japanese small and medium
 enterprises whose business help developing countries
 achieve the Sustainable Development Goals (SDGs).

Citizen Participation

JICA encourages participation of Japanese citizens in development cooperation by working with non-government organizations, local governments, universities, and other Japanese organizations.

- Partnerships with NGOs, local governments, and universities to promote collaboration, regional revitalization, and strengthen Japan's relations with other countries
- JICA Volunteer Program to support activities of Japanese citizens who volunteer for socioeconomic development



DEVELOPMENT COOPERATION IN LUZON

Building north-south connectivity is no longer a dream

PROJECT TITLE:

North-South Commuter Railway Project

RDINARY COMMUTERS are finally seeing signs that a north-south railway project will no longer be a distant dream.

In 2019, construction of the nine stations and elevated structures of the North-South Commuter Railway (NSCR) Project of the Department of Transportation (DOTr) and Japan International Cooperation Agency (JICA) is in full swing. The project is seen to enhance north-south connectivity with travel time reduced to 35 minutes from Malolos, Bulacan to Tutuban, Manila from the usual two-hour commute. Using Japan's seismic design technology and low emission trains, the NSCR will be able to carry as much as 300, 000 passengers daily.

"We continue to work with our partners under the fast and sure approach, so Filipinos can experience a comfortable life through improved infrastructure," said DOTr Secretary Arthur Tugade. Under the Duterte administration, the Philippines targets building approximately 1,900 kilometers of railways in Luzon, Visayas, and Mindanao from its existing 77-kilometer lines.

With economic cost of transportation in Metro Manila projected to reach ₱5.4 billion a day by 2035 (Follow-Up Survey on Roadmap for Transport Infrastructure Development for the Greater Capital Region, 2019), the ongoing NSCR construction activities signal hope of easing such costs and commute, while also lessening carbon emissions from cars sitting in traffic.

The Philippine government and JICA likewise firmed up an agreement to extend the NSCR from Malolos, Bulacan to Clark, Pampanga, and from Blumentritt, Manila to Calamba, Laguna. The extension is co-financed by the Asian Development Bank (ADB) and will stretch the entire NSCR to a total of about 147 km of railway lines.

Once the NSCR links are completed and operationalized, long-term benefits to the ordinary Filipinos commuting daily will be close at hand. •





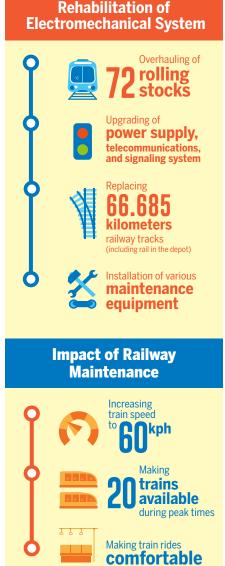
Photos courtesy of Sumitomo Mitsui Construction Co., Ltd.



REHABILITATION PROJECT of Metro Rail Transit (MRT) Line 3 is paving way for a safer, reliable commute in and around Metro Manila, with overhauled rolling stocks, rehabilitated stations and depot, and upgraded safety features and operation system.

This rehabilitation project of the Japan International Cooperation Agency Department (IICA). of Transportation (DOTr) and Sumitomo Group (Sumitomo Corporation, MHI Engineering, and TES Philippines Inc.) will further enhance the improvements made by DOTr in the line's operations and maintenance. Also, upkeep of the depot and railway vehicles as well as installation of essential safety features are prioritized.

"We are committed to sharing Japanese technical knowhow and experience in engineering and railway technology so that rehabilitation of MRT Line 3 will bring positive impact to Filipino commuters," said Morita Kiyoshi, President of TES Philippines Inc. Under the project, the Sumitomo Group will also rehabilitate the train's electromechanical systems replace the current railway tracks. The rehabilitation will restore the



MRT Line 3's original capacity of as much as 500,000 passengers per day from the existing 350,000-passenger capacity.

Metro Manila is one of the most populous metropolitan areas in Asia, with density of 20,000 people for every square kilometer. Rapid urbanization and growing population also contribute to the city's worsening traffic that is already causing the Philippines some ₱3.5-billion every day, according to a JICA-National Economic and Development (NEDA) Authority Roadmap Study for Transport Infrastructure Development for Metro Manila and its Surrounding Areas. With only 88.92 km of operational railway system in Metro Manila, it is an urgent necessity that transport systems are safe and reliable.

"Our mission is to help restore MRT Line 3 ensuring that defective conditions are minimized and that the trains are safe, reliable, comfortable, and punctual," added Morita.

With the project diligently tackling the problems of MRT Line 3, the Filipino commuters are hopeful that commuting will actually become better this time around. •

Support to win the race against tuberculosis

OR THE FIRST TIME, local government units could benefit from a web-based mobile application or tbdashboard.doh.gov. ph that can track cases and enhance monitoring and treatment of one of the major health diseases in the Philippines: tuberculosis (TB).

The Department of Health (DOH) with funding support from the World Health Organization (WHO) developed the mobile application, while Japanese expert Dr. Hamada Yohhei, dispatched by Japan International Cooperation Agency (JICA) to DOH, contributed in the design of some of the features of the web-based application. Said application will help bridge the gap in data management of TB in the Philippines and will be introduced to local health units. "In the Philippines, only 63% of TB cases is reported, while the other 37% go unreported," said Hamada. "This is why we are meeting with heads of local government units to encourage use of this mobile application."

Aside from WHO, JICA also coordinates with the United States Agency for International Development (USAID) on TB prevention and control. Already, JICA and representatives from said institutions met with Manila Mayor Isko Moreno to discuss use of the technology to address the growing TB case rate in the city, one of the highest in the country at 412 per 100,000 population. Said mobile application, downloadable in android or iOS, shows easy-

PROJECT TITLE:

JICA Advisor on Tuberculosis (TB)

Control Program

PROJECT PERIOD: 2018-2019

PROJECT TITLE:
Collaboration Program for
Disseminating Japanese Technology
for New TB Diagnostic Algorithm in
the Philippines

PROJECT PERIOD: **2016-2019**



JICA officials with Manila Mayor Isko Moreno Photo courtesy of Manila Health Department

The Philippines has one of the highest TB incidence in the world, with 591,000 people affected with the disease every year

to-read data on the TB situation in the Philippines, including cases on screening, testing, treatment, outcomes, and prevention.

The Philippines has one of the highest TB incidence in the world, with 591,000 people affected with the disease every year, or 552 people for every 100,000 population, Data from the WHO Global Tuberculosis Report 2019 showed that 26,000 Filipinos die from TB every year, higher than the 11,000 deaths from Ebola in parts of Africa. In a country where one out of every five families is poor, such health

threats can seriously affect their poverty level and quality of life.

With Japan's technology advances and JICA's support to help vulnerable sectors, the mobile application along with a Japanese diagnostic device called TB-LAMP (Loop Mediated Isothermal Amplification) is also

being shared with the Philippines to fight TB. Under the JICA Collaboration Program with Japanese Private Sector scheme, Japanese company Eiken Chemical Co. Ltd., in partnership with the Research Institute for Tropical Medicine (RITM) of DOH, piloted the technology in health units in the National Capital Region such as Las Piñas, Commonwealth Health Center, and San Lazaro Hospital in Manila; Antipolo, Rizal; and Municipality of San Jose, Romblon Province.

"The project offers options for routine TB diagnostic tool and for intensive case finding activities. It also shares Japanese knowledge and technology on TB diagnosis that can be adopted in the Philippines and utilized to improve strategies in reducing TB incidence," said JICA Section Chief Flerida Chan.

Pilot testing so far showed that TB-LAMP can improve the diagnostics reliability of existing TB-DOTS (directly observed treatment short course) facilities and reduce turnaround time in TB diagnosis, paving way for early treatment. Health workers in limited workspaces in health units, private clinics, or evacuation centers in disaster areas can also use the device easily.

Dr. Ramon Basilio, deputy head of the National Tuberculosis Reference Laboratory at RITM said, "The pilot test showed that the technology can easily be adopted in remote or hospital-based settings and has inspired us to continue using research to improve TB diagnosis in the Philippines." •



PROJECT TITLE: **Establishment of One Health Prevention and Treatment Network Model for Elimination of Rabies in the Philippines or Japan-Philippines One Health Rabies** (JAPOHR) Project

PROJECT PERIOD: **2018-2023**

T IS TYPICAL to cross paths with stray dogs in the Philippines, often posing rabies risks to common people. In a country where 97% of rabies cases are from dogs, it is important to equip health practitioners on latest surveillance and diagnosis techniques and methods.

Rabies, a vaccine-preventable disease, is transmitted through bites and exposure from saliva of infected animals. Globally, 59,000 people die from rabies every year, while in the Philippines, rabies is the cause of death of nearly 200-300 Filipinos yearly (World Health Organization report).

That's International why Japan Cooperation Agency (JICA) supported the project called Establishment of One Health Prevention and Treatment Network Model for Elimination of Rabies in the Philippines or Japan-Philippines One Health Rabies (JAPOHR). The one health treatment and network model promotes a comprehensive, multi-agency approach in eliminating rabies. This includes introducing novel diagnostic methods and establishing an integrated laboratory-based surveillance system.

Through the project, Filipino health professionals also studied advanced rabies diagnosis methods in Japan. "We observed modern testing methods in Japan on rabies detection. These tests can deliver faster results in 15-20 minutes, thus preventing deaths from rabies and reducing overall health costs. This is far from the Philippines' current standard

Japan for rabies diagnosis Photo courtesy of RITM



in Japan diagnostic test which is time consuming and requires expensive equipment," said Dr. Sheila Marie Esposo of the Research Institute for Tropical Medicine (RITM),

one of the participants of the training.

Esposo, along with other members of the project team, visited the Veterinary School of Kitasato University, Oita University, and National Institute of Infectious Diseases of Japan. "Japan has been rabies-free since the 1950s made possible when we strictly implemented the anti-rabies law and held mass vaccinations of pets. Through this project, we are coming up with a new approach in eliminating rabies based on advanced techniques from Japan and local expertise in the Philippines," said Japanese expert Dr. Nobuo Saito from Japan's Oita University.

At Oita University, Filipino trainees learned about the ICT kit for rabies diagnosis and testing that the university Department of Health-Research Institute for Tropical Medicine (DOH-RITM), and the Department of Agriculture- Bureau of Animal Industry (DA-BAI) will also come up with easy to use diagnostic kits for rabies that will provide quick results (like pregnancy test kits) and a data sharing system to identify statistics on rabies cases and interventions easily. Officials from DA and DOH Region III offices were also trained in Japan on molecular epidemiology on rabies measures, and as part of the project's long-term capacity enhancement, two officials from RITM and DA-BAI were sent to Japan for postgraduate studies.

So far, the Philippine government has enacted Republic Act (RA) 9482 (Anti-Rabies Act of 2007) but enforcement has been weak due to institutional, resources, and cultural challenges. With all hands on deck boosting the capacity of the health community through this JICAassisted project, rabies prevention in the



Paving the path to sustainable agriculture



PROJECT PERIOD: March 2012-July 2021

The Filipino farmers in this part of Palawan are ready for change.

FTER YEARS of overcoming challenges in rice production, farmers in Narra, Palawan now have a newly-rehabilitated irrigation facility that can help them bring their produce to the market.

"We do not only have better irrigation facility, we were also trained on how to manage our farmers' association better," said Jibsam Andres of the Malatgao Irrigators Association. The irrigation facilities, farm machineries, and farmers' trainings were part of a project of the Japan International Cooperation Agency (JICA) and National Irrigation Administration (NIA) in cooperation with the Philippine Rice Research Institute (PhilRice) called National Irrigation Sector Rehabilitation and Improvement Project (NISRIP).

Other than Palawan, NISRIP is rehabilitating 10 irrigation facilities in nine (9) regions and training more than 25,000 farmers on managing their associations. To date, the project inaugurated three (3) national irrigation systems in the Philippines such as the Mal River Irrigation System (RIS) in Davao del Sur, Sta.Barbara RIS in Iloilo,

and Malatgao RIS in Palawan. "The project did not only help improve facilities, it also strengthens farmers' organizations and trained farmers on operation and maintenance of irrigation facilities. With these, the farmers are also seen as development partners of NIA in growing the agriculture sector," said Conrado Cardenas Jr., division manager of Palawan Irrigation Management Office.

In Narra, Palawan, farmers' groups have organized into a Federation of Irrigators Association who are trained to manage their resources and have built networks with NIA and PhilRice.

With Filipino farmers as among the poorest sectors in the country, NISRIP has empowered farmers to manage productivity and access markets. To sustain the gains from the project, NIA is already looking into replicating the success of the project in Palawan to other areas.

Now equipped with better agriculture facilities and skills, farmers in Narra can now look forward to better prospects in farming, ensuring them of sustainable future. •



LOCOS NORTE

Madongan & Solsona
RIVER IRRIGATION SYSTEMS

PANGASINAN 7 5

San Fabian RIVER IRRIGATION SYSTEM

PAMPANGA 4.040

Porac-Gumain 4,5

QUEZON Dumacaa 1,705

PALAWAN Malatgao 1,505

Sta. Barbara 1,26

BUKIDNON OOG Muleta OOG

DAVAO DEL SUR MAI 3,720 RIVER IRRIGATION SYSTEM

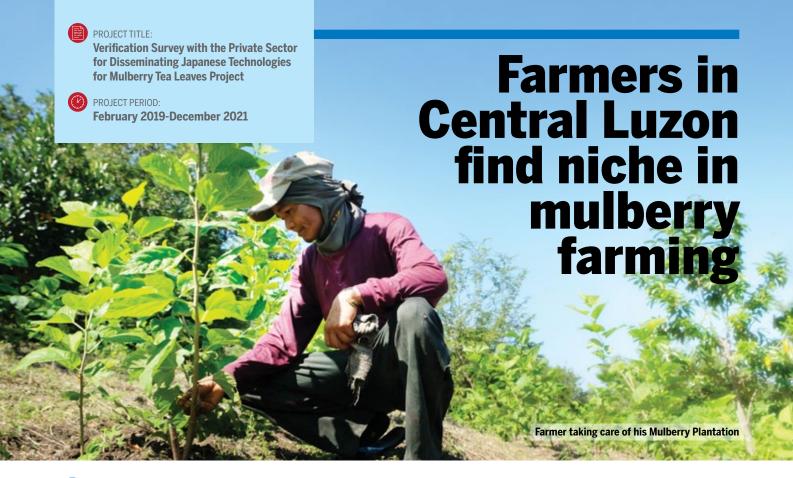
MAGUINDANAO 5,624

Lambayong RIVER IRRIGATION SYSTEM

AGUSAN DEL SUR Simulao 2,033

25,376 TOTAL





IX MODEL FARMS in Pampanga in Central Luzon selected under this project are seizing potential from producing mulberry leaves for tea, a beverage popular with the health-conscious consumer market and tea drinking countries like Japan. One of the main benefits of mulberry leaf is it helps control the blood sugar level.

Mulberry production in the model farms occupy 500 to 1,000 square meters that local farmers cultivate side by side with other fruit bearing trees like sweet tamarind, avocado, bananas, and other crops. Demand for mulberry leaves in Japan is estimated at 3 billion pesos, based on health industry report of Kenko-Sangyo Shimbun.

Since 2016, Japanese company Kuwanosato, Inc. together with the Japan International Cooperation Agency (JICA) worked with Pampanga State Agricultural University (PSAU) to introduce mulberry planting in Pampanga. The JICA Sustainable Development Goals (SDGs) Business Verification Survey with the Private Sector provided mulberry tea processing facilities to the PSAU mulberry tea factory in January 2020. The facilities can produce 200 kilograms of mulberry tea per day. The project aims to improve mulberry cultivation skills, transfer processing

technology, and develop new markets in Japan and the Philippines.

"Planting mulberries gives us opportunity for alternative income aside from traditional crops. Mulberries are also easy to maintain because a farmer can just replant them using the plant's branches and stems," said Carlos Cruz, a farmer in one of Pampanga's model sites.

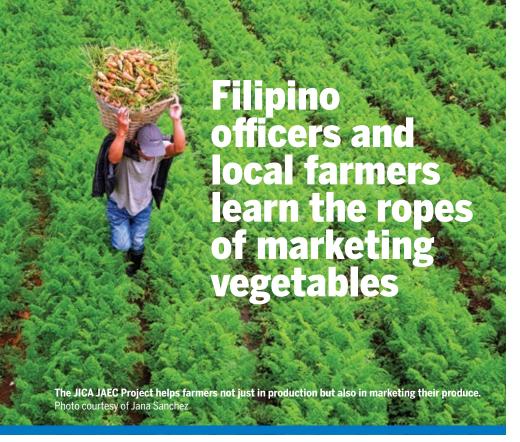
With help from Kuwanosato, PSAU personnel are training on processing mulberry leaves, and then packing and distributing them to potential niche markets such as food, beverage, and pharmaceutical manufacturers in Japan as well as drug stores and health food shops in the Philippines.

Local farmers in the Philippines often suffer from unstable income due to natural disasters and changing prices of agriculture products. In Pampanga, where Mount Pinatubo eruption ravaged farms in 1991, local farmers did not give up in their field and shifted to high value crops instead.

"Mulberry farming is also an opportunity for other farmers to have extra income from stagnant lands," said Ariel Dizon, another farmer in one of the project's model farms in the town of Arayat in Pampanga.

"We hope to become a good example for other farmers here for mulberry planting," he added while gesturing to the green plot he has been cultivating for the past two years. •





PROJECT TITLE:
Safe Vegetable Production
and Marketing Technology
Improvement Project

PROJECT PERIOD:

December 2016-November 2019

Data Source: Farmers in Benguet Practice SAVERS Technology. December 2011. Shimizu, T. n.d. Introduction of JAEC Project in the Philippines. RESHLY PICKED vegetables sorted and packed in symmetry inside crates and styrofoam boxes before shipping to supermarkets illustrate how local farmers in Benguet value improved marketing and distribution compared to before.

This approach to improve vegetable packing and shipment is helping local farmers increase their income while keeping their products fresh. Such is the case with the 17 farmers belonging to the Buguias-Japan Agricultural Trainees Association (BJATA) who have raised their production from double to triple in average, according to one member of BJATA. They found their niche markets supplying supermarkets with support from the Safe Vegetable Production and Marketing Technology Improvement Project of the Japan International

Cooperation Agency (JICA), Japan Agricultural Exchange Council (JAEC), and the Department of Agriculture (DA).

After four (4) phases of implementation of the project from 2007 – 2016 focusing on safe vegetable production, the group recognized the importance of proper post-harvest handling, transport, and pricing to realize an increase in income. About 20-40% of vegetables become food waste from farm to market deliveries. Farmers do not have the knowledge to maintain the quality of their harvest while also lacking the facilities for stock piling and storage.

In the fifth phase of the implementation of the project, all these changed. Under the project's component on Farmers Improvement Vegetable Packing and Shipment, thirty-four national and local officers (including a former DA-Secretary and two DA-Undersecretaries) trained in Japan on soil cultivation and marketing system by visiting vegetable farms to observe harvesting, packing, and shipping of their vegetables; cold storage; wholesale market; farmers' market; and supermarket. "Aside from learning how to use natural materials in production, local farmers also learned marketing strategies in packing and shipping that helped increase their profit," said Wilfredo M. De Chavez, chief technical advisor of JAEC in the Philippines.

The officer trainees, have in fact, began explaining the importance of vegetable distribution to preserve freshness for local farmers.

As local farmers struggle to grow their markets, the project is paving the way to make farming viable through improved marketing, transportation, and post-harvest systems. •

A Look Back

JICA has been working with Japanese non-profit group Japan Agricultural Exchange Council (JAEC) for many years to champion sustainable farming. Here's a timeline of their partnership through the years.

2007-2010

-JICA-JAEC project piloted **Better Farm Income** by Organic-Based Vegetable Production in the Philippines; established **demonstration farm** in Benguet State University

2010-2012

-Introduced SAVERS (Safe Vegetable from Rich Soil) technology through Safe Vegetable Promotion Project in 9 municipalities of Benguet

2012-2015

-Disseminated SAVERS technology through the Safe Vegetable Production and Marketing Project with Soil/Resource Conservation in the 13 municipalities of Benguet province

2013-2016

-Held trainings for the Safe Plant and Livestock Production Technology Dissemination Project in 14 provinces

2016-2019

-Launched
Safe Vegetable
Production and
Marketing Technology
Improvement Project
in the Philippines to
benefit 845 farmers



At the forefront of health promotion in local communities

PROJECT TITLE:

Health Promotion and Quality of Life
Improvement for Diabetics in
Metro Manila

PROJECT PERIOD:

January 2017-December 2019



Tottori University officials interview a diabetes patient in Pateros

NE OF THE LESSONS of Japan's Tottori University when advancing global health is the importance of working with local governments to address health problems. Their undertakings in the Philippines spanned more than three decades from working on AIDS prevention in 1996 to establishing measures for blood infectious diseases today, including sending Filipino medical students to learn in Japan.

Now, Tottori University shares their expertise on diabetes prevention in a local community in Pateros, Metro Manila. In the Philippines, average health costs for diabetes is at US\$205, an appalling amount in a country where average daily pay is at ₱427, government data showed. Together with the University of the Philippines (UP), Diabetic Association of Pateros (DAOP), and JICA, Tottori University formalized a program collecting data among diabetes patients and educating

patients on self-management on preventive measures against diabetes. Through the Technical Cooperation for Grassroots Project (TCGP), more and more diabetics have improved their knowledge on the disease, translating to a better way of life.

"With help of the project, we learned specific types of diet and exercises appropriate for persons with diabetes," said Benjamin Orata, peer leader and former president of DAOP. "Peer leaders like us also share our learning with other patients through sessions at the health center."

Local communities like Pateros are sometimes set back by low health funding and lack of human resources to handle non-communicable diseases. Knowing that health complications are associated with economic burden that drives people into poverty, Tottori University and JICA continue to reach out to communities like Pateros. Also,



for developed countries like Japan, sharing knowledge on important diseases and boosting the capacity of the health workforce in partner countries create opportunity to make the world a safer place for all. •

JICA Technical Cooperation for Grassroots Projects (2015 - Present)



Environment and Social Development

Metro Manila, Region 3

Proponent: ACTION

Counterpart: Department of Social Welfare and Development

Period: 2016.10 - 2019.7

■ Ensuring Children's Potential for Development and Independence through Improved Residential Care Practices

Metro Manila

Proponent: Tottori University Counterpart: Municipality of Pateros Period: **2017.1 - 2019.12**

Health Promotion and Quality of Life (QOL)

Improvement for Diabetics in Metro Manila

Cebu

Proponent: Saitama Prefecture Counterpart: Department of Education Period: 2017.1 - 2018.12

■ Saitama Active Learning Promotion Project

Legazpi City

Proponent: Furusato Minami-Shinshu Green Foundation, Inc. (FMGF) / lida City Counterpart: City of Legazpi Period: 2017.1 - 2018.12

Expansion of Participatory Local Social Development based on lida Local Governance Model in Legazpi City, Philippines

Davao

Proponent: Kitakyushu City

Counterpart: City Environment and Natural Resources Office of Davao

Period: 2017.3 - 2020.2

Project for Enhancing Solid Waste Management in Davao City

Bohol

NGO: Keiou Gijyuku University Counterpart: City Government of Tagbilaran Period: 2018.2 - 2021.7

Plastic Recycling Project for Improving Women's Income In Tagbilaran City, Bohol

Tarlac

Proponent: Momotaro Kai / Kibi Chuo Cho, Okayama Prefecture

Counterpart: Municipality of Capas Period: 2017.9.22 - 2020.8.31

Project on Knowledge Dissemination and Actual Implementation of Preventive Care Program for the Senior Citizens of Capas Municipality

Metro Manila

Proponent: Tanoue Laboratory, Faculty of Design, Kyushu University

Counterpart: Presidential Commission for the **Urban Poor**

Period: 2019.3 - 2021.10

 Housing Design Support Project for Informal Settler Families (ISFs) through Human Resource Development

Bohol

Proponent: Ikaw-Ako Counterpart: Municipality of Ubay Period: 2015.10 - 2019.9

Promoting Sustainable Reduce, Reuse. Recycle (3Rs) System through Education to Produce Environment-Minded Society Development

Rizal

Proponent: Community Life Counterpart: Municipality of Rodriguez Period: 2016.1 - 2018.12

■ Skills Training for Community-Based Rehabilitation (CBR) Workers and Communities through the Community Activities for the Empowerment of Children and Adults with Disabilities

Cebu

Proponent: Saitama Prefecture Counterpart: University of San Jose Recoletos Period: 2016.1 - 2018.6

Saitama-Cebu Comprehensive Human Resource (HR) Monozukuri Project (Phase II)

Mindanao

Proponent: Hiroshima Prefecture / Hiroshima University

Counterpart: Bangsamoro Transition Commission Period: 2015.12 - 2018.11

Global Hiroshima Project to Enhance Peacebuilding Human Resource Development for the Bangsamoro Government in Mindanao

Proponent: Ifugao GIAHS Support Committee / Ishikawa Prefecture

Counterpart: Ifugao Provincial Government, Ifugao State University (IFSU), University of the Philippines Open University (UPOU) Period: 2017.6.1 - 2020.5.31

■ Project for Strengthening "Twinning" between Globally Important Agricultural Heritage Systems (GIAHS) Designated Sites, "Ifugao Rice Terraces" and "Noto's Satoyama and Satoumi" for Sustainable

Development Mindoro

Proponent: DANKA DANKA Counterpart: Doble Kamang Period: 2016.2 - 2018.6

■ A Pilot Project on Livelihood Generation for the Yolanda-Striken Mangyan People through Native Pig **Farming**

Eastern Visayas

Proponent: Positive Planet Japan Counterpart: National Confederation of Cooperatives

Period: **2016.2 - 2019.1**

■ Improving Livelihood of Small Scale Low Income Farmers Affected by Typhoon Haiyan through Enhanced Institutional Capacities of Cooperatives in Eastern Visavas



Agriculture and Agribusiness

Benguet

Proponent: WE21 Japan

Counterpart: Cordillera Green Network

Period: 2016.7 - 2019.6

■ Project for Institutional Capacity Development for the Quality Improvement of Coffee in Tublay, Benguet

Negros Occidental

Proponent: Nanjo City, Okinawa Prefecture/NGO **Lequio Wings**

Counterpart: Victorias City Period: **2017.3 - 2020.3**

■ Victorias City Agri-Business/Agri-Eco-Tourism Enhancement Project Based on Nanjo City Model

Benguet

Proponent: Japan Agricultural Exchange Council (JAEC) / Minami Maki Mura, Nagano Prefecture Counterpart: Department of Agriculture Period: 2016.12 - 2019.11

Safe Vegetable Production and Marketing Technology Improvement Project in the Philippines

Leyte

Proponent: Ishinomaki NPO Center / Higashi **Matsushima City**

Counterpart: Bureau of Fisheries and Aquatic **Resources Region VIII** Period: 2016.2 - 2019.2

Development of Mariculture and Processed Products Using Oku-Matsushima Techniques in Typhoon Yolanda Affected Areas



Disaster Risk Reduction and Management

Cebu

Proponent: NGO SEEDS Asia / Hyogo Prefecture Counterpart: Department of Education Region VII Period: **2017.3 - 2020.3**

Capacity Building on Disaster Risk Reduction through Cooperation between Local Communities and Education Sector in Cebu

Proponent: Hokuriku Gakuin University Counterpart: Central Visayas Fisherfolk **Development Center (FIDEC), Southern Partner** of Fair Trade Center (SPFTC) Period: 2017.1 - 2020.1

Supporting Local Fisher Folk Communities through Training on Seafood Processing Methods and Disaster Prevention/Reduction

Proponent: Nagoya Institute of Technology Counterpart: Municipality of Tubigon Period: 2015.1 - 2018.12

■ The Project for Enhancement of Capacity for Participatory Disaster Management on Prevention, Preparedness, Response and Recovery in the Municipality of Tubigon, Bohol

A league of their own: Japanese volunteers share their expertise with Filipinos

PROJECT TITLE:

JICA Volunteer Program

DISPATCH PERIOD:

2 years

Three Japanese volunteers, all of them women, have traded their professional lives in Japan to share in the effort in international cooperation and strengthen the bridge between Japan and the Philippines.



JICA volunteers Kunisawa, Fukuda, and Yamawaki

Education

HEN Fukuda Megumi told the president of the IT company where she works in Japan that she will join the Japan Overseas Cooperation Volunteers (JOCV) Program, her decision was welcomed since the private sector in Japan is encouraged to contribute to Japan's international volunteer efforts.

Fukuda is an IT engineer who shared that many universities in the Philippines are enthusiastic about IT education and felt that "supporting them will be beneficial for both Japan and the Philippines as demand for engineering jobs in Japan is increasing." At Don Mariano Marcos Memorial State University in La Union Province, Fukuda is training teachers on

web application development and is helping develop curriculum materials. Together with the schools' faculty, Fukuda is helping establish

Fukuda also connected the university with Zenet, Inc. in Japan where is she working to help provide internship opportunities to students and expose them to industry practices. Ms. Perla Vanessa Sobrepeña, chair of the Information Technology course in the university said, "Our volunteer's support helps us address our lack of experience in the IT industry and the trainings she provides to our teachers will make our students more competitive when they graduate."

"I hope that my work will inspire more students to play an active role in the IT industry and help bring IT education closer to real industry experiences," said Fukuda.



Agriculture

At the Philippine Carabao Center (PCC) in Nueva Ecija, Japanese volunteer Kunisawa Asuka helps dairy farmers learn new breeding techniques to increase productivity. A veterinarian by profession, Kunisawa joined the JOCV Program to "share her knowledge and learn from other countries."

She works at the National Impact Zone of the PCC where farmers group into cooperatives and assists in creating sustainable carabaobased enterprises. Farmers in this zone collect milk from the animals and sell them to processors, who, in turn develop milk products for the local market. "Our volunteer has been helping us in the Dairy Herd Improvement Program so we can improve the quality of milk produced while also taking care of the animals for productivity," shared Wilma del Rosario, Senior Science Research Specialist at PCC. "She is providing on-site field coaching and technical supervision to the farmers on proper care of the dairy buffaloes."

Already, Kunisawa has introduced Urea Molasses Mineral Block (UMMB) technology to make the animals healthier as well as a regular deworming technique and a breeding calendar used in Japan to improve animal breeding. To date, Kunisawa is helping organize the Licaong Dairy Producers



Kunisawa (center) with dairy farmers in Nueva Ecija

Cooperative to ensure livelihood sustainability.

"As a volunteer, I learned how to develop faith and trust in others so we can work effectively together," Kunisawa said.

Tourism

In La Trinidad, Benguet in Northern Luzon, Japanese volunteer Yamawaki Kasumi is helping the local tourism office run a promotions campaign to attract more tourists in this part of Benguet. Known for its colorful houses, strawberry fields, and fresh produce, La Trinidad is also eyeing to increase its municipality's tourism-related income by 2024.

A former website engineer for a travel agency in Japan, Yamawaki thought of helping La Trinidad strengthen not only its traditional promotions activities, but also harness new media and new tourism niche:

foreigners learning English language. In Baguio alone, about 14,000 foreigners study English every year. This figure includes about 1,800 Japanese students.

"I began blogging for a language school agent to promote La Trinidad to foreign students and tourists. I'm also disseminating information guides on transportation and promoting the place to Japanese media," said Yamawaki. Her counterpart Valred Olsim, tourism officer of La Trinidad said, "Through her support to the municipality's tourism events and development of promotions materials, La Trinidad is able to create an online presence in Japan."

For someone whose dream is to volunteer her time and skills under the JOCV Program, Yamawaki said, "I hope to contribute in developing local tourism and through the JOCV Program, I found what I really wanted to do."

While it is easier to stay in their lucrative professions in Japan, these three women JOCVs showed that it is more fulfilling to find a life of meaning, overcoming culture boundaries to strengthen the friendship of Japanese and Filipinos. •



Yamawaki (right) with Olsim (left) in La Trinidad

DEVELOPMENT COOPERATION IN Visayas

Alternative fuel from Japanese technology driving Boracay's journey to sustainable tourism

PROJECT TITLE:

Verification Survey with the Private Sector for Disseminating Japanese Technologies for Recycling Waste Cooking Oil as Substitution of Diesel Fuel with Renergy System in Boracay Island



PROJECT PERIOD:

June 2018-May 2020



The Renergy system

LUE ELECTRIC tricycles powered by waste cooking oil (WCO) using Japanese technology bring the future of transportation into the idyllic Boracay Island. Boracay, known for its white pristine sand beaches, is one of the Philippines' major tourist destinations. When the government announced a program for the island's sustainable tourism shift, the electric tricycles signaled hope.

The Renergy System, developed and installed by Japanese company Kanazawa Engineering Systems, Inc., is a system that mixes WCO and diesel at optimal ratios and can also be used as fuel for generators. The initiative is part of JICA's Partnership with the Private Sector scheme that shares Japanese technology with developing countries to address social problems while also helping Japanese companies expand their business. In Boracay, where more than a million tourists visit each year, restaurants do not know how to treat used cooking oil into other uses to avoid polluting the sea. Also, brownouts occur frequently where businesses resort to diesel-run electric generators.

"The project helps address these problems using the proper treatment

of waste cooking oil and reducing the use of diesel fuel," said Mr. Yoshida Kosuke, project leader.

In Manoc-Manoc, a community in Boracay where more than 3,000 households live, residents had no system on disposing WCO that often end up in waterways. Today, residents deposit their WCO in designated collection areas in the barangay. Kanazawa then collects the WCO for reuse as fuel in the generator for backup power of the barangay hall as well as electric tricycles. "While there's still need for more information and education campaigns to encourage residents to deposit their WCO in the barangay, we see the project as important to the environment conservation goals of Boracay," said Barangay Councilor Marino Licerio, Jr.

Already, plans are underway to have two electric tricycle charging stations in Boracay using the WCO, while Boracay Island Water Company and the Manoc-Manoc barangay hall also plan to use the Renergy System to power their generators – all leading to an environment-friendly path to preserve the beauty of the island. •



Photos courtesy of UP-Diliman BlueCARES Team

HE QUEST to protect the Philippines' diversely rich coastal ecosystem, along with that of the rest of the Coral Triangle, gains ground as scientists from universities in Japan and the Philippines undertake initial comprehensive mapping and joint surveys of areas threatened by natural disasters and manmade activities.

This year, said activities under the research project called Comprehensive Assessment and Conservation of Blue Carbon Ecosystems and their Services in the Coral Triangle or BlueCARES are paving way for a proposed Blue Carbon Strategy to guide policy makers in their coastal conservation initiatives. Given degradation of the country's coastal ecosystems, the ongoing survey activities on blue carbon that is stored in our marine resources is emerging as an important undertaking that will contribute to the limited body of research and in the formulation of proposed strategy on blue carbon.

Led by scientists from the University of the Philippines Diliman, and Tokyo Institute of Technology, these research partners will create a core network system (CNS) or Blue Carbon Network (BC-Net) for regular monitoring of pilot sites. With this network, stakeholders such as local government units, research institutes, academic partners, government agencies, non-government groups, and people's organizations can then easily implement the Blue Carbon Strategy in their respective areas.

The project, which started in 2017, covers as pilot sites Busuanga Island, northern and eastern coast of Panay Island, Samar, Leyte, Bolinao, and Boracay Island in the Philippines; Berau-Derawan Islands, Northern Sulawesi Peninsula, Nusa Penida Islands, Karimunjawa Islands, and Northern Coast of Java Island in Indonesia; and Japan's Yaeyama Islands in Okinawa.

"We'd like to leverage our initial findings to come up with useful and easy to understand scientific information and framework for policy makers in addressing challenges and solutions to blue carbon ecosystem conservation,"



This project is the first trilateral initiative under the JICA Science and **Technology Research Partnership for Sustainable Development (SATREPS)** involving Japan, Philippines, and Indonesia. In the Philippines, the project was also supported by the Department of **Science and Technology** and Philippine Council for Industry, Energy and **Emerging Technology Research and Development.**

said Japanese Chief Technical Adviser Professor Nadaoka Kazuo.

In Balangkayan, Eastern Samar, researchers have profiled the mangrove forest in the area and studied its vulnerability to disasters. When Typhoon Yolanda hit this part of Visayas, the team found mangroves that survived despite exposure to this severe weather phenomena. Thereafter, recovery rates of damage mangroves were highly variable. Thus, the project will also provide recommendations to support Blue Carbon Strategy for disaster management in coastal areas.

When completed, the Blue Carbon Strategy can then change the game



PROJECT PERIOD: **2017-2022**



Sediment depth determination using steel rod

in mitigating the impact of extreme weather and other threats to our coastal environments, indeed a pioneering effort to support science-based coastal conservation policies that will benefit the future generation. •

How a forest conservation project is making a difference in upland communities

PROJECT TITLE:

Forestland Management Project

PROJECT COST: ¥9.244 billion

PROJECT PERIOD:

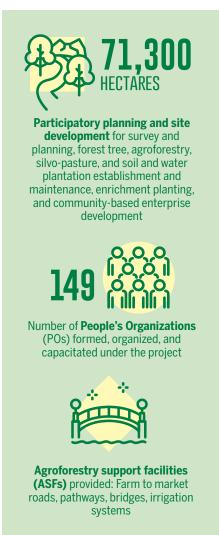
July 2012-July 2022

Mahogany planted in Iloilo

T HAS BEEN said that, "the future of our life on earth depends on our ability to take action." There's truth in this with the way some upland communities work with government and international partners in conserving forest resources. A forest management project is protecting about 71,300 hectares of forest resources in Jalaur Watershed in Iloilo, in the Upper Magat and Cagayan River Basin in Ifugao, Nueva Vizcaya, and Quirino, and Pampanga River Basin in Nueva Ecija. These watersheds are critical for the country's water supply resources which are threatened with both natural disasters and illegal human activities.

Under the JICA-assisted Forestland Management Project (FMP) of the Department of Environment and Natural Resources (DENR), People's Organizations (POs) that were organized or strengthened have undergone various capacity building activities to improve their technical, organizational, and financial knowhow and skills in sustainably managing enterprise development activities and watershed areas for the overall protection of forestlands. Selected POs have also benefited from much needed agroforestry support facilities to improve their access to basic services.

With help from the project, interesting outcomes unfold for people in upland areas. In Iloilo, members of the Panuran Tasik Upland Farmers Association, Inc. (PATUFA) are already reaping gains



from the project. PATUFA members have reforested 207 hectares with mahogany, acacia, and coffee trees, and are operating an enterprise (bakery) as source of livelihood.

Jimmy Rapista, a farmer and one of the project's site managers said, "We used to practice kaingin (cutting down and burning of trees) so we can make charcoal from the area where we earn ₱3,000 a month. The project helped us realize the benefits of our agroforestry activities in terms of improving our income. We have replanted the area with mahogany and coffee since." The coffee harvest, he added, gives farmers like him as much as ₱48,000 per harvest, more than double what they earn before the project.

Moreover, the association's bakery is also giving members additional source of income, selling their products to nearby municipalities. They are also working together to patrol the agroforestry site from illegal activities. With help from the JICA-DENR project, this community in Iloilo has become a model for others in watershed areas: optimizing land for agroforestry, creating partnerships within the community, and championing watershed protection for future generation. The same can also be said for communities in Nueva Vizcaya and Quirino Provinces in Region II (Cagayan Valley) and Ifugao in the Cordillera Administrative Region (CAR) who received ASFs like bridges, roads, and irrigation facilities to support reforestation, connect to markets, and access social services.

"Through FMP, we envision a future where communities and people who depend on forests all benefit from the positive environment outcome of working together. As we continue with the project in the coming years, we are committed to continuously capture the success and progress of our local communities," said Raul L. Lorilla, Provincial Environment and Natural Resources Officer of DENR-Iloilo. •





DEVELOPMENT COOPERATION IN Mindanao

A flood prevention project seen to boost Mindanao business potential

PROJECT TITLE:

Flood Risk Management Project
for Cagayan River, Tagoloan
River, and Imus River

PROJECT COST:

¥ 7.546 billion

PROJECT PERIOD:

March 2012-July 2020

VERY TIME a typhoon hits barangays near Tagoloan River which passes through Misamis Oriental and Bukidnon in Mindanao, shops are forced to close to escape damage from inundation. During Typhoon Senyang in December 2014, a massive flood affected the entire Barangay Sta. Cruz in the Municipality of Tagoloan. Around 1,000 households residing along riverbanks experienced directly the flooding that almost covered their houses. The flood greatly damaged several properties and livelihood resulting to the declaration of state of calamity by the Tagoloan local government. Affected residents welcomed and celebrated the New Year 2015 in the evacuation center where they stayed for almost 3 months from January to March 2015.

Tagoloan River, touted to be one of the largest river systems in the Philippines, forms part of a Flood Risk Management Project of the Japan International Cooperation Agency (JICA) and the Department of Public Works and Highways (DPWH). The project, inaugurated in 2019, is one of three river systems (including Cagayan and Imus Rivers) that the project sought to protect from flooding.

Already, government data has shown that the Philippines lost \$\mathbb{P}96\$ billion from storms and floods from 2006 to 2015. The project will therefore better protect businesses and households in the river systems from future flooding.



The project brings peace of mind to local residents and typhoon survivors

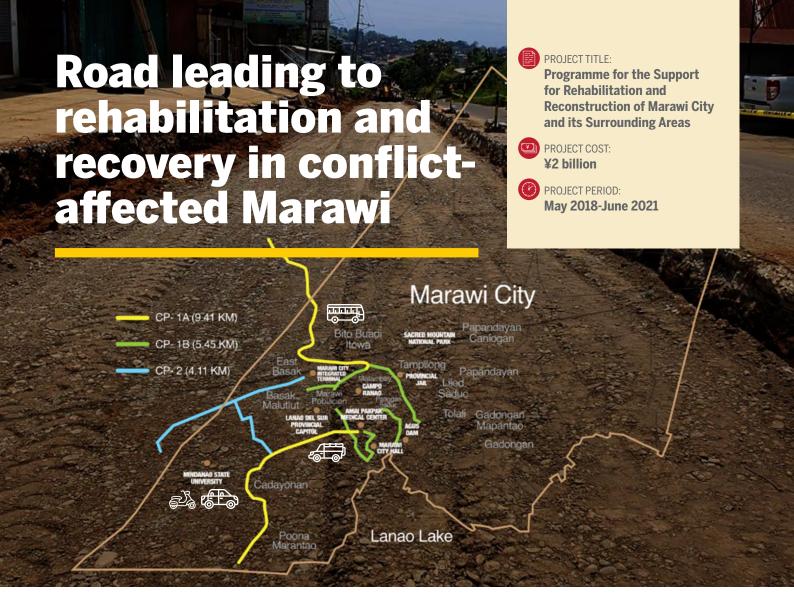
The DPWH Project Management Office said that the dike built in the upstream part of the river, as well as the sluiceway and drainage canal built using Japanese technology will help protect overflow of water, and

drain rainwater to the river. "The project also implements non-structural measures like disaster awareness on floods, evacuation drills, and hazard mapping to help residents become more disaster-resilient," said Director Ramon Arriola of the DPWH Unified Project Management Office (UPMO) Flood Control Management Cluster.

With the project, rainwater in the river will no longer overflow to the communities along riverbanks giving residents and business owners peace of mind from inundation. Now that the flood control structures have been built, the DPWH and the local government in Tagaloan are sharing the responsibility in patrolling and monitoring the facilities. "We are hoping that the flood control structures will ensure protection of nearly a hundred commercial and industrial buildings and 1,162 residential houses in Tagaloan," added Dir. Arriola.

In a region where poverty is prevalent, the flood control project is a model of using both structural and non-structural measures to build the resiliency of people, and enhance the business potential of Mindanao's vulnerable areas. •





T IS WIDELY recognized that there is no peace without development and no development without peace. Such line is true as the people of Marawi get back on their feet after seeing their homes in utter ruin after the siege in 2017. Tucked in the northernmost shore of Lake Lanao, Marawi City is a trading hub whose landscape is dotted with natural sights and beauty. The 2017 siege, however, damaged the city's infrastructure in a massive way.

Aside from the damage, communities surrounding Marawi like Cotabato, Zamboanga, and Maguindanao had difficult access to Marawi's trade center in the absence of a road network. Now, all that is about to change with 61.77-kilometer road projects under the Department of Public Works and Highways (DPWH) and Japan International Cooperation Agency (JICA). "Once completed, these road projects will strengthen the link from resettlement areas to new markets, improve access to public facilities, and improve mobility of people within and around Marawi City," said DPWH Project Director Virgilio Castillo.

The DPWH-JICA road projects consist of ¥ 2 billion grant aid for the rehabilitation of a part (about 18.97 kilometers) of Trans-central Road Phase I and II and US\$ 202 million loan assistance for construction of Trans-central Road Phase III and Marawi City Ring Road. The road projects under grant aid are expected to be completed in June 2021.

For years, the people of Marawi earned a living through trade and the Marawi

siege left many residents out of work. "The road construction projects will help generate jobs for the people of Marawi and boost their access to other government projects like housing, schools, water supply system, marketplace, and sports facilities," added Castillo.

While recovery for the Marawi folks may seem daunting, the roads at least will make life easier than when the conflict left them with nothing. •





PROJECT TITLE: Improvement of Equipment for **Power Distribution in Bangsamoro Area**

PROJECT COST: ¥771 million

PROJECT PERIOD:

March 2017-March 2020

SKIES were clear in Zamboanga City as a boom operator simulates connecting a power line during the handover ceremony for the Project for Improvement of Equipment for Power Distribution in Bangsamoro Area. "Upgrading the power equipment for the Bangsamoro energy sector is an instrument of change in our community and a means to improve the quality of life of our people," said General Marni Marcos, Philippine National Police-Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) Regional Director.

Years of conflict in Bangsamoro have deprived it of access to infrastructure from upgrading their equipment dating back to 1970s. Today, electrification rate in Bangsamoro area is only 36%, far below the Mindanao average electrification rate of 74%. Thus, a grant aid project of the Japan International Cooperation Agency (JICA) to the National Electrification Administration (NEA) can make a huge difference. Six electric cooperatives (ECs) -Maguindanao Electric Cooperative (MAGELCO), Lanao del Sur Electric Cooperative (LASURECO), Basilan Electric Cooperative (BASELCO), Tawi-Tawi Electric Cooperative (TAWELCO), Sulu Electric Cooperative (SULECO), Siasi Electric Cooperative (SIASELCO) will receive new equipment (boom trucks, electric poles, wires, and transformers) under the grant aid.

JICA Chief Representative Wada Yoshio said such assistance to the Bangsamoro "will support the peace building process and open up economic opportunities for conflict-affected areas and the rest of the region."

For now, the 16 boom trucks handed over to NEA will help the ECs in ensuring efficient and safe work for construction maintenance of distribution facilities as the linemen will no longer have to climb poles. In addition, with the upgrading of wire size, it is expected that the distribution rate will decline which will result to the increase of power transmission. Furthermore. the provision of the pole transformers enables more power supply to the power consumers and contributes to the improvement of the electrification rate. With that, communities that had been living in darkness and sounds of armed conflict for decades can now hope for a brighter future teeming with opportunities and prosperity. •





L-HASIL NAHUL is a farmer in the island of Tawi-Tawi in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). Life was difficult for farmers like him back when they sold copra from coconuts. "When we shifted to seaweed farming, we generated profits easily in 45 days after harvest," said Nahul who is also chairman of the Integrated Farmers and Seaweeds Traders (I-FAST) in Tawi-Tawi.

Seaweeds is a global industry with high demand from countries like Japan, United States, and Europe. Philippine seaweed production has particularly high potential in Tawi-Tawi where seaweed farms account for 62,911 hectares and production reaches as much as 321,739 metric tons (2017 industry data). With help from the Market-Driven Local Industry Promotion (MDLIP) Project of the Japan International Cooperation Agency (JICA), and

BARMM's Ministry Trade, Investment, and Tourism (MTIT), Tawi-Tawi's seaweed industry cluster entered into marketing agreements with Tacloban-based TBK Manufacturing Corporation, the leading manufacturer and exporter of natural grade carrageenan in the Philippines, and Sitangkai Seaweed Export (STX) Company, a partner of Cargill, which is a company with a wide range of products and services using carrageenan in France.

ingredient Carrageenan is an extracted from seaweed and used in food and personal care products, among others.

development through industry clustering helped address

our challenges at the local level by promoting cooperation among the seaweed stakeholders in industry. We organized local market consolidators and farmers organizations to meet economies of scale and improve reliability their production," shared Termizie Masahud, former Chief of the Industry Development and Investment Promotion Division of MTIT-Tawi-Tawi Provincial Office and Seaweeds Cluster Coordinator.

Through the project, the seaweeds cluster recently bagged million in sales for February 2019 alone. Certainly, the cluster found their niche with farmers enjoying competitive farm gate prices right in their communities. In the longterm, seaweeds will continue to perform an important economic function in Tawi-Tawi, sustained with the vision to further export seaweeds into the global market. •

industry IICA has supported industry clustering ('convergence of industry players in the value chain') in conflict areas as part of its peace building approach to attract investments and create jobs in BARMM. "The





Assisted about 9,000 industry players from abaca, coconut, coffee,



Convergence of efforts from industry enablers and facilitators from government and nonthe industries



Published an investor's guide for the six (6) industry clusters under the project and a clustering and value

Sectors at a Glance





IGARASHI HIDEHARU

JICA Expert assigned to the

Department of Transportation



Safety is of utmost importance in Japanese railway operations.

Japan's leadership in railway technology is in fact visible in the safety measures that Japanese railways implement. The seismic reinforcement and early earthquake detection system of Japan's shinkansen, and the emergency response skills of the station staff and crew of their conventional trains resulted in zero fatality and injury during the Great East Japan Earthquake and Tsunami in 2011.

Historically, Japan's laws like the Railway Business Act and Railway Operation Act established safety standards on railway operations and maintenance. These standards and systems constitute safety assurance and are one of the most efficient systems all over the world. We also ensure learning from past accidents in order to mitigate the reoccurrence of any accidents.

The basic philosophy is that operators, which are closer to passengers, provide safe and comfortable services responsibly. Such framework eliminates unnecessary capital investment and excessive work, and minimizes the use of licensing rights to regulators.

Achieving sustainable economic growth through "Build Build Build"

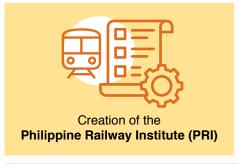
Railways

■ BIG PICTURE

RAILWAYS PLAY a crucial role in the future of Philippine development. It has the potential to meet the future transportation demand projected to grow to 16.4 million by 2035 in Metro Manila alone. Railways also provide a green alternative to other means of transport, thus making urban centers livable, sustainable, and resilient. Globally, railway development aligns with the Sustainable Development Goals (SDGs) that aim to promote health, clean energy, sustainable tourism, resilient infrastructure, sustainable industrialization, and climate change. At the local level, railways stimulate trade, tourism, and jobs.

■ UPDATES

- Recognizing the need for infrastructure to promote inclusive development, the Philippine government is increasing its spending for infrastructure to as much as 7.4% of the GDP by 2022.
- JICA and the Department of Transportation (DOTr) are currently implementing the following railway projects as part of the infrastructure flagship program of the Government of the Philippines.
 - a. Metro Manila Subway Project 36 kms
 - b. North-South Commuter Railway Project Approx. 38 kms
 - North-South Commuter Railway Extension Project -Approx. 109 kms
 - d. Metro Rail Transit Line 3 Rehabilitation Project 16.82 kms
 - e. Light Rail Transit Line 1 Cavite Extension Project1 11.2 kms
 - f. Light Rail Transit Line 2 East Extension Project² 3.9 kms
- JICA has been extending Human Resource Development support to the sector through the:







Training courses

on Urban Railway Management, Comprehensive Urban Transport Programming, and Development of Quality and Sustainable Transport System

- Japan's ODA loan covers the rehabilitation of the existing Baclaran depot, construction of a satellite depot in Zapote, Cavite, and procurement of 120 light rail vehicles. Civil works are funded through Public-Private Partnership.
- ² Japan's ODA loan covers the electro-mechanical system. Civil works are funded by the Government of the Philippines.



■ FACTS



JICA is supporting the 10-point socioeconomic agenda President Duterte particularly the initiatives on addressing traffic congestion in Metro Manila that incurs ₱3.5 billion economic losses a day and impedes potential economic growth. This new daily economic loss compared to ₱2.4 billion in 2014 is expected to escalate more to around ₱5.4 billion per day by 2035 if no interventions will be made. To address this longstanding issue, Prime Minister Abe Shinzo had committed to the Philippines by funding the rollout of the five (5) priority railway projects. These railway projects are part of the "Roadmap for Transport Infrastructure Development for the Greater Capital Region" that had been developed with the help of JICA.

CASE STORY

The Philippine railway system dates back as far as the 1800s when trams or tranvias (horse-drawn streetcars) roamed the streets of Manila. By the turn of the 20th century, electric-powered trams replaced these tranvias under then Manila Electric Railroad and Light Company (now Meralco). JICA's support to the sector came in during the '70s, when the government shifted priority to developing the mass transit system. JICA extended loan for the Philippine National Railway (PNR) Commuter Service Project that ran from Malolos, Bulacan to Carmona, Cavite. With the economic crisis in the 1980s and shift in administrations, priorities then changed. While supporting the PNR became a challenge, JICA continued its assistance in developing the country's urban railways through the Light Rail Transit Lines 1 and 2. JICA helped build the capacity of these railway lines by building depots and increasing rolling stocks to address growing passenger demand. With success in these projects, JICA is continuing its support to the sector via the North-South Commuter Railway Project from Clark International Airport to Calamba, Laguna and the Philippines' first Metro Manila Subway connecting Manila's north and south areas. •



Metro Manila Subway Groundbreaking



NOTO WAKO Tunnel Planner Davao City Bypass Construction Project (South and Center Section)



Japan has been providing assistance to the Philippines transport infrastructure from long time ago. Many Japanese technologies are contributing to road infrastructure such as highways and bridges. Each road and bridge engineering stage such as investigation, planning, design, construction, operation and maintenance have been the subject of Japanese assistance to the Philippines. Historically, the technology transfer from Japan to the Philippines for roads and bridges included bridge seismic design, slope prevention, disaster control, and road information network. Notwithstanding these, the Philippines still needs to improve technologies and knowledge on road tunneling. Since the Davao City Bypass Construction project involve the tunnel planning & engineering and construction of the first ever long distance tunnel in the Philippines as well as capacity development for DPWH on tunnel operation and maintenance, we expect transfer of tunneling technology and knowhow from Japanese Experts to Filipino counterparts. Overall, Japan is proud to be a major partner of the Philippines improving transport infrastructure.

Achieving sustainable economic growth through further promotion of investments

Roads and Bridges

■ BIG PICTURE

HAVING ADEQUATE infrastructure can help ease the costs of doing business in emerging economies. Infrastructure like roads and bridges help run businesses and the economy efficiently. In the Philippines, the road sector accounts for 98% of road traffic and 58% cargo traffic meaning quality road infrastructure could spell better opportunities in investments and job creation (Asian Development Bank, 2012. Philippines: Transport Sector Assessment, Strategy and Roadmap. Manila). Unfortunately, poor infrastructure has affected the Philippine standing in the World Economic Forum Global Competitiveness Report 2019, with the country sliding down to 96th out of the 141 nations studied in terms of infrastructure ranking. Over time, JICA has supported the roads and bridges sector as part of its direction to sustain growth and attract investments in emerging economies like the Philippines. JICA believes that ensuring connectivity among different regions in the country is necessary for economic and social development. JICA support has been in the form of not only new construction, improvement and repair of roads and bridges, but also in terms of institutional support, capacity building and technology transfer.



■ UPDATES

7 out of 25 ongoing project loans as of December 2019 are allocated for roads and bridges or roughly 136 out of 903 billion yen loan assistance. The 7 ongoing roads and bridges projects that contribute to the Build Build agenda of the Philippine Government include:

- Road Upgrading and Preservation Project
- Central Luzon Link Expressway Project
- Metro Manila Interchange Construction Project (Phase VI)
- Metro Manila Priority Bridges Seismic Improvement Project
- Davao City Bypass Construction Project (South and Center Sections)
- Arterial Bypass Road Project (Phase III)
- Road Network Development Project in Conflict Affected Areas in Mindanao

■ FACTS

Amount of JICA financing to Philippine roads and bridges, 1974-2019 Length of national roads constructed and rehabilitated by JICA Number of major bridges constructed Filipino engineers and government officials sent to Japan for road-related training, 2013 onwards Subic - Clark - Tarlac Expressway Project (Central Luzon)

■ OUTCOMES

List of Some JICA-Assisted Roads and Bridges Projects

- Road Network Development Project in Conflict Affected Areas in Mindanao
- Arterial Road Bypass Project (Phases I, II, III) (Bulacan)
- Davao City Bypass Construction Project (South and Center Sections)
- Metro Manila Interchange Construction Projects (Phases III, IV, VI)
- Central Luzon Link Expressway Project
- Central Mindanao Road Project
- Urgent Bridges Construction Project for Rural Development (Nationwide)
- Arterial Road Links Development Project (Phases I, II, III, IV, V, VI) (Nationwide)
- Subic Clark Tarlac Expressway Project (Central Luzon)
- Rural Road Network Development Projects (Phases I, II, III) (Nationwide)
- Second Magsaysay Bridge and Butuan City Bypass Road Construction Project
- Cordillera Road Improvement Project
- Second Mandaue Mactan Bridge (I and II) and Metro Cebu Road Project (Central Visayas)
- Metro Cebu Development Project (III)
 (Cebu South Coastal Road) (Central Visayas)
- Manila South Diversion Road Interchange Project
- Cubao, Shaw and Manila South Diversion Road Grade Separators (Metro Manila)
- Philippine Japan Friendship Highway Projects









Completed section of Central Luzon Link Expressway in Tarlac

■ CASE STORY

JICA's Philippine-Japan Friendship Highway (PJFH) built in the 1960s is a good example of an infrastructure creating impact in the economy, particularly distributing products from remote producers to the markets. Approximately 2,200 kilometers length of network of roads and bridges connected the Philippines' major islands Luzon, Visayas, and Mindanao, while also setting a quality standard in road construction in the Philippines. With the PJFH, one can move seamlessly from one island to another, as with the San Juanico Bridge connecting Leyte and Samar. When JICA rehabilitated the bridge in the early 2000s, the move turned out positive as the infrastructure withstood Typhoon Yolanda in 2013. To this day, the PJFH remains an important north-south link in the Philippines and promotes connectivity in the country's major islands. ●



Yellow line depicts the Philippine-Japan Friendship Highway

Achieving sustainable economic growth through further promotion of investments

Maritime Safety and Security

■ BIG PICTURE

MARITIME TRANSPORTATION is one of the world's important industries. Seas are vital in the global economy for the transport of goods and resources among countries like the Philippines. An archipelagic nation, the Philippines has the 5th longest coastline in the world (approximately 36, 000 kilometers), but the increase in passenger and freight transport traffic, aging vessels, and natural disasters continue to challenge the sector.

Japan is also a maritime nation, with 90% of its trade depending on maritime transport. In the Philippines, 90% of its passenger and cargo transport depends on the sea. Recognizing the economic importance of maritime transport to sustainable development, JICA has since stepped up its cooperation in maritime safety and security in neighboring Asian countries like the Philippines.

■ UPDATES

- JICA signed a new Technical Cooperation Project with the Philippine Coast Guard (PCG) called Vessel Operation, Maintenance Planning and Maritime Law Enforcement Project (June 2019-June 2022) to boost PCG's self-reliance in the operations and maintenance of its vessels for maritime patrol.
- JICA completed its assistance of ¥13.752 billion with the delivery of 10 multi-role response vessels (MRRVs) to support maritime safety, environment protection, search and rescue, and maritime law enforcement.
- Phase II of the Maritime Safety Capability Improvement Project involves the provision of additional two 94-meter MRRVs seen to facilitate faster maritime rescue operations and response, especially for long voyages.





KURATA CHIKARA Commander, Japan Coast Guard / Expert dispatched to the Philippine Coast Guard



Japan is an island nation relying on sea trade routes for its existence and prosperity. It is therefore important to Japan's future to maintain maritime security and safety through international cooperation. Japan through JICA's support to the PCG is an example of this diplomatic direction to ensure stability and peace around Japan and Southeast Asia's sea boundaries.

In fact, Japan is the only country dispatching officials of the national coast guard. Since 1995, Japan Coast Guard (JCG) has constantly dispatched its officials as JICA long-term experts to PCG. As partners, JCG has already established a high degree of trust from the PCG. JCG's capacity building assistance to the PCG shows JICA's strong commitment as partner in sustainable economic growth through maritime security cooperation. Today, JICA supports PCG in enhancing its operational capability of the ten 44-m MRRVs to further strengthen the Philippines' maritime safety and security functions.

■ FACTS

JICA Projects related to Maritime Sector

1989-1996

Maritime Communication Project

1991-2001

Maritime Safety Improvement Project I & II

2007-2009

Project for Enhancement of Communication System for Maritime Safety and Security

2008-2012

Philippine Coast Guard Education and Human Resource Management System Development Project

2013-2016

Enhancement of Practical Capability for Maritime Law Enforcement Project

2013-2022

Maritime Safety Capability Improvement Project I

2014-2018

Project for Enhancement of Coastal Communications System

2016-2019

Project for Comprehensive Practical Capability Improvement for Maritime Law Enforcement

2016-2026

Maritime Safety Capability Improvement Project II

2019-2022

Enhancement of PCG's Capability on Vessel Operations, Maintenance Planning and Maritime Law Enforcement



Deployment of JICA-Assisted Multi-Response Role Vessels in the Philippines

- A. National Capital Region-Central Luzon
- B. Palawan
- C. Eastern Visayas
- D. Central Visayas
- E. Northern Mindanao
- F. South Eastern Mindanao
- G. South Western Mindanao
- H. Western Visayas
- I. Southern Visayas
- J. North Western Luzon

■ OUTCOMES

Over 300

Number of coast guards trained in Japan (1970-present)

Number of Japanese experts dispatched in the PCG (2000-2019)



PCG officers at arresting technique coaching course held in Japan

■ CASE STORY

The Philippine Coast Guard's motto is "Saving Lives" but gaps in the PCG's response to rising maritime accidents and crimes in the Philippine seas prompted them to improve their ability to handle a wide range of duties. Safeguarding the seas combined with their role of protecting the marine environment and rescuing passengers or seafarers needed equipment and training support so the PCG will meet its maritime safety and security functions. Through JICA's support for 10 multi-role response vessels (MRRVs), the PCG has accomplished 1,348 missions and curbed further crimes during the Marawi siege in 2017. Today, the PCG has been carrying out multiple missions improving their response and activities in maritime safety and security. ●

Data Sources

Support for Enhancement of Maritime Safety and Security, Government of Japan. https://www.japan.go.jp/tomodachi/2016/spring2016/support_of_maritime_safety.html

Mission of JMSDF, Japan Maritime Self-Defense Force.

https://www.mod.go.jp/msdf/en/about/role/

Photos courtesy of Philippine Coast Guard

Achieving sustainable economic growth through further promotion of investments

Investment Promotion

■ BIG PICTURE

A VISIT TO the Philippines' economic zone down south of Metro Manila would show offices of some 900 Japanese firms (or 23% of total locators) doing business in the country. Also visible are the hundreds or even thousands of employees whose hopes replace unemployment fears as they set forth working in these economic zones, and changing their lives for the better. There is no doubt about the economic security that investments offer to young graduates, or jobless folks making up the recent 5.7% or 2.4 million out of the 70 million people in the labor force.

The Philippine manufacturing sector accounts for 23% value added and 8% employment (2011-2014 industry.gov.ph data), a rather slowdown trend compared to previous years of 24.3% average value added and 10% jobs created. Recognizing the value of the sector to the Philippine economy, JICA continues to contribute to capacity building of the sector and help the Philippines become a more attractive place for investors and boost job creation. In so doing, JICA also expressed support to development cooperation activities that will help realize the Philippines' National Industrial Strategy and Manufacturing Industry Roadmap towards increasing value added of manufacturing to 30% and employment to 15% by 2025.

■ UPDATES

JICA and the Board of Investments (BOI) are currently implementing the project Industrial Competitive Enhancement through Industrial Human Resource Development and Supply Value Chain Development for the following objectives:

- Create operational supply value chain development (SVCD) model to link foreign and local companies in the automotive industry in Region IV-A (Calabarzon)
- Replicate said SVCD model to other industries and regions
- Improve model for industrial human resource development (IHRD) to bridge jobskills mismatch in the automotive industry in Region IV-A (Calabarzon)
- Replicate said IHRD model to other industries and regions





Academe-Industry Summit

Universities private and companies in Calabarzon region attended the academeindustry summit organized under the project. As outcome of the summit, participants underscored need to improve school curriculum and internship programs to expose students on practical work and provide them incentives during on-the-job trainings.



Pitch Event for Filipino Start-Ups

A pitch event to help strengthen the Filipino start-up ecosystem was held where local start-ups like Maria Health, Tangere, Drive, eCFulfill Inc, PearlPay, Inc., Washub Philippines, Mober, Xpensio Corp., Qwikwire, ISI Inc., and UPROOT met with Japanese investors Rakuten Capital, Spiral Ventures, SBI holdings and other Filipino startup enablers. The pitch event was a platform for Japanese and Filipino companies to exchange knowhow, talent, and markets.

EXPERT VIEW

Japan has looked into Southeast Asia as an investment destination. In the automotive industry, for example, Japanese carmakers like Honda, Mazda, Mitsubishi, Subaru, Suzuki, and Nissan have infused new investments in the region. Japan's foreign direct investments (FDIs) in the region have in fact reached to about US\$200 billion by the end of 2017 (Ministry of Finance, Japan). This direction to infuse capital in automotive production in the region represents opportunities for countries like the Philippines - as well as challenges to provide the skills needed to supply the workforce.

With the Philippines' young population, skilled Filipinos that match the industry's needs can turn into a great competitive advantage. To produce one million cars, for instance, the industry would need about 400,000 people. Equipping university and technical-vocational students with the right skills set will have ripple effect in attracting investments and contributing to industry development.

The projects with the Department of Trade and Industry (DTI) and other relevant stakeholders on Elaboration of Industrial Promotion Plans Using Value Chain Analysis in the Philippines and Enhancement of Industrial Competitiveness through Industrial Human Resource Development and Supply and Value Chain Development are examples that address future Philippine needs. They align with the opportunities from the manufacturing sector and other growing industries while creating jobs that provide livable wages to Filipinos.

– Final Report for the Project Elaboration of Industrial Promotion Plans Using Value Chain Analysis in the Philippines, 2019

■ FACTS

- Japan accounts for 11.8% or US\$9.98 billion of total Philippine trade in 2018
- Japan is among top investors of the Philippines accounting for ₱4-billion in Q2 of 2019



At the academe-industry summit

■ CASE STORY

Creating opportunities for Filipinos to develop their skills so they can participate in the economy has an enormous impact. JICA's ongoing cooperation with the Board of Investments (BOI) on Enhancement of Industrial Competitiveness through Industrial Human Resource Development and Supply and Value Chain Development launched in 2019, for example, equips the Filipino labor force with skills matching vital industries, like automotive. This cooperation aims at strengthening the automotive sector following an operational model that will contribute to 1) the enhancement of university-industry linkages; 2) upgrading of the Technical Education and Skills Development Authority (TESDA) training regulations; 3) business assistance to manufacturers of electric public utility vehicles; 4) Kaizen (Japanese industrial philosophy) consultations to support local supplier development; and 5) capacity development on die engineering.

The project is on pilot in the country's industrial hub or Calabarzon and addresses industries (e.g. IT, electronics, engineering service outsourcing) under the Philippines' Comprehensive National Industrial Strategy. The pilot activities like the pitch event, according to Trade and Industry Undersecretary Rafaelita Aldaba, has so far helped "opened avenues for exchange of knowhow, talents, and markets between Japan and the Philippines." ●

Data Sources.

Securing the Future of Philippine Industries. http://industry.gov.ph/category/manufacturing/

PEZA lures Japanese SMEs. https://www.philstar.com/business/2017/01/28/1666101/peza-lures-japanese-smes

Philippine Statistics Authority. Trade and Investments. http://www.psa.gov.ph

Philippine Statistics Authority. Annual Labor and Employment. http://www.psa.gov.ph/content/2017-annual-labor-and-employment-status

Achieving sustainable economic growth through further promotion of investments

Energy

■ BIG PICTURE

THE PHILIPPINES is among the countries in ASEAN with the lowest electrification rate at 89%, behind countries like Brunei, Singapore, Malaysia, Thailand, Vietnam and Indonesia (ADB Key Indicators for Asia and the Pacific 2017). This is in part due to the archipelagic condition of the country, with places in some islands still off the grid.

The lack of technical and financial capacity of most electric cooperatives also affects the low electrification rate in rural areas. Likewise, the frequency of natural disasters adversely affects the sector, with the National Economic and Development Authority (NEDA) estimating the damage at \$6.8 billion and \$4.2 billion for electricity supply and distribution system, respectively.

At the policy level, the Philippines has liberalized the energy sector through the Electric Power Industry Reform Act (EPIRA) implemented in 2001. The law introduced reforms that encouraged competition in the industry such as privatization of power generation and transmission and establishment of market mechanism by setting up a wholesale electricity spot market to optimize electricity prices.

JICA recognizes that energy access and consumption is critical to the economic vitality of developing countries, requiring huge investments. With climate change considerations, such investment also entails development of environment-friendly energy infrastructure. In the Philippines, JICA has supported the improvement of energy access and reliability, climate change measures including harnessing renewable energy, human resource development, and sharing of Japanese expertise and knowhow.

■ UPDATES

Japan's private sector has been involved in ongoing JICA projects to help promote clean energy and strengthen operation and maintenance capacity of the Philippines. Examples of these projects are:



 Disseminating Japanese Technology for Environment Friendly Urban Transportation Systems through piloting of electric tricycles as alternative to conventional gaspowered tricycles in Quezon City to reduce air pollution



 Disseminating Japanese Technology for Electricity Distribution System and Management through piloting of Distribution Automation System (DAS) in Batangas Electric Cooperative II with the support of the National Electric Administration (NEA) and Japanese companies Takaoka Toko Co. Ltd. and TEPCO Power Grid, Inc. to reduce response time to power interruptions

P EXPERT VIEW

As world population grows, it is projected that energy demand in non-OECD (Organization for Economic Cooperation and Development) countries will also rise by 2040 to as much as 500 Mtoe consequently increasing carbon emissions. (Mtoe stands for millions of tonnes of oil equivalent. One tonne of oil equivalent refers to the amount of energy released by burning one tonne or 1,000 kilograms of crude oil.)

With this scenario, JICA aligns its cooperation strategy on energy with the Sustainable Development Goals (SDGs) on clean energy (SDG 7) and climate action (SDG 13), among others. JICA's 3L energy policy is anchored on low cost, low carbon, and low risk support and is translated into projects that improve energy access and reliability and promote climate change measures and human resource development.

In the Philippines, JICA's work aligns with these pillars by providing equipment to conflict areas like the Bangsamoro to ensure reliable energy supply not only to benefit consumers but also to drive industry development. Also, JICA taps its private sector to improve energy reliability by piloting smart grid technology. JICA believes that such support to the sector will further strengthen the Philippines' economy and encourage inclusive growth.

Kawamata Yamato Energy and Mining Group, Industrial Development and Public Policy Department, JICA Headquarters

■ FACTS

An overview of JICA's support to the Philippine's energy sector through the years emphasize efforts to enhance energy access, industry development, and job creation under JICA's low cost, low carbon, and low risk assistance policy for the sector.



Rural electrification and improvement of distribution systems, 2011-2017

- System Loss Reduction Project for Philippine Electric Cooperatives
- Data Collection Survey on Incentive Mechanism for Improving Disaster Resiliency of Electric Power Distribution Network
- Subproject of Equipment for the Rehabilitation of Electricity under the Programme for Rehabilitation and Recovery from Typhoon Yolanda
- Project for Improvement of Equipment for Power Distribution in Bangsamoro Area

Collaboration with private sector for disseminating Japanese technologies, 2017-Present

Project for Improvement of Electricity
 Distribution System and Management in
 the Philippines

Renewable energy, 2004-2017

- Sustainability Improvement of Renewable Energy Development in Village Electrification
- Environmental Development Project
- Resource Inventory on Hydropower Potential in the Philippines
- Mini-Hydropower Development Projects in Ifugao and Isabela

Policy support, 2013-2015

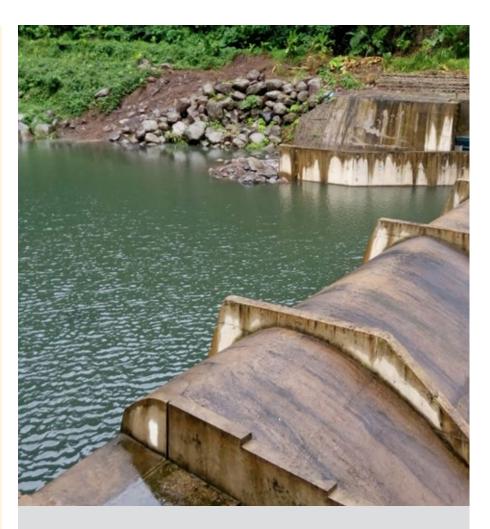
- Study for Verification and Achievement of Energy Sector Reform
- Energy Regulatory Framework Improvement Project

Energy efficiency and conservation, 2012-2013

 Study on Energy Efficiency and Conservation and Follow-Up Cooperation Project for Energy Efficiency and Conservation

Natural gas, 2011-2014

- Data Collection Survey on Utilization of Clean Alternative Energy
- Preparatory Survey for the Batangas-Manila Natural Gas Pipeline Project



Mini-hydropower plant in Majayjay Photo courtesy of Majayjay Hydropower Company Inc.

■ CASE STORY

An example of JICA's support to energy access of remote communities while also meeting climate resiliency goals is the ongoing implementation of a 2-megawatts (MW) mini hydroelectric plant in Majayjay, Laguna under the JICA-assisted Environmental Development Project (EDP) implemented by the Development Bank of the Philippines (DBP). Harnessing renewable energy source like hydropower allowed consumers in the Luzon Grid access to electricity without creating enormous harm to scenery and resources. Aside from energy security, the project's other benefits include reducing greenhouse gas emissions from power generation and foreign exchange savings from the avoidance of use of imported fuel. With waterfalls and picturesque views that make Majayjay a tourist destination, the mini-hydroelectric plant is vital to the future of this town, economically and environmentally. •

Data Source:

J.M.K.C. Donev et al. (2018). Energy Education - Tonne of oil equivalent. https://energyeducation.ca/encyclopedia/Tonne_of_oil_equivalent

Overcoming vulnerability and stabilizing bases for human life and production activity

Environment

■ BIG PICTURE

EXTREME WEATHER events one after another in different parts of the world remind countries to be more mindful of the urgency to balance progress with sustainable environment management. Based on the 2018 Environmental Performance Index, the Philippines ranked particularly low (112th out of 180 countries surveyed) in terms of Environmental Health. This means the Philippines is vulnerable to environment-related threats due to poor air and water quality that may have implications on human health. Since JICA values equitable growth, its projects in the Philippines helps communities enhance systems and approaches that will address threats to environment resources for the country to attain economic stability.

■ UPDATES

JICA's environment projects in the Philippines fall into these areas:



Natural Environment Conservation

- Forestland Management Project 2012-2022
- Project for Comprehensive Assessment and Conservation of Blue Carbon Ecosystems and their Services in the Coral Triangle (BlueCARES) 2017-2022
- Non-Revenue Water Improvement Project in the West Zone of Metro Manila 2017-2020



Environmental Management

- Capacity Development on Improving Solid Waste Management Through Advanced/Innovative Technologies 2019-2022
- Project for Enhancing Solid Waste Management in Davao City 2016-2019
- Verification Survey with the Private Sector for Disseminating Japanese Technologies for Recycling Waste Cooking Oil as a Substitution of Diesel Fuel with Renergy System in Boracay Island 2018-2020
- The Project for Septage Management in Cebu Water District 2020-2023



Recognizing the connection between environment sustainability and economic development, JICA's activities in the environment sector align with the international community's commitment to the Sustainable Development for Goals (SDGs) and beyond. Development cooperation activities mostly towards effectively sharing Japanese technologies, building partnerships, sustainable solutions.

Since water access and sanitation are strongly linked issues especially in developing countries, JICA supported water infrastructure in the Philippines that reduce water pollution from households and industries, the same way Japan tried to address similar problems in the 1960s. One example is Maynilad's sewage treatment facility in Parañaque in Metro Manila funded by JICA's twostep loan to the Development Bank of the Philippines (DBP) Environmental under the Development Project (EDP). The facility, using technology to treat wastewater before discharging them at seas, sets a good example of promoting sanitation ecological and balance through development cooperation.

-JICA Position Paper on Natural Environment (December 2017) and Water Environment Management (July 2018)

■ FACTS AND OUTCOMES

JICA's assistance introduced best practices in the following areas:



Coastal Conservation

Recognizing the value of coastal biodiversity resources and livelihood and jobs for the Filipinos, JICA's Integrated Coastal Ecosystem Conservation and Adaptive Management (CECAM) identified science-based policies to help conserve the Philippines' remaining coastal habitats. The ongoing BlueCARES project is also a pioneering research in investigating blue carbon stocks stored in coastal ecosystems.

Solid Waste Management

With the Philippines' rising population and waste production ranking 4th in ASEAN at 14.66 million tons of waste per year (United Nations Environment Programme, 2017), JICA supported capacity building of selected local government units (LGUs) by developing a Solid Waste Management plan under its technical cooperation with three LGUS, namely Calbayog (Samar), Sagay (Negros Occidental), and Davao.

Water Supply and Sanitation

JICA has advocated public-private sector partnership to support water supply and sanitation practices in the Philippines. In particular, the expansion of Boracay Island's water supply and sanitation facilities was funded through the Philippine Water Revolving Fund (PWRF), a pioneering public-private financing scheme introduced under JICA's Environmental Development Project (EDP). Through PWRF, water availability in Boracay increased to 25 million liters per day from 8 million liters and reduced non-revenue water losses to 12% from 49%.

JICA's activities also paved way for sharing Japan's technical expertise with Filipinos

800 Filipinos

trained in Japan in environment courses, 1975-2016

40 JOCVs

(Japan Overseas Cooperation Volunteers) assisted environment-related projects in the Philippines, 1975-2016



Parañaque Water Reclamation Facility

■ CASE STORY

JICA works with financial institutions and private sector players to address environment sustainability. For instance, the Parañaque wastewater treatment facility project under JICA's Environmental Development Project (EDP) with the Development Bank of the Philippines (DBP) transforms wastewater from some 14,000 households that private company Maynilad Water Services, Inc. serves before discharging water to Manila Bay. By removing pollutants from wastewater using Biological Nutrient Removal, the project makes an impact in water resources conservation amid threats from climate change.

Likewise, JICA introduced a co-financing scheme for water supply and sanitation projects under EDP for water supply facilities through the Philippine Water Revolving Fund (PWRF). The scheme combines Official Development Assistance (ODA) and private sector funds to finance water supply-related projects. The PWRF concept also mainstreamed environment and climate change considerations in water projects, while bridging the financing gap that burdened water utilities through co-financing arrangements between government and private banks. •

Environment

Bringing in climate change resilience in development work

TYPHOONS ARE GETTING STRONGER. Inundation is becoming worse. Temperatures continue to rise.

Climate change is bringing in such realities that development aid agencies such as the Japan International Cooperation Agency (JICA) cannot ignore.

As partner of the Philippines in development cooperation activities since the 1960s, JICA has devoted a part of its work towards climate change mitigation and adaptation as well as instituting mechanisms to address climate resilience.

JICA has dispatched Japanese experts in the Philippines to share Japan's know-how in areas such as conservation of coastal resources, development of mass transit systems, and flood control. JICA has also been supporting infrastructure building to preserve forestland resources and water management, while Japan's private sector is also sharing technology and expertise to support sustainable energy sources from waste and recycled materials.

"Climate change is a threat that advanced and developing countries face in the 21st century. Thus, JICA supports climate change resilience efforts to ensure that vulnerable sectors benefit from development and are not left behind," said JICA Philippines Chief Representative Wada Yoshio.

A United Nations Disaster Risk Reduction Report 1998-2017 showed that people in the poorest countries are six times more likely than people in rich nations to be injured, lose their homes, be evacuated and displaced, or need emergency assistance in case of disasters. This also means that climate change in all its forms (e.g. extreme weather) adversely impacts on low-income nations.

Developing countries, like the Philippines, have felt the brunt of climate change with the catastrophic damage from Typhoon Yolanda in 2013. The consequences were so enormous in terms of lives lost and economic devastation that JICA provided 50 billion yen "Post Disaster Stand-by Loan" under the agency's "Stand-by Emergency Credit for Urgent Recovery" (SECURE) for post-disaster recovery activities.

In the Philippine Development Plan (PDP) 2017-2022, the government sees ensuring ecological integrity and clean and healthy environment as among enablers to achieve sustainable development. The PDP included as part of its concrete strategies the following: sustaining biodiversity, expanding development of sustainable resource-based industries, and mainstreaming ecosystem values in development planning.

JICA recognizes the importance of aligning its work with climate change efforts of its partner countries. Japanese experts and even Japan Overseas Cooperation Volunteers (JOCVs) are inculcating eco values into their work. The North-South Commuter Railway (NSCR) project for example is adopting Japan's expertise on seismic design and low emission rolling stock for climate resilience and sustainability. At the community level, a Japanese volunteer helped address waste management in Bohol, teaching women to upcycle plastic shopping bags into lifestyle products. Japanese volunteers are also supporting disaster education and management in vulnerable areas like Tiwi, Albay; Kalibo, Aklan; and La Trinidad, Benguet.

"Climate action has to include many different stakeholders. It is not something that development aid agencies can handle alone; rather, it requires the collaboration of government, private sector, and the citizens," said Wada. ●

Data Source:

United Nations Office for Disaster Risk Reduction. Economic Losses, Poverty, and Disasters. https://www.unisdr.org/2016/iddr/IDDR2018_Economic%20Losses.pdf

Examples of JICA's Ongoing Assistance Supporting Climate Resiliency in the Philippines



Climate Mitigation

FOREST AND NATURAL RESOURCES CONSERVATION

- Project for Comprehensive
 Assessment and Conservation of
 Blue Carbon Ecosystems and
 their Services in the Coral Triangle
 (BlueCARES)
- Forestland Management Project

TRAFFIC AND TRANSPORTATION

- North-South Commuter Railway Project (NSCR)
- Metro Manila Subway Project
- Verification Survey with the Private Sector Disseminating Japanese Technologies for Environment-Friendly Urban Transportation Systems Using Electric Tricycles

RENEWABLE ENERGY

 Verification Survey with the Private Sector for Disseminating Japanese Technologies for Recycling Waste Cooking Oil as a Substitution of Diesel Fuel with Renergy System in Boracay Island

WATER RESOURCE

 Non-Revenue Water Improvement Project in the West Zone of Metro Manila



Climate Adaptation

DISASTER MANAGEMENT

- Pasig Marikina River Channel Improvement Project (Phase IV)
- Flood Risk Management Project for Cagayan River, Tagoloan River, and Imus River
- Flood Risk Management Project for Cagayan de Oro River
- Promotion of School Disaster Risk Reduction and Management in Cebu



NAKUI TAKAFUMI Flood Management Expert



The scale and characteristics of disasters are changing around the world due to climate change. Governments' awareness of the unexpected scale of disasters has risen, including implementing structural and non-structural measures to protect human lives. The next stage in disaster management is how to recover from disasters quickly and effectively. In Japan, our lesson from disasters is to prevent secondary damage through rapid recovery and close collaboration of stakeholders.

In the Philippine context, close communication of stakeholders is essential to promote disaster prevention measures. The Philippines could also learn to take initiatives based on cross-sectional cooperation of stakeholders and flexibility when it comes to local opinion. It is also important to keep a record of past disasters and reflect them in the disaster management cycle.

In cases of disasters, Japan learned that without crosssectional cooperation, problems happened like unfortunate infrastructure development that does not serve local needs and confusion in disaster recovery. The Philippines, therefore, can learn from Japan by establishing training organizational structures in collaboration with different stakeholders to recover immediately from disasters.

Overcoming vulnerability and stabilizing bases for human life and production activity

Disaster Risk Reduction and Management

■ BIG PICTURE

LIKE JAPAN, the Philippines is located at the Pacific Ring of Fire making it prone to earthquakes, tsunamis, and volcanic eruptions. In fact, based on World Risk Index 2019, the Philippines is among the top countries particularly vulnerable to disasters.

Nations all over the world are also aware of raising disaster resiliency. A global strategy called the Yokohama Strategy for a Safer World in 1994 advocated for implementing pre-disaster measures and ensuring sustainable development. Likewise, the 2005-2015 Hyogo Framework for Action sought to build disaster resilience of nations and communities. The Sendai Framework that followed further stressed the role of the state in disaster risk reduction (DRR) and the importance of DRR in sustainable development.

As a close neighbor and trusted partner in Asia, the Philippines is recipient of a multitude of Japan's Official Development Assistance (ODA) through JICA to promote understanding of disaster risks, invest in mitigation and preparedness, and strengthen disaster risk governance. This strategy also entails using Japan's experience and technology in disaster mitigation to help build disaster resiliency in the Philippines under the build back better concept.

■ UPDATES

Key Ongoing JICA Assistance on DRR Structural and Non-Structural Measures in the Philippines

STRUCTURAL

- Flood Risk Management Project for Cagayan River, Tagoloan River, and Imus River
- Flood Risk Management Project for Cagayan de Oro River
- Cavite Industrial Area Flood Risk Management Project
- Pasig Marikina River Channel Improvement Project (Phase IV)





NON-STRUCTURAL

- · Promotion of School Disaster Risk Reduction and Management in Cebu
- Master Plan and Feasibility Study on Flood Control and Drainage in Davao City
- Development of Extreme Weather Monitoring and Information Sharing System in the Philippines
- Improvement of Flood Forecasting and Warning System for Cagayan de Oro River Basin
- Disaster Risk Reduction Capacity Enhancement Project (Phase II)
- Capability Enhancement for High Quality Weather Observation, Forecast, Warning and Information in the Philippines

■ FACTS



Number of people affected by



74 million

¥345,039 million

Amount of ODA from JICA for DRR, 1979-present

OUTCOMES



JICA's assistance on DRRM in Ormoc developed best practices in DRRM by LGU and JICA since the grant aid (slit dams, river revetment, and bridges) for flood control measures after the 1991 Typhoon Uring paved way for greater LGU-led disaster awareness programs in Ormoc today.



The Philippines adopted the **Build Back Better** concept for Typhoon Yolanda rehabilitation, one of the key concepts from the **Sendai Framework for Disaster Risk Reduction 2015-2030**. Since the adoption of the framework, JICA has been working with the Office of Civil Defense (OCD) to achieve global targets in reducing disaster risks.



More than 200 Filipino professionals trained in DRR in Japan under JICA (2013-2018 data), while 17 LGUs have implemented DRRM plans.



Weather radar station in Catanduanes

■ CASE STORY



PAGASA main office

Since typhoons frequently hit the Philippines, the government sought the assistance of JICA in modernizing its weather forecasting and warning system. In 1978, JICA helped install flood forecasting and warning system in the country's major river systems (Agno, Bicol, and Cagayan) and major dams (Ambuklao, Binga, Magat, Pantabangan, and Angat) including establishment of river centers. The system helped improve the capacity of PAGASA in flood forecasting and warning system for accurate and timely dissemination of information and warning to the public. From 2009 to 2012, JICA helped modernize PAGASA's meteorological telecommunication system featuring three radars in Aparri (Cagayan), Virac (Catanduanes), and Guiuan (Southern Leyte) for weather data collection observation and accurate weather forecasting. In 2014, JICA continued its support to PAGASA through the project for Enhancing the Capacity on Weather Observation, Forecasting and Warning that eventually helped in the timely and reliable dissemination of storm warnings and information. The succeeding assistance sustained JICA's support to PAGASA, further helping the agency deliver accurate, timely, and reliable weather, flood, and warning information to effectively protect life and property of Filipino communities. •

Overcoming vulnerability and stabilizing bases for human life and production activity

Agriculture

■ BIG PICTURE

AT THE CORE of agriculture development are the Filipino farmers and fisherfolks, their community, and their environment. Despite the Philippines being an agricultural country, with more than 40% of its 300, 000 square kilometer land area allocated for agriculture, and 37,000 kilometers of its coastline for fishery, many Filipino farmers and fisher folks continue to live in poverty. Data from the Philippine Statistics Authority (PSA) would show that poverty incidence is high in these sectors: farmers at 34.3% and fishermen at 34% (Family Income and Expenditure Survey 2015).

Through the years, government programs seeking to initiate social change in the agriculture sector are beset with challenges ranging from limited infrastructure for efficient linkage of products to market, lack of access to agricultural credit and insurance, and vulnerability to the effects of climate change, among others, for agriculture to become a sustainable sector. JICA recognizes the need to promote agriculture in general and a food value chain (FVC) that contributes to economic growth and improved food production and nutrition.

■ FACTS

- Since 1965, Japan's Official Development Assistance (ODA) in agriculture accounts for 7% (est. ¥191 billion) of its total loan assistance to the Philippines.
- 62 grant aid projects, 33 technical cooperation projects, and 33 yen loan projects have been implemented as of 2018.
- To date, JICA has developed basic rural infrastructures such as farm-tomarket roads, post-harvest facilities, and communal irrigation systems in 365 agrarian reform communities (ARCs) nationwide through the Agrarian Reform Infrastructure Support Project Phases I to III.
- Since 2008, JICA along with the Alliance for Green Revolution in Africa launched the Coalition for African Rice Development (CARD) to support African countries in increasing rice production.





MIYAZAKO MASAHIRO Japanese Expert Advisor on Agriculture Project Development, Department of Agriculture

EXPERT VIEW

Philippine agriculture been facing the challenges of low productivity and limited diversification. The contribution of the agriculture sector to the national economy has lagged behind other economic sectors. In 2019, there were additional challenges such as plummeting rice prices, low coconut prices and the outbreak of African Swine Fever. Besides, ageing of farmers is becoming a serious problem despite the expansion of younger generations in the entire country. In the Philippines, the Department of Agriculture provides machinery and seeds and also constructs farm roads to improve productivity.

Meanwhile, aside from productivity improvement, improving marketing distribution for high-value crops is crucial. Furthermore, efforts to improve product quality in the Philippines can also have an impact. For example, systematic approach could be established to control hazards in the entire food chain from production to consumption. With the gradual development of dietary habits in the Philippines, dietary education promoting a balanced and safety diet would also be acceptable, to upgrade the consumption pattern and eventually create the incentive for farmers to produce high-quality products.

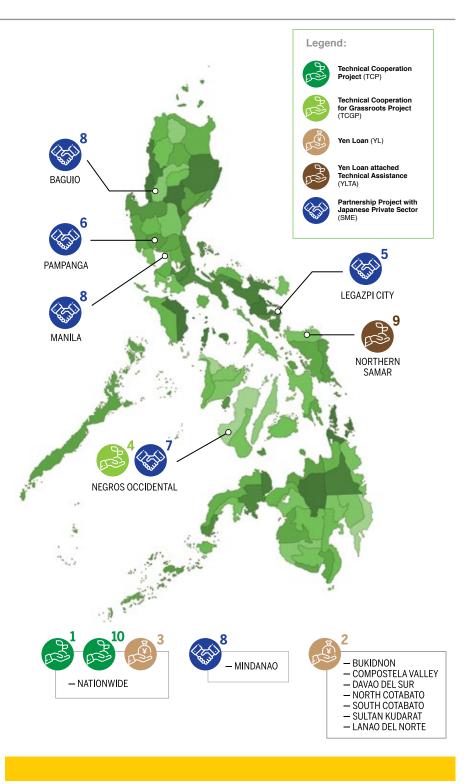
■ UPDATES

- JICA aims to strengthen the entire food value chain covering production, processing, distribution, and consumption of agricultural products.
- In 2016, the First Public and Private Forum on Agricultural Cooperation in the Philippines was held with the aim of enhancing cooperation between Japan and the Philippines towards establishment of food value chains in the Philippines and to facilitate trade and investment of agricultural products between the two countries. The second forum was held in 2018.
- The project map shows JICA's ongoing cooperation in the sector nationwide.

JICA Philippines Operations in Agriculture Sector (Ongoing projects)

PROJECT TITLE

- 1. Dispatch of Expert to DA (2018-2020)
- 2. Mindanao Sustainable Agrarian and Agriculture Development Project (MinSAAD)
- 3. National Irrigation Sector Rehabilitation and Improvement Project (NISRIP)
- **4.** Strengthen Regional Vitalization for the Sustainable Development Project
- 5. Verification Survey with the Private Sector for Disseminating Japanese Technologies for Establishing Sustainable Organic Waste Composting Systems in Legazpi City
- **6.** Verification Survey with the Private Sector for Disseminating Japanese Technologies for Mulberry Tea Leaves Project in Pampanga
- 7. SDGs Business Model Formulation Survey with the Private Sector for the Formation of Highly Profitable and Sustainable Agricultural Area through Baby Leaf Production and Organic Seed Cultivation in the Philippines
- **8.** Survey on Grafted Seedlings Business for High-Quality-and-Yield Vegetables
- Special Assistance for Project Sustainability for the Help for Catubig Agricultural Advancement Project
- Knowledge Co-Creation Program (Young Leaders): Agri-Business/ Agri-Tourism Course





Malinao and Bayongan Dams constructed through the Bohol Integrated Irrigation Project.



■ CASE STORY

It used to be that farmers in the rural parts of Bohol, an island in Central Visayas, had to live in poverty conditions in the 1970s due to lack of infrastructure, jobs, and marketing systems - an ironic circumstance as the province is richly endowed with agriculture resources. Against this backdrop, JICA launched a technical cooperation project Bohol Integrated Area Development in the late 1970s to promote agricultural growth through support to farm-to-market roads, irrigation systems, and capacity building. A JICA grant aid to build the Bohol Agricultural Promotion Centre in 1985 also paved way for pilot farms, and product packaging to help farmers market their produce. Subsequently, JICA assisted the construction of dams and farm-to-market roads in Bohol like the Bohol Circumferential Road project in 2008, thus helping farmers expand their market, while also boosting Bohol's tourism. Such cooperation projects for agriculture in Bohol allowed farmers to improve their productivity, sell their crops, and further integrate themselves in the value chain. JICA's continued ODA cooperation in Bohol for almost four (4) decades has indeed contributed to Bohol's transformation from being one of the poorest provinces in the country to being a progressive place, and a rice exporter nowadays. •



Overcoming vulnerability and stabilizing bases for human life and production activity

Social Development



JICA's support in the social development sector aligns with the Sustainable Development Goals (SDGs) towards helping countries become more inclusive. This is also consistent with Japan's revitalization efforts and diplomatic policy of sharing Japan's experience and knowhow to solve development challenges.

For the health sector, JICA believes in ensuring that people obtain health services without suffering financial hardship. For the education sector, JICA taps opportunities that can help increase the choices of individuals and develop their independence, while also developing high skilled human resources for the global economy.

Currently, JICA works with Japanese universities, research institutions. and private sector to conduct research, or disseminate new technologies and equipment and the Japan brand (e.g. 5S, Kaizen, medical technology, maternal and child "mutual health handbook, learning") to address persistent problems in both health and education sectors. An example is the Science and Technology Research Partnership Sustainable Development (SATREPS) involving JICA Japan Science and Technology (JST) Agency. Through this partnership, universities in the Philippines and Japan undertake joint research addressing infectious disease control like childhood pneumonia, rabies. leptospirosis.

■ BIG PICTURE

DESPITE THE PHILIPPINES being one of the fastest growing nations in the ASEAN region at 6.5% GDP growth rate over the past years, the needlest people in the country still lack basic services like health coverage and access to education.

For health services, nationwide health insurance coverage showed marked improvement at 94% (June 2018 data). However, members still shoulder more than 50% of out-of-pocket expenses like medicines. To help address gaps in the Philippine health sector, JICA's projects seek to strengthen local health systems, establish functional service delivery networks, and prevent/control infectious diseases. In the past, JICA has also supported maternal and child health (MCH) services in areas where MCH indicators are below par.

In terms of education services, efforts in elevating the quality of education gained strides with the passage of Republic Act 10533 or Enhanced Basic Education Act in May 2013. Said law facilitated the implementation of the K to 12 program, a strategy that aims to equip Filipino graduates with skills and mindset in a globally competitive world. JICA recognizes human resource development as a cornerstone in development, and works to expand opportunities in education, and towards improving its quality and management.

■ UPDATES

JICA works with various government agencies to implement the following ongoing cooperation that address emerging health issues:

- 1. Programme for Consolidated Rehabilitation of Illegal Drug Users (CARE)
- 2. Project for Introducing Evidence-Based Relapse Prevention Programs to Drug Dependence Treatment and Rehabilitation Centers in the Philippines (IntERIaPP)
- 3. Project for the Establishment of One Health Prevention and Treatment Network Model for Elimination of Rabies in the Philippines (JAPOHR)
- 4. Verification Survey on Japanese Style Nursing Care

Meanwhile, ongoing JICA cooperation projects for the education sector include the following:

- 1. ASEAN University Network-Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Phase IV
- 2. Verification Survey with the Private Sector for Disseminating Japanese Technologies for Use of Smart Lecture (a hybrid educational material to improve math learning)
- 3. Verification Survey on Japanese Style School Lunch



Photo courtesy of Cez Bazar



■ CASE STORY

Efforts to address public health issues in the Philippines took a major leap with the establishment of the Research Institute for Tropical Medicine (RITM) under a JICA grant aid assistance in 1981. The RITM has emerged as a center of excellence in health research in the country. Through its researches, RITM developed diagnostic techniques and strategies for the control of infectious and emerging tropical diseases. Its research efforts in the Philippines on infectious diseases like cholera and tuberculosis to name a few, helped diminish unnecessary deaths and suffering due to poor health systems. The RITM and JICA continue to collaborate through research programs and trainings against infectious diseases. Whereas before public health is merely a humanitarian issue, the strategic partnership between RITM and JICA proves that it can contribute in solving emerging public health challenges mutually benefit the countries involved, while making the world a safer place for all. •

Data Sources:

Data Collection Survey for Universal Health Coverage in the Philippines, 2016.

JICA Position Paper on Sustainable Development Goals (Health). https://www.jica.go.jp/aboutoda/sdgs/ku57pq00002e2b2a-att/goal03_e.pdf

JICA Position Paper on Sustainable Development Goals (Education). https://www.jica.go.jp/activities/issues/education/ku57pq00002cy6fc-att/sdgs_goal04_en.pdf

■ OUTCOMES

In recent years, here are some of the milestones from JICA-assisted projects in the health and education sectors that made an impact to the Filipinos.



- Cordillera-Wide Strengthening of Local Health System for Effective and Efficient Delivery of Maternal and Child Health Services Project (2012-2017) earned the NEDA Good Practice Award in 2014 for boosting facility-based delivery rate in the area to 83% in 2013 from 68% in 2010.
- Project for Prevention and Control of Leptospirosis in the Philippines (2010-2015) developed effective diagnostic methods, and helped establish the Leptospirosis Prevention and Control Center in the University of the Philippines Manila. While still being studied further, the project also initiated vaccine development for the disease.



- Third Elementary Education Project (1997-2006) and Secondary Education Development Project (1997-2006) provided hard and soft components (school buildings, instructional materials, school furniture, equipment) that improved school facilities, introduced school-based management, and improved access to school facilities as well as contributed to better learning performance in project sites.
- Project for Supporting Senior High School Program in Technical Vocational (TechVoc) High School (2014-2017) trained teachers, improved school-industry linkages, and provided equipment to pilot TechVoc schools. Under the project, "Job Support Corners" in pilot schools helped students access the Philippine government's Job Matching and Labor Market Information Portal.

Peace and Development in Mindanao

■ BIG PICTURE

ONE OF THE OLDEST armed conflicts existing in the world is in the Philippines' second largest island, Mindanao. A region rich with agricultural resources and a vital link to other countries in ASEAN, peace and development in Mindanao is key in ensuring a wider peace and prosperity in the region.

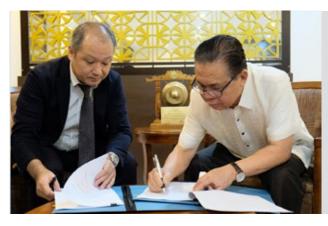
Unfortunately, conflict in Mindanao particularly in the Autonomous Region in Muslim Mindanao (ARMM) has set back the region's prosperity. ARMM remained one of the country's poorest, with more than half of families (55.4%) considered poor as of the first semester of the Family Income and Expenditure Survey 2018.

JICA has been supporting human security including poverty alleviation and peace building in various conflict-affected countries such as Sudan, Afghanistan, Rwanda, Iraq, and Sierra Leone, among others. For peace and development in Mindanao, JICA's work centered on these areas since 2002: peace making (membership to International Contact Group), peacekeeping (dispatch of socioeconomic advisors to International Monitoring Team), and peace building (implementation of development projects).

■ UPDATES

JICA's recent projects for Mindanao's peace and development include the following:

- Comprehensive Capacity Development Project (CCDP) for the Bangsamoro (2013-2019) trained 6,400 farmers and local officials on governance and livelihood
- Market Driven Local Industry Promotion Project (2017-2019) within CCDP supported six industry clusters (abaca, coconut, coffee, palm oil, rubber, seaweed) or 9,036 industry players.
- Capacity Development Project for the Bangsamoro (2019-2022) supporting the transition to Bangsamoro Government by 2022
- Road Network Development Project amounting to \$202.04 million linking Mindanao's key cities through approximately 100 kilometers of roads to revitalize economic activities



JICA Philippines Chief Representative Wada Yoshio and BTA Interim Chief Minister Ahod "Al Haj Murad" Ebrahim



TAKEUCHI HIROSHI Chief Advisor, Capacity Development Project for Bangsamoro



Peace building is one of the thematic areas that JICA pursues in partner countries like the Philippines. One of the common interventions that JICA does towards this end is on economic growth.

JICA's projects in BARMM mostly help improve agriculture production technology and market-oriented promote economy. Sixty percent of industries in BARMM are related to agriculture and fishery. But because of the region's vulnerability, there's a strong need to improve agriculture technology and market access for economic recovery. For the peace process to be valuable, it is important that people realize the dividends of peace in their lives.

A Timeline of JICA's Assistance to Mindanao's Peace and Development

JICA's **ARMM Social Fund** supported development of more than 350 barangays in Mindanao's conflict areas | Japan Prime Minister

| Japan Prime Minister Koizumi Junichiro vowed support to Mindanao's peace and development during his Philippine visit **Japan Prime Minister**

Aso Taro pledged support to Mindanao during his Philippine visit | Year when the **Japan**-

Bangsamoro Initiatives for Reconstruction

and Development was launched | JICA President

Ogata Sadako visited Mindanao and committed higher budget for peace building in Mindanao Talks between former

President Benigno Aquino III and MILF Chair Al Haj

Murad was held for the first time in Narita, Japan

2002 2004

2004 2006 2009

20**11** 20**12**

International Monitoring Team Mindanao was established Peace negotiations between government and the Moro Islamic Liberation Front (MILF) resumed | International Contact Group for the Mindanao Peace Process

was established

Framework Agreement on

the Bangsamoro towards creation of Bangsamoro government was signed

Launching of Comprehensive
Capacity Development
Project for the Bangsamoro

Japan Prime Minister
Abe Shinzo and former
President Benigno Aquino III
declared Japan-Philippines
Strengthened Strategic
Partnership, including
cooperation for Mindanao

President Rodrigo Duterte signed the **Bangsamoro Organic Law** | JICA committed ¥ 2 billion for the **Marawi Trans-Central Roads Rehabilitation Project**

2013 2014 2015 2017 2018 2019

JICA joined the international community in witnessing the signing of the Comprehensive Agreement on the Bangsamoro | JICA and Bangsamoro Transition Commission signed Memorandum of Understanding for quick impact projects for Bangsamoro

Signing of HARVEST Loan
Agreement or Harnessing
Agribusiness Opportunities
through Robust and Vibrant
Entrepreneurship Supportive of
Peaceful Transformation with
Land Bank of the Philippines |
JICA grants boom trucks and
power distribution equipment
to the electric cooperatives in the
Bangsamoro worth
¥771 million

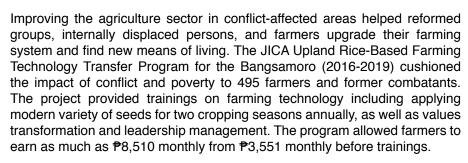
Bangsamoro Organic Law was ratified through a plebiscite |
Bangsamoro Transition Authory was established | Japan's total ODA for Mindanao peace and development reached ¥ 51 billion (2002-2019) | Capacity Development Project for the Bangsamoro supporting the transition to Bangsamoro Government by 2022 commenced



Farmers trained under the Upland Rice-Based Farming Technology Transfer Program for the Bangsamoro



■ CASE STORY



Further, the program used a project model where government agency partners led the trainings of agriculture officers and religious leaders that led to creation of farmers field schools (FFS) whose farmer-trainees also trained other farmers and combatants. The broad partnerships of stakeholders under the project ultimately prepared Bangsamoro people to maximize their land and exert sustainability efforts. By supporting agriculture, the JICA project helped the people feel the impact of peace building in their lives. •



Balibay, A. Philippines climbs 4 notches in Global Peace Index 2019. www.goodnewspilipinas.com

Embassy of Japan. 2018. Japan's Development Cooperation in the Philippines.

Ishikawa, S. June 2017. Human Security in Practice: East Asian Experiences. https://www.jica.go.jp/jica-ri/ja/publication/workingpaper/175nbg00000aa6xg-att/JICA-RI_WP_No.155.pdf

Philippine Statistics Authority. 2018 First Semester Poverty Statistics Among Families in ARMM. http://rssoarmm.psa.gov.ph/release/content/special/55264



Harvesting upland rice in Maguindanao



An affirmation of Japan-Philippine ties through JICA

Photo courtesy of Rey Baniquet, Presidential Photographers Division, Office of the President

AS AN AFFIRMATION of ties between Iapan International Cooperation Agency (JICA) and the Philippines, JICA President Kitaoka Shinichi visited the Philippines on April 2019 and met with key Philippine officials led by President Rodrigo Duterte. He also met with Mohagher Iqbal, Minister for Basic, Higher and Technical Education of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and Chair of the Moro Islamic Liberation Front (MILF) Peace Implementing Panel. This was the third visit of Kitaoka in the Philippines since becoming JICA President.

As both Japan and the Philippines share common challenges in the 21st century, JICA's development work in the Philippines united and strengthened the friendship of both nations. Here are the highlights of President Kitaoka's visit:

Commitment to quality infrastructure

Transport infrastructure accounts for 80% of Japan's Official Development Assistance (ODA) to the Philippines, based on 2013-2017 ODA loan data. President Kitaoka visited one of JICA's ongoing infrastructure projects in Mindanao, the Davao City Bypass Project that aims to increase economic opportunities in growth centers like Davao.



Championing disaster resiliency

JICA has supported disaster risk reduction and management in the Philippines through Japan's knowhow and technology. Effective Flood Control Operation System (EFCOS) is one of the significant projects among our holistic cooperation in flood control in Metro Manila. President Kitaoka visited the site and confirmed how EFCOS is controlling floods in Metro Manila by making use of capacity enhanced by JICA's assistance.

Supporting research and development in partner countries

JICA's cooperation with the Research Institute for Tropical Medicine (RITM) tells of JICA's support to health research and development in the Philippines towards a better quality of life. The RITM complex, which includes a hospital and laboratory wings, as well as a training center, was built with JICA grant aid. Considered a center of excellence in health research, JICA has also supported RITM in the conduct of research on various infectious diseases such as tuberculosis (TB) and pneumonia and currently works with Japanese universities to study diagnosis and prevention of public health diseases like rabies.



Peace and development in Mindanao

JICA has been supporting peace and development in Mindanao, notably through the Japan-Bangsamoro Initiatives for Reconstruction and Development (J-BIRD) launched in 2006. Now that the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) has been established, JICA met with members of the Moro Islamic Liberation Front (MILF) Peace Implementing Panel to reaffirm JICA's support to peace building by promoting good governance, livelihood, and human resource development.

Strengthening people-to-people exchange

Historically, Davao is home to one of Japan's largest immigrant societies. President Kitaoka visited historical sites in Davao as well as a Japanese school, Philippine Nikkei Kai International School. The school has become instrumental in fostering successful people-to-people exchange between countries through partnerships with Japanese universities and promoting Japanese language education.



With JICA's long-standing friendship with the Philippines, the recent visit of President Kitaoka in the Philippines assures continuing cooperation between both countries, particularly on common issues that are mutually beneficial for Japan and the Philippines. •

Partnering with private companies for social impact

THESE DAYS, a growing breed of private companies are on the lookout for ventures that not only impact the bottom line, but also contribute to society. The Japan International Cooperation Agency (JICA) is opening up new ways to engage the private sector towards doing business with other companies or organizations while making social impact in emerging countries.

Investing in water resource sustainability

When Maynilad Water Services, Inc. (Maynilad) was looking for ways to manage the country's water resources efficiently, they struck a co-financing deal to reduce Non Revenue Water (NRW) with JICA and Japanese financial institutions including the Bank of Tokyo-Mitsubishi, Mizuho and Sumitomo Bank, Banking Corporation. This financing deal was materialized under IICA's assistance scheme: Private Sector Investment Finance (PSIF). JICA's loan amounting to about ₱7 billion is helping Maynilad reduce its NRW, optimize water resource usage, and improve efficiency of water delivery to the users.

The PSIF has helped Maynilad replace old pipes and procure meters and detection tools for water leakage. So far, due to these initiatives funded partly by PSIF, NRW ratio has decreased from 32.3% as of 2017 to 26.5% as of 2019. (NRW ratio is calculated as the average of NRW ratio in District Metered Areas.)

Aside from loan funds from PSIF, Maynilad also receives technical assistance from JICA to enhance their staff's capacity on NRW management. "The PSIF is our way to maximize social impact by extending financing to the local private sector. Our partner countries can also benefit from the experience and expertise of Japan in finding innovative ways to improve people's lives," said JICA Philippines Senior Representative Kawabuchi Kiyo.

"Through PSIF, we received support in terms of improving our credit worthiness and our operations to better serve our clients," said Kurata Shigehiko, a Japanese Financial Assistant assigned to the Office of the Chief Finance Officer in Maynilad. With the due diligence well as several towns in C water demand expected with Metro Manila's Maynilad plans to furth NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's Maynilad plans to furth NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's Maynilad plans to furth NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's NRW ratio from 32% 20% in 2022, so that well as several towns in C water demand expected with Metro Manila's

conducted by JICA under PSIF, Maynilad established a high level of creditworthiness that helped it to attract additional financing from other Japanese private banks.

Maynilad provides water to Metro Manila's West Zone (composed of 11 key cities and business districts as well as several towns in Cavite). With water demand expected to rise along with Metro Manila's population, Maynilad plans to further decrease NRW ratio from 32% in 2017 to 20% in 2022, so that water can be delivered to users more continuously with adequate pressure.

Learn how your company can qualify for PSIF:



Must be **quality company** (aligned with Sustainable Development Goals or SDGs)



Project **must have impact** on SDGs, climate change, quality infrastructure, clean water, and sanitation



Has the necessity/willingness to **take more risks** to supplement bankability/investability



Certain Japan-nexus preferable but not a must; **strong development story** is a big plus



CAPEX primarily required



Fishermen in Samar with Hosokawa Takahashi of Nitto Seimo

Creating social impact

Other than private sector finance, JICA also engages Japanese companies whose businesses support the Sustainable Development Goals (SDGs) and create social impact. In Guiuan, Samar, where fishermen lost their livelihood to Typhoon Yolanda in 2013, people are steadily recovering with help from the submersible fish cage technology of Japanese company Nitto Seimo Co., Ltd.

Under JICA's Program for SDGs Business Supporting Surveys, Nitto Seimo introduced the fish cages to fishermen, while also training them and the local government units (LGUs) on their use. Customized from their business in Japan to the Philippine setting, the submersible fish cages of Nitto Seimo are made of high density polyethylene and become filled with seawater when submerged, minimizing damage from wind and waves during typhoon season.

The project benefited the local community by encouraging other investors to rent the fish cages, giving jobs to displaced fishermen and increasing the income of local folks. Gertrudes Abuda of the Organisasyon ng mga Mahihihirap ng Trinidad (OMANGAT) in Guiuan said, "The

project gave jobs to women in our community through harvesting-related work and other aspects of the business like marketing, processing, accounting, and bookkeeping."

In the end, JICA's partnership with Japanese businesses is an example that it is possible for business results and social impact to go hand in hand. •

Learn more about JICA's SDGs Business Supporting Surveys here: https://tinyurl.com/jicaSDGbiz



Redefining relations with Asia Photos courtesy of Philippine Coast Guard

THE CHANGING global landscape is transforming the way nations all over the world are connecting with their partner nations. This has also set the tone for advanced nations like Japan in tapping new ways to promote stability and prosperity in the international community.

Japan is strengthening its relations with Asia through its development cooperation activities that align with so-called Free and Open Indo-Pacific Strategy (FOIP) of the administration of Japan Prime Minister Abe Shinzo. Under FOIP, development cooperation paves way to (1) increasing awareness of confidence, responsibility, and leadership as well as democracy, rule of law, and market economy in Southeast and South Asian countries; and (2) bringing out the potential of Africa as a global main player.

FOIP in Japan-Philippine Development Cooperation Narrative

Japan is the Philippines' leading Official Development Assistance (ODA) partner accounting for US\$352 million ODA disbursements in 2017 alone (Organisation for



Indonesia-Philippines-Japan regional marine pollution exercises in Davao City

Economic Co-operation and Development data). Japan is also a major trading partner of the country with total trade amounting to US\$9.98 billion in 2018. Beyond these figures, Japan through the Japan International Cooperation Agency's (JICA) activities in the Philippines has contributed to the country's growth performance in the region over the years.

An example of this, in addition to the contribution to enhance peace and development in Mindanao, is JICA's activities to support the Philippines' maritime safety and security through

the Philippine Coast Guard (PCG). As a maritime nation, the Philippine seas are crucial to the nation's trade and connectivity. In the same way, ensuring stability and peace around Southeast Asian boundaries is important for Japan as it also relies on sea trade routes for its prosperity.

In recent years, JICA has engaged the PCG through projects such as the (1) Maritime Safety Capability Improvement Project I (December 2013-April 2022) and II (October 2016-February 2026) to boost the PCG's presence in Philippine seas and address maritime accidents by



providing multi-role response vessels (MRRVs) and (2) Enhancement of PCG's Capability on Vessel Operations, Maintenance Planning and Maritime Law Enforcement (June 2019-June 2022) to assist the coast guards in using effectively PCG's floating assets. "JICA's contribution to PCG has been a big impact to our overall success in accomplishing our missions. Before, we lacked available vessels to respond to emergencies, patrol our waters, and enforce maritime laws. Through JICA's support, we are now able to deploy more vessels and increase success in our operations towards enhancing and ensuring safety in Philippine waters." said PCG Deputy Commandant Leopoldo Laroya.

A case in point was the impact of the JICA-assisted multi-role response vessels (MRRVs) in maritime security during the ASEAN Summit in the Philippines in 2017 and ongoing maritime operations in Benham Rise. The United Nations Convention on the Law of the Sea (UNCLOS) declared the Benham Rise as an extended continental shelf of the Philippines well within PCG's patrol route.

JICA's Role

"There's still a compelling need to train and add more knowledge to PCG personnel in operating and maintaining our vessels, as well as acquiring the expertise for regular maintenance so the vessels can help us accomplish our missions," added Laroya.

Recognizing the need to promote self-reliance with its partner countries, IICA forges ahead with its new support to the PCG in training its personnel on operations and maintenance of its assets. JICA Chief Representative in the Philippines Wada Yoshio said, "As Asia (and Africa) shows potential as new corridors of growth in the world, JICA will continue to support human resource development in certain sectors like maritime safety and security under FOIP. JICA's support to PCG will not only sustain our bilateral relations, it will also ensure that the environment for trade is robust and safe." •





Advocating for peace and development in Mindanao

"

JICA has been heavily involved in the peace process and rebuilding of not just the Bangsamoro itself but as well as ensuring a bright future for its people and the coming generation.

- **))** ----

AS CHAIR of the Moro Islamic Liberation Front (MILF), Mr. Ahod "Al Haj Murad" Ebrahim is currently involved in Bangsamoro's transition to an autonomous government. In his new role as Interim Chief Minister of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), ICM Ebrahim is one of the key personalities closely working with Japan International Cooperation (JICA) Agency's peace development initiatives for the Bangsamoro people. JICA Senior Representative Ebisawa Yo met with ICM Ebrahim for JICA's Annual Report interview series where ICM Ebrahim spoke about his experiences in peace building, how his background led him to engage in his current work for the Bangsamoro, and JICA's role in supporting inclusive peace and development.

E: Can you share with us your background, and how your experiences brought you to working actively in the peace building process in Mindanao?

M: I came from a typical Bangsamoro family. My father was a teacher in Quran reading while my mother was an ordinary housewife who died when I was just three (3) yrs. old. At the age of 13, I became completely orphaned when my father passed away.

I spent my elementary and secondary education in public schools in Cotabato City. In college, I was a university scholar at Mindanao State University in Marawi City as a Civil Engineering student, but later transferred to Notre Dame University in Cotabato City after receiving a scholarship from the Commission on National Integration (CNI), a government agency engaged in the development of Muslim formulation.

During my senior years in college from 1968 to 1969, a series of massacres targeting Bangsamoro people became rampant in Mindanao. This extreme massacre interpreted as a genocide campaign triggered the formulation of several organizations of Bangsamoro people such as youth, professional, and religious sectors. Being a youth leader in my college days, I decided to join the underground movement, and left school in 1969.

When former President Ferdinand Marcos declared Martial Law in 1972, all the groups engaged in defending Bangsamoro converged together to establish the Moro National Liberation Front (MNLF) and formulated political objectives. The organization also gave birth to the Bangsamoro people's political struggle for a separate and independent state. I joined said organization where I participated in military trainings and was dispatched in Cotabato Province. The situation between the government and the MNLF worsened, but with the intercession of the Organization of Islamic Conference (OIC) now Islamic Cooperation, MNLF started negotiations with the government from 1974 to 1975. In December 1976, the government and the MNLF signed the peace agreement "1976 Tripoli Agreement" towards the creation of autonomous administrative divisions for Muslims in southern Philippines, the establishment



JICA Philippines Senior Representative Ebisawa Yo and BARMM Interim Chief Minister Ahod "Al Haj Murad" Ebrahim

autonomous government and judicial and security systems, as well as the observance of ceasefire. However, conflict broke out between the government and the MNLF in 1978 when the peace agreements ended.

Within the MNLF, internal problems rose that led to the formation of a breakaway group called Moro Islamic Liberation Front (MILF) which I joined. In 1982, I became the vice-chairman for military affairs and chief of staff of the Bangsamoro Islamic Armed Forces (BIAF) under MILF.

E: What brought you to join in the peace building process?

M: Even though we had waged war in the past to defend ourselves, I always believe that negotiation with the government is still the best solution to address conflict. War is not the real solution. Thus, in 1974, with the help of the OIC, members

of the MNLF agreed unanimously to start negotiations with the government because we recognize that it is the only viable solution to end insurgency.

E: Can you talk about what peace and development in Mindanao means to you?

M: Peace and development are very important to me. In fact, I spent a greater part of my life for this struggle to achieve genuine peace, development, and progress in our beloved homeland. The reason why we are sacrificing for this struggle is that we see that without peace and development the next generation will continue to suffer.

E: What do you see are major challenges in the transition to the autonomous government?

M: One of the biggest challenges is the transformation from being a revolutionary group to handling governance because

most of us do not have any experience in government service. On my part, as I mentioned earlier, I was not able to finish my college education. Additionally, the most important and biggest struggle is the rebuilding of our homeland that has been devastated by war and conflict for more than 50 years. The rebuilding process is very challenging, takes time, and entails huge resources so we can reform the system and achieve development.

E: How will you describe the role of JICA in the transition process of the Bangsamoro to an autonomous government?

M: We recognize the importance of partnership not only with the national government but also with foreign partners. This is because we need partnership as well as resources to address the challenges I have mentioned, specifically the rebuilding process of our homeland. We are fortunate because JICA has been our partner from the beginning before the establishment of the new government. JICA has been heavily involved in the peace process and rebuilding of not just the Bangsamoro itself but as well as ensuring a bright future for its people and the coming generation.

E: Are you also working with other countries for peace and development in Mindanao? How is JICA's support to Bangsamoro different from support from other countries?

M: I think one of the factors that contributed to the success of the MILF's search for peace is the mobilization of foreign countries and organizations. Several counties such as Japan, Turkey, Malaysia, European countries, as well as ASEAN countries have helped us achieve peace and development in the region.

We see that the support of the Japanese Government through JICA differs from others in terms of continuity and comprehensiveness of the relevant programs for the Bangsamoro. JICA is not just providing infrastructure projects, but also capacity building for the people and offering other development programs that the Bangsamoro needs. •



JICA Knowledge Co-Creation Program

Building future leaders

FOR MANY YEARS, the Japan International Cooperation Agency (JICA) has been sending Filipino professionals to study in Japan as part of its contribution to nation building, while also fortifying relations between Japanese and Filipinos. Sharing vignettes of two Filipinos who went to Japan under JICA's Knowledge Co-Creation Program, an initiative that has molded thousands of Filipinos into becoming leaders in their fields.

Former JICA scholar takes lead in lake preservation

The purpose of life is to make some difference that you have lived and lived well.

- RALPH WALDO EMERSON, poet

A group of students from Immaculate Concepcion Academy huddle together, listening to lake conservation practices about the traditional method of catching fish using bottom set gillnets. The fishermen also shared their experiences and challenges in fishing to the students. The activity hopes to mentor the

young generation of Filipinos on the value of preserving Laguna de Bay so that the Philippines' largest body of fresh water will be preserved.

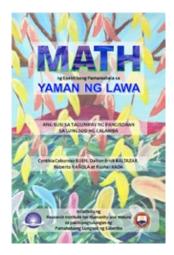
Laguna de Bay, located in southern Metro Manila, is being threatened with pollution that has led to poor water quality in the lake. Unsustainable aquaculture practices

and discharges from nearby polluted creeks and rivers severely affected the lake's water conditions. With help from the MATH for Wealth of the Lake initiative of a former participant of the Knowledge Co-Creation Program (KCCP) for Young Leaders of the Japan International Cooperation Agency (JICA), efforts are ongoing to preserve Laguna de Bay's ecosystem. MATH stands for Mentor the future generation, Access partnership, Technology and information dissemination, and Home and family-based approach.

Cynthia Caburnay Buen, an Aquaculturist from the Agricultural Services Department of Calamba City, Laguna was among the JICA participants sent to a Fisheries Resource Management Course under KCCP in 2015. As part of the training, Buen met leaders of non-profit groups and fishermen's cooperatives in Ishinomaki,



a fishing center in Tohoku Region where the Great East Japan Earthquake and Tsunami happened in 2011. "Meeting them and seeing their work to empower and strengthen fisherfolk organizations became an eye opener for me. The local communities are involved in



MATH booklet distributed to stakeholders

planning and implementing fishery programs; the task of providing training and fishing rights to fishermen are delegated to the fishermen's cooperative; women and elders have their portion of responsibilities in value adding and processing," shared Buen.

When Buen returned to the Philippines, she applied her lessons learned from Japan on bottom-up planning and spearheaded the MATH for the Wealth of the Lake in Laguna to promote sustainable management of fishery resources.

Laguna de Bay is said to be the largest lake in the Philippines and is a valuable resource for agriculture, aquaculture, power generation, and flood control. With the project, Buen promotes conservation to youth and students, partners with different stakeholders for financing, technical and other support, uses new technology for information and dissemination, involves families in lake preservation activities. In October 2018, the program received the Ibaraki Kasumigaura Award as one of ten outstanding papers, besting 500 other papers at the 17th World Lake Conference in Ibaraki,

Her idea is to also involve more women and youth and

Japan.

alleviate poverty among the fisherfolks through strengthening and equipping the fisherfolks cooperative. "I am truly grateful to say that the lessons that I gained from Japan became part of the programs and projects I implement now in our city," she said.

Changing the face of public service

Right at the sprawling Keio University Shonan Fujisawa campus was where then 40-year old Francisco Relevo Cruz finished his master's degree in media and governance. Cruz was an information officer at the Department of Interior and Local Government (DILG) for nearly two decades communicating the Department's plans and programs to local government units (LGUs) and the public.

A scholar under the Project for Human Resource Development Scholarship by Japanese Grant Aid or JDS, Cruz said studying in Japan "gave him the opportunity to advance in his career and improve the situation of his family, while sending all of his six children to good schools." During his studies, Cruz interacted with other international students, Japanese professors, and public servants like himself.

"I've met Japanese public servants working in Fujisawa city government who showed professionalism and patience in their work. They set good examples for Filipino public servants like myself on the way we should do our work,"





Cruz (right) representing the Philippines at the 13th ASEAN Ministerial Meeting on Transnational Crimes

the concept of 'deviant case' meaning being attentive to the concerns of the minority."

At DILG, this has been applied in the consultation process for its initiatives, programs, and projects. "We allow people, civil society organizations (CSOs), and other stakeholders to tell us how they view our programs and how they think we should proceed to improve them. The process is inclusive, never leaving anyone behind."

Since Japan's modernization story also involves learning from other countries, the KCCP is also an instrument for Japan and other countries to share their experiences and lessons to contribute to development. "My studies in Japan taught me to have an open mind and find solutions to problems by engaging other people. Through JDS, I learned how other countries solved their problems similar to ours."

In Japan, Cruz had the chance to stay with a Japanese family who also had several children, visit Sapporo and other scenic places, and learn Japan's values and culture. After returning from Japan, Cruz moved up the ranks, was promoted to Director, and now serves as Assistant Secretary at DILG where he takes the lead in setting the Department's strategic direction and ensuring that all its plans and programs have adequate resources and are aligned with the priorities and thrusts of the national government.

According to him, "JDS is not just about career advancement. It's also a chance to learn from other countries how to solve problems and issues in our public sector." •

Cruz (right) with Japanese professor Umegaki Michio

61

Filipino youth find their voices

Right at the communities where they live, some 40 young Filipinos stepped in front of their cameras to share their thoughts and feelings about their country, their hopes, and aspirations on international cooperation.

Their voices, recorded in video blogs, reflect the narrative of their generation where the young own a social media venue to air their feelings towards social problems from traffic to natural disasters to armed conflict.

Here is what this group of young video bloggers have to say on international cooperation and the impact of Japan International Cooperation Agency's (JICA) work in their lives.

"[JICA] inspires us to work hard and smart to help our fellow Filipinos ourselves, and to essentially become part of something greater: a truly globalized and international society."

HANNAH MARIE MIRALLES, Catholic Filipino Academy Homeschool and ZACHARY SYSANTOS, Ateneo de Manila University

"The Philippines is a calamity-prone country and JICA is always there to help reduce the level of risks during disasters.'

MARICRIS DOROIN, Partido State University (Goa Campus)

"Just like JICA's vision. the Filipino youth must lead our country to make it a better place to live in."

SENAIRA BAGARAM and LARA MAE BACULIO, Opol Community College



community because a non-handicapping environment is not just for persons with disabilities (PWDs) but also for everybody."

FRITZI JOY MANDIN and RAY ANTHONY VACALARES, Opol Community College

greater future for the next

RHAFFE DAYDAY.

For more than decades now, Japan and the Philippines have been in it together in building a generation to come. As a Filipino youth, it made me realize that the world would be better if our mindset is to help rather than to receive."

STI College - General Santos

"JICA's support in the renovation of our transportation system will help increase our productivity and this will be a big improvement to all of our lives.

> JAZEL ANTIPORDA and NICOLE CHUA Ateneo de Manila University



"The projects of JICA made me realize that people you don't even know is willing to help in times of need. As a Filipino, the rehabilitation help from other countries is a call for us to unite as Filipinos, and strengthen the spirit of bayanihan (collective help), and our role as peace makers in our own country.

SHANNEFAMEL ALMAZAN. Mindanao State University Iligan Institute of Technology

"Living in the Philippines isn't easy and that could be said in any other country as well. But, with help from organizations like JICA, living here could get easier.'

> IKOY DUMAYAS. De La Salle - College of Saint Benilde





"As a Filipino student, I am amazed at what JICA has done for the Philippines. JICA inspires Filipinos and instills joy in our hearts and minds."

Technology

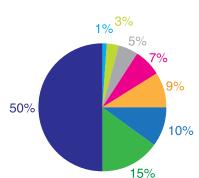




Fast facts

■ Japan's Bilateral Assistance to the Philippines

(Cumulative as of JFY 2018)



ODA Loan and Private Sector **Investment Finance Commitment:**

¥3,113,322 million

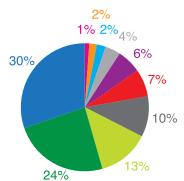
Telecommunications

Agriculture, Forestry, and Fisheries Mining and Manufacturing

Social Services

Power and Energy Irrigation and Flood Control Program Loan, etc.

Transportation



Technical Cooperation: ¥251,667 million

Social Welfare Services Energy

Business/Tourism

Mining and Manufacturing

Health/Healthcare

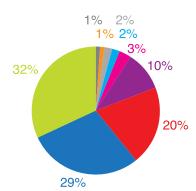
Human Resources

Planning/Government

Agriculture, Forestry, and Fisheries

Others

Public Works/Utilities



Grant Aid: ¥243,777 million

Planning/Government **Energy**

Mining and Manufacturing

Business/Tourism

Social Welfare Services

Health/Healthcare

Human Resources

Public Works/Utilities

Agriculture, Forestry, and Fisheries

■ Distribution

by Sector

Region VI

Region VII Central Visayas

■ Volunteer Program

Total number of volunteers

Cordillera Administrative

Region (CAR)

Region I

Region III Central Luzon

deployed as of February 2020: 35

Distribution

by Region

Region V

Region VIII

Region IV-A





Planning



Philippines

Japanese study team members sent to the **Philippines**



Filipinos trained by JICA

Japanese volunteers dispatched to the Philippines

(Cumulative as of JFY 2018)

Social Welfare





Health Care



Manufacturing



Fisheries and Agriculture

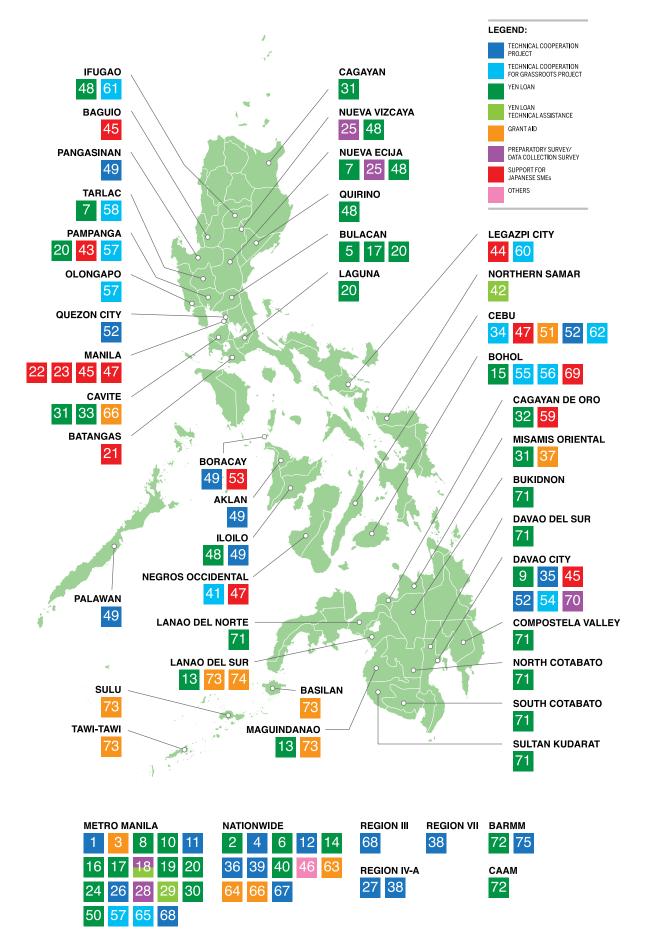






Tourism and **Business**

JICA Philippines Operations Map



JICA Philippines Project List

(Ongoing projects as of December 2019)

Priority Area: Achieving economic growth through further promotion of investment

GOVERNANCE

- The Project for Enhancement of Philippine Coast Guard Capability on Vessel Operation, Maintenance Planning and Maritime Law Enforcement METRO MANILA
- 2. Maritime Safety Capability Improvement Project (Phase I and II) NATIONWIDE
- 3. Improvement of TV Programs of People's Television Network METRO MANILA

ECONOMIC INFRASTRUCTURE

- The Project on Improvement of Quality Management for Road and Bridge Construction and Maintenance (Phase III) NATIONWIDE
- 5. Arterial Road Bypass Project (Phase III) BULACAN
- 6. Road Upgrading and Preservation Project NATIONWIDE
- 7. Central Luzon Link Expressway Construction Project TARLAC
- 8. Metro Manila Interchange Construction Project (Phase VI) METRO MANILA
- Davao City Bypass Construction Project DAVAO CITY
 Metro Manila Priority Bridges Seismic Improvement Project METRO MANILA
- 11. Project for Comprehensive Traffic Management Plan for Metro Manila METRO MANILA
- Study on Masterplan for High Standard Highway Network Development in the Philippines (Phase II) NATIONWIDE
- Road Network Development Project in Conflict Affected Areas in Mindanao LANAO DEL SUR MAGUINDANAO
- New Communications, Navigation, and Surveillance/ Air Traffic Management Systems Development Project NATIONWIDE
- 15. New Bohol Airport Construction and Sustainable Environment Protection Project BOHOL
- 16. Capacity Enhancement of Mass Transit Systems in Metro Manila Project METRO MANILA
- 17. North-South Commuter Railway Project (Malolos Tutuban) METRO MANILA, BULACAN
- 18. Preparatory Survey/Detailed Design Study for the Metro Manila Subway Project METRO MANILA
- Metro Manila Subway Project (Phase I) METRO MANILA
- North-South Commuter Railway Extension Project (Malolos - Clark Blumentritt - Calamba) METRO MANILA, LAGUNA, BULACAN, PAMPANGA
- 21. Collaboration Program with the Private Sector for Disseminating Japanese Technology for Electricity Distribution System and Management In Philippines BATANGAS
- 22. Basic Survey of Participation in Shipbuilding with Inspection and Maintenance Technology for Small and Medium Vessels MANILA
- 23. Survey on Introducing Concrete Repairing Materials for Preventing Water Leakage MANILA
- 24. Metro Rail Transit Line 3 Rehabilitation Project
- 25. Preparatory Survey for Dalton Pass East Alternative Road NUEVA ECIJA, NUEVA VIZCAYA

INVESTMENT PROMOTION AND INDUSTRIAL DEVELOPMENT

- 26. Enhancement of Customs Operations METRO
- Project for Industrial Competitive Enhancement thru Industrial Human Resource Development and Supply and Value Chain Development CALABARZON
- 28. Study on Innovative Bond Financing and Credit Ratings in the Philippines METRO MANILA
- 29. Technical Assistance Project to Establish the Philippine Railway Institute METRO MANILA

Priority Area: Overcoming vulnerability and stabilizing bases for human life and production activity

DISASTER RISK REDUCTION AND MANAGEMENT

- 30. Pasig Marikina River Channel Improvement Project (Phase IV) METRO MANILA
- Flood Risk Management Project for Cagayan River, Tagoloan River, and Imus River CAGAYAN, MISAMIS ORIENTAL, CAVITE
- 32. Flood Risk Management Project for Cagayan de Oro River CAGAYAN DE ORO
- 33. Cavite Industrial Area Flood Risk Management Project CAVITE
- 34. Promotion of School Disaster Risk Reduction and Management in Cebu **cebu**
- 35. Master Plan and Feasibility Study on Flood Control and Drainage in Davao City **DAVAO**
- 36. Development of Extreme Weather Monitoring and Information Sharing System in the Philippines NATIONWIDE
- Improvement of Flood Forecasting and Warning System for Cagayan de Oro River Basin MISAMIS ORIENTAL
- 38. Disaster Risk Reduction Capacity Enhancement Project (Phase II) REGION IV-A, REGION VII
- 39. Capability Enhancement for High Quality Weather Observation, Forecast, Warning and Information in the Philippines NATIONWIDE

AGRICULTURE AND AGRIBUSINESS DEVELOPMENT

- 40. National Irrigation Sector Rehabilitation and Improvement Project NATIONWIDE
- 41. Strengthen Regional Vitalization for the Sustainable Development Project **NEGROS OCCIDENTAL**
- 42. Special Assistance for Project Sustainability for the Help for Catubig Agricultural Advancement Project NORTHERN SAMAR
- 43. Verification Survey with the Private Sector for Disseminating Japanese Technologies for Mulberry Tea Leaves Project in Pampanga PAMPANGA
- 44. Verification Survey with the Private Sector for Disseminating Japanese Technologies for Establishing Sustainable Organic Waste Composting Systems in Legazpi City LEGAZPI CITY
- 45. Survey on Grafted Seedlings Business for High-Ouality-and-Yield Vegetables BAGUIO, MANILA, DAVAO
- 46. Knowledge Co-Creation Program (Young Leaders): Agri-Business/ Agri-Tourism Course **NATIONWIDE**
- 47. SDGs Business Model Formulation Survey with the Private Sector for the Formation of Highly Profitable and Sustainable Agricultural Area through Baby Leaf Production and Organic Seed Cultivation in Philippines NEGROS OCCIDENTAL, CEBU,

ENVIRONMENTAL AND SOCIAL DEVELOPMENT

- 48. Forestland Management Project IFUGAO, NUEVA VIZCAYA, QUIRINO, NUEVA ECIJA, ILOILO
- The Project for Comprehensive Assessment & Conservation of Blue Carbon Ecosystems and Their Services in the Coral Triangle (BlueCARES) PALAWAN, ILOILO, AKLAN, PANGASINAN, BORACAY
- 50. Non-Revenue Water Improvement Project in the West Zone of Metro Manila METRO MANILA
- 51. The Project for the Septage Management of Metro Cebu Water District **CEBU**
- The Project for Capacity Development on Improving Solid Waste Management through Advanced/Innovative Technologies QUEZON CITY, DAVAO CITY, CEBU CITY
- Verification Survey with the Private Sector for Disseminating Japanese Technologies for Recycling Waste Cooking Oil as a Substitution of

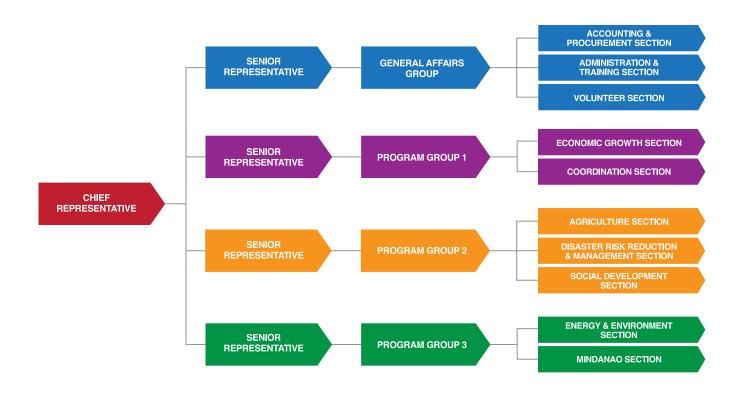
- Diesel Fuel with Renergy System in Boracay island
- 54. Project for Enhancing Solid Waste Management in Davao City **DAVAO CITY**
- Project on Promoting Sustainable Reduce, Reuse, and Recycle (3Rs) System through Education to Produce Environment-Minded Society for Development BOHOL
- 56. Plastic Recycling Project for Improving Women's Income in Tagbilaran City **BOHOL**
- Ensuring Children's Potential for Development and Independence through Improved Residential Care Practices PAMPANGA. OLONGAPO. METRO MANILA
- Project on Knowledge Dissemination and Actual Implementation of Preventive Care Program for the Senior Citizens of Capas Municipality TARLAC
- Verification Survey for the Improvement of Students' Math Performance Using the Hybrid Learning Material "Smart Lecture" CAGAYAN DE ORO
- 60. Expansion of Participatory Local Social Development Based on Iida Local Governance Model in Legazpi City LEGAZPI CITY
- 61. Strengthening "Twinning" between Globally Important Agricultural Heritage Systems (GIAHS) Designated Sites, "Ifugao Rice Terraces" and "Noto's Satoyama and Satoumi" for Sustainable Development IFUGAO
- 62. Project for Supporting Local Fisherfolk Communities through Training on Seafood Processing Methods and Disaster Prevention/ Reduction Education CEBU
- 63. Japanese Grant Aid for Human Resource Development Scholarship (JDS) NATIONWIDE
- 64. ASEAN University Network/South East Asia Engineering Education Development Network (AUN/SEED-Net) (Phase IV) NATIONWIDE
- 65. Health Promotion and QoL improvement for Diabetics in Metro Manila METRO MANILA
- The Programme for Consolidated Rehabilitation of Illegal Drug Users (CARE) CAVITE (REHAB CENTER SITE), NATIONWIDE FOR OTHER PROGRAM COMPONENTS
- 67. The Project for Introducing Evidence-Based Relapse Prevention Programs to Drug Dependence Treatment & Rehabilitation Centers (IntERIaPP)

 NATIONWIDE
- 68. The Project for the Establishment of the One Health Prevention and Treatment Network Model for the Elimination of Rabies in the Philippines METRO MANILA, REGION III
- 69. Verification Survey with the Private Sector for Disseminating Japanese Technologies for Septage Management Improvement with Advanced Treatment Method in Panglao, Bohol BOHOL
- 70. Data Collection Survey for Sewerage System Development in Davao City **DAVAO CITY**

Priority Area: Peace and development in Mindanao

- 71. Mindanao Sustainable Agrarian and Agriculture
 Development Project LANAO DEL NORTE, BUKIDNON,
 COMPOSTELA VALLEY, DAVAO DEL SUR, NORTH COTABATO,
 SOUTH COTABATO, SULTAN KUDARAT
- 72. Harnessing Agribusiness Opportunities through Robust and Vibrant Entrepreneurship Supportive of Peaceful Transformation (HARVEST) BARMM, CONFLICT AFFECTED AREAS IN MINDANAO (CAAM)
- Project for Improvement of Equipment for Power Distribution in Bangsamoro Area MAGUINDANAO, LANAO DEL SUR, BASILAN, SULU, TAWI-TAWI
- The Program for the Support for Rehabilitation and Reconstruction of Marawi City and Its Surrounding Areas LANAO DEL SUR
- 75. Capacity Development Project for the Bangsamoro **BARMM**

JICA Philippine Office Organizational Chart





People behind JICA

General Affairs Group



Program Group 1Infrastructure, Urban and Regional Development, Governance



People behind JICA

Program Group 2

Agriculture, Disaster Risk Reduction and Management, Social Development, Japanese SME Support



Program Group 3Energy and Environment, Peace and Development in Mindanao



Acknowledgements

Japan International Cooperation Agency (JICA) Philippines thanks all officials and staff at national and local government organizations, non-government organizations, private sector organizations, and partner communities, as well as JICA staff, who shared their stories, provided valuable information, arranged interviews, and worked for the success of JICA projects.

EDITORIAL TEAM:

Jennifer Erice, Amanda Bacani, Roxanne De los Santos, Domingo Nievarez Jr.

STORIES BY:

Maffy Carandang-Patio

DESIGN AGENCY:

Buensalido PR & Communications

PHOTOGRAPHS BY:

Rudy Liwanag

LAYOUT AND DESIGN BY:

Arne Lawrence Sarmiento





Annual Report 2019

40th Floor Yuchengco Tower, RCBC Plaza 6819 Ayala Avenue, Makati City, Philippines 1200 Tel: +63 2 8889-7119 Fax: +63 2 8889-6850

Email: pp_oso_rep@jica.go.jp
Official Website: https://www.jica.go.jp/philippine/english

Official Facebook Page: https://www.facebook.com/jicaphilippines