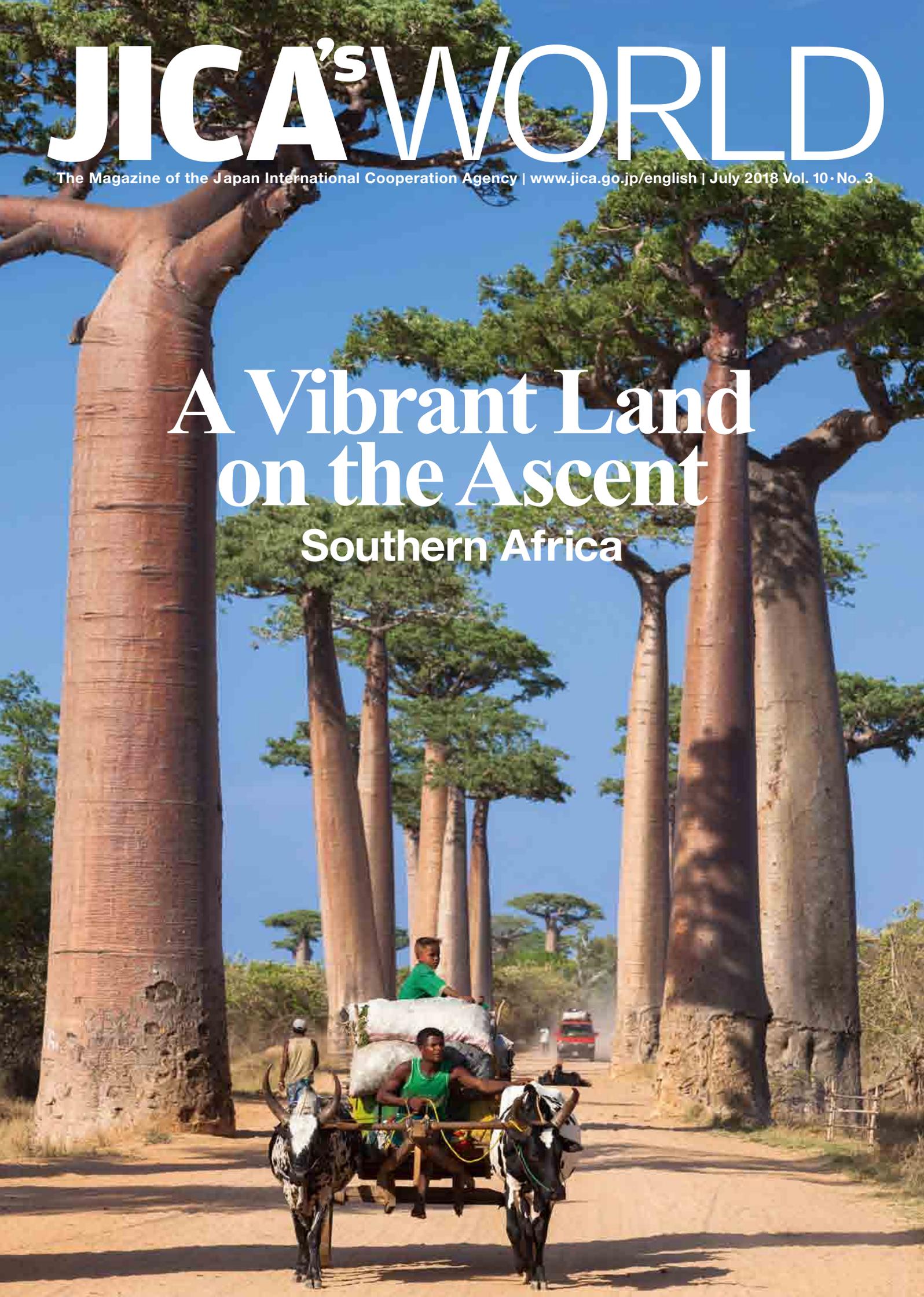


# JICA's WORLD

The Magazine of the Japan International Cooperation Agency | [www.jica.go.jp/english](http://www.jica.go.jp/english) | July 2018 Vol. 10・No. 3

## A Vibrant Land on the Ascent

Southern Africa



# A Vibrant Land on the Ascent

Southern Africa is overcoming racial discrimination and taking advantage of rich mineral resources and tourist attractions to develop, while simultaneously fostering a sense of regional unity.

Today, as various countries in the region step on the path of mutual prosperity, Japan is providing support in accordance with individual strengths and challenges while respecting the ideals of the region which value mutual cooperation.

*Editorial assistance: Yoichi Mine, Professor, Graduate School of Global Studies, Doshisha University*

*Photography: Mika Tanimoto (Mozambique)*

## Transitioning to an Era of Mutual Prosperity among the countries in the Region

With the equator running through it, the African Continent lies astride the northern and southern hemispheres and accounts for around a fifth of the world's land area. The region features diversity that cannot be properly expressed by using only "Africa." For Japanese people, Southern Africa is a region that is becoming more popular as a tourist destination, owing to its attractions such as the wildlife habitat Kruger National Park, the spectacular Victoria Falls, and the ethereal dunes of the fantastical Namib Desert.

When talking about this region, its history of apartheid or racial segregation cannot be overlooked. Apartheid was a policy of racial discrimination implemented in South Africa from 1948 until 1991. Laws divided citizens by race in all areas of politics, economics, and society, and the rights of non-whites were restricted. The late Nelson Mandela dedicated his life to ending apartheid and became president in the first general election open to all races, which was held in 1994. His work promoting racial reconciliation and cooperation is very well-known.

The Southern African Development Community (SADC) was formed in 1992 by various countries in the region to alleviate poverty and improve living standards, but its precursor, which was formed in 1980, had actually been launched without the Republic of South Africa. Professor Yoichi Mine of the Graduate School of Global Studies, Doshisha University in Japan explains that "The white government in South Africa under apartheid subjugated neighboring countries through economic and military control, and these countries came together to break free from that."

South Africa joined the SADC in 1994 as democracy progressed following the end of apartheid. Professor Mine says, "The year of 1994 was a turning point for the Southern African region. South Africa was no longer an 'enemy,' so the SADC could now pursue a path for promoting development as a unified economic zone." Partly due to its historical background of colonization by white people, South Africa had strong ties with European and American enterprises and became a major power for driving economic growth, not only in Southern Africa, but in the whole African Continent. Leveraging that momentum to achieve mutual pros-

perity in the region requires the comprehensive cooperation of developed countries talking regional development into consideration.

## Cooperation Respecting Diversity and Consensus

One of the distinguishing characteristics of Southern Africa is that, overall, manufacturing and industrial infrastructure is relatively advanced. At the same time, when you turn your attention to the individual countries comprising the region, their respective strengths and characteristics become apparent. For example, the strengths of Zambia, Botswana, and Angola lie in their abundant mineral resources. The key to their future economic growth is the acquisition of technology and expertise for promoting sustainable resource development. Namibia, Madagascar, and Mauritius have become popular travel destinations, so they need a system that ties the growth of their tourism industry to local development. South Africa has a significant presence when it comes to business. Many Japanese companies have also set up operations there, and South Africa acts as a business hub in the region.

To empower each country in the region to leverage its

strengths, Japan has been providing support by dispatching experts and offering various training programs in Japan through Official Development Assistance (ODA). At the same time, cooperation is also essential for solving specific challenges. The large-scale starvation that occurred in Malawi, Zimbabwe, and other areas due to the drought that persisted from 2015 is still fresh in people's minds. Southern Africa still bears the serious burden of the HIV/AIDS epidemic. Improving the "quality of development" will become increasingly important in future cooperative endeavors. This includes promotion of agriculture in areas where rainfall is not guaranteed, solving health and urban problems, and others which are not expressed in terms of economic indicators.

The 7th Tokyo International Conference on African Development (TICAD 7) will be held in Yokohama City next year. Observe how the dialog between Japan and African countries will unfold, and learn about the regional characteristics and diversity of Southern Africa and other parts of the continent.

# Rainbow of Promise: Looking Ahead to the Future

South Africa, known as “Africa’s engine,” generates 20% of Sub-Saharan Africa’s Gross Domestic Product (GDP). Securing outstanding human resources that will support industry is essential for not only South Africa’s development but also that of the Southern African region and even of Africa as a whole. Japan supports the introduction of training programs that boost the practical skills of the young people who support Africa’s future.

Photography: Akihito Yoshida



Students assembling a miniature truck in order to learn the necessary skills for discovering problems in the workplace. The truck is based on one used by Nissan for training at its plant in Pretoria.



## From Division to Harmony: A Country that Overcomes Contradictions to Grow

“Rainbow Nation.” This alternative name for South Africa symbolizes a society where many ethnicities and races coexist. The journey to get to this state of society, however, was anything but peaceful. Beginning in the 17th century, Dutch and British citizens, one after another, swarmed and colonized this fertile land, which was already home to black Africans. After South Africa gained independence following World War II, apartheid—racial segregation—came into effect, placing restrictions on the rights of citizens according to race. It was a major turning point when all discriminatory laws were abolished in 1991 following the conclusion of the Cold War. In 1994, the late Nelson Mandela, an anti-apartheid activist, was elected as president. Mandela was imprisoned as political criminal for 27 years, and this year marks 27 years since the abolition of racial discriminatory laws. South Africa’s journey as “the Rainbow Nation” for coexistence of diversified groups has just started.

Instead of displacing white people from South African society, the Mandela administration chose a path where all races would coexist. In this way, the country took over the industrial foundation built by whites, including infrastructure and scientific technology, and made it an asset of all citizens. The current development of the country still largely relies on the utilization of bequeathed properties under white control. At the same time, a negative legacy still exists; social disparities, in particular those between races, are manifest.

Under apartheid, many blacks and other people of color were not given sufficient opportunities for education, resulting in great discrepancies in the level of education between racial groups up to now. In particular, South Africa has long been at the bottom in world rankings of math and science education (as researched by the World Economic Forum). To help South Africa address this, Japan is providing support to restructure the math and science curricula in South African basic education.

Another challenge is the lack of problem-solving capabilities required in the workplace. Mamoru Iida, JICA’s advisor to the Department of Higher Education and Training (DHET), explains, “The old style of education that places emphasis on cramming / memorization is still mainstream in this country, so many young people are facing difficulties of acquiring the attitude of seeking out problems on their own and working to solve them logically.”

Similarly, Mahlubi Mabizela, Chief Director of higher education policy at DHET, mentions inequality, poverty, and unemployment as three challenges the country is facing. “Our country needs



Mahlubi Mabizela, Chief Director of higher education policy at DHET. Mabizela says he wants to deepen ties with Japan and increase personnel exchange.

to develop human resources who have practical skills and are capable of independent thinking. If such individuals are allowed to thrive in the workplace and start their own businesses, it will lead to development in our country and help bring us closer to solving these three problems in our society.”

The Employability Improvement Project (EIP) has been launched at universities of technology nationwide and is being promoted based on the desire to improve practical skills that can be used in society by young people in South Africa and provide them with educational opportunities that will instill independent thinking.

## Changing Perspectives and Ways of Thinking by Developing Human Resources to Mobilize Society

In urban areas around South Africa where industry flourishes, there are a total of six universities of technology that train human resources who will support all of the country’s industries, ranging from education and tourism to high technology. The aim of EIP is for these six universities of technology, as well as the University of Johannesburg, to send out new working members of society with problem-solving skills by providing short-term training programs to students.

We visited Tshwane University of Technology (TUT), which was the first institute in South Africa to implement EIP. “Tshwane” is the name of the metropolitan area where Pretoria, the administrative capital of South Africa, is located. With more than 64,200 students, TUT is the largest University of Technology in South Africa. It has introduced EIP primarily in its departments of science and engineering, and the expected results are being noticed.

Deputy Vice-Chancellor Prof. Stanley Mukhola says that students who participated in EIP have shown a clear change in attitude. “The number of students, who have developed a greater sense of responsibility by learning teamwork through the training is increasing. I hope to make EIP a requirement for all students so that we can develop not only the human resources required by the industrial world of today, but also the human resources who will play



Prof. Stanley Mukhola, Deputy Vice-Chancellor, Tshwane University of Technology (left) and Esau Motaung, Director of Co-operative Education. They have actively taken the lead in introducing EIP.



Many young people attend Tshwane University of Technology. Universities of technology in South Africa originated from technical schools, and one of their primary missions is to develop human resources that will play active roles in the industrial world.

An industrial area in the suburbs of Durban where Duys is located. Various kinds of industrial plants are crowded together in this hilly area.



a role in our country's industries 10 years from now."

Esau Motaung, Director of Cooperative Education, says that EIP will change the way that students look at things and give them the ability to make logical connections and organize their thoughts. "The change in students' attitudes, and acquiring the ability to discover and solve problems, are a big change for them. In the future, I hope to work with the companies that take them in, receive feedback, and continue to strengthen this initiative."

Universities of technology in South Africa have adopted a framework called the Work Integrated Learning (WIL) program. The purpose is to promote a smooth transition to careers following graduation by having students experience internships at actual workplaces before and after taking university classes. EIP is positioned as an introductory stage of the WIL program, and funding assistance for activities is provided by the National Skills Fund (NSF). The whole country is promoting the movement to improve the working skills of new working members of society.

### Awareness Leading to Practical Skills through Hands-on Experience

Located on South Africa's Indian Ocean coast about a one-hour plane ride from Pretoria, Durban is South Africa's second largest city. It is an important trade port and is also a major industrial center with many production plants. Durban University of Technology has 27,000 students and multiple campuses located not only in Durban but also in Pietermaritzburg, the capital of the province of KwaZulu-Natal.

When we visited lecturer Jay Paramanund who works as the university's EIP Program Coordinator, there was an EIP program going on for first year students in the Co-operative Education Department. After explaining basic concepts in business like the PDCA cycle, Paramanund lined up a large number of parts in front of the students. He divided the students into three groups and instructed them to assign a leader and an inventory manager for their group. "Now I would like you to make a vehicle," he said. The parts he had lined up in the classroom were for a miniature truck. Each group was supposed to be a "plant" that would manufacture a miniature vehicle.

The ways the groups worked on the challenge were different. For example, one group had all members engage in discussion, while another group broke down into smaller teams early on. Parts management was also handled differently, such as one group breaking down into teams, and another one working as a single group to gather parts and build up stock. Watching the students having fun

working with the assembly manual in one hand will make you forget that it's a university class. Iida, JICA Expert, let us in on a secret while watching the students work, "There's actually a trap in the manual. There are parts where the work will be difficult if you follow the instructions during assembly."

When the group work was finished, Paramanund asked the students to bring him the trucks they made. This is where quality control came in. The trucks that were made by each group had various defects, such as bent tires and crooked vehicle bodies. There were also several things that would be a problem in an actual workplace, such as extra parts prepared but were not actually used. The point of EIP is to equip students to notice these things and let them think about how to address problems.

Rie Shinozaki is a JICA Expert from World Business Associates Co., Ltd, who works on EIP with Iida and goes around universities to provide program instructions. She says, "While doing the assembly over two or three times, the students gradually begin to come up with their own ideas and start to make more finished products with higher efficiency. This includes cleaning up the desk that serves as their work area and creating an assembly line system for the parts." The experience of thinking for themselves rather than just doing things according to the instructions, like when the students implemented countermeasures after finding the trap in the manual, changes the behavior of young people in the places where they work.

We drove from Pietermaritzburg toward Durban on the highway. The highway is well-constructed, with two lanes going in either direction, and three in some places. The rows of small- and medium-sized plants in the industrial park are reminiscent of the scenery in industrial areas of Japan. In this region, we visited a company that hires graduates of Durban University of Technology.

Bongiwe Sithole, Human Resource Manager of the Duys En-



Bongiwe Sithole (left) has high regard for the practical ability of students who participated in EIP. Her company makes parts for domestic locomotives, Toyota, Nissan, and others.

gineering Group, has high regard for graduates who participated in EIP. "They have a high capacity to understand the purpose of each task in work and are conscious of making a contribution to the workplace. This makes them stand out from other new working members of society. It will be good for society as a whole if young blacks and other people of color (editor's note: mixed-race individuals, those of Southeast Asian descent, etc.) get employed and excel at jobs that the older generation could never have imagined, by receiving this education. They are rays of hope shining in South African society." Sithole, who was raised in a household that valued education, did not hide her expectations for new graduates and young people undergoing practical education.

### Opportunities to Learn Working Skills, Spreading over Neighboring Countries

We headed back to Durban University of Technology and talked to professors who are implementing EIP for students under Paramanund's instruction at the Durban City Campus. Lecturer Nee Sobantu Ntola of the Department of Chemistry, Faculty of Applied Sciences said, "When we implemented EIP at our department, one of the students questioned the EIP by asking, 'Is this really something that we should be doing in class in the Department of Chemistry?' But when the first day of class was finished, that same student told me, 'I look forward to tomorrow.' This program is a good stimulation for all students regardless of their field." Shanaz Ghuman of the Department of Community Health Studies emphasizes, "Traditionally, important things for a working member of society like proper execution of work and time management were not taught at school. When I was little, I learned such things while helping out with my parents' business, but today opportunities like that are rare. For many young people, EIP is a precious opportunity to learn practical skills."

Thami Dlamini, who participated in EIP as part of the WIL program and also did an internship, reflects, "Before undergoing the training, I couldn't even imagine what 'adaptability to the workplace' meant. Not only are the skills I learned participating in EIP essential in the workplace, they're also applicable and important in everyday life."

Thus far we've looked at only the positive side, but the employment situation in South Africa is dire. At 26.7%, the unemployment rate is one of the highest in the world, and among young people, the rate is nearly 40% (according to the National Statistical Office, based on the first quarter survey of 2018). The unemployment rate is particularly high among blacks and other people of color who have been less fortunate in obtaining an education. On the other hand, if the educational situation for this group is improved and they are able to become outstanding human resources, they could be a spark for the South African economy.

Iida emphasizes, "Economic development serves as the driving force for solving social problems and also improves the living standard of each individual. With the improved living standard, it becomes easier for children to receive education and for outstanding human resources to be sent out into society, which leads to further economic development. Fostering outstanding industrial human resources is a major key to getting a cycle of growth going and achieving the national economic plan for 2030."

DHET Chief Director Mabizela explains, "Eight percent of students studying at South African universities have come from neighboring Southern African countries to study. Moreover, the same cooperation has expanded to the nearby Namibia University of Science and Technology through EIP. To help develop the Southern African region, it is absolutely essential that we improve the quality of education in this country and develop outstanding human resources." Iida also narrates, "There are parts of South Africa that are developing, but they face the same problem of poverty as other African countries, particularly in rural areas. Attempts to solve social problems in South Africa will provide hints for solving not only its problems, but that of other countries as well."

In many cultures and religions throughout the world, the rainbow is a sign of hope, prosperity and peaceful co-existence. Having 11 official languages, the Rainbow Nation has vowed to achieve harmony between races and ethnicities. Its prosperity will be good news for the future of all Africa.



With the team involved in promoting EIP at Durban University of Technology. Rie Shinozaki (back row, leftmost), Mamoru Iida (back row, rightmost), and Jay Paramanund (front row, right).



A sample of a certificate given to those who complete the EIP. The list of acquired skills on the back serves as a reference for managers.

# Protecting Forests and People's Livelihoods with Skills Training That is Open to All

In Madagascar, deforestation is becoming more serious as the population increases, leading to land degradation and putting people's livelihoods and production activities at risk. We took a close look at activities aimed at curbing this problem by giving residents technical skills through training that is open to all.



The locals call the soil resulting from the earth collapsing and coming off the mountainsides "lavaka" (top photo). Residents participated in practical training and learned how to make fences to prevent it.

## From "Charity" to "Participatory Development"

Madagascar, which has 1.6 times the land area of Japan, is home to 250,000 kinds of wild fauna and flora, with around 80% of them being endemic. In this country known for its rich ecosystem, trees are disappearing. The causes for this include cultivation of farming land and slash-and-burn associated with a rapid increase in the population, as well as logging for fuel. More mountains are getting bare, particularly in the Central Highlands, which lie upstream, and the earth is collapsing everywhere, resulting in "lavaka," which means "hole" in their local tongue.

Many of those who live in the upstream region are already poor. The sediment spilling down from the surface of the mountains as a result of lavaka covers cultivated land, water sources, and roads, making it even more difficult for the residents to engage in rice farming and other production activities, and threatening their livelihoods. The large volume of sediment travels down the river and even spreads to rice-producing districts downstream.

Since 2012, JICA has been implementing resident-led projects in the Alaotra-Mangoro and Bongolava regions in the Central Highlands for the purpose of soil conservation and developing a

system for activities to improve livelihoods. "Conventional aid from other donors consisted mostly of providing money for soil conservation and planting trees by residents in pre-determined places," explains Hiroko Miura from IC Net, Ltd who works as a project manager. "Such efforts are not led by residents, and they do not help promote understanding of the problem. Moreover, there is also the issue that when you just teach certain people the necessary skills for planting trees, the skills do not spread. That's why we decided to spread these skills through training that is open to all. This motivates them to continue planting trees and implementing countermeasures for lavaka where needed."



Miura (woman in the back) meeting with local trainers. Residents who complete the training course to be a local trainer are awarded certificates.

The skills taught include planting trees on bare slopes, making improved ovens to reduce the amount of firewood or charcoal used, creating countermeasures for preventing the spread of lavaka damage, and cultivating lychee and raising freshwater fish to improve livelihoods. Up to now, the training has been carried out more than 8,500 times in eight municipalities in the two regions, with the number of participants totaling more than 140,000. Miura recalls the background of the training, "We focused on developing a model for implementing training that would spread the information and skills to all residents."

## Creating a Useful Training Model

The model for implementing the training has three layers consisting of persons responsible for implementation, on-site management, and local training. The persons responsible for implementation are from a branch office of the Ministry of Agriculture or the Ministry of Environment or from a local NGO. They decide on the skills to spread within each municipality based on the needs of the residents. Staff members assigned to each municipality supervise the training on site, while more than 800 local trainers, who have been trained from among the residents, let the people in their respective villages know that the training will be held and have the role of teaching the skills. Village residents with the relevant know-how, such as people who had been taught the skills in past projects, served as instructors when training local trainers. By utilizing local human resources to communicate information and develop capabilities, all residents were able to get involved.

Under the instruction of the local trainers, the residents acquired skills ranging from creating seedbeds for tree planting to planting pre-grown seedlings on mountains. On the other hand, during training on how to reduce the damage from lavaka, residents who believe that lavaka is the work of God are shown videos to help them understand that the damage can be mitigated and that those who have suffered damages are tasked to procure the materials necessary for the countermeasures. Practical training was provided on making earth-retaining fences before the rainy season. Miura says, "The residents who have seen the effects of the fences they installed build some more after the training. They're built using materials around them, so another advantage of this model is that the residents are able to maintain and manage on their own, and continuity of activities is high."

As a result of the training, in a span of four years, 2,380,000 trees were planted, earth-retaining fences were installed in more than 100 locations, 21,000 improved ovens were made, and 23,000 lychee plants and more than 120,000 fingerlings were produced. The residents say that they are happy because everyone has an equal opportunity to learn the skills, and these skills are useful to those who are truly hurting, as opposed to aid that has previously been given. One resident said that he did not own land and thus had been of low status in the village, but by becoming a local trainer and working hard for the village in getting everyone to participate in the training, he earned the trust of the other residents and was elected as a local councilor in the municipal elections.

Miura and her project team's approach was developed based on the actual circumstances of the local area and consists of making full use of local human and natural resources, spreading simple skills that the residents can implement through training that are open to all, and conducting follow-up to ensure that the skills take



Training on how to make improved ovens

root. The approach is now being incorporated by projects implemented by other development partners within the country.

## Effectiveness Also Demonstrated in Farming Villages in Malawi

A project based on the same concept is also being carried out in Malawi since 2013. In a rural area near the country's leading commercial city of Blantyre, uncontrolled deforestation and raising of crops not suited to the topography have caused a decrease in soil water retention, bringing about soil erosion during rain and resulting in decreased yield. The aim of this project is to promote tree planting, silviculture, and environmentally friendly farming among farmers.

In past projects of this kind, a very small number of farmers would be taught the skills, and those selected farmers were expected to spread the skills to many other farmers. The concept behind this project is the opposite, however. Three of Malawi's government ministries, including the Ministry of Environment, trained about 3,000 farmers to be trainers in the target villages by the end of last year. Each of them is responsible for 15 nearby farming households to ensure that the skills spread throughout the villages. The farmers learn things such as how to increase rainwater retention and penetration and how to prevent soil erosion by determining the direction, length, and spacing of ridges along contours. They put the skills to use right away in their own fields and continue doing such efforts.

Based on the results in both of these countries, Masato Onozawa who works as a project manager for IC Net, Ltd. says, "Achieving similar results for a specific method in diverse African societies beyond national or regional boundaries has provided a valuable precedent." This training, which give equal opportunity to learn skills and promote understanding of local challenges among residents to help solve them, protect the forests, soil, and livelihood of the people who live there.



Farmers in Malawi gathered rocks to make a check dam in order to reduce soil erosion from cultivated land on a steep slope. The effect of each small handmade check dam is limited, but it can be increased by having residents cooperate to build a large number of them.



Tengenenge, Zimbabwe, one of the target sites of Japan's technical cooperation projects. The locals in this community entertain tourists by performing traditional dances. (Photography: Akihito Yoshida)

### Strengthening Cooperation in Tourism Development: Facing Common Challenges

The deep red dunes of the Namib, the world's oldest desert; the 108-meter Victoria Falls, one of the world's largest waterfalls; the Great Zimbabwe National Monument; and many other historical remnants built by humans. Southern Africa could be called a "gold mine of world heritage." All of these things come together to form the truly majestic picture we have of Africa. However, as of 2015, the number of tourists visiting Southern Africa only accounts for 2% of the international tourist market. As things stand, the abundant tourist attractions are not being fully utilized due to the lack of various elements that are essential to the tourism industry, including strategic marketing surveys, human resources with adequate skills, and transportation infrastructure such as airports and roads.

In response to this situation, the Regional Tourism Organisation of Southern Africa (RETOSA) was established in 1996 as a subordinate organization of the Tourism Committee of Southern African Development Community (SADC). Aiming at promoting cross-border tourism among tourists to Southern Africa, RETOSA has been working on joint development of tourism resources across national borders and developing a system where tourists can move between countries in the region without obtaining a visa. RETOSA has also attempted to solve the common challenges in Southern African countries, such as job creation, increasing income, and reducing inequality, from the perspective of tourism through the promotion of Community-Based Tourism (CBT). CBT is one of the tourism development approaches that provide the benefits to local communities. Since 2014, JICA has been dispatching Advisors for Sustainable Tourism Development and Regional Marketing in Southern Africa to RETOSA in order to support this initiative.

The three pillars of the activities of JICA advisors are: (1) formulating a CBT development strategy, (2) formulating a strategy for tourism marketing and promotion that primarily targets the Japanese market, and (3) strengthening the capabilities of the RETOSA secretariat. The "CBT Development Guidelines" has already been completed and published. For pillar (2), in order to find out how satisfied tourists were with their trip, a survey was conducted at South African airports targeting 300 tourists from Japan and other Asian countries. Guidelines were then created for the tourism promotion of the Southern African region to the East Asian tourist market based on the survey results. Yoshihito Urano, who was involved in the project as a JICA Project Formulation Advisor at the time, says, "The results of the survey revealed that there was a complete lack of tourist information on Southern Africa in Japan. So we made a strong effort into promotion activities for the Japanese market, including having RETOSA participate in Tourism EXPO Japan, one of the largest tourism events in Asia. It provided RETOSA representatives with an opportunity to deepen their understanding of the effectiveness of promotions based on the results of marketing surveys."

### Community-Based Tourism Developed and Managed by Local Residents

Currently, various countries are pouring efforts into promoting CBT. One of those countries is Zimbabwe. Tourism projects, for example, management of facilities that introduce traditional culture were already run by local communities in about 150 areas in Zimbabwe with support from the government and other organizations. Since 2008, however, 90% of these local projects have been abandoned due to economic deterioration and other reasons. For two years starting in 2015, Japan carried out technical cooperation pro-

# ..... Zimbabwe ..... Taking Advantage of Fascinating Tourist Attractions

Southern African countries are focusing on tourism development. One of their objectives is to create jobs and increase income, but there are many challenges that need to be overcome for promoting tourism development, such as facilitating human resource development and developing infrastructure. For tourism development, Japan focuses on and is cooperating in the promotion of Community-Based Tourism (CBT) that will bring benefits to the community.



In Tengenenge, you can experience carving a Shona stone sculpture. Works made by local sculptors (right) are also on display. (Photography: Akihito Yoshida)

jects in Zimbabwe aiming at development of a master plan for implementing CBT and strengthening the capabilities of the Ministry of Tourism and Hospitality Industry (MOTHI).

JICA advisors in RETOSA also cooperated in this project to select four sites through joint discussions between the Japanese expert team and MOTHI. In those four sites, tourism development that made use of the local resources in each community was implemented as a pilot project. Expert Kayo Murakami explains, "I was in charge of an area called 'Chesvingo.' By taking advantage of its strategic location which is a 10-minute drive from the Great Zimbabwe National Monument, a UNESCO World Heritage Site, we targeted tourists from Europe and the United States and domestic students on field trips visiting the ruins."

Firstly workshops were held together with the local residents to prepare tourist routes utilizing local culture and nature. Murakami says she got a solid sense of the differences between Zimbabwe and Japan while working on the project. "We divided the local residents into several groups who prepared the routes while actually walking on them. To my surprise, one of the groups prepared a route that took seven hours. They said that it's normal in that area, to walk two hours one way to get to work, school, or shop." She

also recalls another incident, "We asked a local artist to draw something on a map of the tourist routes, but the artist said he couldn't do it because he had never drawn on a small piece of paper such as A4 size. So we just photographed what he drew for us on a large sheet of paper, and then pasted the photo on an A4-sized sheet of paper with the size adjusted and reduced."

She also implemented training for local tour guides. Murakami narrates, "After visiting the Great Zimbabwe National Monument in the training, we had them experience the role of a tour guide via role playing. When I played the role of a foreign tourist, I tried to make huge reactions as much as possible to let them know the things that would interest and surprise foreigners." Through project activities such as trainings and workshops, the younger generation in the community discovered the value of tourism resources in their own area and began to be proud of them.

The goal is to promote tourism by attracting both visitors and local residents, while utilizing the rich nature and culture of Southern Africa.



Inside the city hall of Bulawayo, the second largest city in Zimbabwe. The historical assets of Bulawayo and other items are displayed. (Photography: Akihito Yoshida)

RETOSA representatives and their support team who took part in the exhibit at Tourism EXPO Japan. They were featured in Japanese media, making their participation an effective promotion.

# A Japanese Initiative for a Prosperous and Healthy Africa



## Aiming at Improving the Livelihood of Farmers with "Agriculture as a Business"



Market survey by a farmer from Malawi. Under the SHEP approach, farmers go to the market themselves and gather various information, such as the crops that are in demand and market prices.

The Smallholder Horticulture Empowerment and Promotion (SHEP) approach was born out of a technical cooperation that JICA implemented in Kenya in 2006, with the aim of improving the income of smallholder farmers. The distinctive characteristic of this approach is that it changed the mindset of the farmers from the conventional "grow and sell" to "grow to sell" through efforts such as market surveys by farmers themselves and trainings for (a) gender equality between wife and husband and (b) management for commercial farming. Through this project, roughly 2,500 farmers' incomes were doubled.

In recent years, many countries in Africa have been working on the promotion of market-oriented agriculture. At TICAD V in 2013, Japan decided on the regional expansion of SHEP over Africa as one of the pillars for Japanese cooperation in Africa.

JICA started by conducting trainings in Japan and Kenya for administrative officials in charge of agricultural extension services for farmers in each African country. Trainees prepared business plans utilizing the concept of SHEP, and then took the lead in implementing those plans after they returned to their own countries.

One of the countries working with SHEP is Malawi, where agricultural workers account for around 80% of the working population. The action plans prepared by trainees from Malawi, including surveys on farmers' needs and crop selection, were implemented in four model provinces. It resulted in their improved livelihood, the launch of joint sales of produce by groups of smallholder farmers, and improved quality of produce. In addition to developing a system for the continuous implementation of SHEP and im-

proving the capacities of officials of the Ministry of Agriculture, JICA has implemented technical cooperation for establishing the original SHEP approach based on the current situation in Malawi, while facing limitations in budget and human resources. Various initiatives are being carried out, including gender and family budget trainings, market surveys, and stakeholder forums between market representatives and farmers.

Moreover, Japanese experts have been dispatched to South Africa to provide technical advice, not only to South African trainees, but also to trainees who have returned to neighboring countries in Southern Africa such as Namibia, Lesotho, and Zimbabwe, and to support agricultural extension activities utilizing SHEP.

JICA will continue to promote the utilization of SHEP and actively engage in PR activities in collaboration with various partners, including companies involved in local agricultural extension and training institutes for extension workers, in order to establish "agriculture as a business."



Preparatory meeting on the PREPARE Program held by JICA in Nairobi, the capital of Kenya, in 2017.

The 7th Tokyo International Conference on African Development (TICAD 7) will be held in Yokohama City in Japan next year, 2019. TICAD VI, which was held in 2016, adopted three pillars for Japan's cooperation policy with Africa: (1) Promotion of economic structural changes through economic diversification and industrialization, (2) Promotion of a resilient health system for high quality of life, and (3) Promotion of social stabilization for shared prosperity. Here we introduce the initiatives for promoting agriculture and creating measures against infectious diseases that JICA aims to extend all over Africa in line with these three pillars.



## Strengthening the Functions of Research Centers for Measures Against Infectious Diseases



Joint research on viral zoonoses in Africa by UNZA-SVM and Hokkaido University.

The spread of the Ebola virus in West Africa in 2014 caused the international community to recognize anew the importance of strengthening the preparations for and response to public health crises. In the midst of this renewed awareness, Japan decided on a basic policy and plan to strengthen measures against infectious diseases in 2016. At TICAD VI, it was announced that Universal Health Coverage (UHC) aimed at creating a society where all people can receive basic health services would be promoted in Africa and that support would be provided to improve the ability to prepare for and respond to public health crises. In response, and as part of its support, JICA launched the Partnership for Building Resilience against Public Health Emergencies through Advanced Research and Education (PREPARE).

Currently, under the PREPARE concept, JICA works on (1) strengthening the functions of the country's hub laboratories that also serve as regional hub laboratories for controlling infectious diseases in Africa, (2) medium- to long-term human resource development for measures against infectious diseases through acceptance of students to universities, and (3) contributing to regional and international initiatives such as the newly launched Africa Centres for Disease Control and Prevention (Africa CDC). The plan is to start with five countries: Kenya, Ghana, and Zambia, where Japan has a long track record of cooperation, and the Democratic Republic of the Congo and Nigeria, where increased support for laboratories and other installations are planned, and then expand gradually into other countries in Africa, Asia, and Central and South America.

Since the 1980s, Japan has been engaged in cooperation with one of the regional hub laboratories, the School of Veterinary Medicine (UNZA-SVM) at the University of Zambia. Activities include construction of facilities, provision of equipment, and development of human resources. In 1982, before technical cooperation began, there were only eight veterinarians in Zambia; 10 years later, the number had increased to 80, and today there are more than 350. Currently, UNZA-SVM is engaged in joint research with Hokkaido University in the aim of improving the ability to research and investigate viral zoonoses (infectious diseases that can be transmitted to both humans and animals).

In the academic year of 2017, three people from the Zambian Ministry of Health and Central Veterinary Research Institute studied at Hokkaido University. In the future, they will carry out their own tests and research and will be responsible for training successors. It is expected that this will improve the quality of measures against infectious diseases in Zambia. The goal is for UNZA-SVM to take the lead in providing training on preparations against infectious diseases to those who are engaged in infectious disease control in Southern Africa, and to strengthen the network of laboratories in the region.



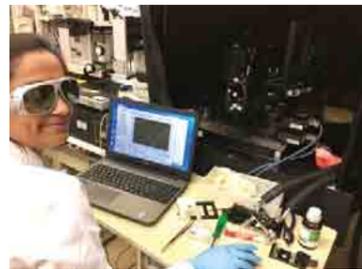
Training conducted by an extension worker for a group of farmers in Mchinji, Malawi.

# Trends



India

## Collaboration at IIT Hyderabad is Helping Realize Innovative Research



The discovery of a new alloy with ultrahigh strength and ductility gained worldwide interest this February after publication in "Scientific Reports," an online journal of global publisher Springer Nature. A collaborative effort by researchers from the JICA-supported Indian Institute of Technology Hyderabad (IIT-H) and Kyoto University, Dr. Pinaki Prasad Bhattacharjee and Dr. Nobuhiro Tsuji played an important role in this research. The alloy holds potential to create lighter and safer automobiles and planes, and subsequent additional joint research is garnering attention.

Research on this new alloy is being supported by JICA's Future Researchers at IIT-H to Enhance Network Development with Scholarship of Japan (FRIENDSHIP) project, which began in 2012 with the aim of promoting industry-academia partnerships between Japan and India. JICA's support for IIT-H seeks to

build networks among researchers and construct facilities, and is greatly expanding possibilities for industry-academia partnerships between Japan and India. Twelve leading Japanese universities are involved in the project, introducing leading-edge research findings to Indian students through joint research, special lectures, and workshops. So far, about 200 researchers from Japan and IIT-H have traveled between the two countries.

Established to strengthen the country's engineering human resources, the Indian Institutes of Technology (IITs) are India's most prominent institutes of higher education in engineering, and their graduates are highly sought after domestically and abroad. In Japan, where demand is rapidly increasing for high-level human resources to work in fields such as AI and cybersecurity, big things are expected from partnerships with the IITs.

Divya Anand is involved in world-class research in a doctoral program at the University of Tokyo.



Bangladesh

## Large-Scale Water Supply Assistance to a Camp for Evacuees from Myanmar



Since August 2017, some 800,000 people have reportedly fled Rakhine State in Myanmar for Bangladesh. JICA is cooperating with the government of Bangladesh and other international agencies to provide support for the evacuees and the host communities in the area. Survey results from Kutupalong Camp in Ukhiya, Cox's Bazar in southeastern Bangladesh, which is home to about 600,000 evacuees, indicate that the urgently dug shallow tubewells are running dry in the dry season, and that the majority of these tubewells are also contaminated with E. coli.

In response to this critical situation, JICA decided to assist with supplying safe and sufficient water to the camp by digging a deep tubewell (400 meters), laying 5,190 meters of pipeline and connecting 216 water taps. The groundbreaking ceremony has already taken place, and when completed the well will service some

40,000 people and be amongst the largest water supply systems in the camp. JICA will drill the deep tubewell as a part of the grant aid project, and will then hand it over to the International Organization for Migration (IOM) to build water supply facilities.

Apart from this assistance, JICA provided pre-dispatch training in disaster nursing to nurses dispatched to the camp and provided equipment to prevent infectious diseases. JICA has also provided equipment for testing non-communicable diseases (such as cancer, diabetes, cardiovascular and respiratory diseases) to the district hospital for use by both evacuees and local residents. In addition, JICA is preparing assistance to local governments affected by the large influx of evacuees, such as repairing local infrastructure and supplying machinery and materials for educational facilities.

A well dug next to a toilet. There are concerns about sanitation.



PALM 8

## President Kitaoka Holds Discussion Meetings with Leaders at PALM 8



JICA President Shinichi Kitaoka was joined by the leaders of thirteen Pacific Island nations for the 8th Pacific Islands Leaders Meeting (PALM 8) in Iwaki Fukushima Prefecture, Japan on the 18th and 19th of May, to discuss JICA activities and exchange opinions on policy development for future cooperation.

On the first day, Samoa's Prime Minister Malielegaoi said he looks forward to cooperation on harbor infrastructure. Palau's President Remengesau said he looks forward to the plan based on the JICA survey into renewable energy coming to fruition, and to strengthening existing cooperation in agriculture and fisheries. President Heine from the Marshall Islands expressed her gratitude for the existing cooperation and discussed the importance of infrastructure development. President Marnau of Kiribati spoke highly of the national development plan currently being finalized. Prime Minister O'Neill of Papua New Guinea discussed the upcoming APEC Economic Leaders' meeting and current infrastructure projects.

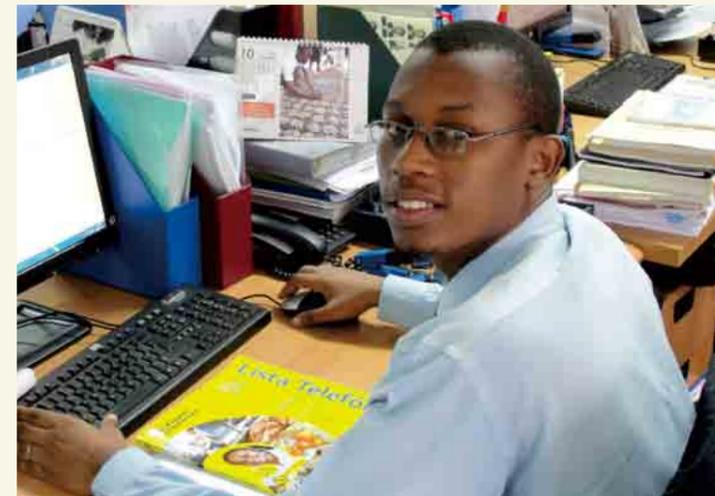
meeting and current infrastructure projects.

On the second day, President Waqa of Nauru discussed climate change and requested infrastructure cooperation. Micronesia's President Christian said he looks forward to Japanese cooperation in electricity generation and Japanese language education. Prime Minister Salwai of Vanuatu expressed his gratitude for the recently completed freight port. Prime Minister Sopoaga of Tuvalu discussed the impact of climate change and policy measures in a global context. The Solomon Islands' Prime Minister Hoenipwela praised the contributions of JICA volunteers. Finally, Tonga's Deputy Prime Minister Sika recommended spreading the fruits of Japanese cooperation in the field of disaster risk reduction to other Pacific Island nations.

JICA values the exchange of opinions at PALM 8 and looks forward to continuing these discussions and incorporating them into realizing a dynamic cooperation within the Pacific region.

JICA is promoting renewable energy in the Pacific Ocean countries.

# Voices from the Field



## Elisio Chiunze Program Officer, JICA Mozambique Office

Elisio Chiunze, 40 years old and native of Mozambique's capital city Maputo, currently serves as a Program Officer for Energy and Transport sector projects including ODA Loan projects in the JICA Mozambique office. Attracted by the opportunity to act as a bridge of cooperation between two countries, he joined JICA in 2011, and still feels the excitement of having the rare privilege of directly contributing toward the development of his country.

Mozambique, like all countries in Southern Africa, faces a constant struggle for development, a challenge being tackled by the Mozambican National Development Strategy. This strategy outlines an integrated approach by the Government, which consists of creating special economic zones according to the potential of each region, and establishing industrial parks along the development corridors. To complement this strategy, JICA has also introduced the concept of Regional Development to magnify poverty reduction efforts, and is focusing its energies on the Nacala Corridor area to the north of Mozambique.

In his role as a JICA officer, Chiunze's work involves initial drafting, negotiation, implementation, monitoring, and evaluation of key projects for the dynamic and inclusive development of Mozambique and the Nacala Corridor. In particular, the construction and improvement of important roads and bridges, rehabilitation and improvement of a port's management, as well as generation of energy and improvement of its quality. Additionally, his role extends to smoothing disbursements for JICA ODA Loan projects and assisting the

Mozambican side with procedures for the repayment of ODA Loans.

Chiunze is optimistic that the cooperation schemes underway in Mozambique and Southern Africa will reach a stage of self-sufficiency in the near future. Moreover, he thinks that at the local level, and where information is available, JICA's efforts at development cooperation are very well received because they contribute positively, directly and indirectly, toward the improvement of the living conditions of a great number of people in Mozambique. However, there is still a great challenge remaining to promote JICA's work in rural areas due to limited access to a variety of media sources.

Of all the JICA work he has been involved with, Chiunze is proudest of the current harmonization of development strategies for the regional development of corridors, which creates integrated projects that generate multiplier effects that benefit a large number of people in various layers of society. JICA's successful implementation of its projects in the Nacala Corridor is attracting both domestic and foreign interest and investment, and is viewed as a successful case of economic development in line with Mozambican poverty reduction strategies.

Chiunze is highly motivated through knowing that doing his job effectively has a positive effect on Mozambique and neighboring inland countries. The fact that his work contributes to the harmonization of cooperation strategies and strengthens the friendly relations between Japan and Mozambique also gives him great pleasure.

# SADC-JICA PARTNERSHIP BOLSTERS INFRASTRUCTURE DEVELOPMENT IN SOUTHERN AFRICA

Dr. Stergomena Lawrence Tax\*

The main objectives of the Southern African Development Community (SADC) are to promote sustainable and equitable economic growth and socio-economic development that will ensure poverty alleviation, and ultimately its eradication, enhance the standard and quality of life of the people of Southern Africa, and support the socially disadvantaged through regional integration. In this regard, the development of the region's infrastructure and services is considered as one of the key strategies to foster regional economic integration and poverty alleviation in SADC.

In pursuing its objectives, the SADC adopted the SADC Regional Infrastructure Development Master Plan (RIDMP) 2013-2027 at its 32nd Ordinary Summit held August 2012 in Maputo, Mozambique. The RIDMP is a 15-year blueprint that guides the implementation of cross-border infrastructure projects from 2013 to 2027, and is to be implemented over three five-year intervals: over the short term (2012-2017); medium term (2017-2022); and long term (2022-2027). It aims to develop infrastructure in key sectors, namely energy, transport, telecommunications, water, and tourism to facilitate regional integration.

In implementing the RIDMP, SADC has been promoting partnerships with local, regional, and international partners, including the private sector and international cooperating partners. The Japanese Government, through the Japan International Cooperation Agency (JICA), is among SADC's major partners, having heeded SADC's call for partnerships for infrastructure development and facilitation of projects in Southern Africa. Along major corridors in the Southern African region, JICA supports infrastructure development and provides technical cooperation, including the formulation of Corridor Development Master Plans. The Nacala Corridor Development Master Plan, which was developed with JICA's technical cooperation, aims to promote re-



gion-wide development that transcends regional and national boundaries, through an integrated development of infrastructure networks in diversified economic sectors. Securing multi-modal transport systems; urban infrastructure development, including electricity and water supply; sustainable agriculture development; and human resource development; these are among the priorities. Emphasis is also placed on social develop-

ment and environmental management to realize inclusive development.

With the support from JICA, SADC introduced and is making use of the One-Stop Border Post (OSBP) Source Book. This has enabled SADC to implement the OSBP concept on all its key corridor border posts. The OSBP concept refers to the legal and institutional framework, facilities, and associated procedures that enable goods, people, and vehicles to stop in a single facility in which they undergo necessary measures, following applicable regional and national laws to exit one state and enter the adjoining state. Currently, more than 80 OSBPs have been planned and/or implemented in various parts of Africa as a means of reducing the time and costs of delays in crossing borders along major corridors. Out of these, three border posts in the North-South Corridor of Southern Africa, namely the Chirundu OSBP, Beitbridge OSBP, and Kazungula OSBP, are benefiting from JICA assistance.

SADC is mindful that the region's economic growth potential can only be fully realized if the region has the capacity to accelerate its infrastructure development and services, hence the region continues to encourage partnerships for in its endeavour to implement its priority infrastructure programmes outlined in the RIDMP.

\*Dr. Stergomena Tax is the Executive Secretary of SADC, and a distinguished alumni of Japan's University of Tsukuba. For more information about SADC visit: [www.sadc.int](http://www.sadc.int)