TOWARDS ACHIEVING MDGs IN KENYA

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ANNUAL REPORT 2015

**JICA** 

Japan International Cooperation Agency

# JICA KENYA OFFICE



# Vision

Inclusive and Dynamic Development

# Mission

- Addressing the Global Agenda
- Reducing Poverty Through Equitable Growth
- Improving Governance
- Achieving Human Security

COVER PICTURE: A JICA Volunteer interacts with school pupils.



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# Message from the Chief Representative

ear 2015 was the target year for achieving the eight Millennium Development Goals (MDGs), which had been the global development framework to fight poverty since year 2000.

In Kenya, various measures to attain the MDGs have been taken in cooperation with Development Partners under the Kenya Vision 2030 which was launched in 2008 as the national long-term development policy. The outcome has been a steady flow of successful results as articulated in the progress reports and statistical data, albeit with some targets not having been achieved.

JICA has and continues to work with the Kenyan Government and other stakeholders through various activities including Vision 2030 Flagship Projects in five key sectors, namely:

- (I) Economic Infrastructure
- (2) Agriculture Development(3) Human Resource
- Development
- (4) Health, and
- (5) Water and Sanitation/ Environment.

Notably, these key sectors are linked closely to the MDGs. In Agriculture

Development for example, IICA's technical cooperation for projects improving productivity and agricultural income generation of smallscale farmers contributes to the MDG I. Indeed, we also contribute towards Goal 3 through support to a project that targets empowering of women and raising awareness among farmers who form nearly 60% of the total labour force in Kenya.

JICA upholds certain values while conducting its activities and emphasizes the importance of the fundamental basis for achieving the MDGs in Kenya; that is Human Resource Development and Economic/Social Infrastructure Development.

Particularly Kenya's in context, JICA gives special attention to the Devolution process by incorporating capacity building at County level into our activities. Combining both "Hard and Soft" components with a broader perspective can create the much required synergy. This is one of IICA's strengths amongst bilateral aid agencies since it is only IICA that includes both technical and financial cooperation under one umbrella organization.

JICA also puts great value on "Quality" in its cooperation, which often lags behind in comparison with quantity or speed. However, I say with confidence that consideration of Quality from the beginning is cost-effective in the long run and a sure way of ensuring that nothing goes wrong later.

We at JICA Kenya Office assure Kenya that we shall continue with our efforts to support the country's endeavors towards a brighter future. I am very glad to share such activities and experiences in this Annual Report.



Keiko Sano, Chief Representative JICA Kenya Office



### MDGs and JICA's Key Sectors

MDGs		Goal 2 Coal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8
JICA's Key Sectors	Eradicate Extreme Poverty and Hunger	Achieve Universal Primary Education	Promote Gender Equality and Empowerment	Reduce Child Mortality	Improve Maternal Health	Combat HIV/AIDS, Malaria and Other Diseases	Ensure Environmental Sustainability	Global Partnership for Development
Economic Infrastructure	Ο		$\bigtriangleup$	$\triangle$	$\triangle$		$\bigtriangleup$	О
Agriculture	Ο		О				$\triangle$	Ο
Human Resource Development	$\triangle$	Ο	О					О
Health			$\bigtriangleup$	Ο	0	0		Ο
Water and Sanitation / Environment			0	0	0		0	О

# At a Glance - Figures of JICA Kenya's Activities

Type of Aid	Calendar Year (January - December)				
	2012	2013	2014	2015	
Technical Cooperation (Unit: Billion Japanese Yen)	4.897	3.811	3.679	4.884	
JICA's ODA Loan (Unit: Billion Japanese Yen)	7.212	21.906	5.419	17.145	
JICA's Grant Aid (Unit: Billion Japanese Yen)	1.566	3.043	0	0	
Training Participants (New) (Unit: Persons)	858	2,284	712	*283	
Experts (New) (Unit: Persons)	191	165	267	*276	
JICA's Volunteers (New) (Unit: Persons)	21	47	34	*22	

(Note) JICA's ODA Loan is based on the amount of disbursement. JICA's Grant Aid is based on the amount of signed Grant Agreement. JICA's Volunteers include Senior Volunteers in addition to JOCV. \*2015 Figures are tentative.

# Fast Tracking Development for Mombasa "Gateway City" to Africa

ombasa is the second largest city in Kenya, with the population of over one million people as of 2015. Mombasa serves as the Gateway not only for Kenya, but also for the East African region especially the hinterland countries i.e. Uganda, Rwanda and Burundi, through the Northern Corridor.

In Mombasa, JICA's cooperation dates back to the 1970s through ODA loan support for the expansion of

Mombasa Airport upgrading to an International Airport.

JICA acknowledges the geographical importance of Mombasa in contributing to the economic growth of Kenya.

Currently, JICA is actively working on cooperation for the development of Mombasa as a "Gateway City" and a regional hub in logistics and economy.

Main targets of cooperation are: (1) Formulation of Master Plans for Mombasa's strategic development

- (2) Improvement of facilities and functions at Mombasa Port based on these Master Plans and
- (3) Improvement of transport evacuation system around the Sea Port.

JICA focuses its support on Mombasa given its economic potential for the realization of Kenya's Vision2030 and Sustainable Growth.



Comprehensive support for Mombasa as a gateway city to the region.

# **JICA Supports Expansion of Mombasa Port**

n 2015, construction of a new container terminal of Berth 20 & 21 and provision of cranes at the Mombasa Port, one of the biggest JICA ODA loan projects in Kenya, was successfully completed and handed over to the Kenya Ports Authority (KPA) in February 2016. This project is responsive to the ever increasing demand for cargo volume and to make port management more efficient.

JICA President Prof. Shinichi Kitaoka visited the site in November 2015. He indicated at an NHK interview (Japanese National TV) that Japan should appeal to developing countries with the Japanese-style cooperation having advantage in areas such as technology, safety, environmental measures and technical transfer to local workers.

JICA and KPA signed a Loan Agreement of up to 32.116 billion yen (approximately 24 billion Kenya Shillings) for the Phase 2 project for construction of Berth 22 in 2015. In addition to the port, the development of roads from the port to Miritini is being promoted under another JICA ODA loan.



Second container terminal at the Mombasa Port.



# Masterplan for the Development of Dongo Kundu Special Economic Zone (SEZ) in Mombasa

n August 2015, a high powered Kenyan delegation led by the Cabinet Secretary in the Ministry of Industrialization and Enterprise Development, Mr. Adan Mohamed, visited Japan to interest Japanese private sector in investing in the Dongo Kundu Special Economic Zone (SEZ) in Mombasa.

During this visit, a seminar was held in which the Delegation and IICA representatives explained the Master plan for the development of the Dongo Kundu SEZ, as an output of IICA's technical cooperation and as part of the comprehensive strategy for development of Mombasa. Over 120 Japanese companies attended the seminar which was highly interactive.

The Master plan envisages a three phase plan for the development of the Mombasa

MOMBASA DONGO KUNDU SEZ

SEZ. The proposed land use plan includes the development of the Port, Free Port/Free Trade Zones, MICE Zones, Real Estate Area and Enterprise areas amongst other zones.

The Mombasa SEZ presents an all-inclusive, well-organized and multi-function environment and will offer incentives to multiple sectors. With the full support of the Kenyan Government, the SEZ will offer inviting and competitive an business environment.

The Dongo Kundu SEZ is expected to be the first-ever and all-new SEZ in Kenya, and awaits the enforcement of SEZ regulation and establishment of an agency for SEZ, based on its Master plan.



Cabinet Secretary Adan Mohamed interacting with Japanese business people during the SEZ investment seminar in Tokyo.

# **Free Trade Zone Residential Zone**

# MICE Industrial 7on reeport Zone LNG power plant Multi Purpose Port Highway Southern Bypass)

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# JICA Volunteers: Working together with Local Communities for 50 Years



n March 1966, three JOCVs (Japan Overseas Cooperation Volunteers) arrived in Kenya. This was the start of JICA's Volunteer program in Kenya. Since then up to 2015, more than 1,570 JOCVs and SVs (Senior Volunteers) have spent two years living and working together with the local communities in different parts of Kenya. The long cooperation by JICA volunteers has earned high acclaim from the people of Kenya. There have been lots of smiles and tears, where Kenyans and Japanese Volunteers tackle the problems together, argue and try to understand each other. JICA Volunteers are the secret of Kenyan people's trust of Japan and Japanese people.

#### Contribution by JICA Volunteers Over the Years



Mr. Inada was a pioneer volunteer in the field of engineering in Kenya under the JOCV programme.



Mr. Takaki was among the 342 JOCVs dispatched in the 80s and 90s as science and mathematics teachers.



The Deputy President, H.E. William Ruto with Volunteers and guests in August 2015.

# A Highlight of Activities, as JICA



*Mr.* Shojiro MINO performing a Judo Demonstration at an event presided over by the Deputy President.



Ms. Ayaha MOCHIZUKI at a past tree planting exercise in Kitui. She has been working at the Kenya Forest Service (KFS) in Kitui.



Ms. Motomiya, an environmentalist volunteer at a primary school explaining the importance of tree planting in conserving our environment.



Mr. Sakaida, a volunteer in the field of evironmental education, and through his soccer hobby he conducts environmental awareness activities.



Ms. Yakushigawa was at the Kenya Soybeans Farmers Association (KESOFA) to support product development and sales promotion. Her actions have energized soya beans farmers in Migori.





*Mr. Yasuhiro HORI, Kisumu, With Some students at the Kisumu Impala Sanctuary where he has been teaching Environmental Education.* 



Ms. Shiori SUMI carrying out a soap making demonstration to community members in Naivasha.

# **Volunteers Make an Impact Over the Years**



Mr. Hiroshi YOKOYAMA showing the Deputy President some merchandise produced by some of the community groups he has been working with in Makueni.



Ms. Mariko KOIDE, a nutritionist working in Kombewa with members of the community.



Mr. Fujimoto and other JOCVs organized a Physical Activities Training Workshop which was held in Kakamega from 18-19 June 2015.

Multimedia University of Kenya (MMU) received engineering equipment from Kokusai Denshin Denwa International Research and Development (KDDI R&D) laboratories to boost Engineering and Optical Communications training at the University. The donation was presented by Dr. Koji Goto, a Senior Volunteer at MMU.



In 2015, Ms. Yamawaki represented JICA in marking the World AIDS Day annually celebrated on 1st December, at a colorful event held in Bondo.





*Mr. Takayuki FUSHIMI, a Community Development* Officer in Homa Bay at a past event with friends.



Ms. Haruka UENISHI, a Community Development Officer with some students from the Agriculture Club of a local school.

# ECONOMIC NFRASTRUCTURE DEVELOPMENT

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A section of Nairobi Western Ring Roads.

#### **QUALITY TRANSPORT INFRASTRUCTURE**

#### CASE 1.1 Nairobi's Western Ring Roads

# Quality Infrastructure that Assures Durability and Comfort

n Kenya, especially in Nairobi, road development is an urgent challenge due to the rapid increase of vehicular traffic. Improvement of transport infrastructure is a commitment in Kenya's Vision2030 Flagship Projects.

Solving heavy traffic jams, improving urban mobility and nation-wide logistics are all key issues to be tackled by the Kenyan government.

Urgency in delivery of construction of roads is sometimes more emphasized than quality delivery. However, even after construction, roads should continue in good and safe condition for the entire life of the project. This includes aspects of users' comfort. This is what the people expect as road services. Moreover, if roads are durable, in the long run, it becomes cheaper from the viewpoint of a life-cycle cost or cost performance although the initial costs would seem higher.

JICA emphasizes these issues when supporting construction of roads, a major public investment under the banner "Quality Infrastructure" for sustainable development.

ICA implemented construction of the Nairobi Western Ring Roads from 2011 to 2013. This project formed the so called missing links 3, 6 and 7 in Nairobi city. Two years have passed since the completion of the project and people have realized the difference of the Japan-made roads based on high quality construction approach.

What is the uniqueness of the Western Ring Road? A lot of thought went into an inclusive and total solution road, including the design of traffic safety and drainage system. Clear road makings with separation of traffic have reduced conflict and accidents especially at



Clear lane markings warn motorists of the hump. This is particularly helpful at night.

#### QUALITY TRANSPORT INFRASTRUCTURE

intersections. Other safety measures are deceleration marks warning of bumps and Cat's eye reflectors for easy driving. The double night roundabouts were introduced for the first time in East Africa. aimed at calming traffic speeds because the road passes through heavily built residential areas. Thanks to the separate footpaths for pedestrians and bicycle lanes for cyclists, driving on Western Ring Road became easier and enjoyable.

Better physical and human environment in the neighborhoods has been achieved. There is improved aesthetics and tree cover along the road due to tree planting and landscaping. On any given day in the very early mornings you will find a group of residents jogging along the sidewalks of this road for their health and social bonding. This is very important for social welfare for the neighborhoods.

"Quality Infrastructure" is a holistic approach to pursue durability, environmentalfriendliness, disaster-resilience, and user-friendliness, in addition to less impact to the Government budget in terms of maintenance costs of the roads in future.

Under this concept, JICA has been implementing technical cooperation for improvement of road maintenance and management for more than 15 years with the Ministry of Transport and Infrastructure, Kenya national Highways Authority (KeNHA), Kenya Urban Roads Authority (KURA), Kenya Rural Roads Authority (KERRA), Kenya Roads Board (KRB) Kenya Wildlife Services (KWS) and Public Procurement and Oversight Authority (PPOA).



Residents walk safely on a designated walking area along the Western Ring Roads.



The reflective light of the Cat's eye warns of the intersection.

#### CASE 1.2 Olkaria I Units 4 & 5 Geothermal Power Plant

# **Clean, Safe and Cheaper Power to Kenyans**

Thanks to being located in the Great Rift Valley, Kenya enjoys not only the spectacle of nature but also the clean and safe renewable energy – that is geothermal. Olkaria is the one of the important geothermal fields not only in Kenya but also in the Great Rift Valley of the African continent.

Stable provision of electricity at reasonable tariffs is essential to people's daily life and the economic growth led by the private investors. While all the stages of generation, transmission and distribution of electricity still require more intervention, JICA is focusing on its support for geothermal power generation based on the Japanese experience and technology.

apan, situated in volcanic zones, has utilized geothermal energy for power generation and its experiences have been shared with other Asian countries such as Indonesia through JICA's cooperation.

JICA is now expanding its support to Kenya by

construction of facilities and capacity development.

As for technical cooperation, the Geothermal Development Company (GDC) is working with JICA experts for capacity building in geothermal resource assessment, management, planning and development as well as On the Job training in drilling techniques on site.

In addition, a scholarship program titled "KIZUNA" (Bonds of Friendship) offers the young generation in GDC and the Kenya Electricity Generating Company (KenGen) opportunities to study at the



President Kenyatta and President Kagame are welcomed to Olkaria by dignitaries, including JICA's former Chief Representative, Mr. Hideo Eguchi.



KenGen staff at the Olkaria Computer Control Room.

Japanese universities which have expertise in energy and mining sectors from the perspective of mid to long term human resource development.

apanese private companies known to have best are technology in the world for the manufacture of geothermal turbines and generators. In Kenya, they won the contracts for the procurement of equipment in the projects financed by other development partners (140 MW Olkaria IV). Geothermal sector is a showcase of Japan's technologies and experience.

The commissioning of the Olkaria I Unit 4 & 5 Power Plant

was conducted on February 19th 2015, by Kenya's President, H.E. Uhuru Kenyatta and Rwanda's President, H.E. Paul Kagame.

Olkaria I Unit 4 & 5 Power Plant which was financed by a JICA ODA loan of 29.5 billion yen (approx. 300 million USD) as well as Olkaria IV financed by other donors have a capacity of 280MW, and were constructed by a consortium of Toyota Tsusho Corporation (Japan) and Hyundai Engineering (South Korea) with supply of two turbines by Toshiba Corporation (Japan).

Olkaria I Unit 4 & 5 alone adds an additional I40MW to the

national grid, and contributing 23% of the total geothermal power and about 8% of Kenya's peak demand. 140MW would be sufficient to power more than 140,000 homes assuming an estimated consumption of IKilowatt hour (kWh) per household per day.

Also assuming an average of 5 persons/household, the power plant provides access to electricity for more than 700,000 persons in rural areas. The Government of Kenya requested Japan to support construction of Olkaria V, too, which is expected to reach the agreement in early 2016.



Olkaria I Units 4&5, financed by JICA.





#### **CASE 1.3** Renewable Energy Project in Narok, Kajiado and Samburu Counties

# Promoting Stable Off-Grid Power to Reach Local Communities

That promotion of power generation linking to the national grid such as Olkaria is necessary, but JICA thinks that technical development and extension of off-grid power generation in local area is very important from the viewpoint that on-grid power development projects take time and require huge investments for the wider national coverage.

Therefore, JICA supports the extension of Solar Photo-voltaic (PV) as an adequate technology suitable for local off-grid environment that can benefit from Japanese advanced technologies.

bout 50kw Solar PV has been installed in Narok, Kajiado and Samburu areas in Primary schools and neighboring Health Centers through IICA's Renewable Energy Project implemented by the Rural Electrification Authority (REA). Positive impacts can be observed because some families near the schools and health centres have solar panels on top of their Manyattas, to replace 'koromboi', a small tin lamp, which exudes a lot of smoke due to poor fuel combustion.

One of the villagers, Mr. Kopiya says, "The smoke from koromboi affects the eyes and breathing when one is reading and one coughs a lot. But it was much better than using firewood for lighting the hut or for reading". Korombois were also frequent causes of fires in the village, so installation of Solar PV was welcomed in the community. Ms. Kimani, the Head Teacher of Iltumtum Primary school was excited that girls' grades have improved since installation of Solar PV. as it enables

the students to study at night time. She also noted that the lights made the school premises safer for the girls. At the Health Centers, electrification by Solar PV has contributed to reducing maternal deaths and pregnancy-related conditions.

Therefore, JICA believes that cooperation in the energy sector is not just an energy matter but also a base for improvement of education and health, as well as eliminating gender inequality and empowering women. All these are keys to the sustainable and inclusive development.



School children celebrate modern lighting from solar-PV in the Dining Hall at Iltumtum Primary School, Narok.

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#### PRIVATE SECTOR DEVELOPMENT

#### CASE 1.4

Human Resource Development for Industrial Development Project (Capacity Building Project at KIBT)

# KAIZEN with Overall Business Management Skills to Boost Business in Kenya

What is "KAIZEN?" KAIZEN was born in Japan in the 1970s and has been accepted all over the world as a method for production and quality management in the private sector. In Africa, KAIZEN was introduced in Ethiopia first through JICA's cooperation and the Ethiopia KAIZEN Institute (EKI) was established.

In Kenya, a JICA project on training of trainers to teach KAIZEN started in September 2015 at the Kenya Institute of Business Training (KIBT). This project does more than just introducing "KAIZEN."

he three-year project on Human Resource Development for Industrial Development kicked off with very active classroom training including a role-play for the 10 selected Master Trainers from KIBT and On-site consultancy in selected private companies. The project aims at enhancing the capacity of Small and Medium Enterprises (SMEs) in Kenya through improving the quality of training and consultancy provided by KIBT.

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Compared with other KAIZEN projects being implemented in Africa, the uniqueness of this project is its focus not only on production and quality management but also on other main management areas such as marketing/sales and financial management.

This holistic package is made for Kenya based on analysis of the country's situation and lessons learnt in other countries where JICA experts gained a lot of experience in similar projects. On-site consultancy by the Master Trainers with the Japanese experts provides direct benefit with the pilot companies.

However, the project aims at creating a sustainable framework of quality training solely by Kenyan personnel. In order to boost the business of the companies and ultimately create more jobs, JICA through this project continues to support capacity development of SMEs.



(Left) A factory before and (Right) after implementing KAIZEN.

# AGRICUTURE DEVELOPMENT

A farmer explains about her produce.

#### CASE 2.1 RiceMAPP Project in Mwea

# Innovative Water Saving Technique Increases Rice Productivity

The scenery of rice fields spread over Mwea resonates well with the Japanese people and brings more familiarity to Kenya. Mwea has been a base for long lasting cooperation between Kenya and Japan in improving agricultural productivities for food security and promoting the market oriented approach.

griculture is an important sector to the Kenyan economy in terms of ensuring food security and engaging 60% of the workforce. Needless to say, this is the sector that holds the key to the realization of inclusive and sustainable development.

While unemployment continues to be a big challenge in the economy, making Agriculture more attractive to the youth presents the best opportunity to create jobs. Kenyan people are actively engaged in JICA's cooperation aiming at shifting from the traditional self-sufficiency model of Agriculture to the promotion of the Market-oriented model.

JICA supports the project on Rice-based and Market-oriented Agriculture Promotion (Rice-MAPP) leveraging on Japan's long experience and high technology in rice cultivation. The increased consumption and rising demand for rice in Kenya provides farmers with a promising sector.

Mr. Alexander Kariuki, a farmer who calls himself a 'Smart Farmer' says, "through Water Saving Rice Culture (WSRC) a technology being promoted by RiceMAPP, the harvest in my farm increased from 18 bags to 26 bags of rice". He had an opportunity to attend a training course in Japan in 2015 under the RiceMAPP project and observed Japan's participatory water management and mechanism of agriculture/ rural development.

Mr. Mauricius Maingi, the Chairman of the Mwea Irrigation Water Users Association also attended the course. He says that they observed in Japan the use of water reservoirs, mechanization, land improvement districts which prepare farmers for climate change and phenomena such as typhoons, floods and earthquakes, dams which help in water storage, water canals and others.

The training participants are now raring to implement good lessons and experiences from Japan to improve their farming which will result in greater economic growth in the area.



Farmers Mr. Alexander Kariuki and Mr. Daniel Kibuchi show their WSRC demonstration farms.



### CASE 2.2 Project on Enhancing Gender Responsive Extension Services in Kenya (PEGRES)

# Raising Awareness among Farmers to Promote Gender Equality and Women Empowerment

Previous JICA interventions have established that it is important to change mindsets of stakeholders towards empowerment of women by visualizing women's contribution and reviewing their burden in farm management.

JICA is developing a 'Gender Mainstreaming Package' which can be incorporated in the projects and trainings by various partners, i.e. development partners as well as the nations government and county governments.

ender Mainstreaming Package (GMP) is being developed under the Project on Enhancing Gender Responsive Extension Services in Kenya (PEGRES). The project has conducted a series of trainings on gender mainstreaming in the process of finalizing GMP.

Participants of these trainings shared their views:

Mr. Michael Ikemer, a member of EAAPP cassava production group known as "I can Women Group" in Teso South Sub-County, Busia County says: "I have realized that women and female youth are overloaded with farm work but when it comes to benefits of the work they have very little access or control. I also realized that male youth are not involved adequately in productive work, opting instead to spend most of their time and energy on leisure and idling, while males have more control over resources than the rest of the family members. From the lessons I learned, I came to know that when workload is shared by all genders, production of the farm will increase. When the benefits are shared according to gender needs, everybody will work hard while knowing that they will benefit."



Michael Ikemer



Community members receive training on gender mainstreaming.

# HUMAN RESOURCE DEVELOPMENT

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Prof. Shinmi, SMASE Expert, shares scientific concepts with school children.

#### CASE 3.1

# Strengthening of Mathematics and Science Education (SMASE Project)

# Quality Improvement to Ensure Children's Right to Education

n September 2015, the Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA) hosted a regional training course for 60 mathematics and science educators at secondary schools from 9 African countries. The following month, two other courses for 51 primary school educators for mathematics and science from 6 African countries were offered by CEMASTEA. CEMASTEA is now playing a key role in the region in quality improvement of education.

enyan national staff from CEMASTEA conducted these training courses with professional skills. This shows the current situation of "Post-SMASE", standing on its own feet and helping others, as a result of long cooperation with JICA on strengthening mathematics and science education through SMASE Project for 15 years.

"We actually learnt more than we had learnt from the universities/colleges on how to teach science and mathematics," many participants commented at the end of the CEMASTEA training courses. Since 1998, JICA supported Kenya in the Strengthening of Mathematics and Science Education (SMASE) Project.

The Project ended in December 2013, having inserviced over 19,000 secondary and over 55,000 primary teachers in Kenya, and over 1,600 educators from other countries in Sub-Sahara Africa. The Project also sensitized all the education field officers on the management of in-service education and training (INSET) in Kenya.

SMASE and Post-SMASE aim at improving the quality of education so that both teachers and students may find mathematics and science easy to understand and essential in their daily lives and social development. This aim has been repeatedly confirmed by educators in African countries and CEMASTEA is playing a key role in the region.



JICA's Vice president, Ms. Kae Yanagisawa with CEMASTEA's Director, Mr. Stephen Njoroge and other staff during a visit to CEMASTEA.

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#### Two Japanese Education Experts Honored

t was a fitting commemoration of the work a man who dedicated his life to Africa. At the occasion of the naming and unveiling of "Sugiyama Hall" at the Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA) in Karen, Nairobi in 16th February 2015, praises were heaped on the Late Mr. Takahiko Sugiyama. He was the first Chief Advisor for the Strengthening of Mathematics and Science in Secondary Education (SMASSE Project) from 1998-2008, with a current 34 participating African countries.

On the same time occassion, the CEMASTEA library was named "Takemura Library" in appreciation of Prof. Shigekazu Takemura (Professor Emeritus) of Hiroshima University, Japan), who was dedicated to the SMASSE project as an Expert of Physics Education and an Academic Advisor (1998-2006).

JICAconstructed laboratories for Chemistry, Physics and Biology, an ICT workshop; Library, Administration Block, Dining Hall and Lecture Rooms at CEMASTEA from 2011-2013 through Japanese grant aid as a component of the SMASE Project.

It was indeed a memorable occasion for the CEMASTEA fraternity, who were also celebrating achievement of their ISO 9001:2008 certification. Prof. Kaimenyi challenged all present to emulate the Late Mr. Sugiyama and Prof. Takemura whose impact in the field of education will outlive them.



The Late Mr. Sugiyama receives a gift from the then Permanent Secretary Prof. Karega Mutahi.

#### Development of Innovative Teaching and Learning Activities in Mathematics and Science

Science and mathematics have been viewed by some learners as 'difficult' subjects. One way of demystifying these subjects is to use innovative teaching and learning activities that make lessons interesting. CEMASTEA, with the support of Prof. Masato Shinmi, Senior Volunteer, has made big strides in coming up with such activities. The following photos show participants being taken through some activities during past trainings.



Prof. Shinmi, a Senior Volunteer, demonstrating Innovative teaching and learning activities in science to Training participants at CEMASTEA.

#### **HIGHER EDUCATION**

# CASE 3.2 Africa-ai-JAPAN Project at JKUAT Foundation of Human Resource Development to Boost Innovation and Industrialization

The Jomo Kenyatta University of Agriculture and Technology, or JKUAT in short, represents one of the most successful effort to realize human resource development by long-lasting cooperation between Kenya and Japan.

he celebration ceremony marking 20 years since JKUAT attained the status of a fully fledged university in 1994 was held in February 2015 in JKUAT. The university was originally constructed with support of Japan's Grant aid in 1981 as an agricultural diploma college.

Around 3,000 apanese experts, lecturers and volunteers have been actively involved in the establishment and growth of the university. One of the leading academicians and scholars involved in JKUAT since its establishment, Prof. Emeritus Hiroshi Nakagawa, was greatly honored to be part of the VIP entourage during the 20th anniversary celebrations. He beamed with happiness as he delivered his speech: "I was deeply involved in the founding of JKUAT, and I am very proud to witness its growth and great achievements since its inception."

In addition to supporting construction of JKUAT, JICA has continued to support its programs cutting across various sectors, including agriculture, engineering, energy and human resource development. Many members of the university have also received short and longterm training in Japan.

H.E. President Uhuru Kenyatta presided over the celebrations and lauded Japan's long support, noting that it



A cheerful Prof. Nakagawa delivers his speech. The joyful atmosphere is apparent.

was "visible and tangible". The President's words expressed well the philosophy of JICA's cooperation towards Higher Education. JICA places emphasis on "Practical Education" so that the students obtain actual knowledge and skills as well as theory in the fields which support JKUAT to produce Industry-Ready human resource.

JKUAT is currently hosting the Pan African University – Science, Technology and Innovation (PAUSTI), which means JKUAT is not only contributing to the community of Kenya but also that of other African countries as Kenya takes the role of a leader in the region.

collaboration **IICA** in with Japanese universities are supporting [KUAT and PAUST] through the AFRICA-ai-JAPAN Project to produce graduates with skills and knowledge in the area of Science, Technology and Innovation. In Japanese language, such skills are referred as "MONOZUKURI", the secret of human resource development which are credited for having boosted innovation and industrialization in Japan.

#### **TRAINING AND SCHOLARSHIP PROGRAMS**

#### **CASE 3.3** African Business Education (ABE)

# A Bridge between Japan and Africa's Industrial Development

The "African Business Education Initiative for Youth", or ABE Initiative in short, is a new strategic 5 year plan providing 1,000 youths in both private and public sectors of Africa with opportunities to study at Japanese universities as well as experience internships at Japanese enterprises.

The Initiative was announced by the Japanese Prime Minister Shinzo Abe at the 5th Tokyo International Conference on African Development (TICAD V) held in Yokohama in 2013. Within the Initiative framework, JICA started a master's degree and internship program in 2014 aiming at fostering excellent personnel who can contribute to Africa's development in collaboration with Japanese private sector. It is planned that a total of 4 batches of participants be dispatched within the 5 year period.

By the end of 2015, 100 Kenyan young future leaders had been selected as the successful participants of the program; 54 students from the 1st Batch and 46 from the 2nd batch. This marks the highest number of participants among all the African countries.



Dr. Kamau at work in the laboratory in Nagasaki University, Japan.

Dr. David Kamau participated in the first batch of the program and was the very first one who came back to Kenya after completion of a special one-year course at Nagasaki University. By working extra hard, Dr. Kamau, a proud holder of a Master of Tropical Medicine now carries with him the many lessons he picked up in the year in Japan.

From his short internship experience at Nimura Genetic Solutions, a leading Japanese company in bioresource exploration, he learnt about efficiency, time management and team building, he reports. Through his interactions in Japan, he learnt the language and some practices that he has adopted once back in Kenya.

#### TRAINING AND SCHOLARSHIP PROGRAMS

Ms. Jacqueline Njoki of International University of Japan experienced an internship at Financial Agency, a company providing digitalized insurance services seeking to expand their business in the African market. She was given an opportunity to conduct a short research on the insurance market in Kenya, and present it to the company along with her ideas. She was impressed with the eye-opening discussions with the company's staff.

Mr. Jessee Mwangi from Saga University's Graduate School of Science and Engineering went to Mayekawa Mfg. Co., Ltd., one of the most advanced companies in manufacturing industrial refrigeration compressors. Jessee had learnt the theory of refrigeration during his undergraduate education, but it was his first time to see it in practice and such market value at a large global scale. He notes the company's philosophy of aligning themselves with their customers' visions, and sees opportunities for the unique technologies to be applied to various industries across Africa.

Mr. Boniface Kariuki from the Graduate School of Environment Science at Hokkaido University visited Panasonic Corporation. He and the other ABE Initiative participants were introduced to Panasonic's new product, the Eneloop Solar Storage, which packages a solar panel, a solar storage device, and Light Emitting Diode (LED) lamps to provide power solutions to rural areas without electricity. In preparation, the ABE Initiative interns were requested to do a short study on rural electrification in their respective countries. This for Boniface turned out to be an eye-opener as he dug deep into his own country's laws and regulations on promotion of business and foreign investments. He was impressed with Panasonic's advanced technology to enrich lives and improve the environment for education in rural communities across Asia and Africa.













#### CASE 3.4 Training Program for Young Leaders

# Young Leaders Acquire Development Skills through Training and Interaction with Japanese People

ICA offers a variety of training programs. The Training Program for Young Leaders is quite unique because talented young people in their twenties and thirties from Asia, Pacific and Africa, who are likely to move into positions of leadership in the future, visit Japan and go through training in their fields of specialization as well as having opportunities to meet and associate with Japanese people.

ctober 2015 will be well remembered by a group of 6 young Kenyans, including Mr. Vincent Ashuma, who all travelled to Japan for the very first time for a two-week course on Rural Development.

These six were representing Taita Taveta, Embu and Kakamega counties as Young Leaders who would establish strong cooperative movements, and create value addition for products unique to their counties so as to promote linkages between markets and the endusers. As crop, agribusiness and planning administrators, they faced similar challenges of poor market linkages, lack of empowerment of women in their rural set-ups, and declining farm incomes.

As part of their training in Japan, they interacted

with Japanese farmers who embraced had smart (or digital) agriculture to receive information on demand and pricing of their products, as well as directly selling their products online. They also learnt about value addition from visits to a juice manufacturing plant of Ehime Beverage Co., Ltd., and from cooperatives that empower farmers in addition to providing financial services.



Participants of the Young Leaders Training after completion of the course.

Upon their return. these young Kenyans have been implementing their action plans, sensitizing their county governments and farmers for better marketing strategies and techniques. During their short stay, they also had cultural exchange visits schools neighboring in their training centre, JICA Shikoku, and shared their Kenyan culture as they learnt some aspects of the Japanese culture.



Health officials discuss medical records on TB.

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#### CASE 4.1 5S-Kaizen-TQM at Hospitals

# Improving Management at Hospitals to Offer Better Quality of Health Services to People

AIZEN method which was created in Japan for the private companies' management is truly functional in other fields. JICA applied KAIZEN and other similar management methods to the hospital management in the developing countries so as to lead quality improvement of the health services offered at the hospitals. Here we focus on an example of the largest national hospital in Kenya.

s. Agnes Chika, who is an Assistant Manager at the Risk & Quality Assurance Department recalls; "Back in time, clients complained that Kenyatta National Hospital (KNH) had a bad smell, but now this is no more."

Agnes was trained on 5S-KAIZEN-TQM (Total Quality Management) approach in Japan in 2007. On her return to Kenya, she took up a position in the Quality Assurance Department at KNH and was formally appointed to lead 5S-KAIZEN-TQM activities at this national teaching & referral hospital.



*Ms. Agnes Chika shares her experience of implementing 5S-Kaizen* 

She identified and organized training for 80 champions to lead implementation of quality improvement activities. To date, a total of 400 staff out of 4,700 at the hospital have been trained on 5S-KAIZEN-TQM.

As а result. work improved environment has through 5S activities. Stores that were once idle were converted into well-organized service areas. Through KAIZEN, the hospital's Prime Care Center improved the process of admission of patients simply by re-organizing service points and patient flow. Admission lead time reduced from 8 to 4 hours. On the other hand, the operating theatre was able to conduct scheduled operations on time, increasing daily procedures from 4 to 6.

The Accident and Emergency (A&E) unit was re-organized to introduce what was dubbed "walk-in A&E." The hospital receives an average of 150 A&E cases, 50% of which are critical. Freeing the A&E unit of walkin patients allowed triage and emergency care to be provided in time for those in need. The turn-around time for the walkin patients reduced from 8 to 4 hours, while the average length of stay also dropped from 10 to 7 days.

There are many good practices arising from 5S-KAIEN-TOM approach. Agnes highlights some of these as; support by top management of the hospital, all-inclusive implementation and teamwork, weekly "gemba-kaizen" grand rounds. benchmarking with other hospitals and reward and recognition for good performers.

Besides challenges such as limitation of resources to expand Quality Improvement (QI)activities. KNH has recorded success stories at the funeral home, Prime Care Center, mental health unit, surgery and Information and Communications Technology (ICT) Departments. Agnes says that, "sustaining activities based on the Plan-Do-Check-Act (P-D-C-A) cycle and support by hospital leadership and management are key to success of the quality improvement program."



#### CASE 4.2 Tuberculosis (TB) Control Advisor

# Working as a Team to Combat Infectious Disease

To contribute to attaining the MDG 6: "Combat HIV/AIDs, Malaria and Other Diseases", JICA has dispatched a Japanese Expert for Tuberculosis (TB) Control.

t public health facilities, free TB diagnosis and treatment are offered. Nahashon M. Marebe. Mr. Nairobi County Medical Laboratory Coordinator who oversees nine sub-counties, takes almost a whole day for a sub-county to review the registration records, compliance to Standard Operating Procedures (SOPs), taking inventory, and checking how the reporting is done during his quarterly supervisory visits.

"Nairobi was already a District before Devolution, therefore our work did not change that much, but due to high staff turnover, many staff were newly recruited and were deployed into new positions without proper induction. These new staff were not informed that they have to do online reporting regularly," he recalls.

Then, Mr. Takashi Miura, JICA TB Control Advisor worked with the National TB, Leprosy and Lung Diseases Programme (NTLDP) at the Ministry of Health to design and implement trainings on laboratory diagnostics. The first one was on online-reporting, and the second one was the socalled "boot camp".

"Miura's trainings were very tough. They included not only the basic lab techniques and how to use the equipment such as fluorescent microscopy and GenExpert, but also covered For the managerial aspects. 'boot camp,' county medical laboratory coordinators like me had to stay two weeks in Nakuru (where the training was conducted), and the subcounty laboratory coordinator joined in the second week. Here we learned how the site visits should be done, and went over the supervision checklist for health facilities. It was tailored for the counties/sub-counties to



Training of Sub-County TB Control Officers, Mombasa.

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#### HEALTH



Mr. Jacob Toroitich, Lang'ata Sub-county Medical Laboratory Coordinator (second left), checks the lab records with laboratory technicians at Mbagathi Hospital.

effectively perform the newly devolved functions," says Mr. Marebe.

"Now I am more confident to interact with the lab technicians. I know what they do, so I am able to supervise effectively. We can engage in more substantial issues and I feel happy when problems are solved on the spot rather than later."

As a result, Mr. Marebe began to see some positive changes: "Sub-county laboratory coordinators now know what they have to do and why they are important. This motivates them to visit health facilities more often not just to conduct monitoring but also to do trouble shooting. Also, online reporting has increased at Subcounty level. The reporting is linked to the national TB system, and has made timely follow-up possible."

Nairobi has the highest number of TB cases in the country, and a number of MDR-TB (Multidrug resistant TB) cases have been recorded in a few densely populated areas. Finding the active TB cases and linking them to care and support is the most fundamental intervention. Here, the role of accurate and timely diagnosis is becoming increasingly important.



Mr. Marebe observing some specimen at the laboratory.

# WATER AND SANITATION / ENVIRONMENT

5

Water facility in Baringo provided under the Rural Water Supply Project.

#### CASE 5.1

### **Rural Water Supply Project**

# Continuous Efforts to Provide Access to Clean Water to People

Needless to say, access to safe water is crucial in peoples' lives. It also contributes to improvement of sanitation and the health condition in communities. Furthermore, the reduction of time spent fetching water provides better education opportunities for children. JICA has been working on this critical issue of water for long.

s a beneficiary of the Project on the Rural Water Supply in Baringo County supported by JICA, Mr. James K. Chebon, a teacher at Katuno primary school says, "We now enjoy clean and reliable supply of water." Under this project, water supply facilities will be provided to 70 communities in the county.

Mr. Chebon explained that people in the community used to

fetch water from a river or even dig wells in the riverbed nearby. He knew very well that the river water was not clean or stable, but there was no alternative source. "Thanks to the project, now people do not need to look for water anymore and the water is very clean," he added.

JICA's cooperation to rural water supply focuses on construction and equipping of facilities in Arid and SemiArid Lands (ASALs) that are handed over to be managed by communities through Water Users' Associations (WUAs). Many of these facilities are constructed in schools.

Reduction of distances to fetch water and the time taken to do so enhances school attendance by children, especially girls, who would otherwise be assigned this work.





These projects also include a soft component comprising of capacity development for participatory operation and maintenance of the facilities by WUAs, and enhancement of awareness on sanitation and hygiene for the communities as a whole. This greatly contributes to not only better management of the facilities but also towards decreasing water borne diseases and improvement of the beneficiaries' health and hygiene in general.

Ms. Ann Kurui, an operator of a water kiosk, emphasized that it is important to think about sustainability of the water supply system. This is one of the key issues she learnt from the training provided under the soft component of the project. She emphasized that "Those people who do not pay shall not get water". She is collecting Ksh.2 per 20L jerry can. Mr. Chebon explained that the school is now discussing with pupils' parents regarding payment of some contribution for the water so that all the children in the school can enjoy the clean water every day.

Over the past decade, JICA has also supported improvement of water supply in urban areas by construction of intakes, water treatment facilities and distribution networks in medium sized towns such as Kapsabet and Embu. The ongoing latest project in Narok town is designed to increase access from a population of 18,000 served in 2012, to 50,000 in 2020 through



Pupils fetch clean water from the water supply facilities provided by JICA.

supply of an additional 4,000 m<sup>3</sup> per day.



#### CASE 5.2 Project for Development of Drought Tolerant Tree Species

# **Towards Adaptation to Climate Change**

Response to Climate Change is one of the most serious global challenges that the international community needs to tackle jointly. JICA is contributing to this by conducting a project on this issue in Arid and Semi-Arid Lands (ASALs) in Kenya.

his is a pioneer project on breeding indigenous trees in Kenya and most likely in Sub-Sahara Africa and has enormous potential in shaping the forestry agenda in the region. It is very important to the forestry sector in Kenya because indigenous species are more adapted to local conditions and more resilient than exotic species," notes Dr. Gabriel Muturi, the Deputy Director in charge of Biodiversity and Environment Management at the Kenya Forestry Research Institute (KEFRI).

Under the ongoing project for Development of Drought Tolerant Tree Species to Adapt to Climate Change in Drylands of Kenya, Melia and Acacia species are being bred from 'plus trees' to produce superior variety of seeds. This is expected to not only contribute towards management and conservation of woody vegetation, which is important for production of both wood and non-wood products in the ASALs, but to also promote afforestation and reforestation.



Demonstration of grafting techniques in Japan.
#### **ENVIRONMENT**



"In line with the MDGs, this project aims to respond to Kenya's long-term vision 10% achieving forest of cover as mentioned in the Constitution of Kenya 2010 and Vision 2030. However, although it is a leading forest research institute not only in Kenya but also within the African continent, KEFRI had not previously undertaken any breeding of indigenous trees and therefore its technical capacity in this field was low." explains Dr. Muturi.

Tree apan's Forest Breeding Center (FTBC) and Kyushu University provides technical support within the project. Dr. Muturi notes that "FTBC has vast breeding expertise from which KEFRI scientists have gained a lot through training at FTBC and engagement with short-term experts in Kenya." In 2015, 10 staff from KEFRI and the Kenya Forest Service (KFS) were trained in Japan.

DNA testing and other scientific analysis have been done in a variety of conditions in ASAL regions within the country. These so-called "Plus trees" will be distributed widely to farmers and private forestry entrepreneurs, so that forest-dependent communities in ASAL regions can expand their livelihood activities and increase their resilience against drought.



Counterpart Training on artificial crossing at Forestry Tree Breeding Center in Iriomote Island in Japan.



Counterpart Training on artificial crossing at Tohoku Regional Breeding Office in Japan.



Counterpart Training on DNA analysis at Forest Tree Breeding Center in Japan.

# REGIONAL COOPERATION

6

One Stop Border Post (OSBP) supported by JICA

#### CASE 6.1 Project on Capacity Development for International Trade Facilitation in the Eastern African Region

## Collaborative Efforts in the Region to share Economic Growth and Social Stability

Kenya's sustainable economic growth path cannot be pursued without tackling common challenges in the region. It is the sharing of the fruits of Kenya's growth with other countries in the region that will lead to the development and stability in the region as a whole and thus bring a positive impact to Kenya's development. Regional Cooperation is therefore important from this viewpoint.

ICA has been conducting a project on Capacity Development for International Trade Facilitation in the Eastern African Region. The third phase of the project hit the half way mark in November 2015. It has been a journey of a strong partnership with all the East African Community (EAC) countries. There are highs and lows, but all in all, a refreshingly satisfying one with remarkable achievements. A joint mid-term review conducted in 2015 revealed that JICA support through the project is on course with notable impact on many fronts, including reducing the time of movement of cargo and people in the region.



Japan Customs Expert in a training session for EAC Revenue Authorities in Japan.

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#### **REGIONAL COOPERATION**

More specifically, the construction of One Stop Border Posts (OSBPs) at Namanga (Kenya/Tanzania) and Rusumo borders (Rwanda/Tanzania) was successfully completed, and technical assistance is now being provided for their operationalization.

То support the legal framework of the OSBP, JICA instrumental has been in facilitating the development of bilateral and regional OSBP procedure manuals. Training and sensitization in these areas has been extensively conducted.

In a bid to work harmoniously with other stakeholders and avoid undue duplication, close partnership with the African Development Bank (AfDB) and Trade Mark East Africa (TMEA) among others has further strengthened the coordination efforts.

The ever evolving digital platform has not been left behind and in this regard, the ICT system based on the OSBP operational model – the Real Time Monitoring System / Cargo Control System – has been developed.

This system is designed to interface with the respective Customs Clearance systems of the Revenue Authorities and other Governmental agencies operating at the borders. It is currently piloted at Taveta/Holili OSBP (Kenya/Tanzania) and JICA is collaborating closely with KenTrade for further integration.



JICA Expert in discussions with Revenue Authority officials.

The outcome will be to facilitate efficient clearance for the border agencies and ultimately facilitate trade by reducing clearing time and cost of doing business.

For the capacity building programs for customs officers and clearing agents, the impact has been considerably felt by the Revenue Authorities. In recognition of JICA's role in this area, both in Kenya and EAC at large, JICA proudly received the prize of the Capacity Building Partner of the Year Award at the Kenya Revenue Authority Tax Payer Award Event officiated by H.E. President Uhuru Kenyatta in October 2015.



President Kenyatta presents the Capacity Building Award to Ms. Anne Olubendi, who receives it on behalf of JICA.

# PUBLIC-PRIVATE PARTNERSHIP

F

Launch of new Water Treatment System at Ruiru.

#### **CASE 8.1** Proposal Based Programs with the Private Sector

# Win-Win Relationship to Contribute to Kenya's Development and to Boost Japanese Enterprise

apanese private sector possesses technological and human resources in various fields that may assist in fulfilling societal needs and have a positive impact on the social welfare of the developing countries.

JICA invites proposals from Japanese enterprises and collaborates with those that have submitted successful proposals. Since TICAD V held in 2013 in Yokohama, Japan, where promotion of trade and investment were committed, proposals for JICA Public-Private partnership programs for Africa have increased.

n Kenya, as of the end of 2015, 22 projects based on the proposals from Japanese private companies were ongoing. One of these is Wellthy Corporation, a specialized company in water purification technology.

In June 2015, Wellthy, Ruiru-Juja Water and Sewerage Company Limited (RUJWASCO) and Athi Water Services Board (AWSB) jointly launched the new Water Treatment System at the RUJWASCO facility in Ruiru, 25km northeast of Nairobi.

Wellthy has ventured into construction of technical inspection of the high cloudiness clean water and basin monitoring by remote-sensing. This is in cooperation with a local water service business entity in Ruiru District where consultation services are also provided.

At the project launching, a water depurator was installed. Water supply to approximately 1,000 local inhabitants covering 400 households has since been running smoothly, thanks to this project.

On the other hand, the journey has been tough, with challenges of procurement of machine parts, lack of basic infrastructure such as stable power supply and skilled human resource, as well as difference in business practices. Solutions have however been applied gradually, courtesy of the good relations between Wellthy and the Kenyan partners.

Closing the gap in business practice is no easy matter. The most important factor is to build the business system by way of mutual cooperation. As such, business profitability may take time, but patience pays, considering the market dynamics of the developing world.



Wellthy Corporation from Japan give an explanation of the water depurator devises.

	PROGRAM/PROJECT NAME	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES	
	ECONOMIC INFRASTRUCTURE					
1	Mombasa Port Development Project	March 2012 - February 2016	Construction of Berth 20 & 21	Mombasa	Increase of Port container capacity to a total of 1.2 million TEUs per year.	
2	Olkaria I Unit 4 and 5 Geothermal Power Project	March 2010 - February 2015	Construction of Geothermal Power Plant with installation of power generator units 4 and 5.	Nakuru	Increase of electricity 140MW through environment friendly geothermal power.	
3	The Project on Masterplan for Development of Mombasa Special Economic Zone (SEZ)	January 2014 - August 2015	Development of a Masterplan of Mombasa SEZ at Dongo Kundu	Dongu Kundu - Mombasa	First ever and all-new multipurpose Special Economic Zone (SEZ) in Kenya, that will provide employment for 27,000 people and bring better quality of life to Kenya.	
			AGRICULTURE			
4	Rice based Market- oriented Agriculture Promotion Project (RICEMAPP)	January 2012 - January 2017	Improve rice cultivation through Water Saving Rice Culture (WSRC), Mechanization, Gender Mainstreaming Package	Mwea, Kirinyaga County	Significantly increase in rice farmers' savings and Gender Mainstreaming.	
5	Sustainable Smallholder Irrigation Development and Management in Semi- Arid Lands (SIDEMAN SAL)	August 2012 - August 2016	<ul> <li>Construction of smallholder community irrigation facilities through the participation of the Irrigation Water Users Associations (IWUAs);</li> <li>Improving the capacity of IWUAs and Technical Staff for effective sustainable Operation &amp; Maintenance (0&amp;M) and participatory irrigation development.</li> </ul>	Narok, Embu, Kilifi, Taita Taveta, Laikipia, Meru, Tharaka Nithi, Elgeyo Marakwet	<ul> <li>Increased the agricultural productivity of food-insecure farmers by:</li> <li>Improving and expanding smallscale irrigation water management</li> <li>Diversifying on-farm enterprises with high value produce, and</li> <li>Supporting effective agricultural extension services</li> </ul>	
6	Smallholder Horticulture Empowerment and Promotion Project for Local and Up Scaling (SHEP-UP)	March 2015 - March 2015	<ul> <li>Holistic support through the entire cycle of farmers' activities;</li> <li>Starting with 'knowing the market' and ending with 'selling to the market';</li> <li>Farmers initiative through conducting market surveys and formulating action plans; and</li> <li>Gender equity and equality.</li> </ul>	Across the Country	<ul> <li>Long and short-term training</li> <li>Market access for smallholder agriculture farmers</li> </ul>	

	PROGRAM/PROJECT NAME	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES
1	SATREPS (RICE RESEARCH) - Project on Rice Research for Tailor- made Breeding and Cultivation Technology Development in Kenya	May 2013 - May 2018	Introducing 'Tailor-made Breeding and Cultivation Technology Development.'	Mwea, Kirinyaga County	<ul> <li>Technologies newly introduced by the project have been transfered to Kenyan researchers and technicians through On-the-Job Training in Kenya; and</li> <li>Kenyan students pursuing doctoral and masters studies in Japan and Kenya, using the experimental results of the project</li> </ul>
8	Mwea Irrigation Development Project	2010 - 2018	Construction of Dam and construction and rehabilitation of water canal in Mwea Irrigation Scheme (JPY 13.17 Billion)	Kirinyaga County	<ul> <li>Increased rice production with more water available for farming;</li> <li>Sustainable irrigation system</li> </ul>
9	Project on Enhancing Gender Responsive Extension Services (PEGRES)	September 2014 - August 2017	Develop Gender Mainstreaming Package (GMP), implement and introduce to other projects	National	<ul> <li>Mainstreaming gender in other projects as a result of collaboration with PEGRES</li> <li>Developing gender mainstreaming package</li> </ul>
10	Agriculture Promotion Advisor	April 2014 - March 2016	Policy advisory on Agriculture promotion	National	Supporting Sustainable Smallholder Irrigation Policy
	Н	JMAN RESC	<b>URCE DEVELO</b>	PMENT	
1	The Third Country Training Program (TCTP) on Strengthening of Mathematics and Science Education (SMASE)	2014 -2016	<ul> <li>Strengthen knowledge on learner-centered approach and improve pedagogical skills</li> <li>In-services 120 Participants/year from more than 15 Anglophone African countries</li> </ul>	Sub-Saharan Africa	Expansion of SMASE and pedagogical knowledge/skills acquired from experiences sharing and demonstration of practical teaching ways (mainly ASEI/PDSI) that enhance quality of mathematics and science education/teachers to 27 African countries
12	Regional Cooperation Advisor	July 2014 - July 2017	Enhance capacity of CEMASTEA to conduct regional activities in mathematics and science education	National, Sub-Saharan Africa	<ul> <li>CEMASTEA capacity for development of training modules and delivery of INSET improved; and</li> <li>INSET providers from African countries trained on learner- centred teaching/learning of mathematics and science education</li> </ul>
13	INSET Policy / Continuous Professional Development (CPD) Advisor	October 2014 - October 2016	Support MOEST in developing a National In-service Education and Training (INSET) policy and Implementation Guideline for Basic Education	National	INSET Policy developed and Knowledge/skills on policy development capacity for MOEST staffs enhanced



	PROGRAM/PROJECT NAME	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES
1	AFRICA-ai-JAPAN Project (African Union - African innovation - JKUAT and PAUSTI* Network Project) (*Pan African University for Science Technology and Innovation)	June 2014 - June 2019	<ul> <li>Promote the full utilization of local knowledge and resources geared towards African Innovation; and</li> <li>Strengthen the ability of PAUSTI/JKUAT students and industries to actualize innovative ideas</li> </ul>	National, Africa	<ul> <li>Increased African Innovation; actualizing PAUSTI/JKUAT innovative ideas; and</li> <li>Encouraging vitality with actions of both private and government industries in Africa</li> </ul>
15	The Project for Capacity Development for Promoting Rural Electrification Using Renewable Energy "BRIGHT Project"	August 2011 - January 2017	Enhance capacity of JKUAT in Research &Development (R&D), Education and Training in the field of rural electrification using renewable energy in collaboration with other stakeholders in the field	National	<ul> <li>Education activities of JKUAT on renewable energy for rural electrification are improved;</li> <li>Collaboration with stakeholders in rural electrification using renewable energy is enhanced;</li> <li>Enhancement in capacity of governmental staff including Energy Regulatory Commission (ERC) and National Industrial Training Authority (NITA) and Technical Training Institutions in Solar PV</li> </ul>
			HEALTH		
15	Organizational Capacity Development for Management of Devolved Health Systems (OCCADEP)	November 2014 -September 2019	<ul> <li>Strengthening managerial support functions and coordination mechanisms at national level;</li> <li>Strengthening leadership and management capacities at County Departments of Health; and</li> <li>Mutual learning for Health Systems Management among County Departments of Health</li> </ul>	National, Kirinyaga, Kericho Counties	Strengthening managerial functions of County Departments of Health in dimensions such as leadership, human resource management, financial management, work place management, team building, facilitation, coordination, information sharing and communication
1	Health Policy Loan for Attainment of Universal Health Coverage (UHC)	2015 - 2017	Support for priority programs for UHC, including Free Maternity Services, Health Insurance Subsidy Program, RBF for Primary Health Services and Capacity Development for UHC (JPY 4 Billion)	National	Acceleration of the Government's priority programs for UHC

	PROGRAM/PROJECT NAME	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES
18	Advisor for UHC	September 2013 - September 2016	<ul> <li>Support MoH to finalize Policy and Strategy to promote UHC; and</li> <li>Support and Advise towards Health Sector Cooperation for JICA Kenya, especially towards the promotion and implementation of UHC Yen Loan Project and formulation of new Yen Loan Project</li> </ul>	National	Preparation of the Program for Health Policy Loan for attainment of UHC. Development of the draft Health Financing Strategy in support of UHC
19	Development of Rapid Diagnostics and Establishment of an Alert System for outbreaks of Yellow Fever and Rift Valley Fever in Kenya	January 2012 - January 2017	Outbreak containment system for Yellow Fever and Rift Valley Fever is strengthened through development of rapid diagnostics and development of a sustainable outbreak vigilance and response mechanism	National, Busia (Alupe), Mombasa	<ul> <li>Strengthening of disease outbreak containment system for Yellow Fever and Rift Valley Fever through the development of rapid diagnostics and establishment of a sustainable outbreak vigilance and response mechanism</li> <li>Mobile SMS-based disease Outbreak alert System (mSOS) was developed and integrated into the District Health Information System (DHIS)</li> </ul>
20	TB Control / Technical Adviser	January 2011 - June 2017	<ul> <li>Strengthening county reporting systems;</li> <li>Improve capability for sputum smear microscopy and strengthen EQA; Improve quality of culture and DST; and</li> <li>Support overall management for TB control</li> </ul>	National	Improvement in the quality of TB diagnostic services available (sputum smear microscopy, External Quality Assurance and reporting by County units)
2	Health Service Improvement by 5S - KAIZEN - TQM Approach	August 2008 - March 2017	Improvement of Quality of Hospital Services through the 5S - KAIZEN (CQI) - TQM Approach	National	<ul> <li>Set up of Quality and Work Improvement Teams at targeted hospitals.</li> <li>Improvement in work environment through 5S (sort; set; shine; standardize; sustain) activities. Improvement in hospital performance indicators (service turn-around-time, service utilization, client satisfaction etc)</li> </ul>



	PROGRAM/PROJECT Name	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES
22	Regional Training Program on HSS- LMG (Health System Strengthening, Leadership, Management and Governance)	September 2011 - March 2020	Capacity Building for Health Systems Strengthening for the sub-Saharan Africa Region	Sub-Saharan Africa	Regional Training Program on HSS: Increased critical mass of professionals and their networks with state-of-the-art knowledge on issues around HSS in Africa, who can promote human resources for health development for HSS in their respective countries and settings
		WATE	R & ENVIRONMENT	•	
23	Augmentation of Water Supply System in Narok	July 2013 - December 2017	Construction of Transmission Pipe, Water Treatment Plant and Distribution Pipe in Narok	Narok	
24	Rural Water Supply in Baringo County	July 2013 - December 2017	Construction of Water Facilities in 70 communities in Baringo County	Baringo	
25	The Project for Capacity Development of Solid Waste Management of Nairobi city	March 2012 - March 2016	<ul> <li>Strengthen capacity of NCC on solid waste management, especially collection and transportation, financial management</li> <li>Promote involvement of private sector, and improve coordination among stakeholders</li> </ul>	Nairobi	There were significant improvement in solid waste collection and transportation by NCC, and introduction of effective mechanism to co-work with CBO
26	Project on Development of Drought Tolerant Trees for Adaptation to Climate Change in Drylands of Kenya	June 2012 - June 2017	<ul> <li>Breed Drought-tolerant trees species i.e. Melia and Acacia, and strengthen structure for dissemination</li> <li>Strengthen KEFRI's capacity for conducting research on genetic diversity of indigenous species</li> <li>Strengthen KEFRI's capacity for implementing forest tree breeding of indigenous species</li> <li>Establishment of quality seed and seedling supply system for Melia volkensii</li> <li>Raising awareness of relevant stakeholders on the importance of quality seed and seedlings</li> </ul>	National, Kitui	Enhancing research capacity and extension system necessary for promoting indigenous species plantation in the ASALs

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	PROGRAM/PROJECT Name	PERIOD	PROJECT DESCRIPTION	LOCATION	OUTCOMES
27	Third Country Training Program on Adaptation to Climate Change in Africa through Social Forestry	2014 - 2018	Training program offered at KEFRI on Social Forestry and Policies/ Actions related to Climate Change	Sub -Saharan Africa	
28	Enhancing Community Resilience against Drought in Northern Kenya (ECORAD)	March 2012 - December 2015	Empowerment of Community Drought Resilience in Northern Kenya through Community Based Disaster Risk Reduction Approach	Marsabit, Turkana	<ul> <li>Sustainable Natural Resource Management; - Improvement of Livestock Value Chain and Livelihood diversification; and</li> <li>Capacity development of Government officers</li> </ul>
		REGIONA	L PROGRAMS		
23	The Project on Capacity Development for International Trade Facilitation in the Eastern African Region	December 2013 - December 2017	<ul> <li>The Rusumo border One Stop Border Post (OSBP) has been constructed and completed while the Namanga OSBP is 90% complete;</li> <li>A pilot model of the RTMS/ CCS, an OSBP ICT system, was successfully completed at the Holili/Taveta (Kenya/Tanzania) border</li> </ul>	The Eastern African Countries	<ul> <li>The Project has contributed to enhancing the Capacity of Customs administrations and Customs Clearing and Forwarding Agents (CCFAs) in the region.</li> <li>Further, there has been increased coordination between and among border agencies within and between the EAC countries</li> </ul>



#### **LOCATION OF JICA'S PROJECTS** (See Projects List on Pages 43-48)



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### ACRONYMS

5S	Sort, Set, Shine, Standardize and Sustain	KWS	Kenya Wildlife Service
A&E	Accident & Emergency	L/A	Loan Agreement
ABE	African Business Education Initiative	LED	Light-Emitting Diode
AFDB	African Development Bank	LMG:	Leadership, Management and Governance
ANC	Antenatal Care	MDGs	Millennium Development Goals
ASAL	Arid and Semi-Arid Lands	MMU	Multimedia University
AWSB	Athi Water Services Board	МОН	Ministry of Health
CAP	Community Action Plan	MOWI	Ministry of Water and Irrigation
CCFA	Customs Clearing & Forwarding Agents	NCC	Nairobi City County
CEMASTEA	Centre for Mathematics, Science and	NITA	National Industrial Training Authority
	Technology Education in Africa	NTLDP	National TB, Leprosy and Lung Diseases
CPD	Continuous Professional Development		Program
CQI	Continuous Quality Improvement	OCCADEP	Organizational Capacity Development for
EAC	East African Community		Management of Devolved Health Systems
EKI	Ethiopia Kaizen Institute	ODA	Official Development Assistance
ERC	Energy Regulatory Commission	OSBP	One Stop Border Post
EQA	External Quality Assessment	PAUISTI	Pan-African University Institute for Basic
F/S	Feasibility Study		Sciences, Technology and Innovation
FTBC	Japan's Forest Tree Breeding Centre	PDCA	Plan-Do-Check-Act Cycle
GDC	Geothermal Development Company	PEGRES	Project on Enhancing Gender Responsive
GMP	Gender Mainstreaming Package		Extension Services in Kenya
GOK	Government of Kenya	PPOA	Public Procurement and Oversight Authority
HIV/AIDS	Human Immunodeficiency Virus/ Acquired	R/D	Record of Discussions
	Immunodeficiency Syndrome	REA	Rural Electrification Authority
HSS	Health System Strengthening	RICEMAPP	Rice-based and Market-oriented Agriculture
ICT	Information & Communication Technology		Promotion Project
INSET	In-Service Education and Training	RUJWASCO	Ruiru-Juja Water & Sewerage Company Ltd.
IWUA	Irrigation Water Users Association	SEZ	Special Economic Zone
JFY	Japanese Financial Year	SHEP	Smallholder Horticulture Empowerment Project
JICA	Japan International Cooperation Agency	SHEP UP	Smallholder Horticulture Empowerment and
JKUAT	Jomo Kenyatta University of Agriculture and		Promotion Unit Project
	Technology	SIDEMAN-SAL	Sustainable Smallholder Irrigation
JOCV	Japan Overseas Cooperation Volunteers		Development and Management in Semi-Arid Lands
JPY	Japanese Yen	SMASE	Strengthening Mathematics and Science
KDDI R&D	Kokusai Denshin Denwa International Research	OIIINGE	Education
	and Development	SME	Small and Medium Enterprise
KEFRI	Kenya Forestry Research Institute	SV	Senior Volunteer
KEMRI	Kenya Medical Research Institute	ТВ	Tuberculosis
KenGen	Kenya Electricity Generating Company	ТСТР	Third Country Training Program
KeNHA	Kenya National Highways Authority	TICAD	Tokyo International Conference on African
KERRA	Kenya Rural Roads Authority		Development
KRB	Kenya Roads Board	TMEA	Trade Mark East Africa
KEWI	Kenya Water Institute	ТQМ	Total Quality Management
KFS	Kenya Forest Service	UHC	Universal Health Coverage
KIBT	Kenya Institute of Business Training	WSRC	Water Saving Rice Culture
KPA	Kenya Ports Authority	WUA	Water Users Association
KURA	Kenya Urban Roads Authority		



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