

## JICA Everyday

Areas of Cooperation:	
	Agriculture 1
	SATREPS 2
	Education 3
	Industrial Promotion 3-4
	Infrastructure (road+energy) 4
	Infrastructure (water) 5
	Volunteers 5
	Up-Next with JICA 6



JICA staff participated in the annual AACRA Road Safety Awareness Relay Race on May 26, 2019.



## Index-based Insurance to Benefit Smallholder Farmers

A new project, "Development of Plant-derived Soil Stabilizing Additives to Problematic Soil as a Means to Mitigate Road Disasters", is one of the nine SATREPS projects that were approved globally, this month.

If the rains fail, if they come too late or if they do not fall as much as expected, the effects on smallholder farmers can be catastrophic. In 2016, due to El Nino, the rains did not fall as expected during the rainy season in Ethiopia. The drought that followed affected tens of thousands of people and the farmers lost their crops and livestock. While the weather cannot be controlled, it is important to install measures that can help farmers' buildup reliance to the effects of drought. One measure is to develop index-based crop insurance system that will allow farmers to reduce the risks associated with shortage of rainfall, erratic rainfall patterns and drought.

At the request of the Ethiopian government to further build on a previous project on rural resilience enhancement, JICA launched the "Index-based Crop Insurance Promotion (ICIP) project" on April 19, 2019. The five-year project will not only focus on providing insurance to farmers, but will provide bundled packages of agricultural support such as farming technology, fertilizer, seeds and microfinance. These bundled packages, called Resilience Enhancement Packages (REPs), will ensure that several options are made available to the farmers based on their agro-ecological locations and farming systems. The REPs provide a way to minimize two types of risks for the farmers, risk control and risk finance. They control risk by providing water saving technologies, providing seed, fertilizer, or providing microfinance. These are bundled with weather-index crop insurance, which minimize risk finance.

JICA will be working with the Ministry of Agriculture (MoA) and the Oromia Bureau of Agriculture and Natural Resources (OBOANR) to promote index-

based insurance among six target zones in Oromia Region. This project is unique in that it will also require the close collaboration of local insurance companies to design packages that will be beneficial to the farmers as well as worthwhile for the insurance companies.

It is expected that the project will insure 20,000 farmers within Oromia Region in the next five years. The long-term goal is for the Government of Ethiopia to scale-up and disseminate index-based crop insurance nationwide.



A smallholder farmer's plot. Such farmers will be the beneficiaries of index-based insurance.



## MNGD Project to Transform Ethiopian Rural Roads

Problematic soils, represented by black cotton soil, are widely found in Africa. Expansive soil covers more than 10% of Ethiopia's 1.1million km<sup>2</sup> of total land area. This soil, which is prone to shrinking or swelling due to changes in water volume, causes roads to crack and lift up. This damages existing roads and in some cases leaves communities isolated as their entrance to main roads is cut off, leaving them without access to social services and trade routes.

Expansive soils present significant geotechnical and structural engineering challenges globally. Therefore, JICA has chosen to tackle this problem in Ethiopia by facilitating a joint international research between Japan and Ethiopia. Researchers from Kyoto University and Addis Ababa Science and Technolo-

gy University (AASTU) are taking the lead in developing plant-derived soil additives and their operation model to reduce road disasters on problematic soil.

The Universal Rural Road Access Program (URRAP) designed by the Government of Ethiopia, seeks to free rural residents from the road access constraints by connecting all *kebele's* (neighbourhoods) to all weather-roads. It stresses that rural roads should be improved and maintained so that they can be accessible year-round, in all weather conditions. The second phase of URRAP highlights the need for: (1) innovative construction methods using local materials (2) low cost construction methods and (3) maintenance using community participation or micro and small enterprises.

The five-year research project, which will run from April 2019 to March 2024, aims to develop a cellulose-based product, which can be added to the soil to stabilize the sub-base of roads. In Japan, a cellulose-based powder called *celludoron* has proven effective when added to concrete mix for making roads. In Ethiopia, researchers will be studying *ensete* (false banana leaves) and other plants in South Omo Zone to see if their cellulose can be used as a soil-stabilizing additive.

Jinka University, which is located in South Omo Zone and the Ethiopian Roads Authority (ERA) will also be involved in the research, mainly in developing operation models in South Omo Zone and in the suburbs of Addis Ababa city respectively. During the duration of the project, trainings will take

place in Japan and at Jinka University on road disaster management for Ethiopian researchers. One of the outputs of the project will be to produce manuals and guidelines for building roads on problematic soil, especially for villages identified for road disaster countermeasures in South Omo Zone.

This projects contribution towards the SDGs



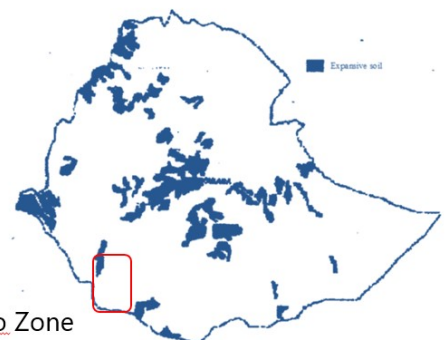
Expansive soil



Distorted roads due to expansive soil



False banana trees (*ensete*) widely found in South Omo Zone. The cellulose from the *ensete* may be used as an additive to stabilize the soil.



South Omo Zone

Map of Ethiopia showing areas with expansive soil.



## Strengthening Mathematics Education in Ethiopia

On a global scale, Japanese students consistently achieve high rankings in mathematics and science. Japan places a lot of emphasis on its science, technology, engineering and mathematics (STEM) curriculum; this is partly to do with the belief that strength in these areas is the foundation for innovation.

Innovation is the key to boosting economies, creating jobs and improving quality of life – which are all crucial concerns for developing countries. With booming population growth and increasing competition in the global market place, emerging countries such as Ethiopia need to work hard to educate their people and ensure that they have the skills needed for success.

Studies have shown that the performance scores of Ethiopian students in mathematics is low. Ethiopia has been working with Japan, through

JICA, to improve mathematics and science education. In the past decade, JICA has conducted the [SMASEE](#) and [LAMS](#) projects that focused on improving the teaching and learning methods in the sciences and mathematics for Grades 7 and 8, nationwide.

To further develop the comprehension of mathematical concepts, JICA has recently launched the “Project for Mathematical Understanding for Science and Technology

(MUST)” to focus on raising student's knowledge of mathematics by improving teaching practices and adding remedial classes for students. The MUST project will focus on developing lesson support materials for Grades one through eight in four designated regions: Amhara, Afar, Oromia and Southern Nations Nationalities and Peoples (SNNP).

With the assistance of Japanese experts, the current curriculum and textbooks will be

analyzed and new lesson support materials will be drafted. Ethiopian teachers will review the materials and localize the content as necessary. Four schools will be chosen in each region to pilot and evaluate the materials. The overall aim is to disseminate lesson support materials, training materials and videos nationally at the completion of the project in August 2023, with the view of having the teaching and learning method developed by MUST adopted into the Ethiopian curriculum.



The JICA team conducted assessments of schools located in Afar region.



## Kaizen Expands into Djibouti via JICA and EKI

In collaboration with the JICA Ethiopia Office and JICA Djibouti Office, basic level Kaizen is being introduced within five Djiboutian Government organizations (Djibouti Road Authority, Waste Management Bureau, Firefighting and Rescue Office, Djibouti Coast Guard, and Geothermal Organization) by dispatching consultants from the Ethiopian Kaizen Institute (EKI).

The initial steps began with an invitation towards 10 Djiboutian delegates to visit Ethiopia in late January to attend training sessions and gain exposure to Kaizen in Ethiopia. The visit motivated the participants to actively begin the process of implementing Kaizen in their organizations, and led to the dispatch of EKI consultants in March to assess the possibility of engaging in further

training sessions.

In early April, a five-day training course was held in Djibouti for employees of the previously mentioned organizations, while those in management levels were trained for two days. Basic Kaizen concepts were covered in the training, including the 5S method and the different types of waste. Fruitful discussions were held throughout the week and the feedback received from each participant was very positive.

The consultants from Ethiopia returned to Djibouti in late April to monitor the implementation of 5S concepts and to provide guidance in situations where challenges arose. During this time, the Djibouti Road Authority (DRA) organized a feedback session for all participants and led the campaign for realizing Kaizen in Djibouti. They have shown

a strong commitment towards Kaizen and they will be instrumental in encouraging other organizations to improve their productivity and competitiveness using this management philosophy.

Follow-up programs by JICA and EKI will continue until December 2019, at which

point JICA will host a national Kaizen workshop and award the best performing organization in the presence of high-level officials from Djibouti. We hope that the five selected organizations will serve as a model for others and will motivate the Djiboutian government and organizations to support the dissemination of the Kaizen philosophy nationwide.



Basic Kaizen training session in Djibouti.



## Largest Start-up Event in Ethiopia: Solve IT 2019 Regional Hub Competitions Underway

JICA, in collaboration with the U.S. Embassy and iCog Labs, is carrying out the largest start-up event in Ethiopia called "Solve IT 2019". More than 2,000 participants from the ages of 18 to 28, in 15 cities, have registered for this innovation competition.

Since February, a series of trainings (on product development, business-plan development, marketing, etc) have been completed in each city and the regional hub competitions began last week. The top three winners from each region will be selected and invited to compete in the grand finale, which will be held in Addis Ababa in August.

So far, regional hub competitions were held in Jigjiga, Jimma and Bahir Dar cities. The top winners were selected and awarded.

The competition schedule for the remaining cities is as follows;

**May 24-27:** Mekelle, Harar, Gondar, Hawassa

**June 7-9:** Addis Ababa Asosa, Axum

**June 14-16:** Semera, Dire Dawa, Arba Minch, Gambella

**June 28-30:** Adama



One of the regional innovation competition winners in Jigjiga city. (Their prototype is a hotel reservation management software, targeting low-mid level hotels)



Presentations were made to judges in Jigjiga city (Their idea is to create an e-commerce platform for buying/selling a variety of products not only commercial products but also "service and data" etc.)



Demonstration of Prototype to audience in Jigjiga city



## JICA Contributes to Improved Management of Addis Roads

Founded in 1877, Addis Ababa - the new flower of Ethiopia - had its first road built in 1902, connecting it to the city of Addis Alem. Since then, periodic episodes of quick expansion grew the road network of the city. Today, the city hailed as the capital of Africa, boasts a road network of around 6,000kms.

Addis Ababa's growth into a metropolitan city is characterized by rapid population growth and spatial expansion. Against the backdrop of steady economic growth in the past several years, the city is becoming increasingly urbanized and motorized. However, due to inadequate maintenance most of the cities roads are old and in poor condition. Lack of follow-up and maintenance is hampering the mobility of pedestrians, raising the operating costs of businesses who spend more time on the road and aggravating road accidents. Additionally, the absence of maintenance work is causing roads to deteriorate quickly, thus increasing the

cost of maintenance and repair with the passage of time.

The Government of Ethiopia has stated that one of its goals is the establishment of a plan that can consider the maintenance needs of all road networks and the development of an advanced infrastructure system. JICA has answered this call for assistance and is at the frontier of developing the management capacity of the staff at the Addis Ababa City Roads Authority (AACRA).

Since 2015, the JICA expert team, together with AACRA, has been developing a systematic and effective road maintenance system. This will help ensure longer life cycles for roads and help AACRA achieve a higher return on their investment.

Initially the project team focused on ensuring accurate data collection, the establishment of a database and evaluation of the data. Previous practices at AACRA were sub-

jective and decisions on road maintenance, repair, and budget allocation were not founded on data. However, with the assistance of the JICA team, data was collected and the staff were trained on how to prioritize which roads should be maintained first and how to appropriately allocate short and long-term repair and maintenance budgets.

"It is the most important work. Correct data never becomes obsolete; whole systems and machines can become absolute," stated Mr. Hiroshi Honda, Chief Advisor, JICA, during a Joint Coordination Committee meeting held in May.

The JICA technical assistance project is centered on system development, but at the same time, it introduced new technology to the AACRA team. A pavement condition survey vehicle (PCSV) was purchased to gather data by capturing road images and the conditions of road surfaces. The information is then analyzed and

used for planning purposes at the AACRA offices.

The technical skills of AACRA engineers have also been developed through over 100 seminars, workshops and on-the-job-training in Ethiopia; additionally two training sessions were conducted in Japan.

The capacity of AACRA staff has increased immensely during the duration of this project. JICA is confident that AACRA will sustainably continue to develop its capacity and serve as a model for other cities within Ethiopia, as JICA experts handover the systems in July 2019.



Japanese expert measuring road damage.



## JICA Hosts Consultations on Groundwater Policy Review

The Ministry of Water, Irrigation and Energy (MoWIE) has a water sector-working group, which was established to coordinate and communicate ideas and courses of action between the government and donor partners. To ensure the effective and efficient achievement of programs and projects, the working group is categorized into Water Sanitation and Hygiene (WASH) and Water Resource Management – Technical Committee (WRM-TC).

The WRM TC, of which JICA is a member, has identified seven critical areas in the national integrated water resource management document; the legalization of groundwater management is one of the pressing issues. Currently, the policy on groundwater covers exploitation, exploration and development, but fails to address the management aspect. There is a need to clarify the

regulation of groundwater at all levels.

During the 10<sup>th</sup> Joint Technical Review Meeting and the 8<sup>th</sup> Multi-stakeholder Forum, which was held in July 2018, cases for legalizing the groundwater management policy were presented by various stakeholders. Based on the recommendations of the group, the Stockholm International Water Institute (SIWI) took the initiative to revise the identified policy gaps for groundwater management.

JICA is currently serving as co-chair of the Groundwater Legislation Technical Committee at MoWIE. JICA is working towards coordinating group members to share technical assistance with MoWIE to further develop the Ethiopian water resource management policy and strategy as it relates to groundwater management.

Upon the request of MoWIE, JICA hosted a consultation session on May 10, 2019, to review the draft of the revised water policy that will legalize groundwater management. The session was attended by technical committee members from MoWIE, Oromia Water and Mines Bureau, Ethiopia Water and Land Resources Center, Addis Ababa University, Italian Agency for Development Coop-

eration, SIWI, Agricultural Transformation Agency, USAID and the Global Green Growth Institute.

For the last 20 years, JICA has provided technical assistance to the Ethiopian government in mapping the hydrogeological landscape of various basins, including Middle Awash and Rift Valley, as well as, Jarar and



Stakeholders consultation session on the legalization of groundwater management



## Sports Volunteers Give First Aid Seminar

Two sports volunteers, Ms. Mitsuki Usami (physical education teacher in Axum) and Ms. Mako Takahashi (badminton instructor in Arba Minch) held a first aid seminar in Arba Minch from May 08-12.

The seminar was organized to refresh the skills of coaches and players, as well as for government officers within Gamo Gofa Zone. The JICA volunteers shared first aid techniques through lectures and by providing the attendants with the opportunity to practice practical exercises. Basic first aid skills, such as CPR and recovery positions, as well as applying dressings, bandages and arm slings using locally available materials were demonstrated.

The participants gained knowledge and skills on how to deal with emergency injuries and sickness. Arrangements were also made with the Gamo Gofa Sports Office to schedule another seminar soon.

These volunteers will be leaving Ethiopia in July; however, they expect that the first aid methods that they have shared will be practiced and shared with others in a sustainable manner.



Lectures on first aid techniques.



CPR demonstration.



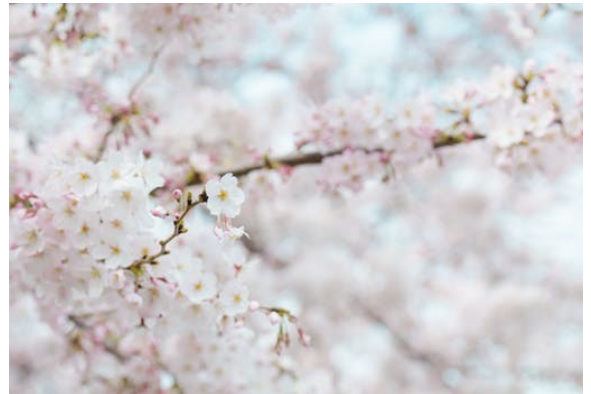
Practical exercises: arm sling and bandage application.



# Coming up in June 2019

## June

- ◆ June 17-20, 1st Water and Energy Week at Skylight Hotel
- ◆ June 24-26, 4th African Kaizen Annual Conference in Tunisia
- ◆ Regional innovation competitions (please refer to page 4)



L e a d i n g   t h e   W o r l d   w i t h   T r u s t

### Mission:

JICA, in accordance with the Development Cooperation Charter, will work on human security and quality growth.

### Vision:

#### Leading the World with Trust

JICA, with its partners, will take the lead in forging bonds of trust across the world, aspiring for a free, peaceful and prosperous world where people can hope for a better future and explore their diverse potentials.

### Actions

1. Commitment: Commit ourselves with pride and passion to achieving our mission and vision.
2. Gemba: Dive into the field ("gemba") and work together with the people.
3. Strategy: Think and act strategically with broad and long-term perspectives
4. Co-creation: Bring together diverse wisdom and resources.
5. Innovation: Innovate to bring about unprecedented impacts.

### JICA ETHIOPIA OFFICE

Japan International Cooperation Agency  
Ethiopia Office  
Mina Building 6th & 7th Floor  
P.O.Box 5384  
Addis Ababa, Ethiopia

Phone: +251 115 50 47 55  
Fax: +251 115 50 44 65

### Follow us on Social Media!



Jica Ethiopia



@JicaEthiopia

<https://www.jica.go.jp/ethiopia/english/index.html>