



## Special Feature

The Middle East Today  
Ten Years After the Arab Spring  
mundi December 2020 No. 87

The Middle East  
Strengthening Ties with Japan  
mundi February 2020 No. 77



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# 2

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Special Feature

## The Middle East Strengthening Ties with Japan





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\* Information within is current at the time of the publication (2/2020)



Leading the world with trust



Old Askar Refugee Camp in the Palestinian territories. Residents are involved in managing the camp (Photo: Mr.ABE Yusuke).

## Prologue Vol.16

# Kurdistan Region and Japan

Article: Ms. YASUDA Natsuki

The first time I first set foot in the Kurdistan region of northern Iraq was in early 2016. While temperatures reach around 50°C in summer, the air is cool throughout the day in winter. As it was the middle of the rainy season, the mountains were lightly covered with greenery, which served as a reminder that warm spring was just around the corner.

In the major city of Erbil sits an ancient citadel registered as a World Heritage Site, and it overlooks a lively central square and souk (market) that is filled with families who are out for their daily shopping. The arcade market was like a maze with its narrow, branch-

ing streets leading in all directions. It was a place where you can easily lose track of time as we wandered around the colorful shops selling everything from sweets and coffee to decorative goods.

What impressed me the most was how kind and welcoming people were. As I walked through the streets, people did not seem to bother about my appearance as a foreigner. However, occasionally when enjoying my tea at a café, someone would timidly ask, "Are you Japanese? If you don't mind, could I take a picture with you?" This sense of hospitality was somewhat comfortable. On the other hand, once you become friends with them, they welcome you to their houses, treat you with a cup of tea and a meal, and before you know it, they are preparing to have you stay the night. While my main purpose for my visit was to conduct interviews, I continuously come back to this place where I am filled with happiness and warmth of the people.

Out of all the districts in the Kurdistan region, there is one district in particular which shows a deeper connection to Japan. Halabja is a district located at the far-east of the region. The small market in the city center gives the impression of a peaceful countryside, where people enjoy their day to day lives. However, this town experienced a tragic loss of 5,000 lives due to a chemical weapon that was dropped by the Iraqi army in 1988. Virtually everyone has lost a family member, and according to a man who survived this atrocity, "the whole city was like an orphanage."

In fact, in Halabja there is a street called "Hiroshima Street." Apparently, the people of Halabja named the street "Hiroshima Street" around three years ago to "send their prayers for Hiroshima from Halabja." Every August, they hold a gathering to pray for Japan. One of the residents I interviewed, an 87-year-old man named Kaka Sheikh mentioned the following: "we hope that Japan will pray for Halabja as we pray for Japan. I believe that by expanding our circle, we can create new friendships, which will naturally lead to fewer enemies. I couldn't help but wonder if we are praying for their peace from Japan as much as they are praying for us."

At the start of 2020, Iraq became the hotspot for the rising tensions between the United States and Iran. A missile, believed to have been aimed at a US military facility, even landed in Erbil in the Kurdistan region. As a response, Japan's Ministry of Foreign Affairs raised the risk level for all of Iraq to "evacuation advisory," including the Kurdistan region. In peaceful time, the Kurdistan region was regarded as a stable and safe place, which received numerous evacuees from neighboring Syria as well as from within Iraq. I can only imagine that those Japanese humanitarian aid workers who were forced to leave due to the crisis must have been deeply disheartened to return to Japan and leaving those people behind.

I hope that someday this place will return to normalcy, and many people will have the opportunity to experience and explore the charm and the long history of this beautiful place.



Illustration: Mr. NAKAMURA Tomofumi

### Ms. YASUDA Natsuki

Born in 1987 in Kanagawa Prefecture. Graduated from Sophia University. She is a photo journalist and Vice President for Dialogue for People (D4P), a non-profit organization. At the age of 16, she worked as a reporter for Children Without Borders, covering children living in poverty in Cambodia, an opportunity that eventually led to her current career in reporting issues surrounding refugees, poverty and natural disasters in Southeast Asia, the Middle East, Africa, and Japan. She is also the author of the book, "Shashin de Tsutaeru Shigoto - Sekai no Kodomo-tachi to Mukiatte (Communicating through Photos - Facing the Children of the World)" (Nihon Shashin Kikaku) and others. Currently appearing as a commentator on a programme by a Japanese broadcasting agency, TBS TV's "Sunday Morning."

# Strengthening Ties with Japan

The Middle East has suffered a long and continuing instability. Yet, Japan has maintained political neutrality and historically maintained a friendly relationship with the region. For this, Japan's cooperation has been favorably received. JICA provides support to people who are vigorously living their lives, by delivering its assistance in a wide range of fields, such as infrastructure improvement, environment, health, education, and industry.

## Japan and the Middle East, a Relationship Bonded by Trust

Not only does JICA provides financial assistance, but it also materializes human development through technical cooperation based on the counterparts' needs – This attitude contributes in building confidence towards Japanese people and businesses, which further enhances friendly relationships between the Middle East and Japan.

### Palestine **Enhancing Regional Development through Cultural Heritage**



Article: Mr. MITSUIISHI Tatsuya Photography: Mr. ABE Yusuke

**Project name** Project for the Construction of the Protective Shelter and the Presentation of the Great Bath at Hisham's Palace, Jericho  
January 2018-May 2020

#### Japan and Palestine Work Together to Conserve Historic Assets

Jericho, a town in the West Bank in the Palestinian Territories, is said to be the world's oldest inhabited city dating back to 10,000 B.C., and also frequently cited in the Bible. In the 8th century, the Umayyad Dynasty, an Islamic dynasty, constructed Hisham's Palace in the town. It is a cultural heritage representative of early Islamic architecture. Its Great Bath is said to be one of the largest baths in the Middle East, and its mosaic floor indicates the prosperity of the period.

The mosaic floor, however, was protected by carpeting and sands, and could not be fully appreciated. There were concerns that tourists may damage them by sweeping away

the sands without permission. In response, JICA is assisting in the construction of a domed shelter to protect the mosaic floor and to enable tourists to view the site simultaneously. In the shelter, a corridor from which visitors can look down on the mosaic floor will be constructed. The construction work is under progress and will be completed in May this year.

Mr. TAKAGI Masakazu of Matsuda Consultants International Co., Ltd., who undertook the designing and the supervision of the construction of the shelter, says, "the Ministry of Tourism and Antiquities of Palestine wanted someone who could listen and cooperate. Regarding this aspect we have established a good relationship with them." He says, "in the design stage, for example, we



A total of about 25 Japanese and Palestinians are working together at the construction site. At the site precautionary measures are taken place, such as displaying warning signs just like in Japan. Sharing and introducing the culture of safety is also an important part of the mission.

held an expert conference on three occasions, inviting local archaeologists, professors, UNESCO (United Nations Educational, Scientific and Cultural Organization) and architects in order to obtain various perspectives



Hisham's Palace, a touristic spot in Palestine, where JICA actively assists in the conservation of historic heritages.

The mosaic floor area is 825 square meters. Dome shelter for viewing the mosaic floor is under construction.



Due to the shelter construction works, the mosaic floor is covered for protection.



Remains of the 8th century Great Bath of the Islamic Dynasty!

on preserving the remains, utilizing resources for tourism, and measuring the impacts on the landscape etc.” Through this approach, local opinions were respected in the planning. Mr. KAGAMI Masahisa (hereinafter, Mr. KAGAMI) (Matsuda Consultants International Co., Ltd), who is a resident construction supervisor, explained their efforts for not damaging the ruins. He describes, “as there is a possibility that some parts of historical ruins are still in the ground, we

adopted a design that allows the foundations to be placed on the ground to avoid digging the ground as much as possible. Sufficient strength of the building is ensured by linking the foundations.”  
Palestine also has plenty of other tourism resources, including the birthplace of Jesus Christ. As the tourism industry stagnated due to the strong image of conflict and lack of know-how in tourism, JICA provided assistance in tourism promotion from 2008 to



The shelter area is 55 x 45 meters, and its height is about 13 meters.

2016. In addition to the assistance in establishing tourist information centers, souvenirs were developed in cooperation with the local residents. “I am sometimes approached by a friendly local resident, and asked if I am engaged in JICA’s work. I feel their trust and expectations for this project,” says Mr. KAGAMI. Japan’s genuine efforts are about to be recognized by Palestinians.

Palestine Israel Jordan **Promoting Regional Tourism**

The Government of Japan is making efforts to promote tourism in Palestine, Israel, and Jordan as a part of the concept for “Creating the Corridor for Peace and Prosperity”, which also includes the project in Hisham’s Palace. In 2019, JICA hosted seminars and tours to advertise Palestine, targeting Japanese tourist agencies in cooperation with the Ministry of Foreign Affairs of Japan and the Japan Association of Travel Agents. This year, a project for providing tours to visit around the area is also starting.



**Banksy’s Art**  
The Walled Off Hotel, a hotel in Bethlehem created by the anonymous artist, Banksy. You can see the art works of Banksy in the town and in the hotel.



**Amphitheater in Jordan**  
Amman, the capital city of Jordan. The Roman amphitheater with a capacity of 6,000 people is in the foreground, and the Amman Citadel is located on the hill behind.



**Birthplace of Jesus Christ**  
Church of the Nativity in Bethlehem. There is a star-shaped sign indicating the birthplace of Jesus Christ in the underground altar of the church.



**Mount of Temptation**  
The Mount of Temptation in Jericho, where it is said that Jesus Christ fasted for 40 days while tempted by the devil. There is a monastery on the sheer cliff, which is one of the tourist sites.



Above are a shelter structural model and design drawing. Below is the mosaic floor.

Treating important remains with greatest care



**Director, Jericho Office, Ministry of Tourism and Antiquities of Palestine**  
**Mr. Iyad HAMDAN**  
“Last year, Palestine welcomed about 2 million tourists. Japan has cooperated with us in tourism promotion efforts for the past ten years, providing various seminars and workshops and improving tourist information center facilities in the city. Also, in the future, we will make efforts to fix the unimproved historical remains and build a town where tourists can stay longer.”



**Matsuda Consultants International Co., Ltd.**  
**Mr. KAGAMI Masahisa (Right)**  
“In order to avoid damaging the remains, obtaining permission from the Ministry of Tourism and Antiquities is required to dig the ground more than 30 cm in depth. During the digging, pottery fragments were sometimes uncovered. In such cases, the construction work was stopped to seek instructions from the Ministry of Tourism and Antiquities. We are engaging in the construction work very carefully.”  
**Mr. TAKAGI Masakazu (Left)**  
“After the shelter is completed, repairing the mosaic floor and the overall remains will be required. Also, regarding these works, the Ministry of Tourism and Antiquities is expressing its intention to ask for Japan’s assistance. It means our past works are highly regarded.”

**Column**  
**Iran** **Constructing a Japanese Garden in Iran**



The Japanese garden will be constructed in Rasht City in the north-west part of Iran. The city has a similar climate to Japan, and many of the wild plants and the soil in that region are well suited for a Japanese garden.  
Manual compiled by Mr. KOMATSU



Mr. KOMATSU Kiyoshi, a member of Senior Volunteers (Left in the photo) “we are aiming at creating a traditional Japanese garden symbolizing Japanese culture,” he says.  
Among the countries in the Middle East region, Iran has quite a long diplomatic relationship with Japan. Last year, we celebrated our 90th anniversary. In order to commemorate the anniversary, Iran requested the construction of a Japanese garden as a symbol of the friendship between the two countries. Mr. KOMATSU Kiyoshi, a member of Senior Volunteers, gave advice to the local designers, and engaged in the compilation of a manual and tree cards that will be required for maintenance after the completion of the garden. A Japanese garden, which will be a place of relaxation for the public as well as an important sightseeing spot, is about to be created.



Egypt

Ms. NISHISAKA and an Egyptian counterpart are studying a tunic dress of King Tutankhamen. "once an item is stored in the display case, we cannot conduct a detailed inspection such as analyzing the sewing techniques. This is why we inspect the item before it is in the display case"

Use the precious experiences for the future

# Conserving History through Trust

Article: Mr. MITSUIHISHI Tatsuya  
Photography: Mr. ABE Yusuke

### Project name

The Project for Conservation Centre in the Grand Egyptian Museum  
June 2008-March 2016  
Grand Egyptian Museum Joint Conservation Project (GEM-JC)  
November 2016-March 2021



### Deputy Manager of the GEM-JC project Ms. NISHISAKA Akiko

"The museum will be cherished for many hundreds of years in the future. It is our great honor that Japan contributed to the museum. Here, precious cultural heritage in Egypt will be exhibited in a way that visitors can feel familiar with them. I am very excited that the visitors will have a totally different experiences from before."

The Grand Egyptian Museum is planned to be opened by the end of this year. The left side of the central entrance is a display space. International conference halls, theaters, a food court, and other public facilities are located in the right side.



Conservation work of the In-Sneferu-Ishetef Painting from the old kingdom (around 2686 B.C.-2185 B.C.). Mud and dirt are removed without damaging the mural paintings.

Ms. NISHISAKA Akiko, the Deputy Manager of the GEM-JC project, says, "the conservation techniques themselves are not unique to Japan and is regarded as the international standard. However, we believe that Japan's strength on teamwork among experts in computers, X-rays, and various other fields is a practice that we would like to continue in Egypt". Many years of cooperation between Egypt and Japan lie in the background of the precious cultural assets displayed in the museum that will be open soon.



### Grand Egyptian Museum Conservation Center General Director in charge of Conservation Dr. Hussein KAMAL

"I have learnt many things since I started working with Japanese experts in 2008. The most important thing I have learnt is to make a solid plan. In the beginning, the Egyptian team tended to finish their work early. As the project progressed, we were able to work both quickly and systematically at the same time."

Statue of Ramesses II with a height of approximately 11 meters. The statue was discovered in Memphis in 1820. Most recently, it was exhibited for about 50 years in Cairo City. It was then relocated at the entrance of the Museum in January 2018.



Iraq

Special Feature

The Middle East  
Strengthening Ties with Japan

# Japanese Businesses Building up Trust by Accumulating Positive Outcomes

### Project name

Hartha Thermal Power Station Rehabilitation Project  
Signing of L/A: February 2015,  
August 2017 (Phase 2)



Before rehabilitation

"Before rehabilitation, exhaust gas was leaking like a boiling kettle," says Mr. YAMAGUCHI. Power generation capacity was as low as 50-60% of the rated capacity.

After rehabilitation

Power generation capacity recovered the rated capacity of 200 megawatt. That is equivalent to the power needed for one million households in Japan.



When the operation first started after the rehabilitation, both Iraqi and Japanese staff showed their excitement with enthusiastic applause.

## Power Supply to the Entire Region with Japan's Support

LBasrah, the biggest city in Southern Iraq, has the Hartha Thermal Power Station constructed in 1982 through Japan's cooperation. It is an important facility, supplying power for the region, and its operation and maintenance were conducted by Iraqi engineers who learnt the technology from Japanese engineers. After the facility was damaged by the Gulf War, its power generation capacity was degrading due to aging and insufficient maintenance caused by shortages of materials during economic sanctions. In order to improve the situation, Iraq started rehabilitation of Unit 4 of the four power generation facility units gaining cooperation from JICA in 2015 (completed in 2017).

Currently, rehabilitation of Unit 1 is being conducted. "in the rehabilitation of Unit 4, the main pillars and other parts that can be used were preserved, and almost all essential parts for the power generation were replaced. We invite Iraqi mechanics to Japan and provide them with technical training for maintenance and operation at the local site," explains Mr. YAMAGUCHI Masayoshi of Mitsubishi Hitachi Power Systems, who is in charge of the project. The electronic control system introduced for the purpose of stable power supply received critical acclaim as it is easy to use. Accepting students from the nearby engineering college for training, we provided them with opportunities to learn about Japan's latest technology. During the rehabilitation project, large material transportation was sometimes stopped at customs or somewhere inside the country. Each time, the staff worked as one to overcome the delay. When the project was completed in time for the delivery date, many Iraqi people involved expressed their appreciation. Furthermore, the workers who became familiar with each other through the rehabilitation works of Unit 4 are now engaged in the work on Unit 1 together. Last year, Iraq and Japan celebrated the 80th anniversary of the establishment of diplomatic relations. During these 80 years, many Japanese businesses have cooperated in the development of Iraq. Accumulation of solid achievements has built up a strong trust.

Mr. YAMAGUCHI Masayoshi (Left)

### Mitsubishi Hitachi Power Systems (Present: Mitsubishi Power) Nagasaki Service Division Mr. YAMAGUCHI Masayoshi (Left)

In charge of the rehabilitation projects from 2015 "I often have a meal together with people from the Iraqi Ministry of Electricity and local workers in order to facilitate a communication with each other. Some Japanese staff also enjoy playing futsal or basketball with them." He is in the photo with Mr. Mahmoud Abdul-Razzaq IBRAHIM, whom he has worked with for many years.



### Column

## Iraq Advancing! Infrastructure Improvement supported by Japan

As Iraq frequently suffered conflicts and ISIL's invasion, the renovation of aging infrastructure facilities has stalled progress. JICA is also making efforts to provide assistance through the Special Terms for Economic Partnership (STEP), which enables utilization of Japanese technology.

The capability of the refinery facilities has declined due to aging and war, which forced Iraq to import oil products in spite of being an oil producer. Iraq's economic recovery is propelled by upgrading the Basrah Refinery in southern Iraq and then increasing domestic production of quality oil products that conforms with modern environmental standards.



**Project name** Basrah Refinery Upgrading Project  
Signing of L/A: October 2012 (I), June 2019 (II)



**Project name** Sewerage Construction Project in Kurdistan Region (I)  
Signing of L/A: June 2015

Erbil city, the capital of the Kurdistan region in Northern Iraq, is rapidly being urbanized. However, the city has yet to improve the sewerage plant. This project aims to improve the hygienic environment by creating the sewerage system in Erbil city.

Video footage of the Iraq projects is open to the public on JICA's YouTube page!  
<https://youtu.be/hv8yBrzMOTY>



# Expanding Circle of Cooperation

In the Middle East, there are ODA graduate countries and developing countries, aiming to achieve independence and development, are deepening mutual cooperation, and further expanding the circle of cooperation to include the Africa region. JICA, utilizing its years of experience, is providing indirect assistance to such efforts.



Left: Younger staff of the Ministry of Finance or the Central Bank of each country participated in the seminar. Right: People from the AMF, Central Bank of Egypt, Japanese banks and JICA participated in the seminar.

## Capacity development in the field of finance and monetary sector Cooperation between JICA and the Arab Monetary Fund

Article: Mr. MITSUISHI Tatsuya

The Arab Monetary Fund (AMF), to which 22 Arab countries belong, is an international institution that promotes integration and development of the Arabic economy. It lends short- and medium-term loans to the member countries, provides policy guidance, develops human resources, and conducts other activities. Since signing the Memorandum of Understanding with JICA in 2014, the joint seminar which is held annually is participated by 30-40 people, including younger officials of the Ministry of Finance, younger bankers of the central banks, etc. in each country. In November 2019, a seminar on "Employment creation through industrial development" was held in Cairo in Egypt, which is one of the member countries. For this seminar, three lecturers were sent from the Tokyo and the London offices of Sumitomo Mitsui Banking Corporation (SMBC). They provided three different

sessions, one of them being "Financial assistance programs for Small and Medium Enterprises" in which 10 lectures were provided during the five-day period. Mr. BABA Kenji, the Chief Representative of SMBC Cairo Representative Office, arranged the lecturers and said, "SMBC participated in the seminar for the first time. As JICA requested, we explained Japan's current circumstances as they are, such as details of loan inspections of Japanese small and medium enterprises. Many questions were raised by the participants, and we felt their enthusiasm. We are also highly interested in the development of industry and the financial markets in Arab countries as there is a solid base of the young generation. We could successfully call their attention to our desire for building a closer relationship in the future."

**1 Islamic Republic of Iran**

- **Population:** approx. 80 million people (2016, the State of the World Population 2016)
- **Currency:** Rial
- **Language:** Persian, Turkish, Kurdish, etc.

**2 Republic of Iraq**

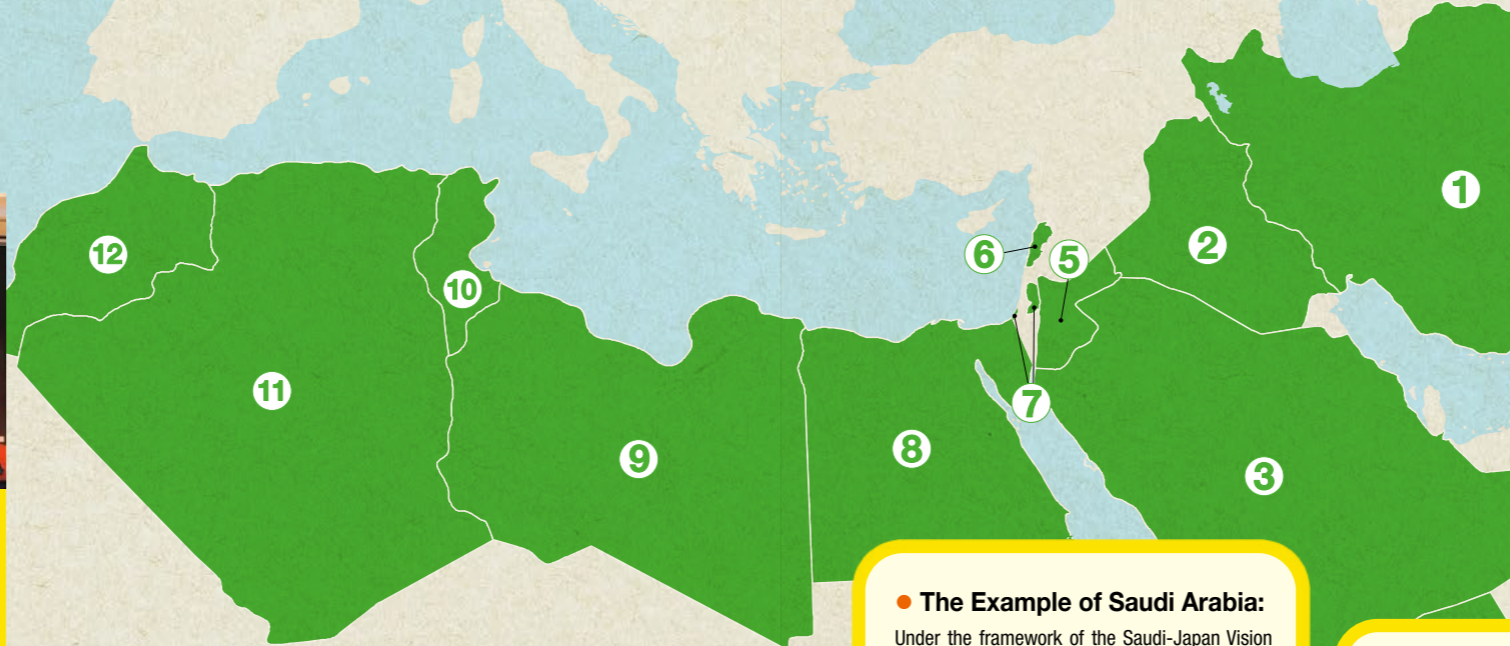
- **Population:** approx. 38.43 million people (2018, the World Bank)
- **Currency:** Iraqi Dinar
- **Language:** Arabic, Kurdish, etc.

**3 Kingdom of Saudi Arabia**

- **Population:** approx. 33.7 million people (2018, the World Bank)
- **Currency:** Saudi Arabia Riyal
- **Language:** Arabic

**4 Republic of Yemen**

- **Population:** approx. 28.92 million people (2018, the United Nations)
- **Currency:** Yemen Rial
- **Language:** Arabic



## The 4th African Kaizen Annual Conference was held in Tunisia

In addition to participants from Africa, more than 200 persons participated in the ceremony from 17 countries across Asia, South America, and other regions.

JICA has supported the promotion of Japanese-style *kaizen* (improvement) activities, which always pursue quality improvement of products/services/work in the industrial field across 30 countries, making a huge contribution to quality/productivity improvement throughout the world. In Tunisia, JICA has provided technical cooperation for quality and productivity improvement since 2006 with dramatic outcomes. For example, productivity of the businesses which participated in the *kaizen* activities rose more than twofold, and the fraction defective of these businesses decreased by half. In June 24-26 in 2019, the 4th African *Kaizen* Annual Conference 2019 was held in Tunisia. Approximately 200 people participated in the conference from the 17 countries where JICA helped to promote *kaizen* activities to share knowledge concerning success-

ful cases in each country and to inspect good-standing businesses. In the conference, the Africa *Kaizen* Award was held to present awards to businesses/organizations which delivered excellent outcomes concerning *kaizen* activities. The Award was participated by 16 bodies from eight countries in the Africa region. From Tunisia, two businesses participated, and one received an Excellence award. The A to Z Textile Mills of Tanzania, as well as an Ethiopian company, won the Outstanding level award. The company's noticeable achievements in cost reduction through *kaizen* activities, reviewing of employees' salary, etc., were recognized. "I would like to make further efforts to promote *kaizen* activities in my country," Mr. Ruben Zebedayo LYANGA of the A to Z Textile Mills boldly stated in the awarding ceremony.

## Continued Assistance for ODA Graduate Countries Technical Cooperation on a Cost-sharing Basis

In Saudi Arabia and other Gulf countries that produce oil, the income level has improved as their crude oil export earnings increase and are no longer included in the targeted ODA countries. However, industry development and human resource development in those countries remain a challenge, and they strongly desired Japan's continued technical cooperation. In 2010, Japan started providing Cost-Sharing Technical Cooperation to ODA graduate countries in the Middle East region, for which the beneficiary country pays part of the cost in order to flexibly respond to each country's development needs.

### ● The Example of Saudi Arabia:

Under the framework of the Saudi-Japan Vision 2030, which is a strategic partnership to promote economic prosperity and ensuring a sustainable future in both Saudi Arabia and Japan, Japan accepts administrative officers of Saudi Arabia as participants in its thematic training. For the purpose of improving educational quality through Lesson Studies, high-level officials serving as advisers to the Ministry of Education participated in training on two occasions. Recently, educational modernization is being promoted by revising the curriculum, whilst respecting the religion. This is an example in which the outcome of the training is being reflected in practice.



Modernization of Education Learned from Japan

Officials of Saudi Arabia's Ministry of Education who are learning the Japanese method of education, explores how to provide a better educational environment.

## Supporting Mutual Learning among Developing Countries

### Third Country Training Program

Providing development assistance inside the region has advantages, including the positive influences of the similarity in language, culture, and climates, which enables the provision of training that is better suited to the circumstances of the beneficiary country. Here in the Middle East, Egypt and Jordan are regarded as comparatively developed country and they are sharing technology/knowledge on to the other developing countries. Japan is indirectly assisting such mutual cooperation among developing countries (Triangular Cooperation).



Participants in the Groundwater Management training. Participants came from Iraq, Yemen, Sudan and other countries in the Middle East and Africa regions.



Similarity of Climate Enables Mutual Learning

### ● The Example of Egypt

Many countries in the Middle East are suffering from water shortages. Appropriate water resource management, including promotion of more efficient water use, is a common challenge in the Middle East region. Egypt, which had received JICA's assistance in strengthening water management capacity, is now providing the other Middle Eastern countries with Third Country Training on groundwater management by utilizing knowledge that was acquired in previous assistance. In addition, rice cultivation training and other training are conducted. In this way, Egypt is extending cooperation with other neighboring countries with a similar climate.

**5 Hashemite Kingdom of Jordan**

- **Population:** approx. 9.956 million people (2018, the World Bank)
- **Currency:** Jordanian Dinar
- **Language:** Arabic and English

**6 Lebanese Republic**

- **Population:** approx. 6.1 million people (2018 Estimation, CIA)
- **Currency:** Lebanon Pound
- **Language:** Arabic, French, and English

**7 Palestinian Authority**

- **Population:** approx. 4.95 million people (2017, Palestinian Central Bureau of Statistics)
- **Currency:** N/A (Israeli shekel)
- **Language:** Arabic

**8 Arab Republic of Egypt**

- **Population:** approx. 98.42 million people (2018, the World Bank)
- **Currency:** Egyptian Pound
- **Language:** Arabic and English

**9 Libya**

- **Population:** approx. 6.68 million people (2018, the World Bank)
- **Currency:** Libyan Dinar
- **Language:** Arabic

**10 Republic of Tunisia**

- **Population:** approx. 11.57 million people (2018, the World Bank)
- **Currency:** Tunisian Dinar
- **Language:** Arabic and French

**11 People's Democratic Republic of Algeria**

- **Population:** approx. 42.2 million people (2018, the National Office of Statistics, Algeria)
- **Currency:** Algerian Dinar
- **Language:** Arabic, Berber, and French

**12 Kingdom of Morocco**

- **Population:** approx. 36.03 million people (2018, the World Bank)
- **Currency:** Moroccan Dirham
- **Language:** Arabic, Berber, and French

\* Map representation is used only for illustrative purpose. It does not indicate the legal state of each country or region, nor JICA's view concerning national boundaries. Although the five countries of Egypt, Libya, Tunisia, Algeria, and Morocco are located in the African continent, JICA categorizes those countries as part of the Middle East.



Students join a JICA-sponsored business get-together to seek job opportunities. They listen attentively to briefings by companies they might be joining after graduation.

## Developing Human Resources Who Will Create Tomorrow's Syria

Article: Ms. KUBOTA Mari

**Project name** Japanese Initiative for the Future of Syrian Refugees (JISR)  
November 2016-March 2025



The Syrian students undergo a month-long orientation to familiarize themselves with the customs, traffic rules, and disaster responses in Japan in addition to a language course.

# Pursuing a Society Where People Can Live in Peace

To live every day in peace is a fundamental right of all people. There has been many support and assistance to people who had to flee from their homeland and people in need of assistance, so that everyone can live in peace.

### JISR means "Bridge"

Japanese Initiative for the future of Syrian Refugees

JISR is an acronym for the title of the human resource development project: Japanese Initiative for the Future of Syrian Refugees. It means also "Bridge" in Arabic.

### Offering Learning Opportunities to Refugees

The Arab Spring, the democratic movement that started in Tunisia, spread across many other countries in the Middle East, causing a civil war in Syria in 2011. As a result, approximately 5.55 million people\* are now living as refugees in and outside of Syria. In the face of the increasing number of refugees and the prolonged conflict, JICA launched the Japanese Initiative for the Future of Syrian Refugees (JISR). The program aims to offer education opportunities to Syrian youths who

have been deprived of such opportunities at home and to develop human resources who will lead the future of their homeland after the civil war ends. The project is designed to invite a maximum of 100 Syrians living as refugees in Lebanon or Jordan to Japan in five separate groups. Since August 2017 to date, 51 students came in three rounds. JICA assistance is provided for up to three years, allowing the time to acquire the Japanese language and to earn a master's degree.

### Focused on Environmental Protection

The Syrian students are enrolled to Ashikaga University, Hiroshima University, and 10 other universities across Japan. Mr. Anas Mr. HIJAZI (hereinafter, Mr. HIJAZI), one of the third-round students, studies at the Soka University Graduate School of Engineering as a visiting researcher. He is expected to be formally enrolled into the Environmental Engineering for Symbiosis course this coming autumn. He is very busy learning the Japanese language and conducting his own research. He says he grew up in a family that



With his friends, Mr. HIJAZI cooked Syrian dishes at the campus festival. Enjoying the school life, while studying hard.



Soka University Faculty of Science and Engineering  
Academic Matters Division, Administration Office  
**Mr. Chia E-SIN**

Taking good care of international students at Soka University in both academic and campus life. "For international students, finding a job in Japan is not easy. I would like to help as much as I can".



Mr. HIJAZI making remarks on behalf of the third-round students at the farewell party in Beirut. He shared his aspiration to study environmental protection. (Please see Page 35 for details about the farewell party in Lebanon.)



embraces Mother Nature as the source of human life, which has led him to be passionate about environment issues. "In the Middle East, especially in Syria, changes in the consumption pattern have led to a rise in waste management problems. Wastewater, soil contamination and other problems pose heavy burdens on the environment. They must be addressed urgently," says Mr. HIJAZI, enthusiastically. Soka University has received seven students from Syria. Mr. Chia E-sin, a staff member of the School of Engineering, says: "the Syrian students are cheerful and hardworking. Their strong desire to research

despite the hardship at home is having a positive impact on fellow Japanese students." Language courses are offered flexibly according to the level of the individual students in collaboration with the University's Japan Studies Center. Special attention is also paid to the native culture and customs of the students, for example, the university has made a dedicated prayer room."

### Supporting the Future Generations of Syria through the provision of work experience

All of the 19 program participants who

arrived in the first round showed interest in living in Japan, though they are determined to help rebuild their homeland when the current instability is over. Some of them are taking a master's course, while others have completed the course and are either working, taking an internship, or looking for a job in Japan.

The Syrian program participants and ex-participants work hard every day at school and at their workplace with a strong desire to one day positively contribute to the future of their country. Furthermore, they are also seen as a bridge between Syria and Japan.



Houses are too old to be safe!



A normal scenery in the streets of the refugee camp were children play and vendors open their stall. From the continuous additions and renovations, the buildings are too old to be safe.



Come and play together, everyone!

Many children have been disabled by the conflict. A balloon slide is donated by JICA for disabled children to play with other kids in the playground.

## Residents Taking Ownership of the Refugee Camp

Children run after a football through narrow alleys, where vegetables and fruits are sold from vending stalls. At first glance, this is a usual street scene, but I am in the Old Askar Refugee Camp in the West Bank of the Jordan River in Palestine. Around 70 years have passed since the camp was installed. The refugees are in the third or fourth generation and the population has increased. The shelters and buildings are crowded and old. This is one of the 24 refugee camps\* in the West Bank, all of which suffer from unemployment, poverty, and other social problems. However, there were no form of governance to represent the residents' voice for problem solving. "There were voices raised in the past, wanting to improve the camp. But we did not have any system



Towards a community creation through citizens participation

Members of Old Askar Refugee Camp CIF. 20 members each represent the elderly, women, youth, disabled and other groups.



Palestine

## Making the Refugee Camp Safer

Article: Mr. MITSUISHI Tatsuya Photography: Mr. ABE Yusuke

Project name

Refugee Camp Improvement Project in Palestine  
December 2016-December 2019

Improving Maternal and Child Health / Reproductive Health in Palestine (Phase 2)  
November 2008-November 2012



"No violence!" Residents perform a drama based on actual incidents in the camp to enlighten fellow residents.



The kitchen has been renovated at the women's center for cooking and beauty classes. Female participants are happy because "the kitchen is cleaner and more convenient. More women is coming here than before."

to gather the opinions and discuss methods for a solution," says one resident who has long been managing the camp. Through JICA's support, a self-governing body named Camp Improvement Forum (CIF) was created in 2018. CIF is composed of representatives of the elderly, women, disabled, and other groups of residents who had not been able to be involved in the camp management. Listening to the voices of the residents and having many discussions, CIF has managed to improve the playground, and implement a women's center renovation, raising awareness of residents, etc. Mr. Yaser Abu KISHK, General Director of Camp Affairs, Department of Refugee Affairs, remarks the increase of citizen participation awareness by saying: "Now everyone recognizes that he/she is a member of the camp." The project was implemented



General Director of Camp Affairs, Department of Refugee Affairs, Palestinian Liberation Organization  
**Mr. Yaser Abu KISHK**

In 2018, he visited a tsunami-stricken site of the Great East Japan Earthquake. "In the past, women, the disabled, and other socially vulnerable people had no place to speak up. Today, however, everyone can express his/her own thoughts and we can listen to them. This is not just a slogan. We actually practice it."

in three different refugee camps and was completed in December last year. Now the challenge is whether the experiences of resident's participation can be expanded and shared by other refugee camps.

## Maternal and Child Health Record Book: a Japanese Invention

### Refugees Have Developed a Smartphone App Version

The Japanese system of a maternal and child health handbook has been introduced to many countries around the world through JICA's support on maternal and children's health. It first started in Palestine, in the West Bank in 2008, followed by refugee camps in Jordan, Syria, and other neighboring countries. Even after the implementation of JICA's project on "Improving Maternal and Child Health" in Palestine, the mothers and children continue to benefit from using their health handbooks. More recently, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), which provides social services to Palestinian refugees, has developed a smartphone app which is based on the Japanese maternal and child health handbook.

JICA cooperated with the UNRWA effort to help spread the use of this app. The data from the health check of the infants and toddlers such as height and weight can be recorded and stored in the Cloud. The app came into use in the Old Askar RC Clinic in May 2019 and is now

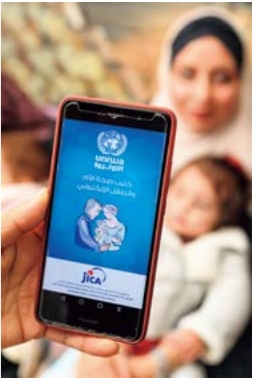
Special Feature

The Middle East  
Strengthening Ties with Japan



Ms. Madeha Bassam OBAID (right), head of the CIF Youth Group  
"I used to hesitate to go out or attend school because I grew up in a very traditional conservative community. But since I was invited to join the CIF, I can express myself more at ease."

The app version of the handbook is linked to the UNRWA's E-Health electronic medical card system. Non-home doctors can see the health data of the mother and the child.



The data of the baby's health can be recorded here



The paper booklet is treasured, too. Mothers often consult the handbook. "I read through the entire handbook on the very first day I received the copy. It contains a lot of useful information, some of which I hesitate to ask the nurse about." "This booklet is a very good teacher. It explains what to expect when the teeth start to come out or what care I should take when my child starts walking."

We developed the MCH handbook app.

UNRWA Clinic  
**Dr. Khalid SHILBAYEH**

Director, Old Askar Refugee Camp Clinic  
"The app version reminds the mother of the medical appointment one day in advance. This function eliminates the long wait at the clinic and helps the doctor to provide medical services more efficiently. Currently, a similar app is being developed for patients with lifestyle diseases."



being used across other camps in the West Bank. Mothers expressed their contentment with the app since "even when I forgot to bring the booklet with me, I can easily look up the height, weight, and other growth data of my child."

A refugee himself, Dr. Khalid SHILBAYEH of the UNRWA Clinic who led the development of the app says: "according to our survey, 85% of the refugee mothers have a smartphone. It is very important that they can access the data wherever they may move to in the future." The support that Japan extended to the refugee camp in Palestine has been adapted well locally and has been part of the maternal and children health in the area.



# The Spirit of The Young

The Middle East has many young people and there are high hopes for the future. However for this, the education level needs to be raised, the industrial structure to be diversified, and employment opportunities to be enhanced. JICA stands behind the young generation young generation through the provision of many projects and programs.

Article: Mr. MITSUISHI Tatsuya  
Photography: Mr. ABE Yusuke

Jordan is not particularly blessed with natural resources and is undergoing economic hardship because of the political instabilities in the neighboring countries along with the inflow of refugees. Over 70% of the population is under 30 years of age, and the unemployment ratio of this age group is said to be over twice the world average.

Ms. KASAI Chikako (hereinafter, Ms. KASAI) (PADECO Co., Ltd.), a JICA expert, points out the traditional social practice as a reason for the high turnover ratio.

“The young people of Jordan take it for granted that their parents decide their future education and job, and they must simply obey. But in reality, the job they chose following the parents’ decision is not what they really liked, so eventually they leave the job.”

To change the situation, JICA launched a project in 2017 to develop career counselors who will sit down with the youths and listen to what they really want to do. The Six Steps of Career Counseling, which is used in Japan’s national qualification program for career consultant, was introduced. The most basic step is the first step: Understanding yourself. “While consulting with the career counselor, young job seekers starts to realize what kind of work he or she is truly interested in,” says Ms. KASAI.

Ms. Samira ZABAIDI, career counselor at the Amman 1 Employment Office, says: “I



Ms. Sondos Saleh ALKISWANI (right), the career counselor of the University of Petra who participated in the project, provides counselling to a student.

used to tell the job seeker that he/she should get this job or that. Now that I have understood what is required for the career counselor, and I realized that I was doing it the wrong way.” I now concentrate on creating an environment where the job seeker can speak more at ease.” She told us that she has learned to change the approach.

As a part of the project, joint job fairs and internship programs have been organized. In the University of Petra in the suburbs of Amman, approx. 2,200 of the total students of 7,200 attended such activities. An increasing number of young people are thinking about their future more seriously.



**Amman 1 Employment Office**  
Career counselor and career counseling trainer  
**Ms. Samira Zabaidi**

“In career counseling, I welcome the student and the job seeker with a smile. And I try to listen patiently. This experience has changed my character, too. I am a more cheerful.”



**Deputy Team Leader of the Project (PADECO Co., Ltd.)**  
**Ms. KASAI Chikako**

“I am working on creating a network where students can consult with alumni. The alumni are also enthusiastic because they want to help their alma mater.”



A poster which students draw their aspirations. The students are free to write down their ideas such as “the best programmer in the Middle East,” “Lawyer,” and “Fashion model”



Six Steps of Career Counseling: 1) Understanding of Self, 2) Understanding of Job, 3) Experience of enlightening, 4) Decision making for future life plan and target, 5) Action taking for choosing a job, looking for a job and capacity development, and 6) Adaptation to a new job



The building of National Library and Archives of Egypt stands alongside the Nile in central Cairo. A room dedicated to DAISY books will be opened by the end of this year.



## Promoting Education Through Lowering Reading Barriers

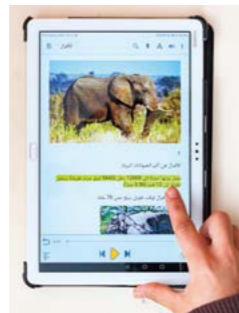
Article: Mr. MITSUISHI Tatsuya  
Photography: Mr. ABE Yusuke

### Project name

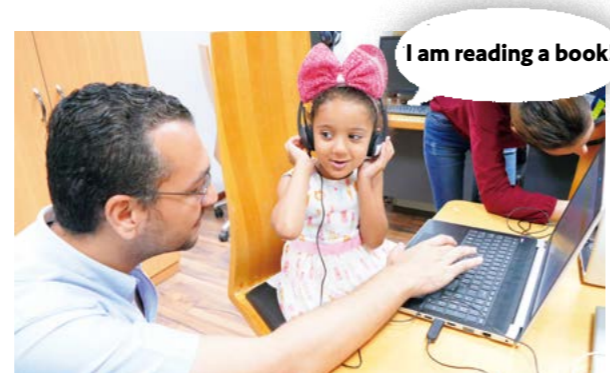
Project for Improvement of Inclusion of Persons with Disabilities through Improvement of Information Accessibility  
March 2019-March 2021



Ms. Fouda Wahid HASSAN of the National Library and Archives of Egypt, who took part in the training under the project, creates a DAISY book, using the PLEXTALK Producer software developed in Japan and adapted into Arabic.



With DAISY, the reader can highlight the section he or she wants to read or to be read by audio. A wide selection of font colors, font sizes, and backgrounds is available for various types of persons with a reading disability.



Many workshops have been held to offer the DAISY experience to children. The children were all smiling after reading picture books, animal and insect books and others.

### The Joy of Book Reading for Everyone Making DAISY Widely Available in Egypt

Some people have a reading disability; they find it hard to read texts printed on paper. The causes are varied: visual impairment, dyslexia (developmental reading/writing disability), cerebral infarction from stroke or car accident, or physical disability in moving the arms or eyeballs. The Digital Accessible Information System (DAISY) is an internationally recognized standard to synchronize text and images for replay on computers and tablets for the convenience of such disabled persons. Many DAISY books are used widely in Japan and other countries as a pastime as well as for learning.

In Egypt, some 20% of primary education students drop out, and the illiteracy rate had reached 25%.

Teaching programs designed for disabled children were very limited and DAISY was not readily available to help them learn.

Shinano Kenshi Co., Ltd. (ASPINA), a Japanese company headquartered in Nagano making

welfare-related equipment and other products, has succeeded in developing the world’s first Arabic-based DAISY book production software PLEXTALK Producer in partnership with JICA. The JICA project was launched in March 2019 using this software to develop human resources to create Arabian language DAISY books. As of now, 18 officials of the National Library and Archives of Egypt participated in the training program, and 24 more are scheduled to join by June 2020. As a result, new DAISY books in Arabic are being created.

One of the program participants, Mr. Hussam HASSAN says with a strong sense of responsibility: “the children who read the DAISY books in the workshop were very excited that these books were easy to read. The Egyptian government has begun to extend more assistance to the disabled people in the field of information accessibility to which this project pertains. Going forward, we hope this project in Egypt becomes a start of a new wave in offering this type of educational assistance in other Arab countries.”



Mr. Hussam HASSAN, Ms. Fouda Wahid HASSAN, Ms. HEND MUHAMMAD HASSAN (from left) of the National Library and Archives of Egypt who received training in DAISY book making. They learnt how to use the software, including synchronization of texts and voices in the first five days of the course. Then, they spent the next two months creating their own DAISY book.

### Chief Advisor Mr. KAWAMURA Hiroshi

Mr. KAWAMURA is a leading DAISY developer in Japan. He is also Vice Chair of Assistive Technology Development Organization (ATDO), an NPO engaged in the extension of DAISY. “The project has just begun in Egypt. More staff members are needed, and more DAISY books need to be published. I am however encouraged by the hard work of the Egyptian members, and I am optimistic that more DAISY will be made available to many people soon.”



In Egypt, the number of college students has increased so dramatically that the ratio of students per teaching staff has jumped, resulting in deterioration of the education level. Most of the college classes are lectures, and not many experiments or research can not be done because of the lack of equipment and supplies. In 2010, the Egyptian government founded the Egypt-Japan University of Science and Technology (E-JUST) based on the concept of “small-size, graduate school and research-oriented, and practical education of an international standard.” With JICA’s cooperation, E-JUST has been working with numerous Japanese universities to create a university characterized by the advantages of Japanese science and technology education.

E-JUST has produced 164 doctors and 108 masters in engineering. E-JUST achieved first rank in International publication per researcher per year among Egyptian University in 2016. In September 2017, the undergraduate program of Faculty of Engineering and the Faculty of International Business and Humanities were newly established. In addition, networking with the industry has been pursued. The foundation of innovation which accelerates the growth and development of Egypt is being prepared. E-JUST attracts not only students within Egypt; students also come from other Middle Eastern and African countries. The human resources that have been developed with JICA’s cooperation will certainly be an asset for Japan as well.



The new campus that opened in November 2019. A truly international environment with many students from the Middle East and Africa.



## Egypt Education Leads to Future Innovation

### Project name

Egypt-Japan University of Science and Technology (E-JUST)  
Project Phase 3  
February 2019-January 2024



E-JUST emphasizes development of capacities for practical and creative research. Small-class education integrating lectures, exercises, and experiments is the standard.



### A 3rd year undergraduate at the Faculty of Engineering, E-JUST Ms. Rahma Mohamed Elbehary

“At first, I was a little nervous about going to a very young university like E-JUST. But I finally decided to apply after I learned that it embodied the education system of Japan, a world leader in science and technology. I major in industrial manufacturing engineering. The lab is fully equipped with equipment made available thanks to the assistance

from Japan. I have no difficulties at all with my research. E-JUST has partnership agreements with many universities in Japan. I can really feel that many opportunities are open to me after graduation. Eventually, I plan to further my studies by pursuing a Master degree and eventually set up my own company.”

Together we will build  
a place where young  
people can enjoy  
working

Economic and production activities have stagnated in the Gaza Strip due to the restriction on the flow of people and goods over many years. While there is existing talent (over 50% of high school graduate continue to college), 7 out of 10 young people are jobless and have no hope for a future career.

One company, Monstarlab (a Japanese digital consulting firm that has been operating globally), is trying to overturn the situation by creating jobs. Monstarlab was chosen in 2017 for JICA’s feasibility survey for SDGs business, and has been engaged in various studies for possible business launch in Gaza. Monstarlab CEO Mr. INAGAWA Hiroki says: “one major strength of IT\*1 is that one can do business without moving people or goods. Jobs could be created under an enclosed environment.” “Needless to say, the Palestine issue must be solved through a political process. But we would not be able to solve the immediate problems in front of us if we waited for a political solution. We are still at a stage of exploring possible ways to launch a preliminary business. Eventually, however, we hope to form an organization from which entrepreneurs and engineers will help improve the life of local people.”



## Palestine

# Creating Job Opportunities in Gaza Through IT

### Project name

Feasibility Survey for SDGs Business on Software Development for Economic Independence of Refugee and Young People through Employment and Technical Training on IT Product Development June 2018-June 2020



A meeting with the Palestine Authority officials. The flow of people and goods are restricted in and out of the Gaza Strip. Along with these circumstances the political factors make it extremely difficult for foreign companies to operate businesses here.



Palestine college students studying IT. “They are so willing to learn new technologies,” says Mr. INAGAWA.

\*2 An open, jointly shared working base for startups and engineers. Technologies and information are actively exchanged.



Some members of Unicharm Egypt. The two on the left are trainees Mr. Romari SHUKRI and Mr. Hatem MOHAMED. Far right is Mr. MIYAKE Osamu, Factory Manager.



Unicharm Egypt Plant. Unicharm’s second plant in the Middle East after Saudi Arabia.

## Obour Industrial secondary school × Unicharm

Graduates of technical secondary schools in Egypt find it difficult to get a job (in 2017, their unemployment rate was 42.7%). Most classes are lectures, and students have few opportunities for practical exercise. As a result, many of them fail to learn the importance of punctuality and other work discipline. Even if a graduate is lucky enough to find a job, his/her unpreparedness for work results in early departure and hence the high unemployment rate. With this in mind, JICA launched in 2017 a technical cooperation project to introduce a Japanese-style education that emphasizes practical lessons, safety management, and the “3Ss” (sorting out, set in order, and shine). As a part of the project, JICA helps to provide training opportunities for technical school students at industrial companies which deepens the link between the two.

### Training at a Japanese Company

Unicharm Corporation, a Japan-based producer of disposable diapers and other sanitary goods, has operated in an Egyptian plant since 2013. Its 600 employees are Egyptians with only a few exceptions. Currently, 47 trainees are working at the plant from the nearby Obour Industrial secondary school. They study at the school for two or three days a week and receive training at the plant on other days. They get paid for their service. The Factory Manager, Mr. MIYAKE Osamu, says: “initially we suffered from a high turnover. Lack of punctuality, cleaning and other basic routines, and a low work ethic were becoming a problem, and not many employees stayed with us. I thought

The students work two days a week in the factory as trainees. They welcome this experience, saying: “we can practice what we learnt in school immediately.”



## Elaraby School for Applied Technology × Elaraby



### Elaraby Chairman and CEO Mr. Mohamed EL-ARABY

Through the Japanese-style education, the students learn the importance of discipline, personal development and family value. We are proud of them. I plan to build a new school for applied technology twice as large as the one now in another industrial complex of our group.



A machinery class at the Elaraby School for Applied Technology. The curriculum includes many practical exercises. In the back is Mr. MIYAMOTO Shigeru, a JICA expert.



Students working at the production line of Toshiba washing machines.

In the future,  
I want to become  
a successful  
engineer.

that education and training would be more effective on younger people and we started receiving student trainees. They are highly motivated and excellent.” With bright eyes, Mr. Hatem MOHAMED, a trainee says: “at first, I was a bit uncomfortable with the early starting time in the morning and the uniform, but now I know that they are necessary and most effective. Since I can put theory into practice at the factory, the knowledge stays with me.”

### Eagerness to Learn and Absorb

Elaraby is a major OEM manufacturer of appliances working together with Toshiba, Sharp, and 12 other world-famous compa-

# \ Graduates Ready to Work / Egypt’s Technical Secondary School × Companies Fostering Talented Young People

For the society to benefit from the younger generation, the human resource development effort is progressing between Egypt’s Technical Secondary School and companies.

Article: Mr. MITSUISHI Tatsuya Photography: Mr. ABE Yusuke

### Project name

Project for Enhancement of Technical Secondary Education  
April 2017-December 2020



Elaraby School for Applied Technology was built in the premises of Elaraby, which JICA provided support

nies. In November 2018, it built the Elaraby School for Applied Technology in one of its industrial complexes in collaboration with JICA project. Today, some 300 students study at the school and also work at the factory. JICA expert Mr. MIYAMOTO Shigeru is a retired teacher of a technical high school in Japan and now helps the Egyptian school teachers in teaching. He is deeply impressed with the students’ enthusiasm to learn. “Both the teaching staff and the students are so eager to absorb new knowledge and knowhow.” The industrial capacity building project is indeed functioning as an engine in supporting the activities of Japanese companies operating in Egypt and the growth of the entire economy of the country.

# Business Opportunities in the Middle East

In recent years, there have been changes in the Middle Eastern business scene, where resources such as oil had been the mainstream of business products for Japanese companies. Different areas of businesses have been expanding, such as IT and business for principle products in the region. Here are some efforts for developing infrastructure, policies and systems to support business, for harnessing the ability of private companies, and for nurturing new businesses through industry-government-academia cooperation.

## Supporting Business through Developing Policies, Regulations and Infrastructure

It is difficult for a company to expand in the region without basic infrastructure, including electricity, water, and roads. Furthermore, if an area has an inadequate business environment, it will keep companies away. Here we introduce, JICA's cooperation in improving people's lives and in fostering local businesses.

### Jordan **Stable Power Supply from One of the Largest-Scale Solar Power Plants in the World**

**Project name** Fiscal Consolidation Development Policy Loan, March 2014  
Fiscal and Public Service Reform Development Policy Loan, May 2015  
Financial Sector, Business Environment and Public Service Reform Development Policy Loan, December 2016  
Business Environment, Employment and Fiscal Sustainability Reform Development Policy Loan, November 2018  
Private-Sector Investment Finance (PSIF) Loan Contract for the Al-Muwaqqar Solar Energy Project, January 2018-March 2020

Under the development policy loans to Jordan, various improvement targets for business enhancement were set in policies and systems by the Jordan government, in areas of finance, investment and trade. Among them, system improvement also has been conducted to progress public infrastructure development through public-private partnerships.

These ODA loans supported the development of public-private partnership system. Under the system, JICA is funding

overseas investment with the International Finance Corporation for the Solar Energy Project (Al-Muwaqqar, Amman Province), which is one of the largest in Jordan, by a private independent power producer. With this project, the power supply will become stabilized, and revitalization of private business is expected. Also, it will lead to an improvement of local residents' lives, including refugees from Palestine, Iraq, and Syria.



The signing ceremony for the ODA loan contract in November 2018

### Tunisia **Steady Water Supply to a Large Metropolitan Area**

**Project name** Sfax Sea Water Desalination Plant Construction Project From July 2017

Sfax is the second largest city in Tunisia, located in the middle of the country, and forms a large metropolitan area with a population of approximately 600,000 people (as of 2015). However, they rely on the water supply from other areas because of the low precipitation rate, the low river and underground water levels. As population increases, a severe water shortage is forecasted. Therefore, a steady water supply is an urgent issue that needs to be addressed. Accordingly, JICA's international ODA Loan Project has been operating to develop facilities for desalinating abundant seawater to continuously supply safe drinking water. The project is expected to lead to an improvement of Sfax residents' lives and also contribute to the business environment for local companies.



Underground water desalination plant developed in Medenine Province in southern Tunisia by Japan's grant aid (2010-2013) as a similar project.

## Leveraging the Strengths of the Private Companies

To support companies that try to expand for business opportunities, JICA conducts various levels of private sector partnership projects, including information gathering, business model formation, and model verification. Here are some projects which help to address local issues and to grow industries. Also, they may become a trigger to develop a new market for Japanese companies.

### Tunisia **Arenabio Co., Ltd. (Ibaraki)**

#### Branding of Olive Oil

Olives are a specialty product in Tunisia, a country located in the Mediterranean coast. Under the JICA's BOP Business Cooperation Promotion Project, Arenabio has researched potential high-value-added product development using high-function Tunisian olives since 2015. The CEO of Arenabio, Ms. TAKAHASHI Mariko said, "the high-polyphenol-content olive oil has a strong pungent taste. Also, it is not known in general that olives are grown in Tunisia. For those reasons, I felt that selling and developing olive oil with this very characteristic flavor would be really hard." Meanwhile, a large food production company has started a discussion about selling Tunisian olive oil, and Arenabio took the opportunity and planned test sales in Japan in 2020. Now, they are preparing for a full introduction to

**Project name** Preparatory Survey for BOP Business on Product Development of High Functional Tunisian Olives in Tunisia (BOP Business Cooperation Promotion Project) April 2015-July 2017



Harvesting at an olive farm that trades with Arenabio

the Japanese market. In addition, a company in Shodo-shima island introduced a processing technology for olive leaves, which were unused in Tunisia, and this introduction contributed to the creation of a new industry. Now, a fish farming company in Shodo-shima island is importing olive leaves to mix with feed for the branded fish, Olive Hamachi (Yellowtail). "Because Tunisian olive farming is basically chemical-free, it has high credibility. Even after the instability of the Arab Spring, we visited Tunisia continuously and have built trusting relationships with local companies. We will keep delivering Tunisian products in good quality to Japan."



**We would love you to taste the Tunisian olive oil.**

The Director of Arenabio **Ms. TAKAHASHI Mariko**

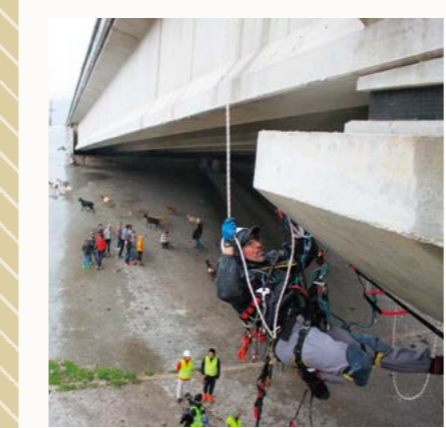
### Morocco **Hanshin Expressway Co. Ltd. (Osaka), Tokusyu Kousyo Gijutsu Inc. (Kyoto)**

#### Managing Infrastructure Using Japanese Technology



Ninja-tech qualification training in Kyoto

**Project name** Collaboration Program with the Private Sector for Disseminating Japanese Technology for Structural Inspection Using Rope Gears, "Ninja-Tech" March 2016-December 2017



On-site training at a bridge in Morocco.

Hanshin Expressway (HEX) uses Ninja-tech developed by Tokusyu Kousyo Gijutsu (TKG) as a technical tool of highway maintenance. Ninja-tech can inspect, test and repair long and high bridges without scaffolding or special vehicle. HEX and TKG are promoting Ninja-tech together to enhance bridge maintenance system for Societe Nationale des Autoroutes du Maroc (ADM) in Morocco. ADM has operated arterial inter-city expressway network for over 25 years and was seeking for a reliable maintenance technology for aging but important bridges on the network. Through the technical dialogues, ADM found that Ninja-tech matched the critical need. As of now, seven engineers mastered and acquired the license of Ninja-tech through a long and hard training including the participation of actual inspection works at both HEX and ADM bridges. In parallel to the Ninja-tech skill transfer, HEX got a

technical advisory contract directly from ADM, in which both companies are cooperating for further improvement of bridge maintenance and management capacity. "ADM has already realized and started to be ready for the rising needs of infrastructure maintenance in the future. This motivation has led them to acquire Ninja-Tech technology," said Mr. NISHIBAYASHI Motohiko (hereinafter, Mr. NISHIBAYASHI), Director of the International Business and Cooperation Office of HEX. HEX and TKG are currently proceeding with discussions for joint business scheme with ADM on conducting structural maintenance in Morocco. Mr. NISHIBAYASHI emphasizes that "we believe that this tripartite business scheme will dedicate the better maintenance of not only road bridges in Morocco but also other infrastructures like railway. Furthermore, we have a long-term vision of expanding the business arena beyond the border to other African nations. The potential is quite high"

**We are working together for keeping every Infrastructure assets in Morocco in good shape!**



Director of the International Business and Cooperation Office, Engineering Department, Hanshin Expressway **Mr. NISHIBAYASHI Motohiko**

Morocco



**Eco-stage Engineering Co., Ltd. (Fukuoka)**

**Recycling Olive Oil Residue**

**Project name** Verification Survey with the Private Sector for Disseminating Japanese Technologies for Recycling of Olive Mill Waste by use of Oil Temperature Decompression Dryer  
February 2019-February 2022

The olive industry is one of the primary industries in Morocco and contributes to employment creation. However, there is the problem of residue and oil waste created by the extraction process which negatively impacts soil and rivers. It is hoped that Eco-Stage Engineering's Oil Temperature Decompression Drying Machine will provide a solution to the problem. "Olive residue after extracting oil will be recycled after a drying process and then used for things like fertilizer and livestock feed. The dehydration drying process is completed in a short time because of our unique technology," said Mr. NAKAZONO Eiji (hereinafter, Mr. NAKAZONO), the CEO of Eco-Stage Engineering.

The company has been engaged in the promotion and demonstration project since 2019. In the future, Mr. NAKAZONO will visit the site multiple times to train workers on how to operate the dryer installed in an industrial complex. "I would like Moroccan people to learn the actual operation method." In addition, he will aim for the facility to be used easily by everyone, especially workers of the olive oil extraction factory in the complex. "I hope this facility acts as a trigger to introduce our dryer to many factories and reduce the environmental impact. At the same time, I would like our project expand to Europe, the Middle East, and Africa."

**Leveraging the Strengths of the Private Companies**



Oil Temperature Decompression Drying Machine demonstration facility installed in the industrial complex.



**Morocco is an attractive country and a hub to expand into Europe**

The CEO of Eco-stage Engineering  
**Mr. NAKAZONO Eiji**



Fun learning with the Ninja character, Surala Ninja!

Egypt



**SuRaLa Net Co., Ltd. (Tokyo)**

**Improve learning ability with Information Technology**

**Project name** SDGs Business Model Formulation Survey with the Private Sector for Strengthening of Children's Mathematical Ability by e-Learning  
December 2019-October 2020

The Trends in International Mathematics and Science Study, which runs through primary and junior high school students all over the world, showed that the math results of Egyptian students (the second year of junior high school) were 24th out of 39 countries in 2015. Improvement in math ability has become their challenge. It is then, SuRaLa Net, the developer of Surala Ninja!, which is a learning system using information technology, spotted the potential of a new business. The company has achieved excellent results in Sri Lanka, Indonesia, India and other countries by establishing tutor centers to teach math using Surala Ninja!.

Mr. YUNOKAWA Takahiko, the CEO of SuRaLa Net, said with passion, "according to previous experiences, we were sure that the children would improve their achievements using Surala Ninja! across different countries. As we were seeking to expand our business in the Middle East and the sub-Saharan region, the project in Egypt would be a great place to start our next business venture." He visited Egypt in January and collected a wide range of opinions, including those from math experts, about the system's consistency with Egyptian curriculum guidelines and the necessity of the Arabic version. "We will definitely look closely at their learning outcomes and needs."



**Fun learning with Ninja characters**

The CEO, SuRaLa Net  
**Mr. YUNOKAWA Takahiko**

Morocco



**MARS Company (Gunma)**

**Contributing to the Fishing Industry with High-Level Refrigeration Technology**

**Project name** Verification Survey with the Private Sector for Disseminating Japanese Technologies for Adding Value to Fishery Products through the Introduction of the Advanced Refrigeration System  
October 2017-March 2020

Fishing is one of the primary industries in Morocco, and many fishery products are exported to Japan. However, product losses are frequent because freshness deteriorates at the preservation and transport stages. To provide fresher products and to reduce product loss, MARS Company is seeking a way to utilize high-level refrigeration technology in the Moroccan fishing industry to keep chilled products fresh at a high-level for a long period.

"In the research under the initiative of the Centre Spécialisé de Valorisation et Technologie des Produits de la Mer, Institut National de Recherche Halieutique (INRH CSVTPM), we discovered products could be kept fresh for around twice as long when compared to using an average refrigerator or when using ice," said Mr. ONO Masaki, the CEO of the company.

At a disseminating project after the sur-

vey, they conducted a seminar introducing the technology and product for government organizations and companies related to the fishing industry. "We received feedback that showed our technology and product are essential for the development of the fishing industry. After the seminar, we received many questions from companies and organizations who requested the installation of our product. I felt it was a great response." In February 2019, he gave a presentation at the largest fishing industry event in Africa as the first official presenter from a Japanese company. The presentation was for the industry's representatives not only from Morocco but also from across Africa, and it was about the company's high-level refrigeration technology. "Through our technology, we hope to contribute in improving the fishing industry in Morocco and eventually to the whole of Africa."



Above: Storing seafood in Kubaran, the high-level refrigeration equipment.



Below: Moroccan fishing industry workers putting seafood in boxes for storage.



MARS Company CEO  
**Mr. ONO Masaki**

**We contribute to industrial development and reduce product loss.**



**Developing New Businesses through Industry-Government-Academia Cooperation**

Utilizing technology and knowledge from higher education institutions and research organizations for industries contributes largely to economic growth and employment creation. To achieve this, cooperation from government and local communities is essential. Here is JICA's industry-government-academia cooperation.



Olives in Tunisia



At the university laboratory in the technology park, researching to discover the variety of functional elements in olives is carried out.



Biotechnology conference at the technology park through industry-academia cooperation.



International students from Tunisia studying at Isoda Laboratory in the University of Tsukuba.



Tunisia

**The First Technology Park in Tunisia to Connect Research and Business**

**Project name** Borj Cedria Science and Technology Park Development Project, 2005-2018  
Valorization of Bio-resources in Semi Arid and Arid Land for Regional Development (SATREPS), 2010-2015  
Project for Valorization of Bio-resources in Semi and Arid Land Based on Scientific Evidence for Creation of New Industry (SATREPS), 2016-2021  
Other projects: Technical Cooperation and Senior Volunteers

Borj Cedria Science and Technology Park, located in a suburb of the capital Tunis, is a base (technology park) for scientific and industrial technology with the functions of a higher education, research and development, and an industrial complex. In the technology park, the industry, government, and academia cooperate in the four fields of biotechnology, water resource and environment, renewable energy, and material science are present. All of these fields are regarded as important in Tunisia. They are also cultivating human resources, emphasizing research development, and providing support for new businesses. With the connection of research to business, the technology park is hoped to be a primary base for creating new business and job opportunities.

The Japanese government has assisted in the technology park construction and research equipment procurement through the ODA Loan Project, as well as conducting research exchange, dispatching experts, and receiving international students at multiple universities in Japan. Among those universities, the University of Tsukuba established the Alliance for Research on the Mediterranean and North Africa (ARENA)

prior to the establishment of the technology park and has been actively exchanging research.

Prof. ISODA Hiroko (hereinafter, Prof. ISODA), a professor of the University of Tsukuba and the chief of ARENA, is the leading figure for function analysis and effective utilization of food and medicine resources. She has been taking part in the exchange with the technology park and ARENA. "The research center has the most advanced equipment through Japanese government aid so that they can carry out the same level of research as in Japan. In fact, the number of scientific articles which were procured through the collaboration of Japanese and Tunisian researchers is over 100," said Prof. ISODA, who spoke about the achievements of the exchanges. Prof. ISODA herself also analyses and researches the ingredients of about 50 species of plants, including Tunisian olives and rosemary, to discover any new functions. As a result, the path for Tunisian companies to utilize the results of the analyses and research has been opened. "Twenty-nine Tunisian students have studied and received a Ph.D degree at Japanese graduate schools such as the University of Tsukuba, Hokkaido University and

Kyoto University. At the technology park, there are spaces to attract factories and are also facilities which entrepreneurs can use for their business. It is a place with a feeling of hope for the future," said Prof. ISODA. A future where students who studied in Japan will cooperate with Japanese universities and companies, conduct research at the technology park, or create new businesses—is not a far away reality.

**From now on, we will see the connection between research results and businesses**



Professor, University of Tsukuba  
Chief of the Alliance for Research on the Mediterranean and North Africa  
**Prof. ISODA Hiroko**

 **The Journey of JICA Overseas Cooperation Volunteers** Vol. 15

Here are volunteers who are working to improve the quality of education in information technology.

**In Morocco**  
**Mr. SHINDO Kensuke**

27 years old  
Birthplace: Gunma; Occupation: PC Instructor  
Volunteer Term: July 2018-July 2020



I have been interested in Japan Overseas Cooperation Volunteers (JOCVs) since I was in university. My teacher told me about her experience as a member of JOCVs, and it was very interesting. I started thinking to be one of them someday. After graduating from university, I didn't choose a career path in JOCV, but I started to work in a private company instead.

As my work got busier, I hesitated to apply to join JOCV. Then one of my colleagues joined JOCV, and it became the trigger for me to decide to take the challenge.

I thought of using my PC skills in JOCV, because I had experience of teaching utilization methods of Office software and how to connect Excel and Database. So, I applied with the main request to join activities in the vocational training center.

I joined the team in Morocco. Though sometimes I teach by myself at an information technology course of the vocational school run by the National Cooperation Administration by myself. Still, mostly I cooperate with local teachers to teach a class and advise them on how to improve the

I hope they acquire computer skills and use them for their future.



Mr. SHINDO teaching at an information technology course.

Try to remember this because it is important.



At a network class for local information teachers started in FY2019

course.

Among those activities, we developed an exam tool with an automatic marking system using educational software, called Moodle. I have a certain feeling that using the tool allowed students to check their essential knowledge of computers and also increased their motivation for studying. To begin with, some students in vocational schools had dropped out of junior high school or high school because of their economically and

socially challenging situation. Therefore, not all the students had enough motivation. However, these students tried the exam tool multiple times to receive a full score, and they asked me if they could use it outside of the school. At that time, I rejoiced together with fellow teachers over the achievements of improving students' motivation.

There are still many problems with course content, and we are thinking around every day, but we work together to develop



Explaining how to use the software.

It is easier to use it this way.

test content, handling classes, and creating learning materials.

Sometimes developing better learning materials and courses can create more work and can be a burden. So, I try to suggest an effective work allocation that is acceptable to local teachers so that they can continue the courses even after I have left.

I feel the path will open if I repeatedly keep working even on small things, taking my time and never give up. I hope that many students acquire these computer skills and it leads them to a future of hope and a way to envision their career for example.

A Message from the Moroccan Office



The support for an IT course in vocational programs has been requested to improve the unemployment rate of the young generation, education quality and accessibility. At the site, it is required to cooperate with Moroccan counterparts to improve students' motivation for studying, provision of sufficient learning materials and facilities. Mr. SHINDO is suggesting a variety of ideas and obtaining trust from colleagues

Project formulation advisor (volunteer program)\*  
**Mr. MOCHIZUKI Takuma**

\* An expert in volunteer program support assisting all volunteer activities. He also manages JOCV activities, and manages official requests from partner countries and negotiating recruitment criteria.

**+one information**  
**Drink and communicate!**

"Drink communication" may sound like having deep conversations over alcohol at a pub – with that image in mind, you may think it is only in countries with a drinking culture.

As Morocco is an Islamic country, most citizens don't drink alcohol. But there are still people who cherish "drink communication." It is tea drinking. They gather at a cafe instead of a pub, and instead of alcohol, they drink traditional mint tea with plenty of sugar and enjoy a good conversation. It is a traditional Moroccan custom that dates back to ancient times. Tea is essential also to communicate with your colleagues. After work, everyone goes to a cafe together and then spends time talking about work, family, and politics. Even without the purpose of talking, they go to a cafe and drink tea together to relax.

Therefore, you can find cafes serving mint tea everywhere in the town. Not only cafes but also general store workers would serve you a cup of tea after you become good friends. Also, it's amusing to see even taxi drivers drinking a glass of tea in the car. I'm not sure if they drink tea instead of alcohol, or Moroccan people in general like tea, but I think it's a type of "drink communication" unique to Morocco because they don't have alcohol. (Mr. SHINDO Kensuke)



Illustration: Ms.SAKAGAWA Narumi



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