Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: Arab Republic of Egypt

Project: Human Resource Development Project (Egypt-Japan Education Partnership)

Loan agreement signed: May 2, 2017 Loan amount: 10,192 million yen

Borrower: Government of the Arab Republic of Egypt

2. Background and Necessity of the Project

(1) Development result (current status) and issues of the education/health sector in Egypt 【Education sector】

In the Arab Republic of Egypt (hereinafter referred to as "Egypt"), all national and public education institutions, including national universities, are free and the net enrolment ratio for 2012/2013 is 96.5% for primary education and 83.7% for lower secondary education, both of which exceed the world average (primary education 85%, lower secondary education 61%).

Conversely, primary students per class are surplus (namely 44 students, nearly double the OECD average of 21.6) due to the increase of the total number of students caused by over 1.5% population boom. Additionally, the memorizing/test—oriented education causes problem such as a lack of understanding, discipline and cooperativeness. To solve these issues, Egypt is setting up new schools as well as trying to promote the introduction of education that helps encourage students become more willing to learn and more sociable by learning Japanese activity as a model case. There is also an urgent need to develop human resources, including officials of the Ministry of Education and teachers, to help to introduce and disseminate the education.

Moreover and likewise in higher education institutions, an excessive number of students per teacher (ratio of students per engineering teacher at Cairo University is 30:1, which is nearly triple the rate of top engineering universities in Japan and worldwide) and the fact that most lessons take place in classrooms cause a considerable deficiency in practical skills and research as a major challenge. To refine and diversify the industry within Egypt as well, there is a need to improve the ability of teachers who develop practical skills and research capability of students in higher education in Egypt.

[Health sector]

Healthcare circumstances in Egypt have improved over the last 20 years and Egypt maintains a level above the global average in health indexes, including life expectancy at birth (71, 2014), the under-five mortality rate (per 1000 live births) (24, 2015), infant mortality (per

1000 live births) (20, the same year), maternal mortality rate (per 100,000 live births) (33, the same year), etc.

The figures for the number of physicians and nurses per ten thousand people are 28.3 and 35.2 respectively (WHO, 2015), exceeding the global averages of 13.9 and 28.6, which does not qualify as an extreme shortage of human resources. Conversely, the recent population surge and medical workers leaving provinces due to urban over-population, raise concerns about a potential lack of human resources in public medical institutions in the provinces.

When it comes to developing medical workers, although they have an education system, improving the education curriculum and fostering trainers are indicated as issues. Many medical workers who take up jobs in public medical institutions after completion of the education face the lack of the knowledge and skills because of the undeveloped capacity building system on the job site, hence to foster medical human resources including instructors is the urgent need. (Arab Republic of Egypt, Health and Medical Sector Information Collection/Confirmation Survey (March 2017))

(2) Development Policies for Education/Health Sector in Egypt and Positioning of the Project

The new constitution, which was revised in January 2014, stipulates that all citizens have the right to education, education complying with international standards shall be provided and at least 6% of GNP shall be allocated for education-related spending. Also, the right of all citizens to receive inclusive healthcare services is guaranteed, health is highlighted as a key national agenda item and it is specified that at least 3% of GNP shall be allocated for a health-related budget.

Moreover, as part of a "Sustainable Development Strategy: Egypt Vision 2030" (hereinafter referred to as "Vision 2030"), which is the long-term development strategy of Egypt announced in February 2016, economic development, enhanced market competitiveness, HR development and the happiness of citizens are set as goals to be achieved. In the course of achieving such goals, improving quality and quantity of education and healthcare services is considered important and human resource development is set as a priority area.

The strategy of the education sector, "Pre-university Education Strategy 2014-2030", aims to ensure that "Young people understand the rights and duties and learn values of freedom/fairness and non-violence (patience)" as well as a "Government strategy for higher education development 2015 – 2030" advocating "the education of human resources capable of contributing to sustainable economic growth, with appropriate qualities to succeed in the global labor market". Conversely, in the health sector, the "Health Sector Reform Program" was formulated in 1997 (note: during political turmoil in 2011,

implementation of the program stalled, but attempts were again promoted in 2014) and HR development and reform of healthcare services are listed as major issues.

The Human Resource Development Project (Egypt-Japan Education Partnership) (hereinafter referred to as "the Project") conducts study and training in Japan, where the education system is established before and after employment, which will enhance practical skills and develop the research capability of students and instructors in higher education, enhance the willingness to learn and sociability of students in basic education, and enhance practical skills by improving knowledge and techniques of medical workers.

(3) Japan and JICA's Policy and Operation in the Education/Health Sector

In the Country Aid Plan for The Arab Republic of Egypt (June 2008), it is cited "realizing sustainable economic growth and creating employment" and "reducing poverty/improving living standards" as one of its priority areas, development areas of which include "export promotion/industrial development" and "expansion/improvement of public services". Similarly, in the Country Analysis Paper for The Arab Republic of Egypt (JCAP, March 2016), a "Japanese-style education/HR development support program" and "Basic social service improvement support program" are listed as a cooperative program that contributes to important development issues. Accordingly, the Project, which conducts human resource development in education and healthcare sector and expected to contribute to improvement of living standards and reduction of disparity, complies with this policy/analysis.

In addition, "Egypt-Japan Education Partnership" (Egypt-Japan Education Partnership, hereinafter referred to as "EJEP") is released on February 2016. It is aimed at enhancing the capacity of the youth of Egypt to help promote the peace, stability, development and prosperity of Egypt. EJEP stipulates to dispatch at least 2,500 Egyptians to Japan mainly for education or health sector over the next five years and the Project will help accomplish it.

Extending the scope further and likewise in the "G7 Ise-Shima Leaders' Declaration" announced at the G7 Summit held in Ise-Shima in May 2016, our country has declared its support for enhancing the capacity of women by focusing on healthcare and education, an accomplishment which the Project will help contribute to. The Project will also help "create the foundations for peace and stability by providing education and vocational training, etc." for "social stabilization for sharing prosperity" as one of the attempts of our country announced during the 6th Tokyo International Conference on African Development (TICAD VI) in August of the same year.

JICA has provided technical cooperation (1997-2006) targeting improvement in science and math education, technical cooperation (2008) and grant aid (2016) aiming to enhance

education and research and the management structure of the Egypt-Japan University of Science and Technology for the education sector of Egypt.

Similarly, grant aid (1980, 1987, 1995, and 2015) and technical cooperation (1983-2002) for the Cairo University Children's Hospital has been provided among many cooperation projects for the health sector.

(4) Other Donor's Activity

The KfW Bankengruppe (KfW), the World Bank and other donors support school construction. The European Union (EU) conducts assistance for studying overseas in higher education as well as developing school infrastructure for children with disabilities. The United States Agency for International Development (USAID) and the UK are also respectively providing assistance for overseas study for students and researchers incapable of proceeding to higher learning for reasons of gender or poverty. In healthcare sector, the World Health Organization (WHO) strives to enhance the system of social health insurance, supports policy development, etc. while the U.S. has also been conducting technical cooperation aiming to improve the quality and safety of its health service since 2014.

(5) Necessity of the Project

The Project is consistent with the development issues and development policy of Egypt and the cooperation policy/analysis of our country and JICA. Furthermore, the Project will also help accomplish the plan of EJEP, namely to accept 2,500 people to Japan over five years and is considered to contribute to SDGs Goal 3 and 4 (health and education). Accordingly, the necessity of JICA's support for the implementation of this Project is high.

3. Project Description

(1) Project Objective

The Project is intended to help reduce poverty/improve living standards in Egypt through promoting HR development of key sectors by conducting study and training in Japan for students and teachers mainly in education and health sectors.

(2) Project Site/Target Area

The whole of the Arab Republic of Egypt

(3) Project Components

- 1) Main project
 - (a) Degree study in Japan (doctoral/master's degree) (about 190 people)
 - (b) Non-degree study in Japan (short-term study, joint research, etc.) (about 350 people)
 - (c) Short-term training in Japan (about 820 people)

- 2) Consulting service
 - (a) Degree study in Japan
 - (i) Monitoring, evaluating and following up on students
 - (b) Non-degree study in Japan (short-term study, joint research, etc.)
 - (i) Matching students and universities in Japan
 - (ii) Support to maintain a living environment, etc. for university admissions
 - (iii) Monitoring, evaluating and following up on students
 - (c) Short-term training in Japan
 - (i) Coordination with parties to accept trainees
 - (ii) Development of a training program
 - (iii) Monitoring, evaluating and following up on students
 - (d) Enhancing the capacity of executing agency and the Embassy of Egypt in Tokyo
 - (i) Enhancing the capacity to plan and implement study/training
 - (ii) Instructing on and assisting with accounts processing for loan lend execution
- (4) Estimated Project Cost
- 10,735 million yen (Loan Amount: 10,192 million yen)

(5) Schedule

Scheduled from December 2016 to December 2024 (a total of 97 months). The Project will be completed when the course of study of all students studying in Japan is over (September 2024).

- (6) Project Implementation Structure
 - 1) Borrower: The Government of the Arab Republic of Egypt
 - 2) Executing Agency: Ministry of Higher Education and Scientific Research
 - 3) Operation and Maintenance System: Ministry of Higher Education and Scientific Research
- (7) Environmental and Social Considerations/Poverty Reduction/Social Development
 - 1) Environmental and Social Considerations
 - 1 Category: C
 - 2 Reasons for Categorization: Because the Project is estimated as having a minimum undesirable influence on the environment in accordance with the "Japan International Cooperation Agency environmental and social considerations guideline" (issued in April 2010).
 - 2) Promotion of Poverty Reduction: None in particular.
 - 3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infection Diseases Including HIV/AIDS, Participatory Development, Consideration for the

Persons with Disability, etc.): the Project is scheduled to include a female participation rate of at least 25% in the selection process from the gender perspective.

(8) Collaboration with Other Donors:

None in particular.

(9) Other Important Issues

1) Coordination with Technical Cooperation

In the education field in Egypt, technical cooperation is underway in preschool education ("The Project for Quality Improvement of Early Childhood Development" (started in June 2017)), basic education ("The Project for Creating Environment for Quality Learning" (started in February 2017)), technical education ("The Project for Improvement of Technical Education" (started in April 2017)) and higher education ("Egypt-Japan University of Science and Technology project phase 2") and association with these projects when examining the contents and selecting participants for short-term training will help establish and expand the effect of the Project and technical cooperation.

Also, because the Ministry of Higher Education and Scientific Research, the executing agency, has no experience of yen-loan projects, Japanese experts providing advice on a technical level, including yen-loan fund management, study/training program formulation/implementation support, etc., will be dispatched as indirect support for the Project.

2) Cooperation with Universities and Related agency

To ensure participants can focus on academic learning/training in Japan, the Embassy of Egypt in Tokyo cooperates with universities and related agencies with assistance from Japanese experts, and supports the participants' lives and other procedures for acceptance. JICA will periodically check through experts whether there is any problem and take necessary measures such as increasing number and strengthening support of Japanese experts if a problem in the implementation capacity of the embassy is identified.

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance indicators (Operation and Effect Indicator)

	Target (2026)
Indicator	【Expected value 2
	years after project
	completion]
Degree study in Japan (doctoral/master's study)	
Ratio of attainment of academic degrees	At least 80%
Ratio of female participation	At least 25%
Ratio of publication of thesis	At least 65%
(within 1 year* of completion of the program)	
Non-degree study in Japan (short-term study, joint research,	
etc.)	
Ratio of completion of program	At least 95%
Ratio of female participation	At least 25%
Credit earning ratio	At least 90%
(semester study, one-year study)	
Ratio of publication of thesis	
(within 6 months of completion of the program)	At least 65%
(research only)	
Short-term training in Japan	
Ratio of completion of training	At least 95%

^{*} The period for publication of thesis following degree study is set to be one year because thesis writing for degree students requires more time than for research students.

2) Internal Rate of Return

Due to the difficulty in measuring/evaluating the benefit of study/training project and the fact that a profitability calculation is inappropriate, this has not been determined.

(2) Qualitative Effect

Helping improve the academic ability of students studying/research capability, improve their understanding of Japan, promoting understanding and the dissemination of Japanese-style education, enhancing healthcare services and medical education, poverty reduction and improving living standards as well.

5. External Factors and Risk Control

N/A

6. Lessons Learned from Past Projects

The lesson learnt from the ex-post evaluation of "Higher Education Loan Fund Project" conducted in Malaysia (2004), etc. is that the factor behind the success in advancing

business in a smooth manner and according to plan lies not only in providing a scholarship, but also in sharing information between the executing agency and universities, as well as in fine-tuned monitoring through consultants. Having learnt from it, Japanese experts will be dispatched to support cooperation/information sharing among relevant government offices and universities, as well as communication/coordination among universities in Japan and Egypt during the Project.

7. Plan for Future Evaluation

(1) Indicators to be Used:

- Degree study in Japan (doctoral/master's study)
 Ratio of attainment of academic degrees, Ratio of female participation, Ratio of publication of thesis (within 1 year of completion of the program)
- Non-degree study in Japan (short-term study, joint research, etc.)
 Ratio of completion of program, Ratio of female participation, Credit earning ratio, (semester study, one-year study), Ratio of publication of thesis (within 6 months of completion of the program) (research only)
- Short-term training in Japan
 Ratio of completion of training

(2) Timing

Ex-post evaluation: two years after completion of the Project