JICA’s Work in Higher Education Sector in Africa

Human Development Department
Japan International Cooperation Agency (JICA)
Issue 1  Advancement of industry in the region

- The integration of the regional economy and the technology level in developing countries have been progressively advanced in the past ten years, and is likely to grow further. Each government acknowledges the importance of human resource development to support high-value-added industry and of research activities for innovation, for advancement of the economy, prioritizing improvement of higher education as one of the critical policies.

Issue 2  Increased importance to address global & regional issues

- It is becoming increasingly important to address global and regional issues such as environmental pollution, climate change and disaster management.
## JICA’s Strategies in Higher Education Sector

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| **1. To strengthen leading institutions** | • Develop education and research capacity of academic staff  
• Enhance education and research environment, i.e., facility and equipment  
• Strengthen management and administration capacity |
| **2. To develop regional academic network Including Japan** | • Conduct collaborative research among universities and industry  
• Promote faculty staff and student exchange  
• Organize academic society and conference  
• Publish academic journals |
| **3. To support study abroad programs to Japan** | • Provide scholarships for academic staff and government officials to pursue higher degrees |
JICA’s Portfolio in Higher Education

**India**
- Indian Institute of Technology Hyderabad (IIT-H): Loan & TA

**Mongolia**
- National University of Mongolia & Mongolia University of Science & Technology: Loan

**Laos**
- Faculty of Management and Administration in Savannakhet Univ: TA

**Cambodia**
- Institute of Technology of Cambodia: Grant & TA

**Vietnam**
- Hanoi University of Technology and Science (IT field): Loan & TA
- Industrial University of Ho Chi Minh City (heavy-chemical sector): TA

**Myanmar**
- Yangon Technological University & Mandalay Technological University: Grant & TA

**Kenya**
- Pan Africa University – Science, Technology & Innovation (PAUSTI) @ Jomo Kenyatta Univ. of Agr. & Tech: TA

**Southeast Asia Region**
- AUN/SEED-Net (ASEAN University Network/Southeast Asia Engineering Education Network) Phase-4: TA (26 ASEAN univ. & 14 Japanese univ.)

**Timor Leste**
- Capacity Development of the Faculty of Engineering, Science and Technology, the National University of Timor-Lorosa’e: TA & Grant

**Indonesia**
- Institute of Technology Bandung: Loan
- Indonesia University (health): Loan
- Hasanuddin University: Loan & TA
- Institute of Technology Surabaya: TA
- Indonesia Accreditation Board on Engineering Education (IABEE): TA

**Egypt**
- Establishment of Egypt-Japan University of Science and Technology (E-JUST): TA

**Malaysia**
- Malaysia Japan International Institute of Technology (MJIIIT): Loan & TA
JICA Projects in Higher Education Sector in Africa

(Egypt-Japan Univ. of S&T)

E-JUST, Egypt

MoU, MoA (Dec., 2014)

JKUAT, Kenya

★ (PAU 5 Institutes)

★ JICA Technical Cooperation Projects (E-JUST ↔ JKUAT)
Overview of JKCAT, JKUCAT and JKUAT

1977: Start of the Plan

1981
Middle Level College (JKCAT)
First Intake of Students (Agriculture: Diploma Technology: Technician)

1988
University College (JKUCAT)
Promoted to University (Degree of KU)

1994
Full Fledged University (JKUAT)
Start of Graduate School (Master, Doctor of JKUAT)

Developed into one of the top-class universities in the fields of Agriculture, Science and Engineering in Kenya

Japan’s Cooperation

1994
JICA: (on-going)
▶ In-country Training: Strengthening of Rural Women’s Capacity (1994-)

Dec.1977

Aug.1994

2000
After

2018

Japan International Cooperation Agency
AFRICA-ai- JAPAN Project:
African Union -african innovation - JKUAT AND PAUSTI Network Project

Major Activities of the Project
1. Strengthening research environment
2. Capacity development of academic staff
3. Advancement of African Innovation

Japanese Supporting Universities
Kyoto Univ., Okayama Univ., Tottori Univ., Nagasaki Univ., Obihiro University of Agriculture and Veterinary Medicine

PAUSTI as of October 2018
- 474 students from 40 African countries have entered Ph.D and M.Sc
- First cohort of 55, Second cohort of 42 and Third cohort of 46 have graduated (M.Sc: 128, Ph.D: 14)
- Approximately 280 students enrolled as Cohorts 3 to 5
<table>
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<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>2005. 8</td>
<td>The government of Egypt officially requested the establishment of E-JUST to the Government of Japan.</td>
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<td>2008. 10</td>
<td>Japan International Cooperation Agency (JICA) started the technical cooperation to support E-JUST.</td>
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<td>2009.3</td>
<td>“The agreement between the government of Japan and the government of the Arab Republic of Egypt concerning the Establishment of E-JUST” was concluded.</td>
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<td>2010.2</td>
<td>E-JUST launched the graduate school of engineering.</td>
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<td>2016.3</td>
<td>The cabinet of Japanese government approved the grant-aid project to provide experimental equipment to the undergraduate school of engineering of E-JUST.</td>
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<tr>
<td>2017.2</td>
<td>The school of basic and applied science was opened under the graduate school of engineering of E-JUST.</td>
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<td>2017.9</td>
<td>E-JUST launched the undergraduate school of engineering and international business and humanities.</td>
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<td>2018.12</td>
<td>E-JUST will complete the permanent campus construction project (phase 1).</td>
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Name of the University: Egypt-Japan University of Science and Technology (E-JUST)

Establishment: February, 2010

Location: New Borg El-Arab City, Alexandria Province, Arab Republic of Egypt

Faculty:
- Graduate School of Engineering
  4 schools, 12 departments
- Undergraduate School of Engineering
  4 schools, 8 tacks
- Undergraduate School of International Business and Humanities
  1 school, 2 tracks

Academic and Administrative Staff
- No. of academic staff: 57
- No. of administrative staff: 192

Student
- Total No. of Student: 249
  - UG of Engineering: 63
  - UG of IBH: 20
  - GS of Engineering: 166
  - International Student: 19
Japanese Cooperation to E-JUST

E-JUST BoT consists of 19 members, 10 members from Egyptian side and 9 members from Japanese side. The Japanese members are from the Ambassador of Japan in Egypt, the Director General of Foreign Affairs of MEXT, the five National Research Universities’ Presidents including Kyoto University, the President advisor of Mitsubishi cooperation and JICA Senior Vice President.

### Board of Trustees
- President
- Vice President for International and Regional Affairs
- Vice President for Education and Academic Affairs
- Vice President for Research
- Secretary General

### Graduate School of Engineering
- School of Electronics, Communication & Computer Eng.
- Computer Science and Eng.
- Electronics & Communication Eng.
- School of Innovative Design Eng.
- Mechatronics and Robotics Eng.
- Material Science Eng.
- Industrial Eng. & System Management
- School of Energy, Environment & Petrochemical Eng.
- Chemical and Petrochemical Eng.
- Environmental Eng.
- Energy Resource Eng.
- School of Basic and Applied Science
- Mathematics
- Chemistry
- Biology
- Physics

### Undergraduate School of Engineering
- Computer Science & Eng.
- Electronics & Communication Eng.
- Electrical Power Eng.
- Mechanical Eng.
- Mechatronics Eng.
- Material Science Eng.
- Industrial & Manufacturing Eng.
- School of Basic and Applied Science
- Chemistry
- Biology
- Energy Resource Eng.

### Undergraduate School of International Business and Humanities
- School of International Business
- Accounting & IT
- Human Resource management
## Characteristics of E-JUST

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<th>Good Quality of Japanese-style Engineering Education</th>
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<td>□ <strong>Small number of students per academic staff</strong></td>
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<td>⇒ Students and teacher ratio 【1: 5.3】</td>
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<td>□ <strong>Annual number of articles per academic staff</strong></td>
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<td>⇒ 3.5 (ranked No.1 among Egyptian universities since 2014)</td>
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<td>□ <strong>Close collaboration with Japanese universities</strong></td>
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<td>⇒ About 100 visiting scholars are dispatched to provide lectures and seminars to E-JUST annually.</td>
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<tr>
<td>□ <strong>Experiment and Laboratory-based education</strong></td>
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<tr>
<td>□ <strong>Collaboration with Industries</strong></td>
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<td>⇒ Scholarship fund is provided by Japanese and Egyptian private companies.</td>
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Japanese academic staff provides technical guidance to Egyptian staffs

E-JUST second campus