# A More Prosperous Africa with the Power of Science, Technology and Innovation (Outline of Recommendations from the Science and Technology Advisor to the Minister for Foreign Affairs)

## **New issues for Africa**

- Issues confronted since TICAD V: Ebola outbreak, terrorism, decline of international resource prices, and environmental and climate change issues
- Agenda 2063 was adopted by AU in January 2015 and the 2030 Agenda for sustainable development (SDGs) was adopted by the United Nations in September 2015; Importance of science, technology and innovation (STI) are highlighted in both agenda as a key factor to solve issues
- Current state of science and technology
- Africa faces issues of limited R&D investments and the "brain drain" of talented people. Wider spread of mobile phones in Africa is spurring a "mobile revolution"; there is potential for dramatic leap by utilizing the ICT (information and communications technology).

## General direction

- Emphasis on Japan's qualities of strong technology capabilities (including social infrastructure technology and systems technology) and human resource development
- Promote policy making and various initiatives based on reliable data and scientific evidence
- Top priority on Africa's development ownership and support for Agenda 2063

## Recommendation 1: Improve Africa's science and technology level by human resources development

"Shift from brain drain to brain circulation"

#### (1) Strengthen interaction and networking among Japanese and African researchers

- Strengthen research interaction and joint research, build sustainable research networks by using Africa-based research hubs, and encourage brain circulation
- (2) Cultivate human resources in science and technology areas that support industrial development
- Strengthen higher education to cultivate human resources who can lead industry, through assistance for Egypt's E-JUST, Rwanda's Tumba College of Technology, and the Pan-African University concept (Jomo Kenyatta University of Agriculture and Technology)
- (3) Cultivate human resources through collaboration of multiple cooperation entities
  - Promote the "Africa Infectious Disease Countermeasures Program" that cultivates a wide range of human resources from core researchers to technical staff for African countries locally and in Japan
- (4) Disseminate and promote results from joint research in other regional countries
- Promote results of joint research with impressive outcomes in other regional countries by inviting researchers and holding symposiums

Recommendation 2: Apply R&D results to overall society

"Enrich people's lives with the power of science and technology"

#### (1) Further promote Joint R&D and utilize results

- Start new cooperation at post-research phase to utilize research results
- (2) Strengthen cooperation in priority areas for utilizing science and technology
- Prioritize the promotion of agriculture, nutrition, and environment and climate change areas with strong potential for utilizing science and technology
- (3) Assist cultivation of female entrepreneurs and researchers
- Promote proactive engagement of women in science, technology, engineering, and mathematical fields, and expand education for women aimed at cultivating female researchers
- (4) Assist economic diversification through cultivation of ICT human resources
- Strengthen ICT human resource education, including ICT entrepreneur support, and transform the industrial structure
- (5) Collaborate with international organizations
- Strengthen collaboration with international organizations, such as working together with the International Atomic Energy Agency (IAEA) through its Peaceful Uses Initiative (PUI) and Consultative Group on International Agricultural Research (CGIAR)