JBIC Signs ODA Loan Agreement with Tunisia

--Supporting Human Resource Development to Strengthen the Country's Industrial Competitiveness and Regional Development that Draws upon Japanese Technology--

- 1. Japan Bank for International Cooperation (JBIC; Governor: Kyosuke Shinozawa) signed today ODA loan agreements totaling up to 9.94 billion yen h the Government of the Republic of Tunisia to finance "the Borj Cedria Science and Technology Park Development Project" and "the Photovoltaic Rural Electrification and Water Supply Project".
- 2. In an effort to improve its traditional economic structure that depends primarily on agriculture and oil, the Government of Tunisia has sought to diversify the economy and has drawn up, under the leadership of President BEN ALI, "the 10th Five-Year Social and Economic Development Plan (2002-2006)"aimed at greater economic growth. Looking toward the establishment of free trade zone with the European Union (EU) in 2008, the Plan gives the highest priority to strengthening industrial competitiveness, human resource development and employment creation, while placing importance on increasing access to electricity in rural areas through the use of renewable energy sources. With this Plan, the government has been pursuing sustainable economic growth and the building of a stable society through rural development. These ODA loans are intended to support this government policy, thus contributing to the economic and social development of Tunisia.
- 3. The following is the highlights of the newly signed ODA loans.
 - (1) Support human resource development to strengthen industrial competitiveness
 - In line with the Tunisian government's policy to give top priority to strengthening industrial competitiveness, JBIC has designated, as one of its assistance pillars, support for the development of higher education institutions and research institutes intended to nurture industries and human resources. The Borj Cedria Science and Technology Park Development Project will support the development of human resources majoring in science and technology, and the improvement of research and development capacity, thereby contributing to human resource development necessary for greater industrial competitiveness in Tunisia.
- (2) Support for regional development that draws upon Japanese technology
 JBIC actively supports the government policy of using renewable energy sources as part of its efforts to address global issues. The Photovoltaic Rural Electrification and Water
 Supply Project will install photovoltaic generation facilities that utilize Japanese advanced technology, thereby contributing to the resolution of global environmental problems. The
 Borj Cedria Science and Technology Park Development Project will also help tackle environmental issues by supporting research and development of renewable energy sources
 including solar energy.
- (3) Drawing on expertise and know-how that Japanese universities have accumulated
 The Borj Cedria Science and Technology Park Development Project will send researchers working at the Technology Park to Japanese universities for study, thereby helping
 Tunisian researchers upgrade their capacity by utilizing Japanese expertise and know-how.

(Click here for more details of the projects)

1. Project Amount and Terms

Project Name	Amount (Mil. Yen)	Interest Rate (% per annum)	Repayment Period/ Grace Period(Years)	Procurement
Borj Cedria Science and Technology Park Development Project	8,209	1.50 0.75*	25/7 40/10	General Untied
Photovoltaic Rural Electrification and Water Supply Project	1,731	0.40**	40/10	Tied
Total	9,940			

^{*} In overseas economic cooperation operations, JBIC supports developing countries' efforts to foster human resources by applying lower-than-ordinary interest rates to human resource development projects.

2. Project Description

(1) Borj Cedria Science and Technology Park Development Project

This Project will support the development of research facilities for biotechnology, water resources and the environment, and renewable energy sources and higher education facilities for environmental science, information communications, and technology research, as well as send researchers to study and earn doctorates in Japan. The project aims at fostering human resources for science and technology, and increasing the capacity for research and development (R&D), thereby contributing to human resource development to strengthen industrial competitiveness in the Republic of Tunisia.

Strengthening and diversifying the competitiveness of the country's industry, and improving the high unemployment rate (14% in 2003) are high on the development agenda of Tunisia. As part of the efforts to tackle these issues, the country plans to construct a "Technopark".[1] thereby creating synergies among such sectors as production, human resource development, and R&D, and eventually promoting a new and advanced technology industry. Since "biotechnology," "water resources and environment", and "renewable energy sources" are regarded as sectors playing the most significant and necessary roles in the national strategy, the Government of Tunisia gives first priority to this Project, which is expected to undertake R&D for these three sectors.

To make this Technopark possible, the Government of Tunisia seeks extensive cooperation with Japan. It is against this background that a joint study with Japanese universities and research institutes, as well as training programs and the deployment of experts by JICA are being planned. In the project formation process, JBIC has been in close touch with these institutions and agencies in Japan from the project preparation stage, and will continue to maintain cooperative ties with them during the implementation stage as well as to ensure greater project effects.

The proceeds of the ODA loan will be applied to the construction of education and research facilities, procurement of materials, overseas study programs, and consulting

Project executing agencies: Ministère de la Recherche Scientifique, de la Technologie et du Développement des Compétences, Ministère de l'Enseignement Supérieur. Point of contact: Unité de Gestion par Objectifs du Technopôle de Borj Cédria (Address: B.P. 95, 2050 Hammam-Lif, TEL: +216-71-430-430 FAX: +216-71-430-330)

(2) Photovoltaic Rural Electrification and Water Supply Project

The Project aims to install photovoltaic generation equipment, water pumps, and desalination equipment[2] to about 500 households in the rural farming area, and to some 60 water wells located in the southern farming area. These installations will help improve the livelihood of local residents and invigorate the livestock business, thereby contributing to a higher level of living in the project areas. The project will utilize the long hours of sunshine, which is one the characteristics of the Tunisian climate, as well as the advanced technology of Japan, a country that has the world's largest share of the solar battery market (48.9%).[3]

Tunisia has pursued greater access to electricity in households since the 1980s. In 2006, the final year of the 10th Five-Year Plan (2002-2006), the average electrification rate nationwide is anticipated to reach as high as 97.7%. Improvements have been hindered, however, in rural farming areas, where small, scattered communities remain without electricity due to the high investment cost of setting up transmission and distribution lines.

In the southern farming areas, where rainfall is extremely scarce, residents rely on underground wells for their water resources. Since livestock farming is one of the major industries in the region, water has to be pumped and demineralized[4] to secure sufficient safe drinking water for humans and farm animals. Such water wells are widely scattered throughout the pastures, however, and cannot possibly be accessed by existing transmission and distribution lines. The majority of water wells thus rely on diesel power generation for pumping water, although this type of power generation has disadvantages in operation and maintenance including the need to transport fuel and equipment failure. To resolve these inconveniences and to boost regional development, the Government of Tunisia is called on to install independent power supplies that utilize a renewable energy

The proceeds of the ODA loan will be applied to the design, procurement, and installation of equipment and materials necessary for installing photovoltaic generation facilities, as well as consulting services.

Project executing agency: Agence Nationale pour la Maîtrise de l'Energie (Address: 3, rue 8000, Montplaisir, 1073 Tunis, B.P. 213, Tunisia, Tel: +216-71-787-700@Fax: +216-71-784-624)

- [1] A center mainly comprising higher education institutions and research institutes, where science and industrial technologies are accumulated.
- [2] Water pumps and desalination equipment will be installed to water wells in the south.
- [3] The source is PV News (2002), which is a journal that specializes in photovoltaic.
- [4] Due to geological features, underground water in many places in southern Tunisia has high concentrations of salt.

^{**} STEP: "Special Terms for Economic Partnership" were established in March 2002 to encourage "aid that is identifiably Japanese" by drawing on advanced technology and knowledge possessed by Japan and transferring technology to the developing countries. These Terms have been available since July 2002.