

Chapter 1 Background of the Project

In Egypt, there is little precipitation, and the agriculture relies on the Nile River as an irrigation water source. There are more than 1,000 pump stations, but some stations are timeworn, and it causes decreasing agricultural productivity. The government of Egypt has implemented rehabilitation and improvement of facilities of these stations and canals as well. In the Upper Egypt, there exists 86 pump stations along the Nile River and out of them 45 stations are the floating pump stations. Sugarcane, wheat, corn, etc. are planted using these pump stations. But these floating pump stations do not fulfill their function properly due to aged deterioration for more than forty years of operation after installation. The government of Egypt had requested the government of Japan to carry out the rehabilitation project in the Upper Egypt by Grant Aid Project. Ten pump stations during the year of 1991 to 1993, and eleven pump stations during 1995 to 1998, were rehabilitated by providing necessary equipments to recover the function of the pump stations. But remaining pump stations still leave unimproved. The five (5) pump stations have especially declined its function due to frequent malfunction, and cause irrigation water shortage.

While, the MED, implementation agency of the project, has adequate know-how and technology in O & M of floating pump stations. But when repairing pump, they must tow it to the workshop on the River because of lack of access roads to the Nile River from main roads. It reads to a long repairing period and trouble in farming such as non-availability of irrigation water.

Under the said condition, the Government of Egypt requested the Government of Japan to implement a rehabilitation project of floating pump stations under the Japanese Grant Aid.

The contents of the request are as follows;

- Procurement of the equipments necessary for the improvement of the five (5) floating pump stations, and
- Provision of a maintenance barge (non self-propelled type) and O & M equipments

According to the request letter from the government of Egypt, beneficial area and capacity and unit of pumps necessary for each pump stations are as follows;

Table 1 Contents of the Request

(No) Pump Stations	Irrigation Area (feddan)	Specifications of Pumps	
		Capacity (m ³ /s) x units	Pump Head (m)
(22) Sahel Alakaba Kebli	250	0.25 x 2 units	12
(23) Al Rakikin Sahel	150	0.15 x 2 units	12
(24) Blowkher	1,500	1.20 x 2 units	12
(25) El Ghorera	1,600	1.25 x 2 units	10
(26) El Biadiea El Ollia	1,700	1.30 x 2 units	28

Note. (1feddan 0.42 ha, 1ha=2.38 feddan)

Maintenance Barge	-	1 set
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