

## GREENING OF EGYPTIAN DESERT



Vertical Turbine Pumps installed at Wadi Sheeh



Mixed Flow Pumps for sewage application at Faiyad, Egypt

### Introduction

Kirloskar Brothers Limited's (KBL) association with Egypt started in the year 1989 with an order of erecting and commissioning of 4 pumping stations in the South Quaronn area. These stations included vertical pumps and motor ratings along with delivery pipe fittings for the General Authority for Rehabilitation Project and Agricultural Development (GARPAD).

### Challenge

1. In 1992, the major challenge came in the form of an order by GARPAD to supply 3000 independent pumping units for sprinkler irrigation and supply of electromechanical equipment for 9 pumping stations in Lower Egypt.
2. The Irrigation Improvement Project (IIP) which was under the purview of Ministry of Public Works and Water Resources consisted of improving irrigation systems by better and economical usage of available water through efficient pumping systems regularly.

### Solution

1. The solution for the GARDAP order came in the form of 3000 independent pumping units for sprinkler irrigation and supply of electromechanical equipments by KBL. The initial order was followed by orders for 5 pumping stations in Upper Egypt.
2. KBL received an order of 286 diesel pumps units for the Ministry of Public Works and Water Resources for the Irrigation Improvement Project which was financed by the World Bank.

With excellent performance of Kirloskar pumpsets, KBL received orders from other Egyptian water authorities like the Mechanical and Electrical Department (MED) under the Ministry of Public Works and Water Resources for the supply of pumping stations comprising of horizontal pumpsets in Upper Egypt. This was followed by a project financed by Islamic Development Bank who had the requirement of pumping stations. More contracts were awarded to KBL at the pumping stations in Lower and Upper Egypt. As the years passed, KBL has expanded the supply of pumpsets from agricultural sector to industries such as sugar, process and paper.

### Learning

We learned that posting technically qualified and experienced engineers at Cairo was beneficial with a view to satiate the increasing demands of consumers. These engineers had to provide servicing for the Kirloskar pumpsets, train the farmers, technical staff in the Government departments and field operators for the operation and maintenance of the pumps installed in Egypt. We conducted customer education and training seminars for such engineers at our factory premises in Kirloskarvadi, India and in various locations in Egypt viz. Mechanical and Electrical Department, Irrigation Improvement Project and national Organization for Portable Water and Sanitary development.

### Conclusion

Kirloskar Brothers Limited has heralded the greening of the Egyptian desert over the past 30 years. Over a lakh Kirloskar pumps have been installed in the area around the River Nile. Kirloskar has been instrumental in building around 40 pumping stations in Egypt and have spearheaded the reclamation of 1,50,000 hectares of desert land for agriculture.