## Improving Water Quality In Egypt



Photo: USAID/Egypt Abu Elmaaty Omar

The water plants are now providing 80,000 Egyptians on the east bank of the Nile in Minya Governorate with drinkable water.

Most Egyptian farmers in the villages of Tena el Gabal and Gabal el Ter in Minya Governorate earn average incomes of about \$60 a month. Until recently they have not been able to obtain drinkable water due to the absence of any treatment plants in these remote areas of Egypt. Consequently the health of the farmers and their families was adversely affected by the lack of clean water. Lab tests showed that the drinking water was contaminated with harmful bacteria and parasites.

USAID introduced the use of slow sand filtration water treatment plants to the villages and funded the construction of these plants in 2003. Each 60 liter per second treatment plant costs about \$1 million. Water from the Nile is filtered using gravel and sand to remove impurities and then chlorinated. The plants are built by Egyptian construction companies which are supervised by an Egyptian engineering firm. The advantages of these plants include high effectiveness of water treatment through removal of turbidity, bacteria and parasites. Operations are manual and require few automation skills from the staff managing the plant - resulting in low cost plant operation and maintenance.

The health of farmers has improved according to lab tests. The two plants will serve as a model for a larger USAID effort to fund the construction of additional ten slow sand filtration plants throughout Minya and Beni Suef Governorate in 2004 and 2005.

