Monitoring and evaluation of irrigation management projects in Egypt

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ABSTRACT

The less the water resources are, the more the demand is and the more important water is. This is the case in Egypt, where rainfall is rare and the desert covers most of the country area, except for a narrow strip of cultivated land and urban areas along the Nile river course.

Like other large rivers, The Nile Delta region is characterized with large tracts of rich fertile agricultural land, overpopulation, unique and delicate environmental conditions caused by mixing drainage and freshwater. Management of these unique natural resource areas has become more critical as the ecological balance in these areas becomes threatened because of an increase in water exploitation to support population growth and resource development. Therefore, performance of water delivery systems, particularly irrigation systems, needs to be clearly defined and assessed under these current or expected stressed conditions. This paper highlights the irrigation and drainage and water management projects in Egypt. It presents the positive and negative effects, and the role of government and users in operation and maintenance of the system. The objective is identifying significant research programs and projects carried out during the last three decades that impacted the irrigated agricultural practices in Egypt. The study documents successful cases of direct and indirect research uptake as well as unsuccessful cases. Specific recommendations for increasing the research uptake, improving the widespread of research results and for taking corrective measures to strengthen and encourage research uptake to irrigation and drainage practices are highlighted.

Discipline: Irrigation, drainage and reclamation

Key words: irrigation, management, performance, positive and negative impacts.

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