

Turkish Journal of Agriculture and Forestry

Turkish Journal



of

Agriculture and Forestry

**Efficiency Indicators in Irrigation Projects' Performance Evaluation: A Case
Study on the Bursa Groundwater Irrigation Project**

Senih YAZGAN, Hasan DEĞİRMENÇİ

Uludağ Üniversitesi, Ziraat Fakültesi, Tarımsal Yapılar ve Sulama Bölümü, Bursa-
TÜRKİYE

 [Keywords](#)
 [Authors](#)



agric@tubitak.gov.tr

[Scientific Journals Home Page](#)

Abstract: Using the 1992-1996's irrigation results, 15 different physical, economic and institutional efficiency indicators were applied to the Bursa groundwater irrigation project to evaluate the performance of the system. A water supply ratio of 0.6-1.09, an irrigation ratio of 57-81%, a realized crop pattern ratio of 71-96.6%, a benefit-cost ratio of 2.5-10.0, a planned water supply ratio of 61-115.3%, a water-use per unit area of 5917.3-8701.3 m³ ha⁻¹, a water fee collection ratio of 71-100%, a sustainable irrigated area ratio of 1.71, an output per unit command of 2628.7 ha⁻¹ and output per cropped area of 4198.5 ha⁻¹ were found. For efficient irrigation management, irrigation planning must be appropriate for the farmers, market and water resource conditions.

Key Words: Groundwater irrigation project, performance evaluation, physical efficiency, economic efficiency, institutional efficiency

Turk. J. Agric. For., **26**, (2002), 93-99.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Agric. For., vol.26, iss.2.](#)